In the matter of the *Commissions of Inquiry Act 1950*Commissions of Inquiry Order (No.1) 2011

Queensland Floods Commission of Inquiry

Witness Statement of Peter Baddiley

Annexure "PB-5"

! 🗅 0	From	Subject	Received	Δ	S 🌣
	e: Older				
	Duty Engi	Situation Report 0800 06/01/2011	Thu 6/01/2011	08:14	17 🕅
	Duty Engi	Situation Report 1500 06/02/2011	Thu 6/01/2011	14:54	20 🚩
	Duty Engi	Situation Report 1800 06/01/2011	Thu 6/01/2011	17:33	20 🚩
<u></u> 0	Duty Engi	North Pine Dam Directive # 2 at 20:15 on Thursday 6 January 2011	Thu 6/01/2011	20:17	46 🕅
	Duty Engi	FOC Situation Report at 06:00 on Friday 7 January 2011	Fri 7/01/2011 0	6:06	21 🕅
<u> ?</u>		Operating Strategy over the next week	Fri 7/01/2011 0	8:05	16 🚩
		Actual and Projected Wivenhoe Releases	Fri 7/01/2011 1		11 🕅
		Impact of Wivenhoe Releases on water levels in the Lower Brisbane River	Fri 7/01/2011 1		9 KB 💝
	Duty Engi	Situation Report 1800 Friday 07/01/2011	Fri 7/01/2011 1		21 🕅
		SitRep Clarification	Fri 7/01/2011 1		5 KB 💝
		Situation Report 0600 Saturday 08/01/2011	Sat 8/01/2011 (22 🕅
		Wivenhoe Dam Directive # 4 at 08:15 on Staurday 8 January 2011	Sat 8/01/2011 (55 🕅
	, ,	North Pine Dam Directive # 5 at 10:15 on Saturday 8 January 2011	Sat 8/01/2011		46 🕅
		Somerset Dam Directive # 3 at 11:30 on Saturday 8 January 2011	Sat 8/01/2011		48 💝
		FOC Status Report at 12:00 on Saturday 8 January 2011	Sat 8/01/2011		22
		Projected Releases - Wivenhoe Dam at 1500 on Saturday 8 January 2011	Sat 8/01/2011		13
			Sat 8/01/2011		24 🕅
		FOC Situation Report at 18:00 on Saturday 8 January 2011			
		Wivenhee Dam Directive #5	Sun 9/01/2011		48 🕅
_		Wivenhoe Dam Directive #6	Sun 9/01/2011		
		FOC Situation Report at 06:00 on Sunday 9 January 2011	Sun 9/01/2011		21
		Wivenhoe Actual and Projected Releases	Sun 9/01/2011		11
		Situation Report 1700 Sunday 9/1/2011	Sun 9/01/2011		22 🕅
		Wivenhoe Actual and Projected Releases	Sun 9/01/2011		11 🕅
! 🚘		Situation Report 2100 9/01/2011	Sun 9/01/2011		20
		Actual and Projected Wivenhoe Releases	Sun 9/01/2011		11
		FOC Situation Report at 01:00 hrs on Monday 10 January 2011	Mon 10/01/201		22 🕅
	, ,	Wivenhoe Dam Actual and Projected Releases - 0200 on Monday 10 January 2	· · ·		11
	Duty Engi	Wivenhoe Dam Directive # 8 at 02:00 on Monday 10 January 2011	Mon 10/01/201		52 🕅
	Duty Engi	FOC Situation Report at 06:00 on Monday 10 January 2011	Mon 10/01/201	1 06:29	23
	Duty Engi	Actual and Projected Wivenhoe Releases	Mon 10/01/201	1 06:32	11
	Duty Engi	Actual and projected Wivenhoe releases	Mon 10/01/201	1 09:56	11
	Duty Engi	FOC Situation Report at 12:00 on Monday 10 January 2011	Mon 10/01/201	1 12:15	23 🕅
	Duty Engi	Actual and Projected Wivenhoe Releases	Mon 10/01/201	1 14:37	18
	Duty Engi	RE: FOC Situation Report at 12:00 on Monday 10 January 2011	Mon 10/01/201	1 14:57	21 🚩
	Duty Engi	FW: Perserverance Event stage 3	Mon 10/01/201	1 15:21	3 KB 🔻
	Duty Engi	RE: URGENT ATTENTION: Helidon to Gatton FLASH FLOOD [SEC=UNCLASSIF	Mon 10/01/201	1 17:39	91 🕅
	Duty Engi	FOC Situation Report at 18:00 on Monday 10 January 2011	Mon 10/01/201	1 18:42	22 🕅
	Duty Engi	FW: Lockyer Ck	Mon 10/01/201	1 22:37	13 🚩
	Duty Engi	FOC Situation Report at 00:00 Tuesday 11 January 2011	Mon 10/01/201	1 23:55	22 🚩
<u></u> 0	Duty Engi	Somerset Dam Directive # 6 at 04:30 on Tuesday 11 January 2011	Tue 11/01/2011	L 04:40	48 🕅
	Duty Engi	FOC Situation Report at 06:00 on Tuesday 11 January 2011	Tue 11/01/2011	06:12	22 🕅
	Duty Engi	Wivenhoe Dam Projected Releases at 06:00 on Tuesday 11 January 2011	Tue 11/01/2011	06:14	11 🕅
! 🙈		Actual and Projected Wivenhoe Releases	Tue 11/01/2011		18
		Actual and Projected Wivenhoe Releases	Tue 11/01/2011		18
		SitRep 1200 11/1/2011	Tue 11/01/2011		17 🕅
		Request for Scenario	Tue 11/01/2011		4 KB 💝
	, ,	Actual and Projected Wivenhoe Releases - Note that is our worst case for the			18
! 🙈		Wivenhoe Dam Update	Tue 11/01/2011		14 🚩
		Wivenhoe ALERT level	Tue 11/01/2011		7 KB
		Projected Wivenhoe Outflows	Tue 11/01/2011		5 KB
		Wivenhoe Actual and Projected Releases	Tue 11/01/2011		11 F
		Situation Report 1800 12 Janaury 2011			17 🕅
			Tue 11/01/2011		
	Duty Lilyi	Actual and Projected Wivenhoe Releases	Tue 11/01/2011	10.00	11

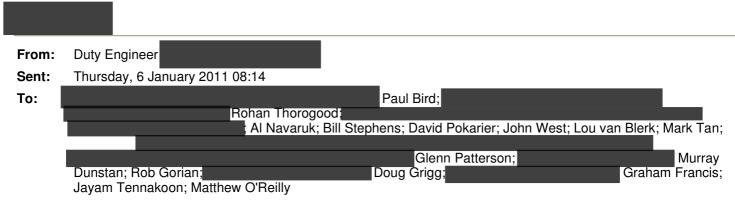
1

3/04/2011 07:35

Duty Engl Brisbane R Estimates Duty Engl Actual and Projected Wivenhoe Releases Duty Engl Actual and Projected Wivenhoe Releases (Updated) Duty Engl Wivenhoe Dam Directive #29 at 01:15 on Tuesdya 12 January 2011 Duty Engl Wivenhoe Dam Directive #30 Duty Engl Wivenhoe Directive #30 Duty Engl Wivenhoe Directive #30 Duty Engl Situation Report 0600 Wed 12/01/2011 Duty Engl Situation Report 0600 Wed 12/01/2011 Duty Engl Situation Report 0600 Wed 12/01/2011 Duty Engl Actual and Projected Wivenhoe Releases (Updated) Duty Engl Actual and Projected Wivenhoe Releases Duty Engl Actual and Projected Wivenhoe Releases Duty Engl Five River Levels at Mt Crosby Weir Duty Engl Five River Levels at Mt Crosby Weir Duty Engl Five River Levels at Mt Crosby Weir Duty Engl Five River Levels at Mt Crosby Weir Duty Engl Five Gauging at Jindalee Wed 12/01/2011 07:55 Duty Engl Five Gauging at Jindalee Wed 12/01/2011 07:55 At KB Duty Engl Five Gauging at Jindalee Wed 12/01/2011 07:59 At KB Duty Engl Five your consideration Wed 12/01/2011 07:59 Duty Engl Situation Report 1500 Wed 12/01/2011 Wed 12/01/2011 07:59 Duty Engl Situation Report 1500 Wed 12/01/2011 Wed 12/01/2011 17:57 Duty Engl Situation Report 1800 Wed 12/01/2011 Wed 12/01/2011 17:57 Duty Engl Wivenhoe Dam Projected Releases - 20:00 at Wednesday 12 January 2011 Wed 12/01/2011 17:57 Duty Engl Wivenhoe Dam Projected Releases - 20:00 at Wednesday 12 January 2011 Duty Engl Wivenhoe Dam Projected Releases - 20:00 at Wednesday 12 January 2011 Duty Engl Situation Report 1830 13 January 2011 Duty Engl Nort	<u>: D</u> 0	From	Subject	Received	Α	S	r
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Duty Engl Actual and Projected Wivenhoe Releases (Updated)				Tue 11/01/2011	21:10	11	7
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3/04/2011 07:35



Subject: Situation Report 0800 06/01/2011

ainfall

Since 9am Wednesday, there have been widespread falls of 30mm with isolated heavy falls up to 50mm in the Somerset and Wivenhoe catchments. Totals in the North Pine catchment have generally been below 10mm. Falls up to 60mm were recorded in the Leslie Harrion catchment.

The forecast for the next 24 to 48 hours is for totals up to 150mm in SE Qld.

The catchments remain wet and are likely to generate additional runoff in the event of rain.

North Pine Dam

At 0700 Thursday, North Pine Dam was 39.60m, 0.05m below gate trigger level and having risen 0.18m since 2/1/2011 due to a combination of baseflow and runoff from rain in the last 24 hours.

Given the forecast rain, gate operations will commence tonight. MBRC will be advised this morning

Somerset Dam

At 0700 Thursday, Somerset Dam was 99.34m, 0.34m above FSL, and rising slowly. The rain in the Stanley River catchment has produced a small amount of runoff in the upper Stanley but there have been significant rises in Kilcoy Ck. Further regulator operations will be required later Thursday.

Wivenhoe Dam

At 0700 Thursday, Wivenhoe Dam was 67.31m and rising slowly. This is 0.31m above FSL and above the gate trigger level of 67.25m. There have been rises recorded at rivers and stream upstream of Wivenhoe Dam. Gates will be opened in the next 24 hours to manage the inflows from the upper Brisbane River and the outflow from Somerset.

Impacts of Wivenhoe Dam Releases

Somerset Regional, Ipswich City and Brisbane City Councils will be advised of the potential for gate operations after a full assessment of the situation this morning. At this stage it is anticipated that peak releases from Wivenhoe will be below 500m3/s but this will depend on the forecast rain and flows downstream of the dam.

The expected Wivenhoe release and local flows will at least impact upon Twin Bridges, Savages Crossing, Kholo Bridge and Colleges Crossing for several days. At this stage, there are not expected to be any adverse impacts upon Fernvale Bridge, Burtons Bridge or Mt Crosby Weir Bridge

Leslie Harrison Dam

Following the heavy rainfall Wednesday night, gate operations commenced at Leslie Harrison Dam late Wednesday night and are continuing. Given the forecast rainfall, gate operations are expected to continue for the next 24 to 48 hours.

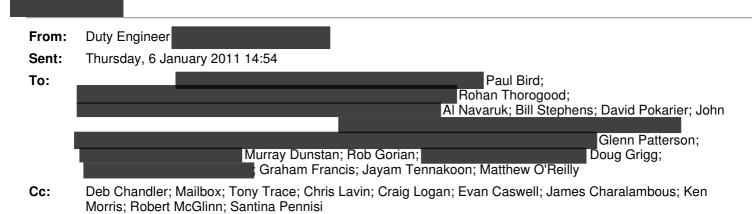
The next situation report will be issued at 1800 Thursday 6/1/2011.

Terry Malone
Duty Engineer
Flood Operations Centre



31/03/2011

Fax:



Subject: Situation Report 1500 06/02/2011

Rainfall

In the 6 hours since 9am Wednesday, there have been general totals around 30mm with isolated heavy falls up to 60mm in the Somerset and Wivenhoe catchments. Totals in the North Pine catchment have generally been between 20 and 30mm. Falls between 20 and 30mm were recorded in the Leslie Harrison catchment.

The forecast for the next 24 to 48 hours is for totals up to 100mm in SE Qld.

The catchments remain wet and are likely to generate additional runoff in the event of rain.

North Pine Dam

At 1400 Thursday, North Pine Dam was 39.66m, 0.01m above gate trigger level. Gate operations will commence at 1900 Thursday and will impact upon Youngs Crossing. MBRC have been advised and will confirm closure of Youngs Crossing prior to gate operations. Given the forecast rainfall during Friday, gate operations may continue into Saturday.

Somerset Dam

At 0700 Thursday, Somerset Dam was 99.34m, 0.34m above FSL, and rising slowly. The rain in the Stanley River catchment has produced a small amount of runoff in the upper Stanley but there have been significant rises in Kilcoy Ck, adding to the Somerset inflows. Further regulator/sluice operations will be required in the next 24 to 48 hours. The estimated event inflow volume into Somerset Dam is 50,000ML.

Wivenhoe Dam

At 0700 Thursday, Wivenhoe Dam was 67.31m and rising slowly. This is 0.31m above FSL and above the gate trigger level of 67.25m. There have been rises recorded at rivers and stream upstream of Wivenhoe Dam. The estimated event inflow volume into Wivenhoe Dam is 180,000ML including Somerset Dam outflow.

There has been significant rainfalls in the Lockyer Ck catchment since 0900 Thursday and a peak of about 600m3/s is expected from the Lockyer late Friday. Wivenhoe gates will be opened after flood levels in the lower Lockyer subside. At this stage Wivenhoe releases during Saturday may be as high as 1,500m3/s and continue for a couple of days.

Impacts of Wivenhoe Dam Releases

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the potential for gate operations during the next 24 hours.

The will at least impact upon Twin Bridges, Savages Crossing, Kholo Bridge and Colleges Crossing for several days. The relatively high Lockyer flows will at least impact upon Twin Bridges, Savages Crossing, Kholo Bridge and Colleges Crossing for several days and may impact upon Burtons Bridge early Saturday. At this stage, there are not expected to be any adverse impacts upon Fernvale Bridge or Mt Crosby Weir Bridge.

Leslie Harrison Dam

Following the heavy rainfall Wednesday night, gate operations commenced at Leslie Harrison Dam late Wednesday night and are continuing. Given the forecast rainfall, gate operations are expected to continue for the next 24 to 48 hours.

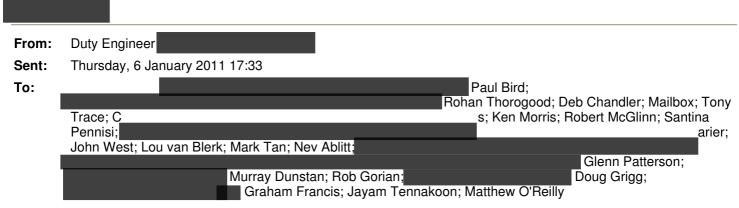
The next situation report will be issued at 1800 Thursday 6/1/2011.

Terry Malone

31/03/2011

Duty Engineer Flood Operations Centre





Subject: Situation Report 1800 06/01/2011

Rainfall

In the 8 hours since 9am Wednesday, there have been general totals around 30mm with isolated heavy falls up to 60mm in the Somerset and Wivenhoe catchments. There have been significant rainfalls in the Lockyer Ck catchment in the last 24 hours with widespread falls of 50mm and isolated falls up to 75mm. Totals in the North Pine catchment have generally been about 30mm. Falls between 20 and 30mm were recorded in the Leslie Harrison catchment.

The forecast for the next 24 to 48 hours is for totals up to 100mm in SE Qld.

North Pine Dam

At 1700 Thursday, North Pine Dam was 39.68m, 0.03m above gate trigger level. Gate operations will commence at 1900 Thursday and will impact upon Youngs Crossing. Moreton Bay Regional Council has been advised and will confirm closure of Youngs Crossing prior to gate operations. Given the forecast rainfall during Friday, gate operations may continue into Saturday.

Somerset Dam

At 1700 Thursday, Somerset Dam was 99.45m, 0.45m above FSL, and rising slowly. The rain in the Stanley River catchment has produced a small amount of runoff in the upper Stanley but there have been significant rises in Kilcoy Ck, adding to the Somerset inflows. Further regulator/sluice operations will be required in the next 24 to 48 hours. The estimated event inflow volume into Somerset Dam is 50,000ML.

Wivenhoe Dam

At 1700 Thursday, Wivenhoe Dam was 67.39m and rising slowly. This is 0.39m above FSL and above the gate trigger level of 67.25m. Upstream of the dam river levels are still rising at the Linville and Gregors Ck gauges. The estimated event inflow volume into Wivenhoe Dam is 180,000ML including Somerset Dam outflow.

A peak of about 600m3/s is expected from the Lockyer late Friday. At this stage there is some uncertainty associated with this estimate and it may or may not impact Burtons Bridge. Wivenhoe gates will be opened after the impact of Lockyer flows on Burtons Bridge has been ascertained and flood levels in the lower Lockyer subside. At this stage Wivenhoe releases will commence late Friday/early Saturday and may be as high as 1,500m3/s, similar to recent events, and continue for a couple of days.

Impacts of Downstream of Wivenhoe

Somerset Regional, Ipswich City and Brisbane City Councils 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, Kholo Bridge and Colleges Crossing for several days and may impact upon Burtons Bridge early Saturday. At this stage, there are not expected to be any adverse impacts upon Fernvale Bridge or Mt Crosby Weir Bridge.

Leslie Harrison Dam

Following the heavy rainfall Wednesday night, gate operations commenced at Leslie Harrison Dam late Wednesday night and are continuing. Given the forecast rainfall, gate operations are expected to continue for the next 24 to 48 hours.

The next situation report will be issued at 0600 Friday 7/1/2011.

Terry Malone

Duty Engineer Flood Operations Centre

Phone Fax:

From: Duty Engineer
Sent: Thursday, 6 January 2011 20:17
To: nstan; Rob Gorian;

Subject: North Pine Dam Directive # 2 at 20:15 on Thursday 6 January 2011 **Attachments:** OPS Directive NorthPine #2.doc

Please find attached Directive # 2 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone

Fax:

Cc: Chris Lavin; Craig Logan; Evan Caswell; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi;

Tony Trace; Deb Chandler; Mailbox

Subject: FOC Situation Report at 06:00 on Friday 7 January 2011

Rainfall

There have been general totals around 30 to 50 mm with isolated heavy falls up to 75mm in the Somerset and Wivenhoe catchments since the event commenced on Wednesday 5 January 2011. There have been significant rainfalls in the Lockyer Ck catchment in the last 72 hours with widespread falls of 50mm and isolated falls up to 100mm.

Totals in the North Pine catchment have generally been about 35mm.

Falls between 20 and 30mm were recorded in the Leslie Harrison catchment.

The forecast for the next five days is for totals between 100 and 200mm in SE Qld. Given the saturated condition of the catchments further runoff will most likely be generated from this rainfall.

North Pine Dam

At 0600 Friday, North Pine Dam was at 39.48m, 0.12m below FSL. Gate operations commenced at 1915 on Thursday 6 January and are expected to continue until at least mid-day Friday 7 January when North Pine Dam is expected to be at 39.40m. These releases have impacted upon Youngs Crossing. Moreton Bay Regional Council was advised and they closed Youngs Crossing prior to gate operations commencing. Based upon the forecast rainfall, gate operations may continue into Saturday, but at this stage it is anticipated that gate operations will cease at around mid-day on Friday 7 January 2011.

Somerset Dam

At 0600 Friday, Somerset Dam was at 99.59m, 0.59m above FSL, and rising slowly. The rain in the Stanley River catchment has produced a small amount of runoff in the Upper Stanley but there have been significant rises in Kilcoy Creek, contributing to the Somerset inflows. Somerset Dam is currently releasing at a rate of 35 cumecs and further regulator/sluice operations will be required in the next 24 to 72 hours.

The estimated event inflow volume into Somerset Dam is around 50,000ML.

Wivenhoe Dam

At 0600 Friday, Wivenhoe Dam was at 67.64m and rising slowly. This is 0.64m above FSL and above the gate trigger level of 67.25m. Upstream of the dam river levels have peaked at the Linville and Gregors Ck gauges. The estimated event inflow volume into Wivenhoe Dam is 230,000ML including Somerset Dam outflow.

A peak of about 470 cumecs is expected from Lockyer Creek by mid-afternoon on Friday 7 January. At this stage there is some uncertainty associated with this estimate but it may be of sufficient magnitude to inundate Burtons Bridge.

Wivenhoe gate releases will occur after the impact of Lockyer flows on Burtons Bridge has been ascertained and flood levels in the lower Lockyer subside. It is proposed that Wivenhoe releases will commence late Friday/early Saturday and may be as high as 1,200 cumecs, (similar but slightly smaller to recent events), and the releases are expected to continue over the weekend though to Monday or Tuesday.

Impacts of Downstream of Wivenhoe

Somerset Regional Council, Ipswich City 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 Colleges Crossing for several days and may impact upon Burtons Bridge from Friday mid-day and Kholo Bridge later on Friday evening. At this stage, there are not expected to be any adverse impacts upon Fernvale Bridge or Mt Crosby Weir Bridge.

Leslie Harrison Dam

Following the heavy rainfall Wednesday night, gate operations commenced at Leslie Harrison Dam late Wednesday night and are continuing. Given the forecast rainfall, gate operations are expected to continue for the next 24 to 48 hours.

The next situation report will be issued at 1800 Friday 7 January 2011.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre



From: Duty Engineer

Sent: Friday, 7 January 2011 08:05

To: David Roberts;
Rohan Thorogood;
Rohan Thorogood;

Glenn Patter
Murray Dunstan; Rob Gorian;
Graham Francis; Jayam Tenn

Subject: Operating Strategy over the next week

Importance: High

Advice from BoM indicates that SE Qld can expect some high rainfall totals over the next 5 days.

Friday: Rain at times 15-50mm with higher falls along the coast Saturday: Rain light at times 15-50mm with higher falls along the coast

Sunday: Widespread rain with totals between 50-100mm Monday: Widespread rain again with totals between 50-100mm

Tuesday: Rain easing with totals between 25-50mm

Given the saturated conditions of the dam catchments, significant volumes of inflows to our dams will be generated.

On this basis, the operating strategy for Somerset, Wivenhoe and North Pine needs to consider the current state of the storages and the project inflows.

North Pine

North Pine currently has 5 gates open releasing runoff from rain on Wed/Thursday. Given the very high likelihood of significant runoff during the next 5 days, it is recommended to keep gates open for the period, rather than opening and closing at various times with short notice. It will not be practical or may not be possible to adopt the usual strategy of opening and closing overnight to minimise the impact on Youngs Crossing.

Somerset

Somerset Dam currently has a regulator open 50%. At this stage, it is expected to open 1 or 2 sluices on Saturday. However, this may need to be reviewed if significant runoff occurs in the Stanley and Upper Brisbane. Under circumstances of high inflows to Somerset and Wivenhoe, it is the usual practice to hold flood water in Somerset until there is a high level of confidence in the estimated inflows to Wivenhoe.

Wivenhoe

As outlined in this morning's SitRep, it is intended to ramp up the release from Wivenhoe to about 1,200m3/s later today. However, given the high likelihood of significant inflows in the next week, this may be increased to 1,500m3/s in order to drain the current temporarily stored flood waters as soon as possible.

This will mean that all of the crossing downstream of Wivenhoe with the exception of Fernvale and Mt Crosby Weir Bridge will be adversely impacted.

Leslie Harrison

Given its proximity to the coast Leslie Harrison is likely to be most impacted by the forecast rain over the next 5 days.

It is likely that the releases from North Pine and Leslie Harrison will continue until the middle of next week and from Wivenhoe until next Friday. Staffing for the Flood Operations Centre will be arranged accordingly. Co-originators should start to plan for prolonged operations at dams.

Terry Malone Duty Engineer Flood Operations Centre

Phone:

31/03/2011

Fax:

Sent: Friday, 7 January 2011 10:23

To: Chris Lavin; Craig Logan; Evan Caswell; James Charalambous; Ken Morris; Robert

McGlinn; Santina Pennisi

Subject: Actual and Projected Wivenhoe Releases

Please note that Wivenhoe releases will commence at 1500 Friday and be slowly increased to about 1,200 m3/s by 1400 Saturday. It will initially be held around this level until Sunday morning at which time the release strategy will be reviewed and be dependent upon further rainfall.

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02/01/2011 1:	2:00:00	50	Actual
02/01/2011 1	3:00:00	50	Actual
02/01/2011 1	4:00:00	50	Actual
02/01/2011 1	5:00:00	50	Actual
02/01/2011 1	6:00:00	50	Actual
02/01/2011 1	7:00:00	50	Actual
02/01/2011 1	8:00:00	50	Actual
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03/01/2011 0	4:00:00	50	Actual
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31/03/2011

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04/01/2011 22	2:00:00	50	Actual
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05/01/2011 16	00:00:	50	Actual
05/01/2011 17	7:00:00	50	Actual
05/01/2011 18	3:00:00	50	Actual
05/01/2011 19	00:00:	50	Actual
05/01/2011 20	0:00:00	50	Actual
05/01/2011 21	:00:00	50	Actual
05/01/2011 22	2:00:00	50	Actual
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06/01/2011 15	5:00:00	50	Actual
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06/01/2011 17	7:00:00	50	Actual
06/01/2011 18	3:00:00	50	Actual
06/01/2011 19	9:00:00	50	Actual
06/01/2011 20	0:00:00	50	Actual
06/01/2011 21	1:00:00	50	Actual
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	7:00:00	204	Projected
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	9:00:00	303	Projected
	0:00:00	352	Projected
	1:00:00	398	Projected
	2:00:00	450	Projected
	3:00:00	465	Projected
08/01/2011 00	0:00:00	510	Projected
08/01/2011 01	1:00:00	562	Projected
	2:00:00	614	Projected
	3:00:00	665	Projected
08/01/2011 04	1:00:00	717	Projected
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08/01/2011 23:00:00	1207	Projected
09/01/2011 00:00:00	1205	Projected
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Duty Engineer Flood Operations Centre



Sent: Friday, 7 January 2011 15:09

To: Chris Lavin; Craig Logan; Evan Caswell; James Charalambous; Ken Morris; Robert

McGlinn; Santina Pennisi;

Cc:

Subject: Impact of Wivenhoe Releases on water levels in the Lower Brisbane River

Conversations have just taken place between BCC, Seqwater and BoM re impact of flows in the lower Brisbane R

Seqwater and BoM concur that a flow of a 1,500m3/s in the lower Brisbane R will only add about 50mm to the expected water levels in the City Reach on the recorded high tides. This has been demonstrated by a comparison of the recorded water levels at Whyte Is and Brisbane City gauges during periods of no flow and periods of higher flows in the last few months.

However, it should be noted that this impact varies during the tidal cycle and is more pronounced on the low tide level that the high tide level.

It is recognized that current recorded high tide levels are 0.4 to 0.5 metres higher than predicted tides due to atmospheric conditions.

Terry Malone

Duty Engineer Flood Operations Centre

Phone Fax:

From: Duty Engineer

Sent: Friday, 7 January 2011 17:57

To: David Robe Bird; Rohan Al Navaruk; Bill Stephens; David

Glenn Patterson; Murray Dunstan; Rob Gorian; Doug Grigg; Graham Francis; Jayam Tennakoon; Matthew O'Reilly; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell;

Subject: Situation Report 1800 Friday 07/01/2011

Rainfall

Since 0900 Friday, there has been widespread 20 to 40mm throughout North Pine, Somerset and Wivenhoe catchments with isolated higher totals of 70mm in the upper reaches of the Brisbane R.

Advice from BoM indicates that SE Qld can expect further high rainfall totals over the next 4 days.

James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Saturday: Rain light at times 15-50mm with higher falls along the coast

Sunday: Widespread rain with totals between 50-100mm

Monday: Widespread rain again with totals between 50-100mm

Tuesday: Rain easing with totals between 25-50mm

Given the saturated conditions of the catchments, significant inflows to Seqwater dams will be generated, especially following the forecast rainfall on Sunday/Monday

North Pine (Full Supply Level 39.60 m AHD)

At 1700 Friday, North Pine currently has 5 gates open releasing runoff from rain on Wed/Thursday. Given the very high likelihood of significant runoff during the next 4 days, gates will be keep open to match inflows over the next few days, rather than opening and closing at various times with short notice. Youngs Crossing will remain adversely impacted for the duration of the gates being open. Moreton Bay Regional Council has been advised and concurs with this strategy.

Somerset (Full Supply Level 99.00 m AHD)

At 1700 Friday, Somerset Dam level was 100.04m AHD and rising steadily with one regulator open 100%. However, as the Wivenhoe headwater level is rising and may impact upon the operation of the regulator, this will be closed in the next few hours and a sluice gate opened. However, this strategy may need to be reviewed if significant runoff occurs in the Stanley and Upper Brisbane. Under circumstances of high inflows to Somerset and Wivenhoe, it is the usual practice to hold flood water in Somerset until there is a high level of confidence in the estimated inflows to Wivenhoe.

Since the commencement of the event on 02/01/2011, approximately 55,000ML has flowed into Somerset Dam with a further 25,000ML expected based on the recorded rainfall to date. Approximately 16,000ML has been released into Wivenhoe.

Wivenhoe (Full Supply Level 67.00 m AHD)

At 1700 Friday, Wivenhoe Dam was 68.10 m AHD and rising steadily with one gate open to 1.5 metres and releasing about 168m3/s. River levels upstream of Wivenhoe Dam were rising again, generating further inflow to the dam It is intended to ramp up the release from Wivenhoe to about 1,200m3/s during the next 18 hours. However, given the high likelihood of significant inflows in the next week, this may be increased later on the weekend.

Since the commencement of the event on 02/01/2011, approximately 140,000ML has flowed into Wivenhoe Dam with a further 160,000ML expected (including Somerset release) based on the recorded rainfall to date. Approximately 24,000ML has been released from Wivenhoe via the hydro and regulator at about 50m3/s.

Impacts downstream of Wivenhoe

The projected Wivenhoe release of 1,200m3/s combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted for several days. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected.

Discussions were held with Brisbane City Council and BoM with all agencies agreeing that the combined flow in the lower Brisbane R will only add 50mm to an upper limit of 100mm to the recorded water levels in the City Reach of the Brisbane River. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.

Leslie Harrison

Given its proximity to the coast Leslie Harrison is likely to be most impacted by the forecast rain over the next 4 days.

Terry Malone Duty Engineer Flood Operations Centre



Sent: Friday, 7 January 2011 18:59

To:

Cc:

Subject: SitRep Clarification

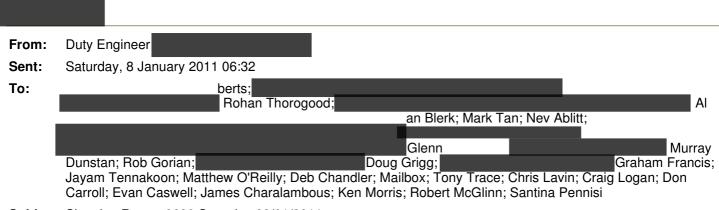
BCC pointed out that they have not done any analysis and do not necessarily agree with the 50 to 100mm but have accepted the BoM and Seqwater estimate.

Terry Malone

Duty Engineer Flood Operations Centre

Phone

Fax:



Subject: Situation Report 0600 Saturday 08/01/2011

Rainfall

Since 0900 Friday, there has been widespread 20 to 40mm throughout North Pine, Somerset and Wivenhoe catchments with isolated higher totals of 70mm in the upper reaches of the Brisbane R. No significant rain has fallen in the past 12 hours.

Advice from BoM indicates that SE Qld can expect further high rainfall totals over the next 4 days.

Saturday: Rain light at times 5-50mm with higher falls along the coast

Sunday: Widespread rain with totals between 50-100mm

Monday: Widespread rain again with totals between 50-100mm

Tuesday: Rain easing with totals between 25-50mm

Given the saturated conditions of the catchments, significant inflows to Seqwater dams will be generated, especially following the forecast rainfall on Sunday/Monday

North Pine (Full Supply Level 39.60 m AHD)

At 0600 Saturday, North Pine Lake Level was 39. 46 m AHD and slowly rising. Currently 3 gates are open to release runoff from rain on Wed/Thursday/Friday. Given the very high likelihood of significant runoff during the next 4 days, gates will be keep open to match inflows over the next few days, rather than opening and closing at various times with short notice. Youngs Crossing will remain adversely impacted for the duration of the gates being open. Moreton Bay Regional Council has been advised and concurs with this strategy.

Somerset (Full Supply Level 99.00 m AHD)

At 0500 Saturday, Somerset Dam level was 100.42m AHD and rising. The Dam is releasing into Wivenhoe through one open sluice gate. Water will be temporarily held in Somerset to allow the inflow from the upper Brisbane is passed through the system. However, this strategy may need to be reviewed if significant runoff occurs in the Stanley and Upper Brisbane. Under circumstances of high inflows to Somerset and Wivenhoe, it is the usual practice to hold flood water in Somerset until there is a high level of confidence in the estimated inflows to Wivenhoe.

Since the commencement of the event on 02/01/2011, approximately 85,000ML has flowed into Somerset Dam with a further 20,000ML expected based on the recorded rainfall to date. Approximately 25,000ML has been released into Wivenhoe.

Wivenhoe (Full Supply Level 67.00 m AHD)

At 0600 Saturday, Wivenhoe Dam was 68.45 m AHD and rising steadily with all five gates open and releasing about 890 m3/s. River levels upstream of Wivenhoe Dam were rising again, generating further inflow to the dam. It is intended to ramp up the release from Wivenhoe to 1,200m3/s by midday Saturday 08/01/2011. Further assessments will be undertaken to determine increases above this level. However, given the high likelihood of significant inflows in the next week, this may be increased.

Since the commencement of the event on 02/01/2011, approximately 200,000ML has flowed into Wivenhoe Dam (including Somerset releases) with a further 180,000ML expected based on the recorded rainfall to date. Approximately 50,000ML has been released from Wivenhoe via the hydro and regulator at about 50m3/s.

Impacts downstream of Wivenhoe

The projected Wivenhoe release of 1,200m3/s combined with Lockyer flows and local runoff will mean that all crossings

downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Colleges Crossing) will be adversely impacted for several days. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected but they could potentially be affected if the predicted rainfall totals eventuate.

The current available assessments indicate that the combined flow in the lower Brisbane R would only add 50mm to an upper limit of 100mm to the recorded water levels in the City Reach of the Brisbane Rive. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.

John Ruffini Duty Engineer Flood Operations Centre



From: Duty Engineer
Sent: Saturday, 8 January 2011 08:08

To: Doug Grigg; Graham Francis; Jayam

Subject: Wivenhoe Dam Directive # 4 at 08:15 on Staurday 8 January 2011

Attachments: OPS_Directive_Wivenhoe #4.doc

Please find attached a copy of Wivenhoe Dam Directive # 4 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone Fax:

From: Duty Engineer
Sent: Saturday, 8 January 2011 10:18
To: nstan; Rob Gorian;

Subject: North Pine Dam Directive # 5 at 10:15 on Saturday 8 January 2011

Attachments: OPS_Directive_NorthPine #5.doc

Please find attached Directive # 5 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone

Fax:

Sent: Saturday, 8 January 2011 11:23

To: Doug Grigg; Graham Francis; Jayam

Tennakoon; Matthew O'Reilly;

Subject: Somerset Dam Directive # 3 at 11:30 on Saturday 8 January 2011

Attachments: OPS_Directive_Somerset #3.doc

Please find attached Directive # 3 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone

Fax:

Sent: Saturday, 8 January 2011 12:16

To: David Roberts; Paul Bird; Rohan

Thorogood; Al Navaruk; Bill Stephens; David

; Glenn Patterson; Murray Dunstan; Rob Gorian; Doug Grigg; Graham Francis; Jayam Tennakoon;

Matthew O'Reilly

Cc: Deb Chandler; Mailbox; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi; Tony Trace

Subject: FOC Status Report at 12:00 on Saturday 8 January 2011

Rainfall

No significant rain has fallen over the dam catchments in the past 18 hours.

Advice from BoM indicates that SE Qld can expect further high rainfall totals over the next 4 days.

Saturday: Rain light at times 5-50mm with higher falls along the coast

Sunday: Widespread rain with totals between 50-100mm Monday: Widespread rain again with totals between 50-100mm

Tuesday: Rain easing with totals between 25-50mm

Given the saturated conditions of the catchments, significant inflows to Seqwater dams will be generated, especially following the forecast rainfall on Sunday/Monday.

North Pine (Full Supply Level 39.60 m AHD)

At 1200 Saturday, North Pine Lake Level was 39.46 m AHD and is steady. Currently 2 gates are open to release runoff generated from rainfall over the last three days. Given the very high likelihood of significant runoff during the next 4 days, gates will be kept open to match inflows over the next few days, rather than opening and closing at various times with short notice. Lake Kurwongbah spillway flows are also contributing to the adverse impacts experienced at Youngs Crossing.

Youngs Crossing will remain adversely impacted for the duration of the gates being open.

Moreton Bay Regional Council has been advised and concurs with this strategy.

Somerset (Full Supply Level 99.00 m AHD)

At 1000 Saturday, Somerset Dam level peaked at 100.47m AHD and is now slowly falling. At 1200 it is now 100.45m. Somerset Dam is releasing into Wivenhoe through two open sluice gates and over the fixed crest at a rate of about 415 m3/s.

Since the commencement of the event on 02/01/2011, approximately 91,000ML has flowed into Somerset Dam with a further 20,000ML expected based on the recorded rainfall to date. Approximately 29,000ML has been released into Wivenhoe.

Wivenhoe (Full Supply Level 67.00 m AHD)

At 1200 Saturday, Wivenhoe Dam was 68.60 m AHD and rising steadily with all five gates open and releasing about 1,150 m3/s. River levels upstream of Wivenhoe Dam have peaked and are now receding. However the further inflows into the dam has led to elevated levels. It is intended to increase the release from Wivenhoe to 1,250 m3/s by 14:00 on Saturday 08/01/2011. This will maintain flows of up to 1,600 m3/s in the mid-Brisbane River throughout the afternoon.

Further assessments will be undertaken to determine increases above this level given the high likelihood of significant inflows in the next few days. The interaction with runoff from the Bremer River and Warrill Creek catchment will also be assessed to determine an appropriate release strategy. Projections based upon the forecast rainfalls suggest flows of up to 1,200 m3/s will emanate from the Bremer River catchment.

Since the commencement of the event on 02/01/2011, approximately 202,000ML has flowed into Wivenhoe Dam (including Somerset releases) with a further 210,000ML expected based on the recorded rainfall to date. Approximately 66,000ML has been released from Wivenhoe via the radial gates, hydro and regulator.

Impacts downstream of Wivenhoe

The projected Wivenhoe release of 1,250m3/s and 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 Colleges Crossing) will be adversely impacted for several days. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected, but they could potentially be affected if the predicted rainfall totals eventuate and higher releases from Wivenhoe Dam are considered necessary.

The current available assessments indicate that the combined flow in the lower Brisbane River would only add 50mm to an upper limit of 100mm to the recorded water levels in the City Reach of the Brisbane River. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides. The tide level at the Port Office Gauge at 1200 Saturday was 1.56 m and rising.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre



Sent: Saturday, 8 January 2011 14:58

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Projected Releases - Wivenhoe Dam at 1500 on Saturday 8 January 2011

Please find attached a copy of the projected release for Wivenhoe Dam based upon our current strategy. This will be subject to change if the forecast rainfall occurs.

02/01/2011 0	09:00:00	50	Actual
02/01/2011 1	10:00:00	50	Actual
02/01/2011 1	11:00:00	50	Actual
02/01/2011 1	12:00:00	50	Actual
02/01/2011 1	13:00:00	50	Actual
02/01/2011 1	14:00:00	50	Actual
02/01/2011 1	15:00:00	50	Actual
02/01/2011 1	16:00:00	50	Actual
02/01/2011 1	17:00:00	50	Actual
02/01/2011 1	18:00:00	50	Actual
02/01/2011 1	19:00:00	50	Actual
02/01/2011 2	20:00:00	50	Actual
02/01/2011 2	21:00:00	50	Actual
02/01/2011 2	22:00:00	50	Actual
02/01/2011 2	23:00:00	50	Actual
03/01/2011 0	00:00:00	50	Actual
03/01/2011 0	01:00:00	50	Actual
03/01/2011 0	02:00:00	50	Actual
03/01/2011 0	03:00:00	50	Actual
03/01/2011 0	04:00:00	50	Actual
03/01/2011 0	05:00:00	50	Actual
03/01/2011 0	06:00:00	50	Actual
03/01/2011 0	07:00:00	50	Actual
03/01/2011 0	08:00:00	50	Actual
03/01/2011 0	09:00:00	50	Actual
03/01/2011 1	10:00:00	50	Actual
03/01/2011 1	11:00:00	50	Actual
03/01/2011 1	12:00:00	50	Actual
03/01/2011 1	13:00:00	50	Actual
03/01/2011 1	14:00:00	50	Actual
03/01/2011 1	15:00:00	50	Actual
03/01/2011 1	16:00:00	50	Actual
03/01/2011 1	17:00:00	50	Actual
03/01/2011 1	18:00:00	50	Actual
03/01/2011 1	19:00:00	50	Actual
03/01/2011 2	20:00:00	50	Actual
03/01/2011 2	21:00:00	50	Actual
03/01/2011 2	22:00:00	50	Actual
03/01/2011 2	23:00:00	50	Actual
04/01/2011 0	00:00:00	50	Actual
04/01/2011 0	01:00:00	50	Actual
04/01/2011 0	02:00:00	50	Actual

04/01/2011 03:00:00	50	Actual
04/01/2011 04:00:00	50	Actual
04/01/2011 05:00:00	50	Actual
04/01/2011 06:00:00	50	Actual
04/01/2011 07:00:00	50	Actual
04/01/2011 08:00:00	50	Actual
04/01/2011 09:00:00	50	Actual
04/01/2011 10:00:00	50	Actual
04/01/2011 11:00:00	50	Actual
04/01/2011 12:00:00	50	Actual
04/01/2011 13:00:00	50	Actual
04/01/2011 14:00:00	50	Actual
04/01/2011 15:00:00	50	Actual
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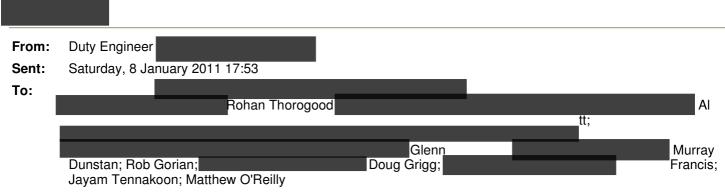
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17/01/2011 07:00:00	13	Projected
17/01/2011 08:00:00	13	Projected

Duty Engineer Flood Operations Centre





Cc: Deb Chandler; Mailbox; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi; Tony Trace

Subject: FOC Situation Report at 18:00 on Saturday 8 January 2011

Rainfall

Some rain has fallen over the dam catchments in the past 12 hours. Catchment average rainfall for this period for North Pine Dam is 6 mm; Stanley River has received 12 mm; and the Upper Brisbane River 4 mm. This has resulted in minor increases in runoff into Somerset dam.

Advice from BoM indicates that SE Qld can expect further high rainfall totals over the next 4 days.

The forecast for the Somerset-Wivenhoe catchment for the next 24 hours is 30 to 50 mm, whilst North Pine is expected to receive 40 to 60 mm in the next 24 hours

The outlook for the following days are:-

Sunday: Widespread rain with totals between 50-100mm

Monday: Widespread rain again with totals between 50-150mm

Tuesday: Rain easing with totals between 25-50mm

Given the saturated conditions of the catchments, significant inflows to Seqwater dams will be generated, especially following the forecast rainfall on Sunday/Monday.

North Pine (Full Supply Level 39.60 m AHD)

At 1700 Saturday, North Pine Lake Level was 39.47 m AHD and steady. Currently two gates are open to release runoff generated from rainfall over the last three days. Given the very high likelihood of significant runoff during the next 4 days, gates will be kept open to match inflows over the next few days, rather than opening and closing at various times with short notice. Lake Kurwongbah spillway flows are also contributing to the adverse impacts experienced at Youngs Crossing.

Youngs Crossing will remain adversely impacted for the duration of the gates being open.

Moreton Bay Regional Council has been advised and concurs with this strategy.

Somerset (Full Supply Level 99.00 m AHD)

Somerset Dam level peaked at 100.47m AHD at 10:00 today and is now slowly falling. At 1700 it is now 100.41m. Somerset Dam is releasing into Wivenhoe through two open sluice gates and over the fixed crest at a rate of about 415 m3/s.

Since the commencement of the event on 02/01/2011, approximately 95,000ML has flowed into Somerset Dam with a further 20,000ML expected based on the recorded rainfall to date. Approximately 38,000ML has been released into Wivenhoe.

Wivenhoe (Full Supply Level 67.00 m AHD)

At 1800 Saturday, Wivenhoe Dam was 68.65 m AHD and rising slowly with all five gates open and releasing about 1,250 m3/s. River levels upstream of Wivenhoe Dam have peaked and are now receding. However the further inflows may result from any additional rainfall. The current gate operation strategy will maintain flows of up to 1,600 m3/s in the mid-Brisbane River throughout the evening.

Since the commencement of the event on 02/01/2011, approximately 227,000ML has flowed into Wivenhoe Dam (including Somerset releases) with a further 200,000ML expected based on the recorded rainfall to date. Approximately 93,000ML has been released from Wivenhoe via the radial gates, hydro and regulator.

Impacts downstream of Wivenhoe

The current Wivenhoe release of 1,250m3/s 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 Colleges Crossing) will be adversely impacted for several days (until Wednesday 12 January). At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected, but they could potentially be affected if the predicted rainfall totals eventuate and higher releases from Wivenhoe Dam are considered necessary.

The current available assessments indicate that the combined flow in the lower Brisbane River would only add 50mm to an upper limit of 100mm to the recorded water levels in the City Reach of the Brisbane River. However, it is noted that tides in the lower Brisbane R will be 0.4 to 0.5 metres higher than predicted tides. The tide level at the Port Office Gauge at 1700 Saturday was 0.06 m and falling.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.

Forecast Scenario – Based upon mid-range rainfall forecasts.

Assessments have been undertaken to determine possible increases to releases given the high likelihood of significant inflows in the next few days. The interaction with runoff from the Bremer River and Warrill Creek catchment is an important consideration as the event magnitude will require the application of Wivenhoe Dam flood operation strategy W2 (Transition strategy between minimizing downstream impacts and maximizing protection to urban areas).

Projections based upon the forecast rainfalls suggest flows of up to 1,200 m3/s will emanate from the Bremer River catchment. If similar rainfall magnitudes occur in the Upper Brisbane and Stanley Rivers then increased releases may be required from both Somerset Dam and Wivenhoe Dam. Preliminary projections suggest that such a forecast will extend the release duration until next Saturday 15 January, but mid-Brisbane River flows will be kept to a maximum of 1,800 m3/s. However, if falls are greater than those forecast releases from Wivenhoe Dam may need to adversely impact Mt Crosby Weir Bridge (1,900 m3/s) and possibly Fernvale Bridge (2,100 m3/s) but will be maintained below 3,500 m3/s.

The assessments will be updated as the event progresses.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre



From: Duty Engineer

Sent: Sunday, 9 January 2011 01:21

To: Graham Francis; Jayam

Tennakoon; Matthew O'Reilly;

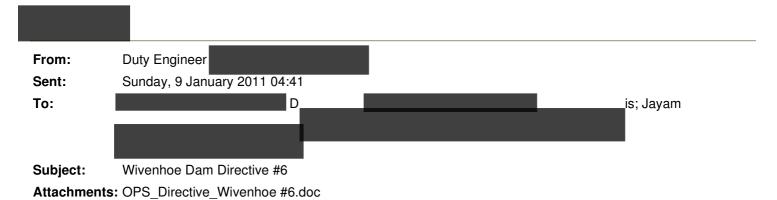
Subject: Wivenhoe Dam Directive #5

Attachments: OPS_Directive_Wivenhoe #5.doc

Please find attached a copy of Wivenhoe Dam Directive # 5.

John Tibaldi
Duty Engineer
Flood Operations Centre

Phone Fax:



Please find attached a copy of Wivenhoe Dam Directive # 6.

John Tibaldi Duty Engineer Flood Operations Centre



From: Duty Engineer
Sent: Sunday, 9 Januar

Sunday, 9 January 2011 06:15

To: erts; Paul Bird; Peter Allen; Rohan Thorogood;

Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt;

Dunstan; Rob Gorian; Glen Glen Murray
Doug Grigg; Graham Francis;

Jayam Tennakoon; Matthew O'Reilly

Cc: Deb Chandler; Mailbox; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi; Tony Trace

Subject: FOC Situation Report at 06:00 on Sunday 9 January 2011

Rainfall

Catchment average rainfall for the past 12 hours is; North Pine Dam (less than 10 mm); Somerset Dam (40 mm); Wivenhoe Dam (less than 10 mm). The bulk of the rain that has fallen in the Somerset Dam catchment has occurred in the last two hours, with recorded falls exceeding 60mm in some areas. The BOM forecast for the next seven days issued at 0450 this morning is:-

Sunday: Rain periods.
Monday: Rain periods.
Tuesday: Rain periods.
Wednesday A few showers.
Thursday A shower or two.
Saturday Mostly fine.

A severe whether warning remains current for heavy rainfall in the dam catchment areas. The dam catchments are relatively saturated and significant inflows will be generated if the forecast rainfall eventuates.

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is currently 39.47 m AHD and steady. Two radial gates remain open to release runoff generated from recent rainfall. Based on rainfall forecasts, the radial gates have been kept open in anticipation of further inflows over the next few days. However unless significant rain falls today, consideration will be given to closing the gates late this afternoon or early tomorrow morning and discussions to finalise a decision on the timing of radial gate closure will be held with the Moreton Bay Regional Council later today. Youngs crossing will remain closed while releases are in progress.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is currently falling slowly, with the current level being 100.27m AHD. However the rain that has fallen in the dam catchment over the last two hours (recorded falls exceed 60mm in some areas) will result in significant inflows later today. The current release rate into Wivenhoe Dam is 35,000ML/day. Since the commencement of the event on 02/01/2011approximately 56,000ML has been released from the dam, with a total of at least 150,000ML to be released on the currently recorded rainfall. The total release for the event is likely to increase significantly over the next few days based on the current rainfall forecasts. At this stage, releases will continue until at least Tuesday.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is currently falling slowly, with the current level being 68.58m AHD. River levels upstream of the dam are receding, however further inflows will result from any additional rainfall. The current gate operation strategy will maintain flows of around 1,600m³/s in the mid-Brisbane River. The current release rate from Wivenhoe Dam is 116,000ML/day. Since the commencement of the event on 02/01/2011approximately 150,000ML has been released from the dam, with a total of at least 450,000ML to be released based on the currently recorded rainfall. The total release for the event is likely to increase over the next few days based on the current rainfall forecasts. At this stage, releases will continue until at least Wednesday.

Impacts downstream of Wivenhoe Dam

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 Colleges Crossing) will be

adversely impacted until at least Wednesday 12 January. At this stage Fernvale and Mt Crosby Weir Bridge are not expected to be affected, but this may be revised if the predicted rainfall totals eventuate and higher releases from Wivenhoe Dam are considered necessary.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.

John Tibaldi Duty Engineer Flood Operations Centre

Phone
Fax:

Sent: Sunday, 9 January 2011 08:44

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Wivenhoe Actual and Projected Releases

Wivenhoe [Dam Actual	and Pro	iected F	Releases
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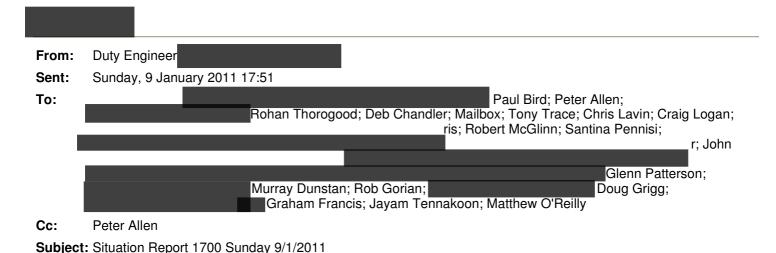
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Duty Engineer Flood Operations Centre





Rainfall

Catchment average rainfall for the past 12 hours is; North Pine Dam (60 mm); Somerset Dam (150 mm); Wivenhoe Dam (80 mm). The bulk of the rain that has fallen in the upper reaches of the Stanley and Brisbane Rivers.

The BOM rainfall forecast for the next few days is:-

Monday: Very heavy rain periods with totals up to 300mm centred around North Pine.

Tuesday: Rain periods with totals up to 150mm centred around North Pine.

Wednesday A few showers less than 10mm

Thursday A shower or two. Friday A shower or two. Saturday Mostly fine.

A severe whether warning remains current for heavy rainfall in the dam catchment areas. The dam catchments are relatively saturated and significant inflows will be generated if the forecast rainfall eventuates.

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is currently 39.65 m AHD and rising at 1600. Following the rain in the 9 hours, the number of open gates has been increased from 2 to 5 which are expected to remain open for the next 12 hours. Youngs Crossing will remain closed while releases are in progress.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 100.75 m AHD and rising quickly. Estimated peak inflow to the dam is about 3,000m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000Ml/d) into Wivenhoe Dam. At this stage the dam will reach at least 101.5 during early Tuesday morning.

Since the commencement of the event on 02/01/2011approximately 80,000ML has been released from the dam, with an event total of at least 320,000ML based on the recorded rainfall to date. The event total is expected to increase significantly due to the forecast rain in the next 24 to 48 hours. At this stage, releases will continue until at least Wednesday.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is currently rising again, with the current level being 68.70m AHD. Estimated peak inflow to the dam just from the Upper Brisbane R is about 5,000m3/s and, at this stage, the dam will reach at least 72.5 m AHD during Wednesday morning. River levels upstream of the dam are rising quickly with significant inflow being generated from the intense heavy rainfall. The current gate operation strategy will maintain flows of around 1,600m³/s in the mid-Brisbane River for the next 24 hours. This may mean temporarily reducing releases from Wivenhoe Dam as Lockyer flows increase. However, releases may have to be increased significantly during Monday depending on the rain in the next 12 to 24 hours. The current release rate from Wivenhoe Dam is 1,400m3/s (120,000ML/day).

Since the commencement of the event on 02/01/2011 approximately 210,000ML has been released from the dam, with an event total approaching 1,000,000ML (including Somerset outflow) based on the recorded rainfall to date. The total release for the event is likely to increase over the next few days based on the current rainfall forecasts. At this stage, releases will continue until at least Saturday 15th January 2011.

Impacts downstream of Wivenhoe Dam

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 Colleges Crossing) will be adversely impacted until at least Saturday 15 January.

At this stage Fernvale and Mt Crosby Weir Bridge will not be affected for the next 24 hours but there is a strong possibility that, if the predicted rainfall totals eventuate in the next 12 to 24 hours, higher releases from Wivenhoe Dam will be necessary. This may adversely impact upon Fernvale and Mt Crosby Weir Bridges as early as Tuesday morning.

Water levels in the lower Brisbane R will be impacted by the combined flows of Lockyer Ck, Bremer River, local runoff and releases from Wivenhoe Dam.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the Wivenhoe operating strategy.

Terry Malone

Duty Engineer Flood Operations Centre



Sent: Sunday, 9 January 2011 17:57

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Wivenhoe Actual and Projected Releases

Please note that projected releases may change significantly in the next 24 to 48 hours

Wivenhoe Dam Actu	al and	Projected Releases
Source: Seqwater FO	OC	9/01/2011 17:55
02/01/2011 09:00:00	50	Actual
02/01/2011 10:00:00	50	Actual
02/01/2011 11:00:00	50	Actual
02/01/2011 12:00:00	50	Actual
02/01/2011 13:00:00	50	Actual
02/01/2011 14:00:00	50	Actual
02/01/2011 15:00:00	50	Actual
02/01/2011 16:00:00	50	Actual
02/01/2011 17:00:00	50	Actual
02/01/2011 18:00:00	50	Actual
02/01/2011 19:00:00	50	Actual
02/01/2011 20:00:00	50	Actual
02/01/2011 21:00:00	50	Actual
02/01/2011 22:00:00	50	Actual
02/01/2011 23:00:00	50	Actual
03/01/2011 00:00:00	50	Actual
03/01/2011 01:00:00	50	Actual
03/01/2011 02:00:00	50	Actual
03/01/2011 03:00:00	50	Actual
03/01/2011 04:00:00	50	Actual
03/01/2011 05:00:00	50	Actual
03/01/2011 06:00:00	50	Actual
03/01/2011 07:00:00	50	Actual
03/01/2011 08:00:00	50	Actual
03/01/2011 09:00:00	50	Actual
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03/01/2011 11:00:00	50	Actual
03/01/2011 12:00:00	50	Actual
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03/01/2011 17:00:00	50	Actual
03/01/2011 18:00:00	50	Actual
03/01/2011 19:00:00	50	Actual
03/01/2011 20:00:00	50	Actual
03/01/2011 21:00:00	50	Actual
03/01/2011 22:00:00	50	Actual
03/01/2011 23:00:00	50	Actual
04/01/2011 00:00:00	50	Actual

04/01/2011	01:00:00	50	Actual
04/01/2011	02:00:00	50	Actual
04/01/2011	03:00:00	50	Actual
04/01/2011	04:00:00	50	Actual
04/01/2011	05:00:00	50	Actual
04/01/2011	06:00:00	50	Actual
04/01/2011	07:00:00	50	Actual
04/01/2011	08:00:00	50	Actual
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04/01/2011	18:00:00	50	Actual
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	23:00:00	50	Actual
	00:00:00	50	Actual
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	20:00:00	50	Actual
	21:00:00	50	Actual
	22:00:00	50	Actual
	23:00:00	50	Actual
	00:00:00	50 50	Actual
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	03:00:00	50	Actual
	04:00:00	50	Actual
06/01/2011	00:00:60	50	Actual

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06/01/2011	17:00:00	50	Actual
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07/01/2011	19:00:00	267	Actual
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07/01/2011	23:00:00	468	Actual
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17/01/2011 03:00:00	13	Projected
17/01/2011 04:00:00	13	Projected
17/01/2011 05:00:00	13	Projected
17/01/2011 06:00:00	13	Projected

17/01/2011 07:00:00 13 Projected 17/01/2011 08:00:00 13 Projected

Duty Engineer Flood Operations Centre

Phone Fax:

Sent: Sunday, 9 January 2011 21:04

To: David Roberts;

Rohan Thorogood; u van Blerk; Mark Tan; Nev Ablitt;

Doug Grigg;

Glenn Patterson;

Murray Dunstan; Rob Gorian; Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Cc: Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James

Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Subject: Situation Report 2100 9/01/2011

Importance: High

Rainfall

Very heavy rainfall has been recorded in the upper reaches of the Brisbane and Stanley in the last 6 hours with totals up 100 to 140mm. Totals for the last 24 hours range from 100 to 300mm.

Rainfall of similar magnitudes is expected in the 12 to 24 hours, especially around the Bremer/Warrill catchments as the system tracks south.

A severe weather warning remains current for heavy rainfall in the dam catchment areas.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 101.68 m AHD (about 500,000ML currently in storage) and rising quickly. Peak inflow to the dam is estimated to be about 4,000 m3/s based on observed rainfall and could be as high as 5,000m3/s with additional forecast rainfall. Five sluice gates are open releasing about 1,100m3/s (95,000Ml/d) into Wivenhoe Dam. At this stage the dam will reach at least 103.5 early Tuesday morning which will adversely impact areas around Kilcoy.

Since the commencement of the event on 02/01/2011approximately 100,000ML has been released from the dam into Wivenhoe, with an event total of the order of 520,000ML expected. This may increase due to the forecast rain in the next 24 to 48 hours. At this stage, releases will continue until at least Thursday.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

River levels upstream of the dam are rising quickly with significant inflow being generated from the intense heavy rainfall. Flows in the Brisbane River at Gregor's Ck have already reached 6,700m3/s and the river is still rising.

The dam level is rising again, with the current level being 69.10m AHD (1,410,000ML with about 300,00 of flood storage). Estimated peak inflow to the dam just from the Upper Brisbane R alone may reach as high as 7,500m3/s and, at this stage, the dam will reach at least 73.0 m AHD during Tuesday morning. Given the rapid increase in inflow volumes, it will be necessary to increase the release from Wivenhoe Monday morning.

The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam and, at this stage, releases will be kept below 3,500m3/s and the combined flows is the lower Brisbane will be limited to 4,000m3/s. This is below the limit of urban damages in the City reaches.

The current release rate from Wivenhoe Dam is 1,400m3/s (120,000ML/day). Gate opening will start to be increased from noon Monday and the release is expected increase to at least 2,600m3/s during Tuesday morning.

Since the commencement of the event on 02/01/2011 approximately 220,000ML has been released from the dam, with an event total approaching 1,000,000ML without further rain and as much as 1,500,000ML with forecast rainfall of (both including Somerset outflow). At this stage, releases will continue until at least Sunday 16th January 2011.

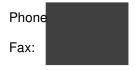
Impacts downstream of Wivenhoe Dam

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 Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees.

Water levels in the lower Brisbane R will be impacted by the combined flows of Lockyer Ck, Bremer River, local runoff and releases from Wivenhoe Dam.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the updated Wivenhoe operating strategy.

Terry Malone Duty Engineer Flood Operations Centre



Sent: Sunday, 9 January 2011 21:08

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Actual and Projected Wivenhoe Releases

Wivenhoe Dam Actual and Projected Releases

Wivenhoe Dam Actual	and Pr	rojected Releases
Source: Seqwater FO	3	9/01/2011 20:52
02/01/2011 09:00:00	50	Actual
02/01/2011 10:00:00	50	Actual
02/01/2011 11:00:00	50	Actual
02/01/2011 12:00:00	50	Actual
02/01/2011 13:00:00	50	Actual
02/01/2011 14:00:00	50	Actual
02/01/2011 15:00:00	50	Actual
02/01/2011 16:00:00	50	Actual
02/01/2011 17:00:00	50	Actual
02/01/2011 18:00:00	50	Actual
02/01/2011 19:00:00	50	Actual
02/01/2011 20:00:00	50	Actual
02/01/2011 21:00:00	50	Actual
02/01/2011 22:00:00	50	Actual
02/01/2011 23:00:00	50	Actual
03/01/2011 00:00:00	50	Actual
03/01/2011 01:00:00	50	Actual
03/01/2011 02:00:00	50	Actual
03/01/2011 03:00:00	50	Actual
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03/01/2011 08:00:00	50	Actual
03/01/2011 09:00:00	50	Actual
03/01/2011 10:00:00	50	Actual
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03/01/2011 21:00:00	50	Actual
03/01/2011 22:00:00	50	Actual
03/01/2011 23:00:00	50	Actual
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04/01/2011 02:00:00	50	Actual
04/01/2011 03:00:00	50	Actual
31/03/2011		

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04/01/2011	07:00:00	50	Actual
04/01/2011	08:00:00	50	Actual
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04/01/2011	10:00:00	50	Actual
04/01/2011	11:00:00	50	Actual
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04/01/2011	13:00:00	50	Actual
04/01/2011	14:00:00	50	Actual
04/01/2011	15:00:00	50	Actual
04/01/2011	16:00:00	50	Actual
04/01/2011	17:00:00	50	Actual
04/01/2011	18:00:00	50	Actual
04/01/2011	19:00:00	50	Actual
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05/01/2011	03:00:00	50	Actual
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05/01/2011	22:00:00	50	Actual
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06/01/2011		50	Actual
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06/01/2011	09:00:00	50	Actual
06/01/2011	10:00:00	50	Actual
06/01/2011	11:00:00	50	Actual
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07/01/2011	03:00:00	50	Actual
07/01/2011	04:00:00	50	Actual
07/01/2011	05:00:00	50	Actual
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07/01/2011	07:00:00	50	Actual
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07/01/2011		470	Actual
08/01/2011		523	Actual
08/01/2011		576	Actual
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08/01/2011		1209	Actual
2.2.7.2011			

08/01/2011 14:00:00	1261	Actual
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10/01/2011 12:00:00		Projected Projected
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10/01/2011 16:00:00		Projected Projected
10/01/2011 17:00:00		•
10/01/2011 10.00.00	, 2023	Projected

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10/01/2011 23:00:00	2320	Projected
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12/01/2011 23:00:00	2556	Projected

13/01/2011	00:00:00	2552	Projected
13/01/2011	01:00:00	2549	Projected
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13/01/2011	03:00:00	2539	Projected
13/01/2011	04:00:00	2533	Projected
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13/01/2011	12:00:00	2482	Projected
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13/01/2011	17:00:00	2449	Projected
13/01/2011	18:00:00	2442	Projected
13/01/2011	19:00:00	2435	•
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			Projected
13/01/2011	21:00:00	2422	Projected
13/01/2011	22:00:00	2415	Projected
13/01/2011		2408	Projected
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14/01/2011	02:00:00	2388	Projected
14/01/2011		2381	Projected
14/01/2011		2374	Projected
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14/01/2011	07:00:00	2352	Projected
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14/01/2011	17:00:00	2280	Projected
14/01/2011	18:00:00	2272	Projected
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15/01/2011	02:00:00	2122	Projected
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15/01/2011 05:00:00	2101	Projected
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15/01/2011 17:00:00	2013	Projected
15/01/2011 17:00:00	2005	•
15/01/2011 19:00:00	1998	Projected Projected
		Projected
15/01/2011 20:00:00	1990	Projected
15/01/2011 21:00:00	1982	Projected
15/01/2011 22:00:00	1975	Projected
15/01/2011 23:00:00	1967	Projected
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17/01/2011 06:00:00	1710	Projected
17/01/2011 07:00:00	1701	Projected
17/01/2011 08:00:00	1692	Projected
2 . 31. 23.00.00	-	2,20.00



From: Duty Engineer

Sent: Monday, 10 January 2011 01:14

To: David Roberts;

Rohan Thorogood;

an Blerk; Mark Tan; Nev Ablitt;

Glenn Patterson;

Graham Francis;

Jayam Tennakoon; M

Cc: Andy Bickerton; Deb Chandler; Mailbox; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James

Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi; Tony Trace

Subject: FOC Situation Report at 01:00 hrs on Monday 10 January 2011

Rainfall

Very heavy rainfall has been recorded in the Upper Brisbane and Stanley Rivers in the last 12 hours with totals up 100 to 240mm. Totals for the last 24 hours range from 100 to 300mm.

Rainfall of similar magnitudes is expected in the 12 to 24 hours around the downstream catchments as the system tracks south.

A severe weather warning remains current for heavy rainfall in the dam catchment areas.

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level was 39.95 m and steady. Five gates are open releasing 445 m3/s. The inflow into the dam since the commencement of the event is 42,000 ML. Estimated event volume is 57,000 ML assuming no further rainfall. Gate operations will continue until at least Tuesday 11 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 102.22 m AHD and rising quickly (storing 157,000 ML above FSL). Peak inflow to the dam is estimated to be about 4,200 m3/s based on observed rainfall and could be as high as 5,000m3/s with additional forecast rainfall. Five sluice gates are open releasing about 1,100m3/s (95,000Ml/d) into Wivenhoe Dam. At this stage the dam will reach at least 103.5 on Monday afternoon which will adversely impact areas around Kilcoy.

Since the commencement of the event on 02/01/2011approximately 115,000ML has been released from the dam into Wivenhoe, with an event total of the order of 520,000ML expected. This is expected to increase due to the forecast rain in the next 24 to 48 hours. At this stage, releases will continue until at least Thursday.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

River levels upstream of the dam are rising quickly with significant inflow being generated from the intense heavy rainfall. Flows in the Brisbane River at Gregor's Ck have already reached 7,350m3/s and the river has just peaked at 23:00 on Sunday 9 January.

The dam level is rising quickly, with the current level being 69.60m AHD (storing 301,000 ML). Estimated peak inflow to the dam just from the Upper Brisbane R alone may reach as high as 8,800m3/s and, at this stage, the dam will reach at least 73.3 m AHD during Tuesday morning. Given the rapid increase in inflow volumes, it will be necessary to increase the release from Wivenhoe during Monday morning.

The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam and, at this stage, releases will be kept below 3,500m3/s and the combined flows in the lower Brisbane will be limited to 4,000m3/s if possible.

Fernvale Bridge approaches and Mt Crosby Weir Bridge have been inundated and both bridges are now closed or are in the process of being closed.

The current release rate from Wivenhoe Dam is 1,400m3/s (120,000ML/day). Gate opening will start to be increased during early Monday morning and the release is expected to increase to at least 2,600m3/s.

Since the commencement of the event on 02/01/2011 approximately 240,000ML has been released from the dam, with an event total approaching 1,500,000ML without further rain and as much as 2,100,000ML with forecast rainfall of (both including

Somerset outflow). At this stage, releases will continue until at least Sunday 16th January 2011.

Impacts downstream of Wivenhoe Dam

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 Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees.

Water levels in the lower Brisbane R will be impacted by the combined flows of Lockyer Ck, Bremer River, local runoff and releases from Wivenhoe Dam. If the predicted rainfall eventuates in the downstream tributary catchments the resultant combined flows in the lower Brisbane may exceed the threshold of damaging discharge in the urban areas within the next 24 to 48 hours.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the updated Wivenhoe operating strategy.

Regards

John Ruffini

Duty Engineer Flood Operations Centre



From: Duty Engineer

Sent: Monday, 10 January 2011 01:56

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Wivenhoe Dam Actual and Projected Releases - 0200 on Monday 10 January 2011

Wivenhoe Dam Actual and Projected

Releases

		10/01/20	
Source: Seqwater	FOC	1	:46
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06:00:00 17/01/2011	112	Projected
07:00:00 17/01/2011	62	Projected
08:00:00	13	Projected



From: Duty Engineer

Sent: Monday, 10 January 2011 02:07

To: Doug Grigg; Graham Francis; Jayam

Subject: Wivenhoe Dam Directive # 8 at 02:00 on Monday 10 January 2011

Attachments: OPS_Directive_Wivenhoe #8.doc

Please find attached Directive # 8 for your action.

Regards

John Ruffini

Duty Engineer Flood Operations Centre

Phone Fax:

Allen;

ΑI

From: Duty Engineer

Sent: Monday, 10 January 2011 06:30

To: John Ruffini (Home); David Roberts;

Rohan Thorogood;

Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt;

Dunstan; Rob Gorian; Glen Glen Murray

Doug Grigg; Graham Francis;

Jayam Tennakoon; Matthew O'Reilly

Cc: Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell;

James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Subject: FOC Situation Report at 06:00 on Monday 10 January 2011

Rainfall

Moderate to heavy rainfall has been recorded in the Upper Brisbane and Stanley Rivers in the last 12 hours with totals up to 90 mm. Totals for the last 24 hours range from 100 to 325mm.

Mt Glorious recorded 100 mm in the last 12 hours.

Rainfall of similar magnitudes is expected in the 12 to 24 hours around the downstream catchments as the system tracks south.

A severe weather warning remains current for heavy rainfall in the dam catchment areas.

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level was 39.97 m and steady. Five gates are open releasing 475 m3/s. The inflow into the dam since the commencement of the event is 52,000 ML. Estimated event volume is 72,000 ML assuming no further rainfall. Gate operations will continue until at least Tuesday 11 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level at 05:00 was 102.84 m AHD and rising (storing 193,000 ML above FSL). Peak inflow to the dam is estimated to be about 4,200 m3/s based on observed rainfall and could be as high as 5,000m3/s with additional forecast rainfall. Five sluice gates are open releasing about 1,100m3/s (95,000Ml/d) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5 mAHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Since the commencement of the event on 02/01/2011approximately 142,000ML has been released from the dam into Wivenhoe, with an event total of the order of 520,000ML expected. This is expected to increase due to the forecast rain in the next 24 to 48 hours. At this stage, releases will continue until at least Thursday.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

River levels upstream of the dam have peaked and are falling slowly with significant inflow being generated from the intense heavy rainfall. Flows in the Brisbane River at Gregor's Ck have peaked at 7,350m3/s at 23:00 on Sunday 9 January. This peak is bigger than January 1974 and February 1999 at this location.

The dam level is rising quickly, with the current level being 70.77m AHD (storing 450,000 ML). Estimated peak inflow to the dam just from the Upper Brisbane R is around 8,800m3/s and, at this stage, the dam will reach at least 73.3 m AHD during Tuesday morning. Given the rapid increase in inflow volumes, it was necessary to start to increase the release from Wivenhoe during Monday morning.

The objective for dam operations will be to minimise the impact of urban flooding in areas downstream of the dam and, at this stage, releases will be kept below 3,500m3/s and the combined flows in the lower Brisbane will be limited to 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000 m3/s.

Fernvale Bridge approaches and Mt Crosby Weir Bridge have been inundated and both bridges are now closed.

The current release rate from Wivenhoe Dam is 1,753m3/s (150,000ML/day). Gate opening will continue to be increased during Monday and the release is expected to increase to at least 2,600m3/s in the next 12 to 24 hours.

Since the commencement of the event on 02/01/2011 approximately 275,000ML has been released from the dam, with an event total approaching 1,600,000ML without further rain and as much as 2,100,000ML with forecast rainfall of (both including

Somerset outflow). At this stage, releases will continue until at least Sunday 16th January 2011.

Impacts downstream of Wivenhoe Dam

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 Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees.

Water levels in the lower Brisbane R will be impacted by the combined flows of Lockyer Ck, Bremer River, local runoff and releases from Wivenhoe Dam. If the predicted rainfall eventuates in the downstream tributary catchments the resultant combined flows in the lower Brisbane may exceed the threshold of damaging discharge in the urban areas within the next 24 to 48 hours. Currently the estimate peak flow in the lower Brisbane River will be the highest since Wivenhoe Dam was completed in 1984 but still well below flows the 1974 levels.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the updated Wivenhoe operating strategy.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

John Ruffini

Duty Engineer Flood Operations Centre



From: Duty Engineer

Sent: Monday, 10 January 2011 06:32

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Actual and Projected Wivenhoe Releases

Wivenhoe Dam Actual and Projected Releases

Wivenhoe Dam Actua	l and P	Projected Releases
Source: Seqwater FO	С	10/01/2011 6:05
02/01/2011 09:00:00	50	Actual
02/01/2011 10:00:00	50	Actual
02/01/2011 11:00:00	50	Actual
02/01/2011 12:00:00	50	Actual
02/01/2011 13:00:00	50	Actual
02/01/2011 14:00:00	50	Actual
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02/01/2011 16:00:00	50	Actual
02/01/2011 17:00:00	50	Actual
02/01/2011 18:00:00	50	Actual
02/01/2011 19:00:00	50	Actual
02/01/2011 20:00:00	50	Actual
02/01/2011 21:00:00	50	Actual
02/01/2011 22:00:00	50	Actual
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03/01/2011 01:00:00	50	Actual
03/01/2011 02:00:00	50	Actual
03/01/2011 03:00:00	50	Actual
03/01/2011 04:00:00	50	Actual
03/01/2011 05:00:00	50	Actual
03/01/2011 06:00:00	50	Actual
03/01/2011 07:00:00	50	Actual
03/01/2011 08:00:00	50	Actual
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03/01/2011 11:00:00	50	Actual
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03/01/2011 23:00:00	50	Actual
04/01/2011 00:00:00	50	Actual
04/01/2011 01:00:00	50	Actual
04/01/2011 02:00:00	50	Actual
04/01/2011 03:00:00	50	Actual
31/03/2011		

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04/01/2011	07:00:00	50	Actual
04/01/2011	08:00:00	50	Actual
04/01/2011	09:00:00	50	Actual
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04/01/2011	19:00:00	50	Actual
04/01/2011	20:00:00	50	Actual
	21:00:00		Actual
04/01/2011		50	
04/01/2011		50	Actual
04/01/2011	23:00:00	50	Actual
05/01/2011	00:00:00	50	Actual
05/01/2011	01:00:00	50	Actual
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06/01/2011		50	Actual
06/01/2011		50	Actual

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06/01/2011	11:00:00	50	Actual
06/01/2011	12:00:00	50	Actual
06/01/2011	13:00:00	50	Actual
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06/01/2011		50	Actual
06/01/2011	22:00:00	50	Actual
06/01/2011	23:00:00	50	Actual
07/01/2011			
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07/01/2011	02:00:00	50	Actual
07/01/2011	03:00:00	50	Actual
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07/01/2011	19:00:00	268	Actual
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07/01/2011	22:00:00	418	Actual
07/01/2011	23:00:00	471	Actual
08/01/2011	00:00:00	524	Actual
08/01/2011	01:00:00	578	Actual
08/01/2011	02:00:00	631	Actual
08/01/2011		685	Actual
08/01/2011		738	Actual
08/01/2011	05:00:00	792	Actual
08/01/2011	06:00:00	846	Actual
08/01/2011	07:00:00	900	Actual
08/01/2011		949	Actual
08/01/2011	09:00:00	1002	Actual
08/01/2011		1055	Actual
08/01/2011	11:00:00	1109	Actual
08/01/2011		1162	Actual
08/01/2011		1215	Actual
00/01/2011	13.00.00	1213	Autual

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08/01/2011	19:00:00	1269	Actual
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09/01/2011		1269	Actual
09/01/2011		1315	Actual
09/01/2011		1315	Actual
09/01/2011		1314	Actual
09/01/2011		1366	Actual
09/01/2011		1365	Actual
09/01/2011		1365	Actual
09/01/2011		1364	Actual
09/01/2011		1363	Actual
09/01/2011		1363	Actual
09/01/2011		1363	Actual
09/01/2011		1415	Actual
09/01/2011		1415	Actual
09/01/2011		1416	Actual
09/01/2011		1418	Actual
09/01/2011		1420	Actual
09/01/2011		1423	Actual
09/01/2011		1427	Actual
09/01/2011	19:00:00	1431	Actual
09/01/2011	20:00:00	1436	Actual
09/01/2011	21:00:00	1442	Actual
09/01/2011	22:00:00	1449	Actual
09/01/2011	23:00:00	1457	Actual
10/01/2011	00:00:00	1467	Actual
10/01/2011	01:00:00	1479	Actual
10/01/2011	02:00:00	1546	Actual
10/01/2011	03:00:00	1614	Actual
10/01/2011	04:00:00	1683	Actual
10/01/2011	05:00:00	1753	Actual
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10/01/2011	07:00:00	1893	Projected
10/01/2011	08:00:00	1964	Projected
10/01/2011	09:00:00	2035	Projected
10/01/2011	10:00:00	2103	Projected
10/01/2011	11:00:00	2171	Projected
10/01/2011	12:00:00	2237	Projected
10/01/2011	13:00:00	2305	Projected
10/01/2011	14:00:00	2372	Projected
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10/01/2011	16:00:00	2501	Projected
10/01/2011	17:00:00	2565	Projected
10/01/2011		2628	Projected
			-,-5.50

10/01/2011 19:00:00	2690	Projected
10/01/2011 20:00:00	2695	Projected
10/01/2011 21:00:00	2700	Projected
10/01/2011 22:00:00	2703	Projected
10/01/2011 23:00:00	2707	Projected
11/01/2011 00:00:00	2709	Projected
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11/01/2011 07:00:00	2718	Projected
11/01/2011 09:00:00	2718	Projected
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11/01/2011 10:00:00	2717	Projected
11/01/2011 11:00:00	2717	Projected
11/01/2011 12:00:00	2715	•
		Projected
	2714	Projected
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11/01/2011 16:00:00	2712	Projected
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11/01/2011 22:00:00	2701	Projected
11/01/2011 23:00:00	2699	Projected
12/01/2011 00:00:00	2697	Projected
12/01/2011 01:00:00	2695	Projected
12/01/2011 02:00:00	2692	Projected
12/01/2011 03:00:00	2690	Projected
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12/01/2011 05:00:00	2685	Projected
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12/01/2011 07:00:00	2679	Projected
12/01/2011 08:00:00	2676	Projected
12/01/2011 09:00:00	2674	Projected
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12/01/2011 14:00:00	2659	Projected
12/01/2011 15:00:00	2656	Projected
12/01/2011 16:00:00	2652	Projected
12/01/2011 17:00:00	2649	Projected
12/01/2011 18:00:00	2646	Projected
12/01/2011 19:00:00	2643	Projected
12/01/2011 20:00:00	2640	Projected
12/01/2011 21:00:00	2636	Projected
12/01/2011 22:00:00	2633	Projected
12/01/2011 23:00:00	2630	Projected
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13/01/2011	00:00:00	2626	Projected
13/01/2011	01:00:00	2623	Projected
13/01/2011	02:00:00	2619	Projected
13/01/2011	03:00:00	2616	Projected
13/01/2011	04:00:00	2613	Projected
13/01/2011	05:00:00	2609	Projected
13/01/2011	06:00:00	2606	Projected
13/01/2011	07:00:00	2602	Projected
13/01/2011	08:00:00	2598	Projected
13/01/2011	09:00:00	2593	Projected
13/01/2011	10:00:00	2589	Projected
13/01/2011	11:00:00	2583	Projected
13/01/2011	12:00:00	2578	Projected
13/01/2011	13:00:00	2573	Projected
13/01/2011	14:00:00	2567	Projected
13/01/2011	15:00:00	2561	Projected
13/01/2011	16:00:00	2556	Projected
13/01/2011	17:00:00	2550	Projected
13/01/2011	18:00:00	2544	•
13/01/2011	19:00:00	2538	Projected
			Projected
13/01/2011	20:00:00	2531	Projected
13/01/2011	21:00:00	2525	Projected
13/01/2011	22:00:00	2519	Projected
13/01/2011		2512	Projected
14/01/2011	00:00:00	2506	Projected
14/01/2011	01:00:00	2499	Projected
14/01/2011	02:00:00	2493	Projected
14/01/2011		2486	Projected
14/01/2011	04:00:00	2479	Projected
	05:00:00	2473	Projected
14/01/2011	06:00:00	2466	Projected
14/01/2011	07:00:00	2459	Projected
14/01/2011	08:00:00	2453	Projected
14/01/2011	09:00:00	2446	Projected
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14/01/2011	11:00:00	2432	Projected
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14/01/2011	13:00:00	2419	Projected
14/01/2011	14:00:00	2412	Projected
14/01/2011	15:00:00	2405	Projected
14/01/2011	16:00:00	2398	Projected
14/01/2011	17:00:00	2391	Projected
14/01/2011	18:00:00	2384	Projected
14/01/2011	19:00:00	2377	Projected
14/01/2011	20:00:00	2370	Projected
14/01/2011	21:00:00	2363	Projected
14/01/2011	22:00:00	2356	Projected
14/01/2011	23:00:00	2349	Projected
15/01/2011	00:00:00	2341	Projected
15/01/2011	01:00:00	2334	Projected
15/01/2011	02:00:00	2327	Projected
15/01/2011	03:00:00	2320	Projected
15/01/2011		2312	Projected
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15/01/2011 05:00:00	2258	Projected
15/01/2011 06:00:00	2203	Projected
15/01/2011 07:00:00	2197	Projected
15/01/2011 08:00:00	2142	Projected
15/01/2011 09:00:00	2090	Projected
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15/01/2011 12:00:00	1978	Projected
15/01/2011 13:00:00	1924	Projected
15/01/2011 14:00:00	1875	Projected
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15/01/2011 17:00:00	1768	Projected
15/01/2011 18:00:00	1715	Projected
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15/01/2011 20:00:00	1611	Projected
15/01/2011 21:00:00	1560	Projected
15/01/2011 22:00:00	1557	Projected
15/01/2011 23:00:00	1505	Projected
16/01/2011 00:00:00	1454	Projected
16/01/2011 01:00:00	1402	Projected
16/01/2011 02:00:00	1351	Projected
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16/01/2011 04:00:00	1296	Projected
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16/01/2011 07:00:00	1148	Projected
16/01/2011 08:00:00	1146	Projected
16/01/2011 09:00:00	1096	Projected
16/01/2011 10:00:00	1044	Projected
16/01/2011 11:00:00	993	Projected
16/01/2011 12:00:00	943	Projected
16/01/2011 13:00:00	941	Projected
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16/01/2011 15:00:00	840	Projected
16/01/2011 16:00:00	789	Projected
16/01/2011 17:00:00	739	Projected
16/01/2011 18:00:00	738	Projected
16/01/2011 19:00:00	688	Projected
16/01/2011 20:00:00	638	Projected
16/01/2011 21:00:00	587	Projected
16/01/2011 22:00:00	537	Projected
16/01/2011 23:00:00	537	Projected
17/01/2011 00:00:00	487	Projected
17/01/2011 01:00:00	444	Projected
17/01/2011 02:00:00	394	Projected
17/01/2011 03:00:00	344	Projected
17/01/2011 04:00:00	344	Projected
17/01/2011 05:00:00	300	Projected
17/01/2011 06:00:00	254	Projected
17/01/2011 07:00:00	208	Projected
17/01/2011 08:00:00	160	Projected



From: Duty Engineer

Sent: Monday, 10 January 2011 09:56

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Actual and projected Wivenhoe releases

Wivenhoe Dam Actual and Projected Releases

Wivenhoe Dam Actua	l and P	rojected Releases
Source: Seqwater FO	С	10/01/2011 9:07
02/01/2011 09:00:00	50	Actual
02/01/2011 10:00:00	50	Actual
02/01/2011 11:00:00	50	Actual
02/01/2011 12:00:00	50	Actual
02/01/2011 13:00:00	50	Actual
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02/01/2011 16:00:00	50	Actual
02/01/2011 17:00:00	50	Actual
02/01/2011 18:00:00	50	Actual
02/01/2011 19:00:00	50	Actual
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02/01/2011 21:00:00	50	Actual
02/01/2011 22:00:00	50	Actual
02/01/2011 23:00:00	50	Actual
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04/01/2011 02:00:00	50	Actual
04/01/2011 03:00:00	50	Actual
31/03/2011		

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04/01/2011	05:00:00	50	Actual
04/01/2011	06:00:00	50	Actual
04/01/2011	07:00:00	50	Actual
04/01/2011	08:00:00	50	Actual
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04/01/2011	19:00:00	50	Actual
04/01/2011	20:00:00	50	Actual
	21:00:00		Actual
04/01/2011		50	
04/01/2011		50	Actual
04/01/2011	23:00:00	50	Actual
05/01/2011	00:00:00	50	Actual
05/01/2011	01:00:00	50	Actual
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06/01/2011	03:00:00	50	Actual
06/01/2011	04:00:00	50	Actual
06/01/2011	05:00:00	50	Actual
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17/01/2011 06:00:00	253	Projected
17/01/2011 07:00:00	206	Projected
17/01/2011 08:00:00	159	Projected
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Phone
Fax:

Duty Engineer From: Sent: Monday, 10 January 2011 12:16 To: d Roberts; Paul Bird; Peter Allen; Rohan Thorogood; Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt; Glen Murray Dunstan; Rob Gorian; Graham Francis; Doug Grigg; Jayam Tennakoon; Matthew O'Reilly Cc: Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi;

Subject: FOC Situation Report at 12:00 on Monday 10 January 2011

Rainfall

Rainfall has continued in the dam catchments over the last 6 hours, with approximate catchment averages as follows: North Pine (30mm); Wivenhoe Dam (20mm); Somerset Dam (40mm). A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 10:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (75mm to 150mm); Wivenhoe/Somerset Dam Catchments (50mm – 100mm).

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is 40.00m AHD and relatively steady (storing 9,000ML above FSL). Five gates are open and releasing 500 m3/s. The inflow into the dam since the commencement of the event is 63,000 ML. Estimated event volume is 77,000 ML assuming no further rainfall. Gate operations will continue until at least Wednesday 12 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.11m AHD and rising (storing 210,000 ML above FSL). Peak inflow to the dam is estimated to be about 4,200 m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000ML/day) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5m AHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Since the commencement of the event on 02/01/2011approximately 182,000ML has been released from the dam into Wivenhoe, with an event total of the order of 520,000ML expected. This is expected to increase due to the forecast rain in the next 24 to 48 hours. At this stage, releases will continue until at least Thursday 13 January 2011.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 71.95m AHD and rising quickly (storing 610,000 ML above FSL). Peak inflow to the dam is estimated to be about 8,800m3/s. Five radial gates are open releasing about 2000m3/s (170,000ML/day) into the Brisbane River. At this stage, the dam will reach about 73.5m AHD during Tuesday morning. Flows in the Brisbane River above the dam at Gregor's Creek peaked at 7,350m3/s and this peak is bigger than both the January 1974 and February 1999 flood events at this location.

The objective for dam operations is to minimise the impact of urban flooding in areas downstream of the dam and the current aim is to keep river flows in the lower Brisbane River below 3,500m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s.

Since the commencement of the event on 02/01/2011 approximately 325,000ML has been released from the dam, with an event total approaching 1,600,000ML without further rain and as much as 2,100,000ML with forecast rainfall of (both including Somerset outflow). At this stage, releases will continue until at least Sunday 16 January 2011.

The volume between the expected peak (73.5m AHD) and the level at which the safety of the dam becomes the primary objective in managing flood releases (74.0m AHD) is 75,000ML. The volume between the expected peak (73.5m AHD) and initiation of the first Fuse Plug is 330,000ML.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees.

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. If the predicted rainfall eventuates in the downstream tributary catchments the resultant combined flows in the lower Brisbane may exceed the threshold of damaging discharge in the urban areas within the next 24 to 48 hours. Currently the estimate peak flow in the lower Brisbane River will be the highest since Wivenhoe Dam was completed in 1984 but still well below flows the 1974 levels.

Somerset Regional, Ipswich City and Brisbane City Councils have been advised of the updated Wivenhoe operating strategy.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

Terry Malone Duty Engineer Flood Operations Centre



Jeff Perkins

From: Duty Engineer

Sent: Monday, 10 January 2011 14:38

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Actual and Projected Wivenhoe Releases

Actual and Projected Wivenhoe Releases

	cted Wivenhoe Rel	eases
Source: Seqwater		
02/01/2011 09:00:00	50	Actual
02/01/2011 10:00:00	50	Actual
02/01/2011 11:00:00	50	Actual
02/01/2011 12:00:00	50	Actual
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Duty Engineer Flood Operations Centre



Sent: Monday, 10 January 2011 14:58

To: 'Duty Engineer'; John Ruffini (Home); David Roberts;

Paul

Rohan Thorogood;

Al Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan;

Glenn Patterson; Murray Grigg; Graham Francis;

Jayam Tennakoon; Matthew O'Reilly

Cc: Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell;

James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi;

Subject: RE: FOC Situation Report at 12:00 on Monday 10 January 2011

Rainfall

Significant rainfall has fallen in the Wivenhoe Dam catchment over the last 3 hours, with falls exceeding 100mm. This rainfall will significantly increase inflows into the dam. A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 10:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (75mm to 150mm); Wivenhoe/Somerset Dam Catchments (50mm – 100mm). Potentially significant rain moving towards the dam catchments is currently evident on the BOM radar.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.41m AHD and rising. Peak inflow to the dam is estimated to be about 4,200 m3/s. Five sluice gates are open releasing about 1,100m3/s (95,000ML/day) into Wivenhoe Dam. At this stage the dam lake level will reach about 103.5m AHD on Monday afternoon. Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 72.41m AHD and rising quickly. The rainfall experienced over the last 2 to 3 hours will result in significant further inflows into the dam and releases from the dam will need to be increased in accordance with Flood Mitigation procedures and to ensure that a fuse plug is not initiated. The initiation of a fuse plug will result in a rapid uncontrolled outflow from the dam of 2,000m3/s being added to the gate release outflow. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

Five radial gates are currently open at the dam releasing about 2,000m3/s into the Brisbane River and this will need to be increased steadily to an outflow of 2,800m3/s over the next 9 hours (commencing at 1500). At this stage, the dam will reach about 73.8m AHD during Tuesday morning.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

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.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

Duty Engineer Flood Operations Centre



From: Sent:

Duty Engineer

11 15:22

To:

Subject: FW: Perserverance Event stage 3

Duty Engineer Flood Operations Centre

Phone:

Fax:

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).

----Original Message----

From:

Sent: Monday, 10 January 2011 2:49 PM

To: Duty Engineer

Cc: Nguyen Khanh; Guppy Ron; Khadka Hari
Subject: FW: Perserverance Event stage 3

Terry,

FYI. I have just spoken to Kev Flanagan and he has indicated that at 2:45 pm, there was three metres over Perseverance and 0.5m over Cressbrook. He has also indicated that the rain event is easing so they don't expect a huge further rise in Cressbrook.

Safety (Water Supply) Office of the Water Supply Regulator

----Original Message----

From: Sent:

To: Allen Peter

Subject: Perserverance Event stage 3

Peter

Perserverance at 2 pm reached event stage 3 with 2.35 m over spillway.

Cressbrook spilled at 1.30pm at 2pm is 0.3 m over.

Director Water Services
Toowoomba Regional Council

T: F: M: E:

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Think DAIL Drint

Think B4U Print

1 ream of paper = 6% of a tree and 5.4 kg CO2 in the atmosphere

3 sheets of A4 paper = 1 litre of water

Sent: Monday, 10 January 2011 17:39

To: Peter Baddiley

Subject: RE: URGENT ATTENTION: Helidon to Gatton FLASH FLOOD [SEC=UNCLASSIFIED]

Peter

Thanks for the advice. I suspect that it will be routed out by the time it gets to the Brisbane R and should have little impact upon current estimates and strategy for the lower Brisbane. We use the Gatton TM in preference to the ALERT station.

Terry



Duty Engineer Flood Operations Centre

Phone

31/03/2011

Fax:

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From: Peter Baddiley

Sent: Monday, 10 January 2011 5:32 PM

To:

Rob Vertessy; Dasarath Jayasuriya; Jim Elliott; 'Duty

Engineer'

Cc:

Subject: URGENT ATTENTION: Helidon to Gatton FLASH FLOOD [SEC=UNCLASSIFIED]

Importance: High

Serious flash flooding at Toowooba this afternoon - only seen images on tv!

Rapid rise in Lockyer Creek at Helidon between 2pm to 3pm; auto gauge indicates it rose about 8 metres. Accuracy unknown.

Flash flood arriving in Gatton area now. Has now risen 2 metres in one hour and continuing.

Helidon catchment area 440km2; Gatton catchment 1500 km2 creek at Gatton is larger, so impact at Gatton should be less, but how high Gatton will get is UNKNOWN.

Highway is immediately downstream of Gatton need closing or Police attention.

Fast rises will extend along Lockyer Creek from Gatton to Glenore Grove/Lyons Bridge tonight - magnitude unknown at this stage but will model once we see Gatton rises.

Map attached.

See flash flood warning at http://www.bom.gov.au/cgi-bin/wrap_fwo.pl?IDQ20780.html

Peter Baddiley

Regional Hydrology Manager Climate & Water Division **Bureau of Meteorology**

Level 21, 69 Ann Street

GPO B

Phone: **EMAII**

EMAIL for flood matters: flood.qld@bom.gov.au

WWW: www.bom.gov.au

Duty Engineer From: Sent: Monday, 10 January 2011 18:43 'Paul Roberts'; To: 'Duty Engineer'; 'Jo 'Rohan Thorogood'; 'Al Navaruk'; 'Bill Stephens'; 'David Pokarier'; 'John West'; 'Lou van Blerk'; 'Mark 'Glenn : 'Murray Dunstan'; 'Rob Gorian'; 'Doug Grigg'; 'Graham Francis'; 'Jayam Tenna Cc: 'Andy Bickerton'; 'Deb Chandler'; 'Mailbox'; 'Tony Trace'; 'Chris Lavin'; 'Craig Logan'; 'Don Carroll'; 'Evan Caswell'; 'James Charalambous'; 'Ken Morris'; 'Robert McGlinn'; 'Santina Pennisi'

Subject: FOC Situation Report at 18:00 on Monday 10 January 2011

Rainfall

Only minor rainfall has been experienced in the North Pine Dam and Somerset Dam catchments with a catchment averages of less than 20mm.

However, significant rain has fallen in the Wivenhoe Dam catchment over the last 6 hours, with isolated falls exceeding 100mm. This rainfall has significantly increase inflows into the dam. A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 10:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (25mm to 50mm, with isolated falls to 100mm); Wivenhoe/Somerset Dam Catchments (25mm to 50mm, with isolated falls to 100mm). Potentially significant rain moving towards the dam catchments is currently evident on the BOM radar.

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is 39.84m AHD and falling slowly (storing 9,000ML above FSL). Five gates are open and releasing 362 m3/s. The inflow into the dam since the commencement of the event is 72,000 ML. Estimated event volume is 84,000 ML assuming no further rainfall. Releases from the dam will continue until at least Wednesday 12 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.46m AHD and rising slowly. Peak inflow to the dam is estimated to be about 4,200 m3/s. Total discharge into Wivenhoe Dam is currently 1700m3/s and this discharge will decrease slowly in the next 24 hours to be around 1200m3/s late Tuesday. The dam level will peak at 103.5m AHD in the next few hours, unless further significant rainfall is experienced. Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 72.92m AHD and rising quickly. Releases from the dam have been increased over the last 3 hours in accordance with Flood Mitigation procedures and to ensure that a fuse plug is not initiated. The initiation of a fuse plug will result in a rapid uncontrolled outflow from the dam of 2,000m3/s being added to the gate release outflow. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing. The flash flooding experienced in the upper areas of Lockyer Creek have been examined and are not expected to significantly increase Brisbane River flows above the current projection of 4000m3/s at Moggill.

Five radial gates are currently open at the dam releasing about 2,400m3/s into the Brisbane River and this will need to be increased steadily to an outflow of 2,800m3/s. At this stage, the dam will reach about 73.8m AHD during Tuesday morning.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff 31/03/2011

and releases from Wivenhoe Dam.

Outlook

Heavy rainfall continues throughout South East Queensland and the situation could deteriorate rapidly over the next 24 hours. The flood operation centre will continue to monitor the situation and provide every six hours until the situation stabilizes.

Terry Malone Duty Engineer Flood Operations Centre



Sent: Monday, 10 January 2011 22:38

To:

Subject: FW: Lockyer Ck

Peter

This is Terry's guesstimate.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone

Fax:

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From: Terry Malone

Sent: Monday, 10 January 2011 10:27 PM

To: Duty Seq **Subject:** Lockyer Ck

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Terry Malone

Principal Hydrologist

Queensland Bulk Water Supply Authority trading as Seqwater



cid:image001.png@01C99019.433

Level 3, 240 Margaret St, Brisbane City QLD 4000 Australia PO Box 16146, City East QLD 4002

From: Duty Engineer

Sent: Monday, 10 January 2011 23:56

To:

Rohan Thorogood;
Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt;

Glenn Patterson;
Dunstan; Rob Gorian;
Jayam Tennakoon; Matthew O'Reilly

Graham Francis;

Cc: Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell;

James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Subject: FOC Situation Report at 00:00 Tuesday 11 January 2011

Rainfall

Rainfall continues in the North Pine Dam, Somerset Dam and Wivenhoe Dam catchments with falls of generally less than 20mm since 18:00 today. However, some isolated falls in the Upper Brisbane River of up to 110 mm have been recorded at Monsildale in this time. This rainfall will increase inflows into the dam.

A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 16:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (25mm to 50mm, with isolated falls to 100mm); Wivenhoe/Somerset Dam Catchments (25mm to 50mm, with isolated falls to 100mm).

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is 39.80m AHD and falling slowly (storing 4,400ML above FSL). Five gates are open, releasing 153 m3/s. The inflow into the dam since the commencement of the event is 74,000 ML. Estimated event volume is 84,000 ML assuming no further rainfall. Releases from the dam will continue until at least Wednesday 12 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.40m AHD and falling slowly. Peak inflow to the dam is estimated to be about 4,200 m3/s. Total discharge into Wivenhoe Dam is currently 1700m3/s and this discharge will decrease slowly in the next 24 hours to be around 1200m3/s late Tuesday. The dam level peaked at 103.52m AHD at 19:00 on Monday 10 January 2011, unless further significant rainfall is experienced. Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 73.22m AHD and rising at about 50 mm/hour. Releases from the dam have been held at a rate of 2,750 m3/s since 19:30 hours. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

The BoM has provided further advice about the flash flooding experienced in the upper areas of Lockyer Creek. The rainfall responsible for this event was not observed at any rainfall stations but it is considered to be very significant. Flood levels in the Lockyer Creek catchment will exceed maximum recorded levels in some stations in the upper catchment. This flow may result in increases in Brisbane River levels below the junction of Lockyer Creek.

Five radial gates are currently open at the dam releasing about 2,750m3/s into the Brisbane River. At this stage, the dam will reach about 73.8m AHD during Tuesday afternoon.

The objective for dam operations is currently to minimise the impact of urban flooding in areas downstream of the dam and to keep river flows in the lower Brisbane River below 4,000m3/s if possible. This is significantly less than the current estimated combined pre-dam peak inflow of 12,000m3/s. If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

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.

The BoM will provide further information regarding the magnitude of the flash flood event occurring in Lockyer Creek early Tuesday morning. Consideration will be given to modifying the releases from Wivenhoe Dam to try to moderate the peak flows emanating from Lockyer Creek.

Outlook

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.

Regards

Rob Ayre Duty Engineer Flood Operations Centre



Sent: Tuesday, 11 January 2011 04:40

To: Doug Grigg; Graham Francis; Jayam

Tennakoon; Matthew O'Reilly:

Subject: Somerset Dam Directive # 6 at 04:30 on Tuesday 11 January 2011

Attachments: OPS_Directive_Somerset #6.doc

Please find attached Directive # 6 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone

Fax:

Sent: Tuesday, 11 January 2011 06:12

To:

Rohan Thorogood;
Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt;

Dunstan; Rob Gorian; Doug Grigg; Murray Graham Francis;

Jayam Tennakoon; Matthew O'Reilly

Cc: Andy Bickerton; Deb Chandler; Mailbox; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James

Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi; Tony Trace

Subject: FOC Situation Report at 06:00 on Tuesday 11 January 2011

Rainfall

Rainfall continues in the North Pine Dam, Somerset Dam and Wivenhoe Dam catchments. Isolated falls in the Upper Brisbane River of up to 125 mm have been recorded with widespread falls of 40 to 70 mm in the Somerset Dam catchment. This rainfall will increase inflows into the dam.

There has also been 20 to 60 mm in the Lockyer Creek catchment in the last 12 hours with falls of up to 30 mm in the Bremer River.

A severe weather warning remains current for heavy rainfall in the dam catchment areas. The QPF issued by BOM at 16:00 estimates rainfalls for the 24 hours to 10:00 Tuesday as North Pine Dam (25mm to 50mm, with isolated falls to 100mm); Wivenhoe/Somerset Dam Catchments (25mm to 50mm, with isolated falls to 100mm).

North Pine Dam (Full Supply Level 39.60 m AHD)

The dam level is 39.80m AHD and has commenced rising again (storing 4,400ML above FSL). Five gates are open releasing 177 m3/s. The inflow into the dam since the commencement of the event is 77,000 ML. Estimated event volume is 88,000 ML assuming no further rainfall. Releases from the dam will continue until at least Wednesday 12 January 2011.

Somerset Dam (Full Supply Level 99.00 m AHD)

The dam level is 103.27m AHD and falling slowly. Peak inflow to the dam is estimated to be about 4,200 m3/s. Total discharge into Wivenhoe Dam is currently 1400 m3/s and this discharge will be decreased in the next few hours to be around 500 m3/s later on Tuesday. This is to ensure that the combined flood mitigation capacity in Somerset and Wivenhoe Dam is maximized.

The dam level peaked at 103.52m AHD at 19:00 on Monday 10 January 2011, (unless further significant rainfall is experienced). Areas around Kilcoy will continue to be adversely affected.

Wivenhoe Dam (Full Supply Level 67.00 m AHD)

The dam level is 73.51m AHD and rising at about 25 mm/hour. Releases from the dam have been held at a rate of 2,750 m3/s since 19:30 hours on Monday 10 January 2011. Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing.

The BoM has provided further advice about the flash flooding experienced in the upper areas of Lockyer Creek. The rainfall responsible for this event was not observed at any rainfall stations but it is considered to be extreme. Flood levels in the Lockyer Creek catchment will exceed maximum recorded levels in some stations in the upper catchment. This flow will result in increases in Brisbane River levels below the junction of Lockyer Creek.

Five radial gates are currently open at the dam releasing about 2,750m3/s into the Brisbane River. At this stage, the dam will reach just over 74.0m AHD during Tuesday evening.

Above EL 74.0m AHD the objective for dam operations is to maintain the security of the dam and minimise downstream flood flows if possible.

If further rainfall occurs, dam releases may need to be increased further and this may result in river flows in the lower Brisbane River approaching or exceeding 5,000m3/s.

Impacts downstream of Wivenhoe Dam

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted until at least Sunday 16 January in varying degrees.

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.

The BoM will provide further information regarding the magnitude of the flash flood event occurring in Lockyer Creek early Tuesday morning. Consideration was given to modifying the releases from Wivenhoe Dam to try to moderate the peak flows emanating from Lockyer Creek but the rainfall in the past 12 hours in the catchment above the dam makes this option not possible. Therefore instead of decreasing releases to accommodate the Lockyer Creek flows, the strategy will endeavour to maintain the current releases until Lockyer Creek peaks.

Outlook

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.

Duty Engineer Flood Operations Centre



Sent: Tuesday, 11 January 2011 06:14

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Wivenhoe Dam Projected Releases at 06:00 on Tuesday 11 January 2011

Wivenhoe Dam Actual and Projected Releases

vviverinoe Dain Actual		
Source: Seqwater FO		11/01/2011 5:48
02/01/2011 09:00:00	50	Actual
02/01/2011 10:00:00	50	Actual
02/01/2011 11:00:00	50	Actual
02/01/2011 12:00:00	50	Actual
02/01/2011 13:00:00	50	Actual
02/01/2011 14:00:00	50	Actual
02/01/2011 15:00:00	50	Actual
02/01/2011 16:00:00	50	Actual
02/01/2011 17:00:00	50	Actual
02/01/2011 18:00:00	50	Actual
02/01/2011 19:00:00	50	Actual
02/01/2011 20:00:00	50	Actual
02/01/2011 21:00:00	50	Actual
02/01/2011 22:00:00	50	Actual
02/01/2011 23:00:00	50	Actual
03/01/2011 00:00:00	50	Actual
03/01/2011 01:00:00	50	Actual
03/01/2011 02:00:00	50	Actual
03/01/2011 03:00:00	50	Actual
03/01/2011 04:00:00	50	Actual
03/01/2011 05:00:00	50	Actual
03/01/2011 06:00:00	50	Actual
03/01/2011 07:00:00	50	Actual
03/01/2011 08:00:00	50	Actual
03/01/2011 09:00:00	50	Actual
03/01/2011 10:00:00	50	Actual
03/01/2011 11:00:00	50	Actual
03/01/2011 12:00:00	50	Actual
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06/01/2011	03:00:00	50	Actual
06/01/2011	04:00:00	50	Actual
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06/01/2011	06:00:00	50	Actual
06/01/2011	07:00:00	50	Actual
06/01/2011	08:00:00	50	Actual

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06/01/2011	13:00:00	50	Actual
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06/01/2011	15:00:00	50	Actual
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08/01/2011		947	Actual
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08/01/2011		1053	Actual
08/01/2011		1107	Actual
08/01/2011		1160	Actual
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08/01/2011	14:00:00	1264	Actual
08/01/2011	15:00:00	1264	Actual
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09/01/2011	05:00:00	1362	Actual
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09/01/2011	10:00:00	1358	Actual
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09/01/2011	13:00:00	1411	Actual
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	15:00:00		Actual
09/01/2011	16:00:00	1416	Actual
09/01/2011	17:00:00	1419	Actual
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09/01/2011		1432	Actual
09/01/2011		1438	Actual
09/01/2011		1445	Actual
09/01/2011		1453	Actual
10/01/2011		1463	Actual
10/01/2011		1474	Actual
10/01/2011		1540	Actual
10/01/2011		1608	Actual
10/01/2011		1676	Actual
10/01/2011		1745	Actual
10/01/2011		1814	Actual
10/01/2011		1883	Actual
10/01/2011		1953	Actual
10/01/2011		2023	Actual
10/01/2011	10:00:00	2036	Actual
10/01/2011	11:00:00	2049	Actual
10/01/2011	12:00:00	2061	Actual
10/01/2011	13:00:00	2074	Actual
10/01/2011	14:00:00	2085	Actual
10/01/2011	15:00:00	2094	Actual
10/01/2011	16:00:00	2160	Actual
10/01/2011	17:00:00	2280	Actual
10/01/2011	18:00:00	2403	Actual

10/01/2011 19:00:00	2523	Actual
10/01/2011 20:00:00	2702	Actual
10/01/2011 21:00:00	2709	Actual
10/01/2011 22:00:00	2716	Actual
10/01/2011 23:00:00	2722	Actual
11/01/2011 00:00:00	2728	Actual
11/01/2011 01:00:00	2734	Actual
11/01/2011 02:00:00	2739	Actual
11/01/2011 03:00:00	2743	Actual
11/01/2011 04:00:00	2748	Actual
11/01/2011 05:00:00	2751	Actual
11/01/2011 06:00:00	2754	Projected
11/01/2011 07:00:00	2757	Projected
11/01/2011 08:00:00	2758	Projected
11/01/2011 09:00:00	2759	Projected
11/01/2011 10:00:00	2760	Projected
11/01/2011 11:00:00	2762	Projected
11/01/2011 12:00:00	2763	Projected
11/01/2011 13:00:00	2766	Projected
11/01/2011 14:00:00	2768	Projected
11/01/2011 15:00:00	2771	Projected
11/01/2011 16:00:00	2775	Projected
11/01/2011 17:00:00	2778	Projected
11/01/2011 18:00:00	2782	Projected
11/01/2011 19:00:00	2785	Projected
11/01/2011 20:00:00	2788	Projected
11/01/2011 21:00:00	2791	Projected
11/01/2011 22:00:00	2793	Projected
11/01/2011 23:00:00	2795	Projected
12/01/2011 00:00:00	2797	Projected
12/01/2011 01:00:00	2798	Projected
12/01/2011 02:00:00	2799	Projected
12/01/2011 03:00:00	2799	Projected
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12/01/2011 07:00:00	2798	Projected
12/01/2011 08:00:00	2797	Projected
12/01/2011 09:00:00	2796	Projected
12/01/2011 10:00:00	2794	Projected
12/01/2011 11:00:00	2792	Projected
12/01/2011 12:00:00	2790	Projected
12/01/2011 13:00:00	2788	Projected
12/01/2011 14:00:00	2844	Projected
12/01/2011 15:00:00	2899	Projected
12/01/2011 16:00:00	2896	Projected
12/01/2011 17:00:00	2950	Projected
12/01/2011 18:00:00	3004	Projected
12/01/2011 19:00:00	3057	Projected
12/01/2011 20:00:00	3053	Projected
12/01/2011 21:00:00	3105	Projected
12/01/2011 22:00:00	3100	Projected
12/01/2011 23:00:00	3151	Projected

13/01/2011 00:00:00	3202	Projected
13/01/2011 01:00:00	3196	Projected
13/01/2011 02:00:00	3246	Projected
13/01/2011 03:00:00	3296	Projected
13/01/2011 04:00:00	3290	Projected
13/01/2011 05:00:00	3283	Projected
13/01/2011 06:00:00	3277	Projected
13/01/2011 07:00:00	3270	Projected
13/01/2011 08:00:00	3263	Projected
13/01/2011 09:00:00	3257	Projected
13/01/2011 10:00:00	3250	Projected
13/01/2011 11:00:00	3243	Projected
13/01/2011 12:00:00	3236	Projected
13/01/2011 13:00:00	3229	Projected
13/01/2011 14:00:00	3221	Projected
13/01/2011 15:00:00	3214	Projected
13/01/2011 16:00:00	3207	Projected
13/01/2011 17:00:00	3199	Projected
13/01/2011 18:00:00	3192	Projected
13/01/2011 19:00:00	3184	Projected
13/01/2011 20:00:00	3177	Projected
13/01/2011 21:00:00	3169	Projected
13/01/2011 22:00:00	3161	Projected
13/01/2011 23:00:00	3154	Projected
14/01/2011 00:00:00	3146	Projected
14/01/2011 01:00:00	3138	Projected
14/01/2011 02:00:00	3130	Projected
14/01/2011 03:00:00	3122	Projected
14/01/2011 04:00:00	3114	Projected
14/01/2011 05:00:00	3105	Projected
14/01/2011 06:00:00	3097	Projected
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14/01/2011 10:00:00	3070	Projected
14/01/2011 11:00:00	3065	Projected
14/01/2011 12:00:00	3060	Projected
14/01/2011 13:00:00	3055	Projected
14/01/2011 14:00:00	3049	Projected
14/01/2011 15:00:00	3044	Projected
14/01/2011 16:00:00	3038	Projected
14/01/2011 17:00:00	3033	Projected
14/01/2011 18:00:00	3027	Projected
14/01/2011 19:00:00	3021	Projected
14/01/2011 20:00:00	3015	Projected
14/01/2011 21:00:00	3009	Projected
14/01/2011 22:00:00	3003	Projected
14/01/2011 23:00:00	2997	Projected
15/01/2011 20:00:00	2991	Projected
15/01/2011 01:00:00	2985	Projected
15/01/2011 01:00:00	2979	Projected
15/01/2011 02:00:00	2973	Projected
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15/01/2011 05:00:00	2960	Projected
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15/01/2011 08:00:00	2941	Projected
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15/01/2011 11:00:00	2922	Projected
15/01/2011 12:00:00	2915	Projected
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16/01/2011 00:00:00	2832	Projected
16/01/2011 01:00:00	2824	Projected
16/01/2011 02:00:00	2815	Projected
16/01/2011 03:00:00	2805	Projected
16/01/2011 04:00:00	2795	Projected
16/01/2011 05:00:00	2785	Projected
16/01/2011 06:00:00	2775	Projected
16/01/2011 07:00:00	2675	Projected
16/01/2011 08:00:00	2576	Projected
16/01/2011 09:00:00	2523	Projected
16/01/2011 10:00:00	2424	Projected
16/01/2011 11:00:00	2325	Projected
16/01/2011 12:00:00	2271	Projected
16/01/2011 13:00:00	2218	Projected
16/01/2011 14:00:00	2164	Projected
16/01/2011 15:00:00	2110	Projected
16/01/2011 16:00:00	2058	Projected
16/01/2011 17:00:00	2007	Projected
16/01/2011 18:00:00	1954	Projected
16/01/2011 19:00:00	1901	Projected
16/01/2011 20:00:00	1852	Projected
16/01/2011 21:00:00	1801	Projected
16/01/2011 22:00:00	1750	Projected
16/01/2011 23:00:00	1698	Projected
17/01/2011 00:00:00	1646	Projected
17/01/2011 01:00:00	1595	Projected
17/01/2011 02:00:00	1545	Projected
17/01/2011 02:00:00	1494	Projected
17/01/2011 03:00:00	1443	Projected
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17/01/2011 05:00:00	1341	Projected
17/01/2011 00:00:00	1289	Projected
17/01/2011 07:00:00	1237	Projected
17/01/2011 00:00:00	1201	i rojecieu

Duty Engineer Flood Operations Centre



From: Duty Engineer

Sent: Tuesday, 11 January 2011 08:11

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James Charalambous; Ken

Morris; Robert McGlinn; Santina Pennisi

Subject: Actual and Projected Wivenhoe Releases

Importance: High

Note that Wivenhoe releases will be increased from the current 2,800 to 3,700m3/s by 1300 Tuesday 11/01/2011 with further increases highly likely

Actual and Projected Wivenhoe Releases

•	ted Wivenhoe Releases
Source: Seqwater	
02/01/2011 09:00:00	50 Actual
02/01/2011 10:00:00	50 Actual
02/01/2011 11:00:00	50 Actual
02/01/2011 12:00:00	50 Actual
02/01/2011 13:00:00	50 Actual
02/01/2011 14:00:00	50 Actual
02/01/2011 15:00:00	50 Actual
02/01/2011 16:00:00	50 Actual
02/01/2011 17:00:00	50 Actual
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02/01/2011 20:00:00	50 Actual
02/01/2011 21:00:00	50 Actual
02/01/2011 22:00:00	50 Actual
02/01/2011 23:00:00	50 Actual
03/01/2011 00:00:00	50 Actual
03/01/2011 01:00:00	50 Actual
03/01/2011 02:00:00	50 Actual
03/01/2011 03:00:00	50 Actual
03/01/2011 04:00:00	50 Actual
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23/01/2011 02:00:00	361	Projected
23/01/2011 03:00:00	355	Projected
23/01/2011 04:00:00	349	Projected

Duty Engineer Flood Operations Centre



Duty Engineer From:

Tuesday, 11 January 2011 11:38 Sent:

Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi To:

Subject: Actual and Projected Wivenhoe Releases

Actual and Projected Wivenhoe Releases

Actual and Projected Wivenhoe R	el	eases
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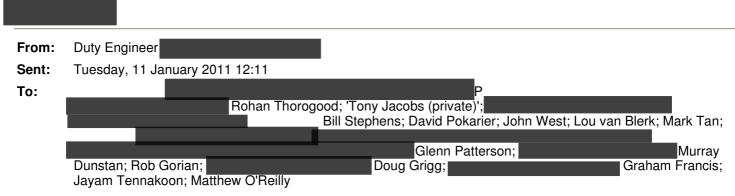
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21/01/2011 20:00:00	493	Projected
21/01/2011 21:00:00	489	Projected
21/01/2011 22:00:00	484	Projected
21/01/2011 23:00:00	480	Projected
22/01/2011 00:00:00	476	Projected
22/01/2011 01:00:00	472	Projected
22/01/2011 02:00:00	468	Projected
22/01/2011 03:00:00	464	Projected
22/01/2011 04:00:00	460	Projected
22/01/2011 05:00:00	456	Projected
22/01/2011 06:00:00	452	Projected
22/01/2011 07:00:00	448	Projected
22/01/2011 08:00:00	444	Projected
22/01/2011 09:00:00	440	Projected
22/01/2011 10:00:00	436	Projected
22/01/2011 11:00:00	432	Projected
22/01/2011 12:00:00	429	Projected
22/01/2011 13:00:00	425	Projected
22/01/2011 14:00:00	421	Projected
22/01/2011 15:00:00	417	Projected
22/01/2011 16:00:00	414	Projected
22/01/2011 17:00:00	410	Projected
22/01/2011 18:00:00	406	Projected
22/01/2011 19:00:00	403	Projected
22/01/2011 20:00:00	399	Projected
22/01/2011 21:00:00	395	Projected
22/01/2011 22:00:00	392	Projected
22/01/2011 23:00:00	388	Projected
23/01/2011 00:00:00	385	Projected
23/01/2011 01:00:00	382	Projected
23/01/2011 02:00:00		Projected
23/01/2011 03:00:00	375	Projected
23/01/2011 04:00:00	371	Projected

Duty Engineer Flood Operations Centre





Subject: SitRep 1200 11/1/2011

Somerset/Wivenhoe

Our current strategy revolves around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 4,500 to 5,000m3/s at the time. However, it may be that fuse plug initiation might provide a lower outflow than increasing the gate outflow to protect it. In this case, we would adopt an alternate scenario.

Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy.

- 1. With no further rainfall, Wivenhoe will approach 75.0m AHD and there will be an attempt to limit the dam outflow to 4,500m3/s, however this strategy currently being reviewed on an hour by hour basis. The release will be 4,000m3/s by 1300.
- 2. With 50mm rainfall in the Stanley and Upper Brisbane in the next 12 to 24 hours, the release will need to be significantly increased to be in the order 6,000m3/s.

It should be noted that the flow in the lower Brisbane River in 1974 was about 9,500m3/s

Wivenhoe has lost incoming mains power and are on backup power. Energex are attempting to rectify.

North Pine

Inflows and outflows are increasing very rapid and will exceed 2,000m3/s.

Duty Engineer Flood Operations Centre



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From:	Duty	Engineer

Sent: Tuesday, 11 January 2011 13:28

To:

Cc:

Subject: Request for Scenario

Peter Borrows has asked the FOC to request BOM to considered the height for Brisbane City if Wivenhoe is releasing 9,000m3/s.

Terry Malone

Duty Engineer Flood Operations Centre

Phone Fax:

Duty Engineer From:

Tuesday, 11 January 2011 13:32 Sent:

Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi To:

Subject: Actual and Projected Wivenhoe Releases - Note that is our worst case for the next 12 hours

Actual and Projected Wivenhoe Releases

Source: Seqwater 11/01/2011 13:28	
02/01/2011 09:00:00 50 Actual	
02/01/2011 10:00:00 50 Actual	
02/01/2011 11:00:00 50 Actual	
02/01/2011 12:00:00 50 Actual	
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21/01/2011 03:00:00	410 Projected
21/01/2011 04:00:00	404 Projected
21/01/2011 05:00:00	398 Projected
21/01/2011 06:00:00	392 Projected
21/01/2011 07:00:00	386 Projected
21/01/2011 08:00:00	380 Projected
21/01/2011 09:00:00	375 Projected
21/01/2011 10:00:00	369 Projected
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23/01/2011 04:00:00	195	Projected

Duty Engineer Flood Operations Centre



Subject: Wivenhoe Dam Update

Importance: High

Somerset/Wivenhoe

Our strategy revolves ensuring dam security and is around trying to prevent initiation of the first fuse plug at EL 75.6m. If this happens we will get a rapid increase of about 2,000m3/s in outflow from the dam in addition to the gate release which could be as high as 10,000m3/s at the time. Sluices have been closed at Somerset and this will result in high upstream water levels affecting Kilcoy.

Wivenhoe Dam is rising very quickly and rapid gate openings are required to manage this increase. Based on the current rate of rise, inflow rate is in excess of 12,000m3/s. The situation is being revised constantly and releases will be increased hourly until the water level starts to stabilize. It is possible that the releases will be as high as 10,000m3/s in the next few hours. Heavy rainfall continues in the catchment especially around the dam.

It should be noted that the flow in the lower Brisbane R in 1974 was about 9,500m3/s

North Pine

Inflows and outflows are at record levels and increasing within inflows nearing 3,000m3/s, and is approaching an extreme event (possibly as high as 1 in 10,000 AEP)

Terry Malone Duty Engineer Flood Operations Centre



From: Duty Engineer

Sent: Tuesday, 11 January 2011 14:26

To:

Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre';

James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Subject: Wivenhoe ALERT level

Please be aware that the Wivenhoe ALERT level is reading low by about 100mm due to draw down through the gates

Terry Malone

Duty Engineer Flood Operations Centre

Phone

Fax:

From:	Duty Engineer
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Sent: Tuesday, 11 January 2011 15:43

To:

Cc:

Subject: Projected Wivenhoe Outflows

Peter

As you recently discussed with Barry Dineen can you please provide advice as to the height of the Brisbane City gauge will reach if Wivenhoe releases 10,000m3/s.

Thanks

Terry Malone

Duty Engineer Flood Operations Centre

Phone

Fax:

Duty Engineer From:

Tuesday, 11 January 2011 16:52 Sent:

Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi To:

Subject: Wivenhoe Actual and Projected Releases

Note that without further rain

Will be reviewed at 1800 11/01/2011

Wivenhoe Dam Actua Source: Segwater FO		rojected Releases 11/01/2011 16:49
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06/01/2011 16:00:00	50	Actual
06/01/2011 17:00:00	50	Actual
06/01/2011 18:00:00	50	Actual
06/01/2011 19:00:00	50	Actual
06/01/2011 20:00:00	50	Actual
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06/01/2011 23:00:00	50	Actual
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07/01/2011 18:00:00	218	Actual
07/01/2011 19:00:00	268	Actual
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21:00:00	365	Actual
07/01/2011 22:00:00	418	Actual
07/01/2011 23:00:00	471	Actual
08/01/2011 00:00:00	524	Actual
08/01/2011 01:00:00	578	Actual
08/01/2011 02:00:00	631	Actual
08/01/2011 03:00:00	685	Actual
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06:00:00	846	Actual
08/01/2011 07:00:00	900	Actual
08/01/2011 08:00:00	949	Actual
08/01/2011 09:00:00	1002	Actual
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21/02/2011		

00/04/0044		
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11:00:00 11/01/2011	3542	Actual
12:00:00 11/01/2011	3665	Actual
13:00:00 11/01/2011	4242	Actual
14:00:00 11/01/2011	4540	Actual
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31/03/2011		

10/01/0011		
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12/01/2011 22:00:00	7105	Projected
12/01/2011 23:00:00	7068	Projected
13/01/2011 00:00:00	7030	Projected
13/01/2011 01:00:00	6991	-
13/01/2011		Projected
02:00:00 13/01/2011	6951	Projected
03:00:00 13/01/2011	6911	Projected
04:00:00 13/01/2011	6870	Projected
05:00:00 13/01/2011	6837	Projected
06:00:00 13/01/2011	6804	Projected
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08:00:00 13/01/2011	6735	Projected
09:00:00 13/01/2011	6700	Projected
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11:00:00 13/01/2011	6627	Projected
12:00:00 13/01/2011	6590	Projected
13:00:00 13/01/2011	6552	Projected
14:00:00 13/01/2011	6514	Projected
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13/01/2011 16:00:00	6435	Projected
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13/01/2011 18:00:00	6323	Projected
13/01/2011		
31/03/2011		

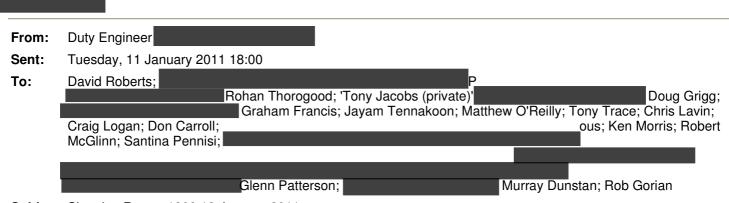
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20:00:00	6159	Projected
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13/01/2011 22:00:00	5991	Projected
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14/01/2011 00:00:00 14/01/2011	5817	Projected
01:00:00	5728	Projected
14/01/2011 02:00:00	5639	Projected
14/01/2011 03:00:00	5552	Projected
14/01/2011 04:00:00	5459	Projected
14/01/2011 05:00:00	5365	Projected
14/01/2011 06:00:00	5267	Projected
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14/01/2011 09:00:00	4983	Projected
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15/01/2011 02:00:00	3631	Projected
15/01/2011 03:00:00	3563	Projected
15/01/2011 04:00:00	3497	Projected
15/01/2011 05:00:00	3433	Projected
15/01/2011 06:00:00	3369	Projected
31/03/2011		

15/01/2011		
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15/01/2011 08:00:00	3246	Projected
15/01/2011 09:00:00	3186	Projected
15/01/2011 10:00:00	3127	Projected
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12:00:00	1936	Projected
16/01/2011 13:00:00	1902	Projected
16/01/2011 14:00:00	1868	Projected
16/01/2011 15:00:00	1834	Projected
16/01/2011 16:00:00 16/01/2011	1802	Projected
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16/01/2011		
31/03/2011		

18:00:00 16/01/2011	1738	Projected
19:00:00	1708	Projected
16/01/2011 20:00:00	1677	Projected
16/01/2011 21:00:00	0	Projected
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23:00:00	0	Projected
17/01/2011 00:00:00	0	Projected
17/01/2011		
01:00:00	929	Projected
17/01/2011 02:00:00	0	Projected
17/01/2011		
03:00:00	0	Projected
17/01/2011 04:00:00	0	Projected
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17/01/2011 06:00:00	798	Projected
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Duty Engineer Flood Operations Centre





Subject: Situation Report 1800 12 January 2011

In the last twelve hours totals of up to 370mm have fallen in the area around Wivenhoe Dam. In the last hour, rainfalls between 15 and 30mm have been recorded in the same area. At 1600, the BoM advised that falls between 50 to 100mm are still forecast for the 24hrs to 1600 Wednesday 12 January 2011 for the North Pine and Somerset/Wivenhoe catchments.

At 1730 Wivenhoe Dam was 74.92m AHD and rising slowly and releasing about 6,700m3/s.

The current expectation is that the dam will reach a steady state (outflow equals inflow) within the next 3 hours without further significant rainfall. At this time, release from the dam will be about 8,000 m3/s.

If there is no further rainfall, it may be possible to then slowly reduce this release overnight.

The dam is expected to peak below 75.5m AHD which is 100mmm below the first fuse plug initiation level.

Note that the automatic recorder as indicated on the BoM website is affected by drawdown and is not reflecting the actual lake level and tendency.

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is also maintaining close contact with warning agencies and local councils.

The next report will be issued at 2100 12 January 2011.

Terry Malone Duty Engineer Flood Operations Centre



Duty Engineer From:

Tuesday, 11 January 2011 18:07 Sent:

Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi To:

Subject: Actual and Projected Wivenhoe Releases

Wivenhoe	Dam	Actual	and	Projected	Rele	ases

11/01/001	3
Source: Seqwater FOC 11/01/201	
02/01/2011	
09:00:00 50 Actual 02/01/2011	
10:00:00 50 Actual	
02/01/2011	
11:00:00 50 Actual	
02/01/2011	
12:00:00 50 Actual	
02/01/2011	
13:00:00 50 Actual	
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31/03/2011	

13:00:00	50	Actual
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03/01/2011 16:00:00	50	Actual
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12:00:00 04/01/2011	50	Actual
13:00:00 04/01/2011	50	Actual
14:00:00 04/01/2011	50	Actual
15:00:00 04/01/2011	50	Actual
16:00:00 04/01/2011	50	Actual
17:00:00 04/01/2011	50	Actual
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04/01/2011 23:00:00	50	Actual
05/01/2011 00:00:00	50	Actual
21/02/2011		

05/04/0044		
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05/01/2011 02:00:00	50	Actual
05/01/2011 03:00:00	50	Actual
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22:00:00 07/01/2011	418	Actual
23:00:00	471	Actual
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08/01/2011 03:00:00	685	Actual
08/01/2011 04:00:00	739	Actual
08/01/2011 05:00:00	792	Actual
08/01/2011 06:00:00	846	Actual
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09/01/2011 04:00:00	1313	Actual
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09/01/2011 06:00:00	1364	Actual
09/01/2011 07:00:00	1363	Actual
09/01/2011 08:00:00	1363	Actual
09/01/2011 09:00:00	1362	Actual
09/01/2011 10:00:00	1362	Actual
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11:00:00	1362	Actual
09/01/2011 12:00:00	1414	Actual
09/01/2011 13:00:00	1414	Actual
09/01/2011 14:00:00	1415	Actual
09/01/2011 15:00:00	1417	Actual
09/01/2011 16:00:00	1420	Actual
09/01/2011 17:00:00	1423	Actual
09/01/2011 18:00:00	1426	Actual
09/01/2011 19:00:00	1431	Actual
09/01/2011 20:00:00	1436	Actual
09/01/2011 21:00:00	1442	Actual
09/01/2011 22:00:00	1449	Actual
09/01/2011 23:00:00	1458	Actual
10/01/2011 00:00:00	1468	Actual
10/01/2011 01:00:00	1480	Actual
10/01/2011 02:00:00	1546	Actual
10/01/2011 03:00:00	1614	Actual
10/01/2011 04:00:00	1683	Actual
10/01/2011 05:00:00	1753	Actual
10/01/2011 06:00:00	1822	Actual
10/01/2011 07:00:00	1892	Actual
10/01/2011 08:00:00	1963	Actual
10/01/2011 09:00:00	2034	Actual
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10/01/2011 13:00:00	2085	Actual
10/01/2011 14:00:00	2096	Actual
10/01/2011 15:00:00	2106	Actual
10/01/2011 16:00:00	2172	Actual
10/01/2011 17:00:00	2293	Actual
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10/01/2011 20:00:00	2718	Actual
10/01/2011 21:00:00	2726	Actual
10/01/2011 22:00:00	2733	Actual
31/03/2011		

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10/01/2011 23:00:00	2739	Actual
11/01/2011 00:00:00	2745	Actual
11/01/2011 01:00:00	2751	Actual
11/01/2011 02:00:00	2756	Actual
11/01/2011 03:00:00	2761	Actual
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11/01/2011 08:00:00	2787	Actual
11/01/2011 09:00:00	3012	Actual
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11/01/2011 12:00:00 11/01/2011	3665	Actual
13:00:00 11/01/2011	4242	Actual
14:00:00 11/01/2011	4540	Actual
15:00:00 11/01/2011	5132	Actual
16:00:00 11/01/2011	5743	Actual
17:00:00 11/01/2011	6382	Actual
18:00:00 11/01/2011	6720	Actual
19:00:00 11/01/2011	7412	Projected
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07:00:00 12/01/2011	7363	Projected
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11:00:00	7277	Projected
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12/01/2011 13:00:00	7226	Projected
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12/01/2011 21:00:00	6983	Projected
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13/01/2011 03:00:00	6770	Projected
13/01/2011 04:00:00	6733	Projected
13/01/2011 05:00:00	6703	Projected
13/01/2011 06:00:00	6672	Projected
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13/01/2011 08:00:00	6610	Projected
13/01/2011 09:00:00	6577	Projected
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13/01/2011 11:00:00	6511	Projected
13/01/2011 12:00:00	6476	Projected
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13/01/2011 15:00:00	6370	Projected
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13/01/2011 17:00:00	6297	Projected
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13/01/2011 20:00:00	6179	Projected
13/01/2011 21:00:00	6136	Projected
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13/01/2011 23:00:00	6046	Projected
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14/01/2011 02:00:00	5807	Projected
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14/01/2011 22:00:00	4014	Projected
14/01/2011 23:00:00	3939	Projected
15/01/2011 00:00:00	3866	Projected
15/01/2011 01:00:00	3794	Projected
15/01/2011 02:00:00	3724	Projected
15/01/2011 03:00:00	3654	Projected
15/01/2011 04:00:00	3586	Projected
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15/01/2011 06:00:00	3454	Projected
15/01/2011 07:00:00	3390	Projected
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1910	Projected
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08:00:00	0	Projected

Duty Engineer Flood Operations Centre



From: Duty Engineer

Sent: Tuesday, 11 January 2011 20:15

To:

Subject: Brisbane R Estimates

This is my best estimate for the lower Brisbane for your consideration.

LOWER BRISBANE RIVER

LOWER BRISBANE RIVER (no forecast rainfall)

RUN DATED: Tue Jan 11 2011 19:59

FORECAST RUN FROM Sun Jan 02 2011 09:00

DATA PARAMETERS : Locations = 18 Values = 393 Data Interval = 1.000 hours MODEL PARAMETERS: alpha = 0.1700 m = 0.80 beta = 3.000 IL = 10.0 CL = 2.00

._____ Peak Discharge Time of Peak Peak Height LOCATION cumecs metres WD_OUTFLOW Tue Jan 11 2011 23:00 OREILLYS_WEIR Tue Jan 11 2011 23:00 7438.00 3811.81 N/A 3811.01 11257.03 11274.15 11322.15 2098.22 11840.39 11841.99 27.13 L_PUMP_STN Wed Jan 12 2011 13:00 SAVAGES_XING Wed Jan 12 2011 15:00 52.41 27.50 29.96 MT_CROSBY_WEIR Wed Jan 12 2011 23:00 IPSWICH Thu Jan 13 2011 04:00 22.52 Thu Jan 13 2011 07:00 22.22 MOGGILL Thu Jan 13 2011 11:00 16.02 JINDALEE 11824.91 6.19 BRISBANE Thu Jan 13 2011 16:00 Mon Jan 03 2011 09:00 BAR N/A 2.45

Please note that this is a personal email from me and does not reflect official Segwater position.

Terry

From: Duty Engineer

Sent: Tuesday, 11 January 2011 21:11

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James

Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Subject: Actual and Projected Wivenhoe Releases

Please note we have commenced closure sequences at 2100 11/01/2011.

Hopefully there will be no more significant rain

Wivenhoe Dam Actu	al and F		
11/01/2011 Source: Segwater FOC 21:07			
02/01/2011			
09:00:00	50	Actual	
02/01/2011			
10:00:00	50	Actual	
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10:00:00	50	Actual
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03/01/2011 19:00:00	50	Actual
03/01/2011 20:00:00	50	Actual
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03/01/2011 22:00:00	50	Actual
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07/01/2011 18:00:00	220	Actual
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07/01/2011 20:00:00	320	Actual
21/02/2011		

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07/01/2011 22:00:00	422	Actual
07/01/2011 23:00:00	476	Actual
08/01/2011 00:00:00	529	Actual
08/01/2011 01:00:00	583	Actual
08/01/2011 02:00:00	637	Actual
08/01/2011 03:00:00	691	Actual
08/01/2011 04:00:00	745	Actual
08/01/2011 05:00:00	799	Actual
08/01/2011 06:00:00	854	Actual
08/01/2011 07:00:00	909	Actual
08/01/2011 08:00:00	957	Actual
08/01/2011 09:00:00	1011	Actual
08/01/2011 10:00:00	1064	Actual
08/01/2011 11:00:00	1118	Actual
08/01/2011 12:00:00	1172	Actual
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18:00:00	6786	Actual
11/01/2011 19:00:00	7482	Actual
11/01/2011 20:00:00	7487	Actual
11/01/2011 21:00:00	7489	Actual
11/01/2011		
22:00:00 11/01/2011	6802	Projected
23:00:00 12/01/2011	6804	Projected
00:00:00 12/01/2011	6804	Projected
01:00:00	6802	Projected
12/01/2011 02:00:00	6798	Projected
12/01/2011 03:00:00	6793	Projected
12/01/2011 04:00:00	6786	Projected
12/01/2011		
05:00:00 12/01/2011	6778	Projected
06:00:00	6768	Projected
12/01/2011		

07:00:00 12/01/2011	6756	Projected
08:00:00 12/01/2011	6744	Projected
09:00:00 12/01/2011	6730	Projected
10:00:00	6715	Projected
12/01/2011 11:00:00	6699	Projected
12/01/2011 12:00:00	6682	Projected
12/01/2011 13:00:00 12/01/2011	6664	Projected
14:00:00	6645	Projected
12/01/2011 15:00:00	6626	Projected
12/01/2011 16:00:00	6605	Projected
12/01/2011 17:00:00	6584	Projected
12/01/2011 18:00:00	6562	Projected
12/01/2011 19:00:00	6540	Projected
12/01/2011 20:00:00	6516	Projected
12/01/2011 21:00:00	6493	Projected
12/01/2011 22:00:00	6468	Projected
12/01/2011 23:00:00	6443	Projected
13/01/2011 00:00:00	6417	Projected
13/01/2011 01:00:00	6391	Projected
13/01/2011 02:00:00	6365	Projected
13/01/2011 03:00:00	6338	Projected
13/01/2011 04:00:00	6310	Projected
13/01/2011 05:00:00	6282	Projected
13/01/2011 06:00:00	6253	Projected
13/01/2011 07:00:00	6224	Projected
13/01/2011 08:00:00	6195	Projected
13/01/2011 09:00:00	6165	Projected
13/01/2011 10:00:00	6134	Projected
13/01/2011 11:00:00	6103	Projected
13/01/2011 12:00:00	6072	Projected
13/01/2011 13:00:00	6040	Projected
13/01/2011 14:00:00	6008	Projected
13/01/2011 15:00:00	5976	Projected
13/01/2011 16:00:00	5943	Projected
13/01/2011 17:00:00	5910	Projected
13/01/2011 18:00:00	5876	Projected
31/03/2011		

10/01/0011		
13/01/2011 19:00:00	5842	Projected
13/01/2011 20:00:00	5807	Projected
13/01/2011 21:00:00	5773	Projected
13/01/2011 22:00:00	5737	Projected
13/01/2011 23:00:00	5702	Projected
14/01/2011 00:00:00	5666	Projected
14/01/2011 01:00:00	5629	Projected
14/01/2011 02:00:00	5592	Projected
14/01/2011 03:00:00	5555	Projected
14/01/2011 04:00:00	5517	Projected
14/01/2011 05:00:00	5480	Projected
14/01/2011 06:00:00	5441	Projected
14/01/2011 07:00:00	5402	Projected
14/01/2011 08:00:00	5363	Projected
14/01/2011 09:00:00	5324	Projected
14/01/2011 10:00:00	5284	Projected
14/01/2011 11:00:00	5243	Projected
14/01/2011 12:00:00	5202	Projected
14/01/2011 13:00:00	5161	Projected
14/01/2011 14:00:00	5120	Projected
14/01/2011 15:00:00	5059	Projected
14/01/2011 16:00:00	4988	Projected
14/01/2011 17:00:00	4900	Projected
14/01/2011		•
18:00:00 14/01/2011	4815	Projected
19:00:00 14/01/2011	4730	Projected
20:00:00 14/01/2011	4647	Projected
21:00:00 14/01/2011	4565	Projected
22:00:00 14/01/2011	4485	Projected
23:00:00 15/01/2011	4406	Projected
00:00:00 15/01/2011	4329	Projected
01:00:00 15/01/2011	4252	Projected
02:00:00 15/01/2011	4177	Projected
03:00:00 15/01/2011	4104	Projected
04:00:00 15/01/2011	4031	Projected
05:00:00	3960	Projected
15/01/2011		

06:00:00	3890	Projected
15/01/2011 07:00:00	3821	Projected
15/01/2011 08:00:00	3754	Projected
15/01/2011 09:00:00	3687	Projected
15/01/2011 10:00:00	3622	Projected
15/01/2011 11:00:00	3558	Projected
15/01/2011 12:00:00	3495	Projected
15/01/2011 13:00:00	3433	Projected
15/01/2011 14:00:00	3373	Projected
15/01/2011		-
15:00:00 15/01/2011	3313	Projected
16:00:00 15/01/2011	3255	Projected
17:00:00 15/01/2011	3197	Projected
18:00:00 15/01/2011	3141	Projected
19:00:00 15/01/2011	3085	Projected
20:00:00 15/01/2011	3031	Projected
21:00:00 15/01/2011	2977	Projected
22:00:00 15/01/2011	2925	Projected
23:00:00	2873	Projected
16/01/2011 00:00:00	2822	Projected
16/01/2011 01:00:00	2773	Projected
16/01/2011 02:00:00	2724	Projected
16/01/2011 03:00:00	2676	Projected
16/01/2011 04:00:00	2629	Projected
16/01/2011 05:00:00	2583	Projected
16/01/2011 06:00:00	2538	Projected
16/01/2011 07:00:00	2493	Projected
16/01/2011 08:00:00	2449	Projected
16/01/2011 09:00:00	2407	Projected
16/01/2011 10:00:00	2365	Projected
16/01/2011 11:00:00	2324	Projected
16/01/2011 12:00:00	2283	-
16/01/2011		Projected
13:00:00 16/01/2011	2243	Projected
14:00:00 16/01/2011	2204	Projected
15:00:00 16/01/2011	2166	Projected
16:00:00 16/01/2011	2129	Projected
17:00:00	2092	Projected
31/03/2011		

10/01/0011		
16/01/2011 18:00:00	2056	Projected
16/01/2011		•
19:00:00	2020	Projected
16/01/2011		
20:00:00	1985	Projected
16/01/2011		
21:00:00	1951	Projected
16/01/2011		
22:00:00	1918	Projected
16/01/2011		
23:00:00	1007	Projected
17/01/2011		
00:00:00	1005	Projected
17/01/2011		
01:00:00	965	Projected
17/01/2011		
02:00:00	926	Projected
17/01/2011		
03:00:00	895	Projected
17/01/2011		
04:00:00	857	Projected
17/01/2011		
05:00:00	856	Projected
17/01/2011		
06:00:00	819	Projected
17/01/2011		
07:00:00	779	Projected
17/01/2011		
08:00:00	740	Projected

Duty Engineer Flood Operations Centre



From: Duty Engineer

Tuesday, 11 January 2011 22:02 Sent:

Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi To:

Subject: Actual and Projected Wivenhoe Releases (Updated)

Please note that the closure sequence is only valid for 12 hours to 0900 12/01/2011

Wivenhoe Dam A	ctual and F		eleases 01/2011
Source: Seqwater 02/01/2011	FOC	,	22:00
09:00:00	50	Actual	
02/01/2011 10:00:00	50	Actual	
02/01/2011	50	Actual	
11:00:00	50	Actual	
02/01/2011 12:00:00	50	Actual	
02/01/2011 13:00:00	50	Actual	
02/01/2011			
14:00:00 02/01/2011	50	Actual	
15:00:00	50	Actual	
02/01/2011			
16:00:00	50	Actual	
02/01/2011 17:00:00	50	Actual	
02/01/2011	E0	Actual	
18:00:00 02/01/2011	50	Actual	
19:00:00	50	Actual	
02/01/2011 20:00:00	50	Actual	
02/01/2011	50	Actual	
21:00:00 02/01/2011	50	Actual	
22:00:00	50	Actual	
02/01/2011 23:00:00	50	Actual	
03/01/2011			
00:00:00 03/01/2011	50	Actual	
01:00:00	50	Actual	
03/01/2011 02:00:00	50	Actual	
03/01/2011	30	Actual	
03:00:00 03/01/2011	50	Actual	
04:00:00 03/01/2011	50	Actual	
05:00:00	50	Actual	
03/01/2011 06:00:00	50	Actual	
03/01/2011 07:00:00	50	Actual	
03/01/2011			
08:00:00 03/01/2011	50	Actual	
09:00:00 03/01/2011	50	Actual	
10:00:00	50	Actual	
03/01/2011 11:00:00	50	Actual	
31/03/2011			

00/04/0044		
03/01/2011 12:00:00	50	Actual
03/01/2011 13:00:00	50	Actual
03/01/2011 14:00:00	50	Actual
03/01/2011 15:00:00	50	Actual
03/01/2011 16:00:00	50	Actual
03/01/2011 17:00:00	50	Actual
03/01/2011 18:00:00	50	Actual
03/01/2011 19:00:00	50	Actual
03/01/2011 20:00:00	50	Actual
03/01/2011 21:00:00	50	Actual
03/01/2011 22:00:00	50	Actual
03/01/2011 23:00:00	50	Actual
04/01/2011 00:00:00	50	Actual
04/01/2011 01:00:00	50	Actual
04/01/2011 02:00:00	50	Actual
04/01/2011		
03:00:00 04/01/2011	50	Actual
04:00:00 04/01/2011	50	Actual
05:00:00 04/01/2011	50	Actual
06:00:00 04/01/2011	50	Actual
07:00:00 04/01/2011	50	Actual
08:00:00 04/01/2011	50	Actual
09:00:00 04/01/2011	50	Actual
10:00:00 04/01/2011	50	Actual
11:00:00 04/01/2011	50	Actual
12:00:00 04/01/2011	50	Actual
13:00:00	50	Actual
04/01/2011 14:00:00	50	Actual
04/01/2011 15:00:00	50	Actual
04/01/2011 16:00:00	50	Actual
04/01/2011 17:00:00	50	Actual
04/01/2011 18:00:00	50	Actual
04/01/2011 19:00:00	50	Actual
04/01/2011 20:00:00	50	Actual
04/01/2011 21:00:00	50	Actual
04/01/2011 22:00:00	50	Actual
04/01/2011		
0.1.10.0.10.0.1.1		

23:00:00	50	Actual
05/01/2011 00:00:00	50	Actual
05/01/2011 01:00:00	50	Actual
05/01/2011 02:00:00	50	Actual
05/01/2011 03:00:00	50	Actual
05/01/2011 04:00:00	50	Actual
05/01/2011 05:00:00	50	Actual
05/01/2011 06:00:00	50	Actual
05/01/2011 07:00:00	50	Actual
05/01/2011 08:00:00	50	Actual
05/01/2011 09:00:00	50	Actual
05/01/2011 10:00:00	50	Actual
05/01/2011 11:00:00	50	Actual
05/01/2011 12:00:00	50	Actual
05/01/2011 13:00:00	50	Actual
05/01/2011 14:00:00	50	Actual
05/01/2011 15:00:00	50	Actual
05/01/2011 16:00:00	50	Actual
05/01/2011 17:00:00	50	Actual
05/01/2011 18:00:00	50	Actual
05/01/2011 19:00:00	50	Actual
05/01/2011 20:00:00	50	Actual
05/01/2011 21:00:00	50	Actual
05/01/2011 22:00:00	50	Actual
05/01/2011 23:00:00	50	Actual
06/01/2011 00:00:00	50	Actual
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06/01/2011 02:00:00	50	Actual
06/01/2011 03:00:00	50	Actual
06/01/2011 04:00:00	50	Actual
06/01/2011 05:00:00	50	Actual
06/01/2011 06:00:00	50	Actual
06/01/2011 07:00:00	50	Actual
06/01/2011 08:00:00	50	Actual
06/01/2011 09:00:00	50	Actual
06/01/2011 10:00:00	50	Actual
21/02/2011		

00/04/0044		
06/01/2011 11:00:00	50	Actual
06/01/2011 12:00:00	50	Actual
06/01/2011 13:00:00	50	Actual
06/01/2011 14:00:00	50	Actual
06/01/2011 15:00:00	50	Actual
06/01/2011 16:00:00	50	Actual
06/01/2011 17:00:00	50	Actual
06/01/2011 18:00:00	50	Actual
06/01/2011 19:00:00	50	Actual
06/01/2011 20:00:00	50	Actual
06/01/2011 21:00:00	50	Actual
06/01/2011 22:00:00	50	Actual
06/01/2011 23:00:00	50	Actual
07/01/2011 00:00:00	50	Actual
07/01/2011 01:00:00	50	Actual
07/01/2011 02:00:00	50	Actual
07/01/2011 03:00:00	50	Actual
07/01/2011 04:00:00	50	Actual
07/01/2011 05:00:00	50	Actual
07/01/2011 06:00:00	50	Actual
07/01/2011 07:00:00	50	Actual
07/01/2011 08:00:00	50	Actual
07/01/2011 09:00:00	50	Actual
07/01/2011 10:00:00	50	Actual
07/01/2011 11:00:00	50	Actual
07/01/2011 12:00:00	50	Actual
07/01/2011 13:00:00	50	Actual
07/01/2011 14:00:00	50	Actual
07/01/2011 15:00:00	65	Actual
07/01/2011 16:00:00	117	Actual
07/01/2011 17:00:00	169	Actual
07/01/2011 18:00:00	220	Actual
07/01/2011 19:00:00	271	Actual
07/01/2011 20:00:00	320	Actual
07/01/2011 21:00:00	369	Actual
07/01/2011		

22:00:00	422	Actual
07/01/2011 23:00:00	476	Actual
08/01/2011 00:00:00	529	Actual
08/01/2011 01:00:00	583	Actual
08/01/2011 02:00:00	637	Actual
08/01/2011 03:00:00	691	Actual
08/01/2011 04:00:00	745	Actual
08/01/2011 05:00:00	799	Actual
08/01/2011 06:00:00	854	Actual
08/01/2011 07:00:00	909	Actual
08/01/2011 08:00:00	957	Actual
08/01/2011 09:00:00	1011	Actual
08/01/2011 10:00:00	1064	Actual
08/01/2011 11:00:00	1118	Actual
08/01/2011 12:00:00	1172	Actual
08/01/2011 13:00:00	1225	Actual
08/01/2011 14:00:00	1277	Actual
08/01/2011 15:00:00	1278	Actual
08/01/2011 16:00:00	1278	Actual
08/01/2011 17:00:00	1279	Actual
08/01/2011 18:00:00	1279	Actual
08/01/2011 19:00:00	1279	Actual
08/01/2011 20:00:00	1280	Actual
08/01/2011 21:00:00	1280	
08/01/2011 22:00:00	1280	Actual
08/01/2011 23:00:00	1279	Actual
09/01/2011		
00:00:00 09/01/2011	1279	Actual
01:00:00 09/01/2011	1279	Actual
02:00:00 09/01/2011	1326	Actual
03:00:00 09/01/2011	1325	
04:00:00 09/01/2011	1325	Actual
05:00:00 09/01/2011	1377	Actual
06:00:00 09/01/2011	1376	Actual
07:00:00 09/01/2011	1376	Actual
08:00:00 09/01/2011	1375	Actual
09:00:00	1374	Actual
31/03/2011		

09/01/2011		
10:00:00	1374	Actual
09/01/2011 11:00:00	1374	Actual
09/01/2011 12:00:00	1428	Actual
09/01/2011 13:00:00	1428	Actual
09/01/2011 14:00:00	1429	Actual
09/01/2011 15:00:00	1431	Actual
09/01/2011 16:00:00	1434	Actual
09/01/2011 17:00:00	1437	Actual
09/01/2011 18:00:00	1442	Actual
09/01/2011 19:00:00	1447	Actual
09/01/2011 20:00:00	1452	Actual
09/01/2011 21:00:00	1459	Actual
09/01/2011 22:00:00	1466	Actual
09/01/2011 23:00:00	1475	Actual
10/01/2011 00:00:00	1485	Actual
10/01/2011 01:00:00	1497	Actual
10/01/2011 02:00:00	1564	Actual
10/01/2011 03:00:00	1632	Actual
10/01/2011 04:00:00	1701	Actual
10/01/2011 05:00:00		Actual
10/01/2011 06:00:00	1840	Actual
10/01/2011 07:00:00	1910	
10/01/2011 08:00:00	1981	Actual
10/01/2011 09:00:00	2052	
10/01/2011 10:00:00	2065	
10/01/2011 11:00:00	2077	Actual
10/01/2011 12:00:00	2090	
10/01/2011 13:00:00	2103	Actual
10/01/2011		
14:00:00 10/01/2011	2114	Actual
15:00:00 10/01/2011	2124	Actual
16:00:00 10/01/2011	2190	
17:00:00 10/01/2011	2312	
18:00:00 10/01/2011	2438	
19:00:00 10/01/2011	2560	
20:00:00	2741	Actual
10/01/2011		

21:00:00	2749	Actual
10/01/2011 22:00:00	2756	Actual
10/01/2011 23:00:00	2763	Actual
11/01/2011 00:00:00	2769	Actual
11/01/2011 01:00:00	2774	Actual
11/01/2011 02:00:00	2779	Actual
11/01/2011 03:00:00	2784	Actual
11/01/2011 04:00:00	2788	Actual
11/01/2011		
05:00:00 11/01/2011	2793	Actual
06:00:00 11/01/2011	2799	Actual
07:00:00 11/01/2011	2805	Actual
08:00:00 11/01/2011	2811	Actual
09:00:00 11/01/2011	3038	Actual
10:00:00 11/01/2011	3394	Actual
11:00:00 11/01/2011	3574	Actual
12:00:00	3699	Actual
11/01/2011 13:00:00	4283	Actual
11/01/2011 14:00:00	4584	Actual
11/01/2011 15:00:00	5183	Actual
11/01/2011 16:00:00	5801	Actual
11/01/2011 17:00:00	6445	Actual
11/01/2011 18:00:00	6786	Actual
11/01/2011 19:00:00	7482	Actual
11/01/2011 20:00:00	7487	Actual
11/01/2011 21:00:00	7489	Actual
11/01/2011 22:00:00	7141	Actual
11/01/2011 23:00:00	7141	Projected
12/01/2011 00:00:00	6800	•
12/01/2011		Projected
01:00:00 12/01/2011	6798	Projected
02:00:00 12/01/2011	6466	Projected
03:00:00 12/01/2011	6462	Projected
04:00:00 12/01/2011	6137	Projected
05:00:00 12/01/2011	6133	Projected
06:00:00 12/01/2011	6127	Projected
07:00:00 12/01/2011	5809	Projected
08:00:00	5803	Projected
21/02/2011		

10/01/0011		
12/01/2011 09:00:00	5492	Projected
12/01/2011 10:00:00	5485	Projected
12/01/2011 11:00:00	5479	Projected
12/01/2011 12:00:00	5471	Projected
12/01/2011 13:00:00	5463	Projected
12/01/2011 14:00:00	5454	Projected
12/01/2011 15:00:00	5444	Projected
12/01/2011 16:00:00	5434	Projected
12/01/2011 17:00:00	5423	Projected
12/01/2011 18:00:00	5412	Projected
12/01/2011 19:00:00	5400	Projected
12/01/2011 20:00:00	5388	Projected
12/01/2011 21:00:00	5375	Projected
12/01/2011 22:00:00	5362	Projected
12/01/2011 23:00:00	5349	Projected
13/01/2011 00:00:00	5335	Projected
13/01/2011 01:00:00	5320	Projected
13/01/2011 02:00:00	5306	Projected
13/01/2011 03:00:00	5291	Projected
13/01/2011 04:00:00	5276	Projected
13/01/2011 05:00:00	5260	Projected
13/01/2011 06:00:00	5244	Projected
13/01/2011 07:00:00	5228	Projected
13/01/2011 08:00:00	5212	Projected
13/01/2011 09:00:00	5195	Projected
13/01/2011 10:00:00	5178	Projected
13/01/2011 11:00:00	5161	Projected
13/01/2011 12:00:00	5143	Projected
13/01/2011 13:00:00	5125	Projected
13/01/2011 14:00:00	5107	Projected
13/01/2011 15:00:00	5089	Projected
13/01/2011 16:00:00	5070	Projected
13/01/2011 17:00:00	5052	Projected
13/01/2011 18:00:00	5033	Projected
13/01/2011 19:00:00	5013	Projected
13/01/2011		

20:00:00	4994	Projected
13/01/2011 21:00:00	4974	Projected
13/01/2011 22:00:00	4954	Projected
13/01/2011 23:00:00	4934	Projected
14/01/2011 00:00:00	4914	Projected
14/01/2011 01:00:00	4893	Projected
14/01/2011 02:00:00	4872	Projected
14/01/2011 03:00:00	4851	Projected
14/01/2011 04:00:00	4830	Projected
14/01/2011 05:00:00	4808	Projected
14/01/2011 06:00:00	4787	Projected
14/01/2011 07:00:00	4765	Projected
14/01/2011 08:00:00	4743	Projected
14/01/2011 09:00:00	4720	Projected
14/01/2011 10:00:00	4698	Projected
14/01/2011 11:00:00	4675	Projected
14/01/2011 12:00:00	4652	Projected
14/01/2011 13:00:00	4629	Projected
14/01/2011 14:00:00	4605	Projected
14/01/2011 15:00:00	4582	Projected
14/01/2011 16:00:00	4558	Projected
14/01/2011 17:00:00	4534	Projected
14/01/2011 18:00:00	4510	Projected
14/01/2011 19:00:00	4485	Projected
14/01/2011 20:00:00	4461	Projected
14/01/2011 21:00:00	4436	Projected
14/01/2011 22:00:00	4411	Projected
14/01/2011 23:00:00	4385	Projected
15/01/2011 00:00:00	4360	Projected
15/01/2011 01:00:00	4334	Projected
15/01/2011 02:00:00	4308	Projected
15/01/2011 03:00:00	4282	Projected
15/01/2011 04:00:00	4256	Projected
15/01/2011 05:00:00	4229	Projected
15/01/2011 06:00:00	4202	Projected
15/01/2011 07:00:00	4175	Projected
31/03/2011		

45/04/0044		
15/01/2011 08:00:00	4148	Projected
15/01/2011 09:00:00	4120	Projected
15/01/2011 10:00:00	4093	Projected
15/01/2011 11:00:00	4064	Projected
15/01/2011 12:00:00	4036	Projected
15/01/2011 13:00:00	4008	Projected
15/01/2011 14:00:00	3979	Projected
15/01/2011 15:00:00	3950	Projected
15/01/2011 16:00:00	3921	Projected
15/01/2011 17:00:00	3892	Projected
15/01/2011 18:00:00	3862	Projected
15/01/2011 19:00:00	3832	Projected
15/01/2011 20:00:00	3802	Projected
15/01/2011 21:00:00	3772	Projected
15/01/2011 22:00:00	3741	Projected
15/01/2011 23:00:00	3710	Projected
16/01/2011 00:00:00	3679	Projected
16/01/2011 01:00:00	3640	Projected
16/01/2011 02:00:00	3593	Projected
16/01/2011 03:00:00	3533	Projected
16/01/2011 04:00:00	3468	Projected
16/01/2011 05:00:00	3404	Projected
16/01/2011 06:00:00	3341	Projected
16/01/2011 07:00:00	3279	_
16/01/2011		Projected
08:00:00 16/01/2011	3219	Projected
09:00:00 16/01/2011	3160	Projected
10:00:00 16/01/2011	3101	Projected
11:00:00 16/01/2011	3044	Projected
12:00:00 16/01/2011	2988	Projected
13:00:00 16/01/2011	2933	Projected
14:00:00 16/01/2011	2879	Projected
15:00:00 16/01/2011	2827	Projected
16:00:00 16/01/2011	2775	Projected
17:00:00 16/01/2011	2724	Projected
18:00:00	2674	Projected
16/01/2011		
31/03/2011		

19:00:00 16/01/2011	2625	Projected
20:00:00	2577	Projected
16/01/2011 21:00:00	2530	Projected
16/01/2011 22:00:00	2484	Projected
16/01/2011		-
23:00:00 17/01/2011	1101	Projected
00:00:00	1098	Projected
17/01/2011 01:00:00	1055	Projected
17/01/2011 02:00:00	1012	Projected
17/01/2011		-
03:00:00 17/01/2011	977	Projected
04:00:00 17/01/2011	936	Projected
05:00:00	935	Projected
17/01/2011 06:00:00	894	Projected
17/01/2011 07:00:00	851	•
17/01/2011	001	Projected
08:00:00	809	Projected

Duty Engineer Flood Operations Centre



From: Duty Engineer

Sent: Wednesday, 12 January 2011 01:24

To: D is; Jayam

Subject: Wivenhoe Dam Directive #29 at 01:15 on Tuesdya 12 January 2011

Attachments: OPS_Directive_Wivenhoe #29.doc

Please find attached a copy of Directive #29 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone Fax:

Sent: Wednesday, 12 January 2011 03:38

To: Doug Grigg; Graham Francis; Jayam

Tennakoon; Matthew O'Reilly;

Subject: Wivenhoe Directive #30

Attachments: OPS_Directive_Wivenhoe #30.doc

Please find attached a copy of the latest directive for Wivenhoe Dam

Duty Engineer Flood Operations Centre

Phone

Fax:

Duty Engineer From:

Wednesday, 12 January 2011 03:48 Sent:

'Duty Engineer'; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi To:

Subject: Actual and Projected Wivenhoe Releases (Updated)

Wivenhoe Dam Actual and Projected Releases

wivennoe Dam Actuai		•
Source: Seqwater FO0)	12/01/2011 3:43
02/01/2011 09:00:00	50	Actual
02/01/2011 10:00:00	50	Actual
02/01/2011 11:00:00	50	Actual
02/01/2011 12:00:00	50	Actual
02/01/2011 13:00:00	50	Actual
02/01/2011 14:00:00	50	Actual
02/01/2011 15:00:00	50	Actual
02/01/2011 16:00:00	50	Actual
02/01/2011 17:00:00	50	Actual
02/01/2011 18:00:00	50	Actual
02/01/2011 19:00:00	50	Actual
02/01/2011 20:00:00	50	Actual
02/01/2011 21:00:00	50	Actual
02/01/2011 22:00:00	50	Actual
02/01/2011 23:00:00	50	Actual
03/01/2011 00:00:00	50	Actual
03/01/2011 01:00:00	50	Actual
03/01/2011 02:00:00	50	Actual
03/01/2011 03:00:00	50	Actual
03/01/2011 04:00:00	50	Actual
03/01/2011 05:00:00	50	Actual
03/01/2011 06:00:00	50	Actual
03/01/2011 07:00:00	50	Actual
03/01/2011 08:00:00	50	Actual
03/01/2011 09:00:00	50	Actual
03/01/2011 10:00:00	50	Actual
03/01/2011 11:00:00	50	Actual
03/01/2011 12:00:00	50	Actual
03/01/2011 13:00:00	50	Actual
03/01/2011 14:00:00	50	Actual
03/01/2011 15:00:00	50	Actual
03/01/2011 16:00:00	50	Actual
03/01/2011 17:00:00	50	Actual
03/01/2011 18:00:00	50	Actual
03/01/2011 19:00:00	50	Actual
03/01/2011 20:00:00	50	Actual
03/01/2011 21:00:00	50	Actual
03/01/2011 22:00:00	50	Actual
03/01/2011 23:00:00	50	Actual
04/01/2011 00:00:00	50	Actual
04/01/2011 01:00:00	50	Actual
04/01/2011 02:00:00	50	Actual
04/01/2011 03:00:00	50	Actual
31/03/2011		

04/01/2011	04:00:00	50	Actual
04/01/2011	05:00:00	50	Actual
04/01/2011	06:00:00	50	Actual
04/01/2011	07:00:00	50	Actual
04/01/2011	08:00:00	50	Actual
04/01/2011	09:00:00	50	Actual
04/01/2011	10:00:00	50	Actual
04/01/2011	11:00:00	50	Actual
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04/01/2011	14:00:00	50	Actual
04/01/2011	15:00:00	50	Actual
04/01/2011	16:00:00	50	Actual
04/01/2011	17:00:00	50	Actual
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04/01/2011	19:00:00	50	Actual
04/01/2011	20:00:00	50	Actual
04/01/2011	21:00:00	50	Actual
04/01/2011	22:00:00	50	Actual
04/01/2011	23:00:00	50	Actual
05/01/2011	00:00:00		Actual
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05/01/2011	01:00:00	50 50	Actual
05/01/2011	02:00:00	50	Actual
05/01/2011	03:00:00	50 50	Actual
05/01/2011	04:00:00	50	Actual
05/01/2011	05:00:00	50	Actual
05/01/2011	06:00:00	50	Actual
05/01/2011	07:00:00	50	Actual
05/01/2011	08:00:00	50	Actual
	09:00:00	50	Actual
05/01/2011	10:00:00	50	Actual
05/01/2011	11:00:00	50	Actual
05/01/2011	12:00:00	50	Actual
05/01/2011	13:00:00	50	Actual
05/01/2011	14:00:00	50	Actual
05/01/2011	15:00:00	50	Actual
05/01/2011	16:00:00	50	Actual
05/01/2011	17:00:00	50	Actual
05/01/2011	18:00:00	50	Actual
05/01/2011	19:00:00	50	Actual
05/01/2011		50	Actual
05/01/2011	21:00:00	50	Actual
05/01/2011	22:00:00	50	Actual
05/01/2011	23:00:00	50	Actual
06/01/2011	00:00:00	50	Actual
06/01/2011	01:00:00	50	Actual
06/01/2011	02:00:00	50	Actual
06/01/2011	03:00:00	50	Actual
06/01/2011	04:00:00	50	Actual
06/01/2011	05:00:00	50	Actual
06/01/2011	06:00:00	50	Actual
06/01/2011	07:00:00	50	Actual
06/01/2011	08:00:00	50	Actual

06/01/2011 09:00:00	50	Actual
06/01/2011 10:00:00	50	Actual
06/01/2011 11:00:00	50	Actual
06/01/2011 12:00:00	50	Actual
06/01/2011 13:00:00	50	Actual
06/01/2011 14:00:00	50	Actual
06/01/2011 15:00:00	50	Actual
06/01/2011 16:00:00	50	Actual
06/01/2011 17:00:00	50	Actual
06/01/2011 18:00:00	50	Actual
06/01/2011 19:00:00	50	Actual
06/01/2011 20:00:00	50	Actual
06/01/2011 21:00:00	50	Actual
06/01/2011 22:00:00	50	Actual
06/01/2011 22:00:00	50	Actual
07/01/2011 23:00:00	50	Actual
07/01/2011 00:00:00	50	Actual
	50	Actual
07/01/2011 03:00:00	50 50	Actual
07/01/2011 04:00:00	50	Actual
07/01/2011 05:00:00	50	Actual
07/01/2011 06:00:00	50	Actual
07/01/2011 07:00:00	50	Actual
07/01/2011 08:00:00	50	Actual
07/01/2011 09:00:00	50	Actual
07/01/2011 10:00:00	50	Actual
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07/01/2011 13:00:00	50	Actual
07/01/2011 14:00:00	50	Actual
07/01/2011 15:00:00	65	Actual
07/01/2011 16:00:00	117	Actual
07/01/2011 17:00:00	169	Actual
07/01/2011 18:00:00	220	Actual
07/01/2011 19:00:00	270	Actual
07/01/2011 20:00:00	320	Actual
07/01/2011 21:00:00	368	Actual
07/01/2011 22:00:00	421	Actual
07/01/2011 23:00:00	475	Actual
08/01/2011 00:00:00	529	Actual
08/01/2011 01:00:00	582	Actual
08/01/2011 02:00:00	636	Actual
08/01/2011 03:00:00	690	Actual
08/01/2011 04:00:00	744	Actual
08/01/2011 05:00:00	798	Actual
08/01/2011 06:00:00	852	Actual
08/01/2011 07:00:00	907	Actual
08/01/2011 08:00:00	956	Actual
08/01/2011 09:00:00	1009	Actual
08/01/2011 10:00:00	1062	Actual
08/01/2011 11:00:00	1116	Actual
08/01/2011 12:00:00	1170	Actual
08/01/2011 13:00:00	1222	Actual

08/01/2011	14:00:00	1274	Actual
08/01/2011	15:00:00	1275	Actual
08/01/2011	16:00:00	1276	Actual
08/01/2011	17:00:00	1276	Actual
08/01/2011	18:00:00	1276	Actual
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08/01/2011	21:00:00	1277	Actual
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08/01/2011	23:00:00	1276	Actual
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09/01/2011		1276	Actual
09/01/2011	02:00:00	1322	Actual
09/01/2011		1322	Actual
09/01/2011		1321	Actual
09/01/2011		1373	Actual
09/01/2011		1373	Actual
09/01/2011		1372	Actual
09/01/2011		1371	Actual
09/01/2011		1371	Actual
09/01/2011	10:00:00	1370	Actual
09/01/2011		1371	Actual
09/01/2011	12:00:00	1424	Actual
09/01/2011		1424	Actual
09/01/2011	14:00:00	1425	Actual
09/01/2011		1427	Actual
09/01/2011	16:00:00	1430	Actual
09/01/2011		1433	Actual
09/01/2011		1433	Actual
09/01/2011		1442	Actual
09/01/2011		1447	
09/01/2011		1454	Actual Actual
09/01/2011		1461	Actual
		1470	
09/01/2011 10/01/2011			Actual
10/01/2011		1480	Actual
		1491	Actual
10/01/2011		1558	Actual
10/01/2011		1625	Actual
10/01/2011		1693	Actual
10/01/2011		1763	Actual
10/01/2011		1832	Actual
10/01/2011		1901	Actual
10/01/2011		1971	Actual
10/01/2011		2042	Actual
10/01/2011		2055	Actual
10/01/2011		2067	Actual
10/01/2011		2079	Actual
10/01/2011		2092	Actual
10/01/2011		2102	Actual
10/01/2011		2112	Actual
10/01/2011		2178	Actual
10/01/2011		2299	Actual
10/01/2011	18:00:00	2424	Actual

10/01/2011 19:00:00	2545	Actual
10/01/2011 20:00:00	2725	Actual
10/01/2011 21:00:00	2732	Actual
10/01/2011 22:00:00	2739	Actual
10/01/2011 23:00:00	2745	Actual
11/01/2011 00:00:00	2751	Actual
11/01/2011 01:00:00	2757	Actual
11/01/2011 02:00:00	2762	Actual
11/01/2011 03:00:00	2766	Actual
11/01/2011 04:00:00	2770	Actual
11/01/2011 05:00:00	2775	Actual
11/01/2011 06:00:00	2781	Actual
11/01/2011 07:00:00	2786	Actual
11/01/2011 08:00:00	2792	Actual
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11/01/2011 11:00:00	3548	Actual
11/01/2011 12:00:00	3671	Actual
11/01/2011 13:00:00	4250	Actual
11/01/2011 14:00:00	4547	Actual
11/01/2011 15:00:00	5140	Actual
11/01/2011 16:00:00	5751	Actual
11/01/2011 17:00:00	6388	Actual
11/01/2011 18:00:00	6723	Actual
11/01/2011 19:00:00	7411	Actual
11/01/2011 20:00:00	7414	Actual
11/01/2011 21:00:00	7416	Actual
11/01/2011 22:00:00	7071	Actual
11/01/2011 23:00:00	7071	Actual
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12/01/2011 01:00:00	6093	Actual
12/01/2011 02:00:00	5479	Actual
12/01/2011 03:00:00	5481	Actual
12/01/2011 04:00:00	4888	Projected
12/01/2011 05:00:00	4889	Projected
12/01/2011 06:00:00	4309	Projected
12/01/2011 07:00:00	4310	Projected
12/01/2011 08:00:00	3733	Projected
12/01/2011 09:00:00	3734	Projected
12/01/2011 10:00:00	3151	Projected
12/01/2011 11:00:00	3152	Projected
12/01/2011 12:00:00	2553	Projected
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12/01/2011 14:00:00	2556	Projected
12/01/2011 15:00:00	2557	Projected
12/01/2011 16:00:00	2558	Projected
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12/01/2011 19:00:00	2559	Projected
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12/01/2011 21:00:00	2559	Projected
12/01/2011 22:00:00	2559	Projected
12/01/2011 23:00:00	2558	Projected
	_555	

13/01/2011 00:00:00	2558	Projected
13/01/2011 01:00:00	2557	Projected
13/01/2011 02:00:00	2556	Projected
13/01/2011 03:00:00	2555	Projected
13/01/2011 04:00:00	2615	Projected
13/01/2011 05:00:00	2613	Projected
13/01/2011 06:00:00	2672	Projected
13/01/2011 07:00:00	2670	Projected
13/01/2011 08:00:00	2730	Projected
13/01/2011 09:00:00	2728	Projected
13/01/2011 10:00:00	2786	Projected
13/01/2011 11:00:00	2784	Projected
13/01/2011 12:00:00	2842	Projected
13/01/2011 13:00:00	2839	Projected
13/01/2011 14:00:00	2896	Projected
13/01/2011 15:00:00	2893	Projected
13/01/2011 16:00:00	3007	Projected
13/01/2011 17:00:00	3004	Projected
13/01/2011 18:00:00	3117	Projected
13/01/2011 19:00:00	3113	Projected
13/01/2011 20:00:00	3167	Projected
13/01/2011 21:00:00	3162	Projected
13/01/2011 22:00:00	3273	Projected
13/01/2011 23:00:00	3268	Projected
14/01/2011 00:00:00	3377	Projected
14/01/2011 01:00:00	3372	Projected
14/01/2011 02:00:00	3424	Projected
14/01/2011 03:00:00	3419	Projected
14/01/2011 04:00:00	3528	Projected
14/01/2011 05:00:00	3524	Projected
14/01/2011 06:00:00	3631	Projected
14/01/2011 07:00:00	3626	Projected
14/01/2011 08:00:00	3621	Projected
14/01/2011 09:00:00	3615	Projected
14/01/2011 10:00:00	3609	Projected
14/01/2011 11:00:00	3604	Projected
14/01/2011 12:00:00	3598	Projected
14/01/2011 13:00:00	3592	Projected
14/01/2011 14:00:00	3586	Projected
14/01/2011 15:00:00	3580	Projected
14/01/2011 16:00:00	3573	Projected
14/01/2011 17:00:00	3567	Projected
14/01/2011 17:00:00	3561	Projected
14/01/2011 19:00:00	3554	Projected
14/01/2011 20:00:00	3548	Projected
14/01/2011 21:00:00	3541	Projected
14/01/2011 22:00:00	3534	Projected
14/01/2011 22:00:00	3527	Projected
15/01/2011 23:00:00	3521	Projected
15/01/2011 00:00:00	3514	Projected
15/01/2011 01:00:00	3507	Projected
15/01/2011 02:00:00	3499	Projected
15/01/2011 03:00:00	3492	Projected
15/01/2011 04.00.00	U732	i roject e u

15/01/2011 05:00:00	3485	Projected
15/01/2011 06:00:00	3478	Projected
15/01/2011 07:00:00	3470	Projected
15/01/2011 08:00:00	3463	Projected
15/01/2011 09:00:00	3455	Projected
15/01/2011 10:00:00	3448	Projected
15/01/2011 11:00:00	3440	Projected
15/01/2011 12:00:00	3432	Projected
15/01/2011 13:00:00	3425	Projected
15/01/2011 14:00:00	3417	Projected
15/01/2011 15:00:00	3409	Projected
15/01/2011 16:00:00	3401	Projected
15/01/2011 17:00:00	3393	Projected
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15/01/2011 19:00:00	3369	Projected
15/01/2011 20:00:00	3360	Projected
15/01/2011 22:00:00	3352	
		Projected Projected
	3344	Projected
16/01/2011 00:00:00	3336	Projected
16/01/2011 01:00:00	3327	Projected
16/01/2011 02:00:00	3319	Projected
16/01/2011 03:00:00	3310	Projected
16/01/2011 04:00:00	3302	Projected
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16/01/2011 06:00:00	3285	Projected
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16/01/2011 13:00:00	3224	Projected
16/01/2011 14:00:00	3215	Projected
16/01/2011 15:00:00	3207	Projected
16/01/2011 16:00:00	3198	Projected
16/01/2011 17:00:00	3189	Projected
16/01/2011 18:00:00	3180	Projected
16/01/2011 19:00:00	3171	Projected
16/01/2011 20:00:00	3162	Projected
16/01/2011 21:00:00	3153	Projected
16/01/2011 22:00:00	3144	Projected
16/01/2011 23:00:00	3135	Projected
17/01/2011 00:00:00	3125	Projected
17/01/2011 01:00:00	3115	Projected
17/01/2011 02:00:00	3105	Projected
17/01/2011 03:00:00	3094	Projected
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17/01/2011 05:00:00	3073	Projected
17/01/2011 06:00:00	3061	Projected
17/01/2011 07:00:00	3049	Projected
17/01/2011 08:00:00	3037	Projected

Duty Engineer Flood Operations Centre



Duty Engineer From: Wednesday, 12 January 2011 05:49 Sent: To: Paul Bird; Peter Allen; Rohan Thorogood; 'Tony Jacobs (private)'; Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Cas : James obert McGlinn; Santina Pennisi; Al Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt; Glenn Patterson; Murray Dunstan; Rob Gorian; Doug Grigg; Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Situation Report 0600 Wed 12/01/2011

No significant rain has fallen over the catchments in the past twelve hours. Less than 10 to 15 millimeters of rainfall is expected over the next 24-48 hours.

Wivenhoe Dam peaked on the 11th January, Tuesday night at 19:00 at 74.97 mAHD with a corresponding discharge of 7,450 m3/s. The release have now been scaled back to 4,300m3/s at 05:00 am. Wivenhoe Dam is currently 74.77 m AHD and falling slowly.

The releases from Wivenhoe Dam will be temporarily reduced to 2,500 m3/s to allow the peak of Lockyer Creek to enter the Brisbane River, after which they will be increased to maximum of 3,500 m3/s. This release will then be maintained to drain the flood storage component within the required 7 days.

Somerset Dam is at 105.10 mAHD and slowly rising. The dam is discharging 1,230 m3/s over the spillway. The dam is expected to peak this morning near its current level. Sluice gates will be utilised to assist the draining of the flood storage compartment commencing on Thursday.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2 million megalitres.

North Pine Dam is currently releasing 105 m3/s through five gates. At 17:00 the lake was 39.78 mAHD. The event has a volume of around 200,000 ML. The peak discharge from the dam was 2,800 m3/s. This is categorised as an extreme event in the order of 1 in 10,000.

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is also maintaining close contact with warning agencies and local councils.

The next report will be issued at 08:00 12 January 2011.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone Fax:

Duty Engineer From:

Wednesday, 12 January 2011 05:54 Sent:

Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi To:

Subject: Actual and Projected Wivenhoe Releases

Wivenhoe Dam	Actual and	Projected	Releases
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Source: Seqwater FO	С	12/01/2011 5:5
02/01/2011 09:00:00	50	Actual
02/01/2011 10:00:00	50	Actual
02/01/2011 11:00:00	50	Actual
02/01/2011 12:00:00	50	Actual
02/01/2011 13:00:00	50	Actual
02/01/2011 14:00:00	50	Actual
02/01/2011 15:00:00	50	Actual
02/01/2011 16:00:00	50	Actual
02/01/2011 17:00:00	50	Actual
02/01/2011 18:00:00	50	Actual
02/01/2011 19:00:00	50	Actual
02/01/2011 20:00:00	50	Actual
02/01/2011 21:00:00	50	Actual
02/01/2011 22:00:00	50	Actual
02/01/2011 23:00:00	50	Actual
03/01/2011 00:00:00	50	Actual
03/01/2011 01:00:00	50	Actual
03/01/2011 02:00:00	50	Actual
03/01/2011 03:00:00	50	Actual
03/01/2011 04:00:00	50	Actual
03/01/2011 05:00:00	50	Actual
03/01/2011 06:00:00	50	Actual
03/01/2011 07:00:00	50	Actual
03/01/2011 08:00:00	50	Actual
03/01/2011 09:00:00	50	Actual
03/01/2011 10:00:00	50	Actual
03/01/2011 11:00:00	50	Actual
03/01/2011 12:00:00	50	Actual
03/01/2011 13:00:00	50	Actual
03/01/2011 14:00:00	50	Actual
03/01/2011 15:00:00	50	Actual
03/01/2011 16:00:00	50	Actual
03/01/2011 17:00:00	50	Actual
03/01/2011 18:00:00	50	Actual
03/01/2011 19:00:00	50	Actual
03/01/2011 20:00:00	50	Actual
03/01/2011 21:00:00	50	Actual
03/01/2011 22:00:00	50	Actual
03/01/2011 23:00:00	50	Actual
04/01/2011 00:00:00	50	Actual
04/01/2011 01:00:00	50	Actual
04/01/2011 02:00:00	50	Actual
04/01/2011 03:00:00	50	Actual
31/03/2011		

04/01/2011	04:00:00	50	Actual
04/01/2011	05:00:00	50	Actual
04/01/2011	06:00:00	50	Actual
04/01/2011	07:00:00	50	Actual
04/01/2011	08:00:00	50	Actual
04/01/2011	09:00:00	50	Actual
04/01/2011	10:00:00	50	Actual
04/01/2011	11:00:00	50	Actual
04/01/2011	12:00:00	50	Actual
04/01/2011	13:00:00	50	Actual
04/01/2011	14:00:00	50	Actual
04/01/2011	15:00:00	50	Actual
04/01/2011	16:00:00	50	Actual
04/01/2011	17:00:00	50	Actual
04/01/2011	18:00:00	50	Actual
04/01/2011	19:00:00	50	Actual
04/01/2011	20:00:00	50	Actual
04/01/2011	21:00:00	50	Actual
04/01/2011	22:00:00	50	Actual
04/01/2011	23:00:00	50	Actual
05/01/2011	00:00:00		Actual
		50 50	
05/01/2011	01:00:00	50 50	Actual
05/01/2011	02:00:00	50	Actual
05/01/2011	03:00:00	50 50	Actual
05/01/2011	04:00:00	50	Actual
05/01/2011	05:00:00	50	Actual
05/01/2011	06:00:00	50	Actual
05/01/2011	07:00:00	50	Actual
05/01/2011	08:00:00	50	Actual
	09:00:00	50	Actual
05/01/2011	10:00:00	50	Actual
05/01/2011	11:00:00	50	Actual
05/01/2011	12:00:00	50	Actual
05/01/2011	13:00:00	50	Actual
05/01/2011	14:00:00	50	Actual
05/01/2011	15:00:00	50	Actual
05/01/2011	16:00:00	50	Actual
05/01/2011	17:00:00	50	Actual
05/01/2011	18:00:00	50	Actual
05/01/2011	19:00:00	50	Actual
05/01/2011		50	Actual
05/01/2011	21:00:00	50	Actual
05/01/2011	22:00:00	50	Actual
05/01/2011	23:00:00	50	Actual
06/01/2011	00:00:00	50	Actual
06/01/2011	01:00:00	50	Actual
06/01/2011	02:00:00	50	Actual
06/01/2011	03:00:00	50	Actual
06/01/2011	04:00:00	50	Actual
06/01/2011	05:00:00	50	Actual
06/01/2011	06:00:00	50	Actual
06/01/2011	07:00:00	50	Actual
06/01/2011	08:00:00	50	Actual

06/01/2011 09:00:00	50	Actual
06/01/2011 10:00:00	50	Actual
06/01/2011 11:00:00	50	Actual
06/01/2011 12:00:00	50	Actual
06/01/2011 13:00:00	50	Actual
06/01/2011 14:00:00	50	Actual
06/01/2011 15:00:00	50	Actual
06/01/2011 16:00:00	50	Actual
06/01/2011 17:00:00	50	Actual
06/01/2011 18:00:00	50	Actual
06/01/2011 19:00:00	50	Actual
06/01/2011 20:00:00	50	Actual
06/01/2011 21:00:00	50	Actual
06/01/2011 22:00:00	50	Actual
06/01/2011 22:00:00	50	Actual
07/01/2011 23:00:00	50	Actual
07/01/2011 00:00:00	50	Actual
	50	Actual
07/01/2011 03:00:00	50 50	Actual
07/01/2011 04:00:00	50	Actual
07/01/2011 05:00:00	50	Actual
07/01/2011 06:00:00	50	Actual
07/01/2011 07:00:00	50	Actual
07/01/2011 08:00:00	50	Actual
07/01/2011 09:00:00	50	Actual
07/01/2011 10:00:00	50	Actual
07/01/2011 11:00:00	50	Actual
07/01/2011 12:00:00	50	Actual
07/01/2011 13:00:00	50	Actual
07/01/2011 14:00:00	50	Actual
07/01/2011 15:00:00	65	Actual
07/01/2011 16:00:00	117	Actual
07/01/2011 17:00:00	169	Actual
07/01/2011 18:00:00	220	Actual
07/01/2011 19:00:00	270	Actual
07/01/2011 20:00:00	320	Actual
07/01/2011 21:00:00	368	Actual
07/01/2011 22:00:00	421	Actual
07/01/2011 23:00:00	475	Actual
08/01/2011 00:00:00	529	Actual
08/01/2011 01:00:00	582	Actual
08/01/2011 02:00:00	636	Actual
08/01/2011 03:00:00	690	Actual
08/01/2011 04:00:00	744	Actual
08/01/2011 05:00:00	798	Actual
08/01/2011 06:00:00	852	Actual
08/01/2011 07:00:00	907	Actual
08/01/2011 08:00:00	956	Actual
08/01/2011 09:00:00	1009	Actual
08/01/2011 10:00:00	1062	Actual
08/01/2011 11:00:00	1116	Actual
08/01/2011 12:00:00	1170	Actual
08/01/2011 13:00:00	1222	Actual

08/01/2011	14:00:00	1274	Actual
08/01/2011	15:00:00	1275	Actual
08/01/2011	16:00:00	1276	Actual
08/01/2011	17:00:00	1276	Actual
08/01/2011	18:00:00	1276	Actual
08/01/2011	19:00:00	1276	Actual
08/01/2011	20:00:00	1277	Actual
08/01/2011	21:00:00	1277	Actual
08/01/2011	22:00:00	1276	Actual
08/01/2011	23:00:00	1276	Actual
09/01/2011	00:00:00	1276	Actual
09/01/2011		1276	Actual
09/01/2011	02:00:00	1322	Actual
09/01/2011		1322	Actual
09/01/2011		1321	Actual
09/01/2011		1373	Actual
09/01/2011		1373	Actual
09/01/2011		1372	Actual
09/01/2011		1371	Actual
09/01/2011		1371	Actual
09/01/2011	10:00:00	1370	Actual
09/01/2011		1371	Actual
09/01/2011	12:00:00	1424	Actual
09/01/2011		1424	Actual
09/01/2011	14:00:00	1425	Actual
09/01/2011		1427	Actual
09/01/2011	16:00:00	1430	Actual
09/01/2011		1433	Actual
09/01/2011		1433	Actual
09/01/2011		1442	Actual
09/01/2011		1447	
09/01/2011		1454	Actual Actual
09/01/2011		1461	Actual
		1470	
09/01/2011 10/01/2011			Actual
10/01/2011		1480	Actual
		1491	Actual
10/01/2011		1558	Actual
10/01/2011		1625	Actual
10/01/2011		1693	Actual
10/01/2011		1763	Actual
10/01/2011		1832	Actual
10/01/2011		1901	Actual
10/01/2011		1971	Actual
10/01/2011		2042	Actual
10/01/2011		2055	Actual
10/01/2011		2067	Actual
10/01/2011		2079	Actual
10/01/2011		2092	Actual
10/01/2011		2102	Actual
10/01/2011		2112	Actual
10/01/2011		2178	Actual
10/01/2011		2299	Actual
10/01/2011	18:00:00	2424	Actual

10/01/2011 19:00:00	2545	Actual
10/01/2011 20:00:00	2725	Actual
10/01/2011 21:00:00	2732	Actual
10/01/2011 22:00:00	2739	Actual
10/01/2011 23:00:00	2745	Actual
11/01/2011 00:00:00	2751	Actual
11/01/2011 01:00:00	2757	Actual
11/01/2011 02:00:00	2762	Actual
11/01/2011 03:00:00	2766	Actual
11/01/2011 04:00:00	2770	Actual
11/01/2011 05:00:00	2775	Actual
11/01/2011 06:00:00	2781	Actual
11/01/2011 07:00:00	2786	Actual
11/01/2011 08:00:00	2792	Actual
11/01/2011 09:00:00	3017	Actual
11/01/2011 10:00:00	3369	Actual
11/01/2011 11:00:00	3548	Actual
11/01/2011 12:00:00	3671	Actual
11/01/2011 12:00:00	4250	Actual
11/01/2011 13:00:00	4547	Actual
11/01/2011 14:00:00	5140	Actual
11/01/2011 16:00:00	5751	Actual
11/01/2011 17:00:00	6388	Actual
11/01/2011 18:00:00	6723	Actual
11/01/2011 19:00:00	7411	Actual
11/01/2011 20:00:00	7414	Actual
11/01/2011 21:00:00	7416	Actual
11/01/2011 22:00:00	7071	Actual
11/01/2011 23:00:00	7071	Actual
12/01/2011 00:00:00	6091	Actual
12/01/2011 01:00:00	6093	Actual
12/01/2011 02:00:00	5479	Actual
12/01/2011 03:00:00	5481	Actual
12/01/2011 04:00:00	4888	Actual
12/01/2011 05:00:00	4309	Actual
12/01/2011 06:00:00	3733	Projected
12/01/2011 07:00:00	3735	Projected
12/01/2011 08:00:00	3153	Projected
12/01/2011 09:00:00	3155	Projected
12/01/2011 10:00:00	2556	Projected
12/01/2011 11:00:00	2558	Projected
12/01/2011 12:00:00	2560	Projected
12/01/2011 13:00:00	2562	Projected
12/01/2011 14:00:00	2563	Projected
12/01/2011 15:00:00	2564	Projected
12/01/2011 16:00:00	2565	Projected
12/01/2011 17:00:00	2565	Projected
12/01/2011 18:00:00	2566	Projected
12/01/2011 19:00:00	2566	Projected
12/01/2011 20:00:00	2566	Projected
12/01/2011 21:00:00	2566	Projected
12/01/2011 22:00:00	2566	Projected
12/01/2011 23:00:00	2565	Projected
		2,30.00

13/01/2011 00:00:00	2565	Projected
13/01/2011 01:00:00	2564	Projected
13/01/2011 02:00:00	2563	Projected
13/01/2011 03:00:00	2562	Projected
13/01/2011 04:00:00	2621	Projected
13/01/2011 05:00:00	2620	Projected
13/01/2011 06:00:00	2679	Projected
13/01/2011 07:00:00	2677	Projected
13/01/2011 08:00:00	2737	Projected
13/01/2011 09:00:00	2735	Projected
13/01/2011 10:00:00	2794	Projected
13/01/2011 11:00:00	2792	Projected
13/01/2011 12:00:00	2849	Projected
13/01/2011 13:00:00	2847	Projected
13/01/2011 14:00:00	2904	Projected
13/01/2011 15:00:00	2901	Projected
13/01/2011 16:00:00	3016	Projected
13/01/2011 17:00:00	3012	Projected
13/01/2011 17:00:00	3126	-
13/01/2011 19:00:00	3120	Projected Projected
		Projected Projected
13/01/2011 20:00:00	3176	Projected
13/01/2011 21:00:00	3171	Projected
13/01/2011 22:00:00	3282	Projected
13/01/2011 23:00:00	3277	Projected
14/01/2011 00:00:00	3387	Projected
14/01/2011 01:00:00	3382	Projected
14/01/2011 02:00:00	3434	Projected
14/01/2011 03:00:00	3429	Projected
14/01/2011 04:00:00	3538	Projected
14/01/2011 05:00:00	3534	Projected
14/01/2011 06:00:00	3642	Projected
14/01/2011 07:00:00	3637	Projected
14/01/2011 08:00:00	3631	Projected
14/01/2011 09:00:00	3626	Projected
14/01/2011 10:00:00	3620	Projected
14/01/2011 11:00:00	3614	Projected
14/01/2011 12:00:00	3609	Projected
14/01/2011 13:00:00	3603	Projected
14/01/2011 14:00:00	3597	Projected
14/01/2011 15:00:00	3590	Projected
14/01/2011 16:00:00	3584	Projected
14/01/2011 17:00:00	3578	Projected
14/01/2011 18:00:00	3571	Projected
14/01/2011 19:00:00	3565	Projected
14/01/2011 20:00:00	3558	Projected
14/01/2011 21:00:00	3552	Projected
14/01/2011 22:00:00	3545	Projected
14/01/2011 23:00:00	3538	Projected
15/01/2011 00:00:00	3531	Projected
15/01/2011 01:00:00	3524	Projected
15/01/2011 02:00:00	3517	Projected
15/01/2011 03:00:00	3510	Projected
15/01/2011 04:00:00	3503	Projected

15/01/2011 05:00:00	3496	Projected
15/01/2011 06:00:00	3489	Projected
15/01/2011 07:00:00	3481	Projected
15/01/2011 08:00:00	3474	Projected
15/01/2011 09:00:00	3466	Projected
15/01/2011 10:00:00	3459	Projected
15/01/2011 11:00:00	3451	Projected
15/01/2011 12:00:00	3443	Projected
15/01/2011 13:00:00	3436	Projected
15/01/2011 14:00:00	3428	Projected
15/01/2011 15:00:00	3420	Projected
15/01/2011 16:00:00	3412	Projected
15/01/2011 17:00:00	3404	Projected
15/01/2011 17:00:00	3396	Projected
15/01/2011 19:00:00	3388	Projected
15/01/2011 19:00:00	3380	Projected
15/01/2011 21:00:00	3372	Projected
15/01/2011 22:00:00	3363	Projected
15/01/2011 23:00:00	3355	Projected
16/01/2011 23:00:00	3347	-
		Projected
16/01/2011 01:00:00	3339	Projected Projected
16/01/2011 02:00:00	3330	Projected Projected
16/01/2011 03:00:00	3322	Projected Projected
16/01/2011 04:00:00	3313	Projected
16/01/2011 05:00:00	3305	Projected
16/01/2011 06:00:00	3296	Projected
16/01/2011 07:00:00	3288	Projected
16/01/2011 08:00:00	3279	Projected
16/01/2011 09:00:00	3271	Projected
16/01/2011 10:00:00	3262	Projected Projected
16/01/2011 11:00:00 16/01/2011 12:00:00	3253 3245	Projected Projected
		Projected Projected
	3236	Projected
16/01/2011 14:00:00	3227	Projected
16/01/2011 15:00:00	3218	Projected
16/01/2011 16:00:00	3210	Projected
16/01/2011 17:00:00	3201	Projected
16/01/2011 18:00:00	3192	Projected
16/01/2011 19:00:00	3183	Projected
16/01/2011 20:00:00	3174	Projected
16/01/2011 21:00:00	3165	Projected
16/01/2011 22:00:00	3156	Projected
16/01/2011 23:00:00	3147	Projected
17/01/2011 00:00:00	3137	Projected
17/01/2011 01:00:00	3127	Projected
17/01/2011 02:00:00	3117	Projected
17/01/2011 03:00:00	3107	Projected
17/01/2011 04:00:00	3096	Projected
17/01/2011 05:00:00	3085	Projected
17/01/2011 06:00:00	3073	Projected
17/01/2011 07:00:00	3061	Projected
17/01/2011 08:00:00	3050	Projected

Duty Engineer Flood Operations Centre

Phone Fax:

Sent: Wednesday, 12 January 2011 05:58

To:

Subject: FW: River Levels at Mt Crosby Weir

FYI

Duty Engineer Flood Operations Centre

Phone

Fax:

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From: Duty Engineer ma Sent: Wednesday, 12 J To: 'Brett Myatt'

Subject: RE: River Levels at Mt Crosby Weir

Thanks.

Duty Engineer Flood Operations Centre

Phone

Fax:

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).

From: Brett Myatt Ment: Wednesday, 1

To: Duty Seq

Subject: FW: River Levels at Mt Crosby Weir

12/1/2011

0430 25.4m

From: Brett Myatt

Sent: Wednesday, 12 January 2011 3:52 AM

To: Duty Sea

Subject: River Levels at Mt Crosby Weir

11/1/2011 1845 21.6m 1915 21.75m

2000 22 m 2050 22.4m 2150 22.75m 2300 23.2m

12/1/2011 0140 24.4 0245 24.8m 0340 25.1m

Regards Brett

Brett Myatt

Manager Water Treatment Operations South

QLD Bulk Water Supply Authority trading as Segwater



Level 3, 240 Margaret St, Brisbane City QLD 4000 Australia PO Box 16146, City East QLD 4002 Website | www.seqwater.com.au

Sent: Wednesday, 12 January 2011 07:36

To: Cc:

Subject: Flow Gauging at Jindalee

Ali

I asked Paul to consider getting you guys to take a flow measurement at Jindalee during the next 24 hours. Best estimate is that the peak will be at Jindalee tonight around 10pm.

Terry Malone Duty Engineer Flood Operations Centre

Phone Fax:

Sent: Wednesday, 12 January 2011 07:57

To: 'Duty Engineer'; David Roberts;

Paul Bird: Peter Allen:

Rohan Thorogood; 'Tony Jacobs (private)'; Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi;

Al Navaruk; Bill Stephens; David

Glenn Patterson;
Murray Dunstan; Rob Gorian;
Doug Grigg;

Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: RE: Situation Report 0800 Wed 12/01/2011

Rainfall

No significant rain has fallen over the catchments in the past twelve hours. Less than 10 to 15 millimeters of rainfall is expected over the next 24-48 hours.

Somerset/Wivenhoe

Somerset Dam has peaked at 105.11 mAHD at 06:00 on 12 January 2011 and the dam is discharging 1,230 m3/s over the spillway. Sluice gates will be utilised to assist the draining of the flood storage compartment commencing later Wednesday.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m3/s. Wivenhoe Dam was 74.75 m AHD at 07:30 and generally falling slowly.

The releases from Wivenhoe Dam have been temporarily reduced to 2,500 m3/s at 07:30 to allow the peak of Lockyer Creek to enter the Brisbane River. After the downstream peak in the lower Brisbane River has passed, releases will be increased to maximum of 3,500 m3/s. This release will then be maintained to drain the flood storage component within the required 7 days.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2 million megalitres.

North Pine

At 07:00 North Pine Dam was 39.78 mAHD falling and releasing about 105 m3/s. North Pine has peaked at 41.11 mAHD at 14:00 on 11 January 1974 with peak release of 2,800 m3/s. The event has a volume of around 200,000 ML. It is expected that gates will be close later Wednesday or early Thursday.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is maintaining close contact with warning agencies and local councils.

The next report will be issued at 12:00 12 January 2011.

Regards

Terry Malone

Duty Engineer Flood Operations Centre



Sent: Wednesday, 12 January 2011 08:00

To: 'Cameron Alasdair'

Cc:

Subject: Flow Gauging at Jindalee

Ali

I asked Paul to consider getting you guys to take a flow measurement at Jindalee during the next 24 hours. Best estimate is that the peak will be at Jindalee tonight around 10pm.

Terry Malone Duty Engineer Flood Operations Centre

Phone

Fax:

Sent: Wednesday, 12 January 2011 09:40

To:

Subject: For your consideration

To achieve this result I've reduced the outflows from Wivenhoe by 0.15 (loss=0.15)

LOWER BRISBANE RIVER

LOWER BRISBANE RIVER (no forecast rainfall)

RUN DATED: Wed Jan 12 2011 09:03

FORECAST RUN FROM Sun Jan 02 2011 09:00

DATA PARAMETERS : Locations = 18 Values = 407 Data Interval = 1.000 hours MODEL PARAMETERS: alpha = 0.1300 m = 0.80 beta = 3.000 IL = 10.0 CL = 2.00

-----Time of Peak LOCATION Peak Discharge Peak Height cumecs metres WD_OUTFLOW
OREILLYS_WEIR
Wed Jan 12 2011 05:00 3272.60
L_PUMP_STN
Wed Jan 12 2011 03:00 8231.07
SAVAGES_XING
Wed Jan 12 2011 04:00 8295.82
BURTONS_BR
Wed Jan 12 2011 06:00 8380.03
L_MANCHESTER
Tue Jan 11 2011 17:00 N/A
L_MANCHESTER
Tue Jan 11 2011 17:00 390.76
KHOLO_BR
Wed Jan 12 2011 09:00 8494.16
MT CROSBY WEIR
Wed Jan 12 2011 11:00 8479.41 N/A * 23.96 39.33 24.23 25.14 53.43 53.45 28.10 MT_CROSBY_WEIR Wed Jan 12 2011 11:00 8479.41 27.32 COLLEGES_XING Wed Jan 12 2011 11:00 8482.12 30.54
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 AMBERLEY
 Wed Jan 12 2011 07:00

 LOAMSIDE
 Tue Jan 11 2011 21:00

 ONE_MILE_BR
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 HANCOCKS_BR
 Wed Jan 12 2011 15:00

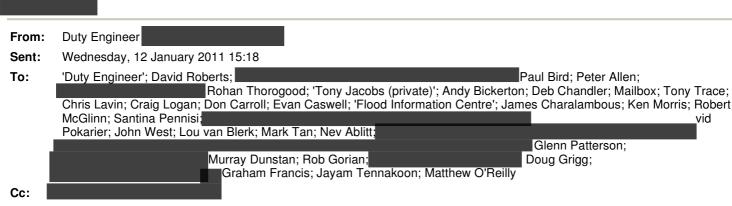
 MOGGILL
 Wed Jan 12 2011 16:00

 JINDALEE
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 BRISBANE
 Thu Jan 13 2011 02:00

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 1654.60 11.77 757.57 9.09 170.11 7.67 170.11 2573.66 22.29 2600.05 20.05 2598.47 20.57 9563.23 20.01 9577.34 13.88 9556.60 N/A 5.23 Mon Jan 03 2011 09:00 2.45

Terry



Subject: Situation Report 1500 Wed 12/01/2011

Rainfall

Rainfall in the last 12 hours is generally below 5mm with a couple of 10mm falls in the Stanley and North Pine catchments. There is no significant rain expected fin the next 4 days.

Somerset/Wivenhoe

Somerset Dam has peaked at 105.11 mAHD at 06:00 on 12 January 2011. One sluice was opened at 1030 12 January 2011 and the dam is discharging 1,440 m3/s. Sluice gates will be utilised to drain of the flood storage compartment during the next 5 days.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m3/s. Wivenhoe Dam was 74.81 m AHD at 15:00 and steady.

The releases from Wivenhoe Dam have been temporarily reduced to 2,500 m3/s at 07:30 12 January 2011 to allow the peak of Lockyer Creek to enter the Brisbane River. After the downstream peak in the lower Brisbane River has passed, releases will be increased to maximum of 3,500 m3/s. This release will then be maintained to drain the flood storage component within the required 7 days.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2 million megalitres.

North Pine

At 15:00 North Pine Dam was 39.74 mAHD falling with all gates open 1 increment, releasing about 80 m3/s. North Pine peaked at 41.11 mAHD at 14:00 on 11 January 1974 with peak release of 2,800 m3/s. The event has a volume of around 200,000 ML. It is expected that gates will be closed on Thursday or Thursday.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy every 30 minutes. The FOC is maintaining close contact with warning agencies and local councils.

The next report will be issued at 18:00 12 January 2011.

Regards

Terry Malone

Duty Engineer Flood Operations Centre



Duty Engineer From: Sent: Wednesday, 12 January 2011 17:57 To: Bird 'Arminda Roberts (priv (Private)'; Peter A rogood; 'Tony Jacobs (private)'; Al Navaruk; Bill S John West; Lou van Blerk; Mark Tan; Nev Ablitt; Murray Dunstan; Rob Gorian; Doug Grigg; Graham Francis: Jayam Tennakoon; Matthew O'Reilly Cc: 'Robert Drury' Subject: Situation Report 1800 Wed 12/01/2011

Rainfall

Rainfall in the last 12 hours is generally below 5mm with a couple of 10mm falls in the Stanley and North Pine catchments. There is no significant rain expected fin the next 4 days.

Somerset/Wivenhoe

Somerset Dam has peaked at 105.11 mAHD at 06:00 on 12 January 2011. One sluice was opened at 1030 12 January 2011. Somerset Dam was 104.87 mAHD at 1700 12 January 2011 and discharging 1,410 m3/s. Sluice gates will be utilised to drain of the flood storage compartment during the next 5 days.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on 11 January 2011 with a corresponding discharge of 7,450 m3/s. Wivenhoe Dam was 74.82 m AHD at 17:00 and steady.

The release from Wivenhoe Dam was reduced to 2,500 m3/s at 07:30 12 January 2011 to allow the peak of Lockyer Creek to enter the Brisbane River and this release has been maintained since. After the downstream peak in the lower Brisbane River has passed, releases will be increased to maximum of 3,500 m3/s. The release is expected to commence Thursday and then be maintained at this level to drain the flood storage component within the required 7 days. The releases will not result in any renewed rises at downstream locations.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be 2.6 million megalitres.

North Pine

At 17:00 North Pine Dam was 39.74 mAHD steady with all gates open 1 increment, releasing about 80 m3/s. North Pine peaked at 41.11 mAHD at 14:00 on 11 January 1974 with peak release of 2,800 m3/s. The event has a volume of around 200,000 ML. It is expected that gates will be closed on Thursday or Friday.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels through the Brisbane and Pine catchments and reviewing operating strategy regularly. The FOC is maintaining close contact with warning agencies and local councils.

The next report will be issued at 06:00 13 January 2011.

Regards

Terry Malone

Duty Engineer Flood Operations Centre



Duty Engineer From:

Wednesday, 12 January 2011 18:07 Sent:

Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi To:

Subject: Wivenhoe Dam Projected Releases - 1800 at Wednesday 12 January 2011

This is subject to forecast rainfall over the next week. Please advise if there are any issues you wish us to consider?

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14/01/2011 11:00:00	3631	Projected
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14/01/2011 15:00:00	3606	Projected
14/01/2011 16:00:00	3600	Projected
14/01/2011 17:00:00	3593	Projected
14/01/2011 18:00:00	3587	Projected
14/01/2011 19:00:00	3580	Projected
14/01/2011 20:00:00	3573	Projected
14/01/2011 21:00:00	3566	Projected
14/01/2011 22:00:00	3560	Projected
14/01/2011 23:00:00	3553	Projected
15/01/2011 00:00:00	3546	Projected
15/01/2011 01:00:00	3539	Projected
15/01/2011 02:00:00	3531	Projected
15/01/2011 03:00:00	3524	Projected
15/01/2011 04:00:00	3517	Projected
15/01/2011 05:00:00	3509	
15/01/2011		Projected
06:00:00 15/01/2011	3502	Projected
07:00:00 15/01/2011	3495	Projected
13/01/2011		

08:00:00	3487	Projected
15/01/2011 09:00:00	3479	Projected
15/01/2011 10:00:00	3472	Projected
15/01/2011 11:00:00	3464	Projected
15/01/2011 12:00:00	3456	Projected
15/01/2011 13:00:00	3448	Projected
15/01/2011 14:00:00	3441	Projected
15/01/2011 15:00:00	3433	Projected
15/01/2011 16:00:00	3425	Projected
15/01/2011 17:00:00	3417	Projected
15/01/2011 18:00:00	3408	Projected
15/01/2011 19:00:00	3400	Projected
15/01/2011 20:00:00	3392	Projected
15/01/2011 21:00:00	3384	Projected
15/01/2011 22:00:00	3376	Projected
15/01/2011 23:00:00	3367	Projected
16/01/2011 00:00:00	3359	Projected
16/01/2011 01:00:00	3351	Projected
16/01/2011 02:00:00	3342	Projected
16/01/2011 03:00:00	3334	Projected
16/01/2011 04:00:00	3326	Projected
16/01/2011 05:00:00	3317	Projected
16/01/2011 06:00:00	3309	Projected
16/01/2011 07:00:00	3300	Projected
16/01/2011 08:00:00	3291	Projected
16/01/2011 09:00:00	3283	Projected
16/01/2011 10:00:00	3274	Projected
16/01/2011 11:00:00	3266	Projected
16/01/2011 12:00:00	3257	Projected
16/01/2011 13:00:00	3248	Projected
16/01/2011 14:00:00	3240	Projected
16/01/2011 15:00:00	3231	Projected
16/01/2011 16:00:00	3222	Projected
16/01/2011 17:00:00	3213	Projected
16/01/2011 18:00:00	3204	Projected
16/01/2011 19:00:00	3195	Projected
31/03/2011		

16/01/2011		
20:00:00	3187	Projected
16/01/2011		,
21:00:00	3178	Projected
16/01/2011		-
22:00:00	3169	Projected
16/01/2011		
23:00:00	3160	Projected
17/01/2011		
00:00:00	3150	Projected
17/01/2011		
01:00:00	3140	Projected
17/01/2011	0400	
02:00:00	3130	Projected
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04:00:00	3109	Projected
17/01/2011 05:00:00	3098	Drainatad
17/01/2011	3090	Projected
06:00:00	3086	Projected
17/01/2011	3000	Projected
07:00:00	3074	Projected
17/01/2011	3074	Projected
08:00:00	3062	Projected
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Duty Engineer Flood Operations Centre



Sent: Wednesday, 12 January 2011 20:15

To: 'Duty Engineer'; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information

Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Subject: Wivenhoe Dam Projected Releases - 20:00 at Wednesday 12 January 2011

Wivenhoe Dan	n Actual	and	Projected Releases
			10/01/00/1

Wivenhoe Dam Actual and Projected Releases			
12/01/2011 Source: Seqwater FOC 20:10			
02/01/2011			
09:00:00	50	Actual	
02/01/2011			
10:00:00	50	Actual	
02/01/2011			
11:00:00	50	Actual	
02/01/2011			
12:00:00	50	Actual	
02/01/2011			
13:00:00	50	Actual	
02/01/2011			
14:00:00	50	Actual	
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15:00:00	50	Actual	
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16:00:00	50	Actual	
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11:00:00	50	Actual	
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03/01/2011			
31/03/2011			

13:00:00	50	Actual
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03/01/2011 20:00:00	50	Actual
03/01/2011 21:00:00	50	Actual
03/01/2011 22:00:00	50	Actual
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08:00:00 04/01/2011	50	Actual
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11:00:00 04/01/2011	50	Actual
12:00:00 04/01/2011	50	Actual
13:00:00 04/01/2011	50	Actual
14:00:00 04/01/2011	50	Actual
15:00:00 04/01/2011	50	Actual
16:00:00 04/01/2011	50	Actual
17:00:00 04/01/2011	50	Actual
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04/01/2011 20:00:00	50	Actual
04/01/2011 21:00:00	50	Actual
04/01/2011 22:00:00	50	Actual
04/01/2011 23:00:00	50	Actual
05/01/2011 00:00:00	50	Actual
21/02/2011		

05/01/2011		
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05/01/2011 03:00:00	50	Actual
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05/01/2011 05:00:00	50	Actual
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05/01/2011 10:00:00	50	Actual
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05/01/2011 22:00:00	50	Actual
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06/01/2011 00:00:00	50	Actual
06/01/2011 01:00:00	50	Actual
06/01/2011 02:00:00	50	Actual
06/01/2011 03:00:00	50	Actual
06/01/2011 04:00:00		Actual
06/01/2011	50	
05:00:00 06/01/2011	50	Actual
06:00:00 06/01/2011	50	Actual
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08:00:00 06/01/2011	50	Actual
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07/01/2011 11:00:00	50	Actual
07/01/2011 12:00:00	50	Actual
07/01/2011 13:00:00	50	Actual
07/01/2011 14:00:00	50	Actual
07/01/2011 15:00:00	65	Actual
07/01/2011 16:00:00	117	Actual
07/01/2011 17:00:00	169	Actual
07/01/2011 18:00:00	220	Actual
07/01/2011 19:00:00	270	Actual
07/01/2011 20:00:00	319	Actual
07/01/2011 21:00:00	367	Actual
07/01/2011 22:00:00	421	Actual
07/01/2011 23:00:00	474	Actual
21/02/2011		

08/01/2011		
00:00:00	528	Actual
08/01/2011 01:00:00 08/01/2011	581	Actual
02:00:00 08/01/2011	635	Actual
03:00:00	689	Actual
08/01/2011 04:00:00 08/01/2011	742	Actual
05:00:00 08/01/2011	796	Actual
06:00:00 08/01/2011	850	Actual
07:00:00 08/01/2011	905	Actual
08:00:00 08/01/2011	953	Actual
09:00:00 08/01/2011	1006	Actual
10:00:00 08/01/2011	1059	Actual
11:00:00 08/01/2011	1113	Actual
12:00:00 08/01/2011	1167	Actual
13:00:00 08/01/2011	1219	Actual
14:00:00 08/01/2011	1271	Actual
15:00:00 08/01/2011	1272	Actual
16:00:00 08/01/2011	1272	Actual
17:00:00	1273	Actual
08/01/2011 18:00:00	1273	Actual
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08/01/2011 20:00:00	1273	Actual
08/01/2011 21:00:00	1273	Actual
08/01/2011 22:00:00	1273	Actual
08/01/2011 23:00:00 09/01/2011	1273	Actual
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09/01/2011 01:00:00	1272	Actual
09/01/2011 02:00:00	1318	Actual
09/01/2011 03:00:00	1318	Actual
09/01/2011 04:00:00	1317	Actual
09/01/2011 05:00:00	1369	Actual
09/01/2011 06:00:00	1368	Actual
09/01/2011 07:00:00	1368	Actual
09/01/2011 08:00:00	1367	Actual
09/01/2011 09:00:00	1366	Actual
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09/01/2011 20:00:00	1442	
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21:00:00 09/01/2011	1448	Actual
22:00:00 09/01/2011	1455	Actual
23:00:00 10/01/2011	1464	Actual
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01:00:00 10/01/2011	1485	Actual
02:00:00 10/01/2011	1551	Actual
03:00:00 10/01/2011	1618	Actual
04:00:00 10/01/2011	1685	Actual
05:00:00 10/01/2011	1754	Actual
06:00:00	1822	Actual
10/01/2011 07:00:00	1891	Actual
10/01/2011 08:00:00	1961	Actual
10/01/2011 09:00:00	2031	Actual
10/01/2011 10:00:00	2043	Actual
10/01/2011 11:00:00	2055	Actual
10/01/2011 12:00:00	2067	Actual
10/01/2011 13:00:00	2079	Actual
10/01/2011 14:00:00	2090	
10/01/2011 15:00:00	2100	
10/01/2011 16:00:00	2165	
10/01/2011		
17:00:00 10/01/2011	2285	
18:00:00 10/01/2011	2409	
19:00:00 10/01/2011	2529	
20:00:00 10/01/2011	2707	
21:00:00 10/01/2011	2715	Actual
22:00:00	2721	Actual
31/03/2011		

10/01/2011 23:00:00	2727	Actual
11/01/2011 00:00:00	2733	Actual
11/01/2011 01:00:00	2738	Actual
11/01/2011 02:00:00	2743	Actual
11/01/2011 03:00:00	2748	Actual
11/01/2011		
04:00:00 11/01/2011	2752	Actual
05:00:00 11/01/2011	2756	Actual
06:00:00 11/01/2011	2762	Actual
07:00:00 11/01/2011	2767	Actual
08:00:00 11/01/2011	2773	Actual
09:00:00 11/01/2011	2996	Actual
10:00:00	3345	Actual
11/01/2011 11:00:00	3522	Actual
11/01/2011 12:00:00	3644	Actual
11/01/2011 13:00:00	4217	Actual
11/01/2011 14:00:00	4511	Actual
11/01/2011 15:00:00	5097	Actual
11/01/2011 16:00:00	5701	Actual
11/01/2011 17:00:00	6330	Actual
11/01/2011 18:00:00	6661	Actual
11/01/2011 19:00:00	7339	Actual
11/01/2011 20:00:00	7341	Actual
11/01/2011		
21:00:00 11/01/2011	7342	Actual
22:00:00 11/01/2011	7001	Actual
23:00:00 12/01/2011	7000	Actual
00:00:00 12/01/2011	6032	Actual
01:00:00 12/01/2011	6033	Actual
02:00:00 12/01/2011	5427	Actual
03:00:00 12/01/2011	5427	Actual
04:00:00	4842	Actual
12/01/2011 05:00:00	4269	Actual
12/01/2011 06:00:00	3699	Actual
12/01/2011 07:00:00	3123	Actual
12/01/2011 08:00:00	2531	Actual
12/01/2011 09:00:00	2534	Actual
12/01/2011		

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13/01/2011 22:00:00	2693	Projected
13/01/2011 23:00:00	2690	Projected
14/01/2011 00:00:00	2687	Projected
14/01/2011 01:00:00	2744	Projected
14/01/2011 02:00:00	2741	Projected
14/01/2011		•
03:00:00 14/01/2011	2739	Projected
04:00:00 14/01/2011	2737	Projected
05:00:00 14/01/2011	2735	Projected
06:00:00 14/01/2011	2791	Projected
07:00:00 14/01/2011	2789	Projected
08:00:00 14/01/2011	2787	Projected
09:00:00	2784	Projected
14/01/2011 10:00:00	2840	Projected
14/01/2011 11:00:00	2837	Projected
14/01/2011 12:00:00	2834	Projected
14/01/2011 13:00:00	2831	Projected
14/01/2011 14:00:00	2828	Projected
14/01/2011 15:00:00	2940	Projected
14/01/2011 16:00:00	2936	Projected
14/01/2011 17:00:00	2933	Projected
14/01/2011 18:00:00	2929	Projected
14/01/2011 19:00:00	3039	Projected
14/01/2011 20:00:00	3035	Projected
14/01/2011 21:00:00	3031	Projected
14/01/2011 22:00:00	3027	Projected
14/01/2011 23:00:00	3022	Projected
15/01/2011		•
00:00:00 15/01/2011	3018	Projected
01:00:00 15/01/2011	3013	Projected
02:00:00 15/01/2011	3009	Projected
03:00:00 15/01/2011	3060	Projected
04:00:00 15/01/2011	3055	Projected
05:00:00 15/01/2011	3050	Projected
06:00:00 15/01/2011	3045	Projected
07:00:00	3040	Projected
15/01/2011 08:00:00	3035	Projected
15/01/2011		

09:00:00	3030	Projected
15/01/2011 10:00:00	3025	Projected
15/01/2011 11:00:00	3129	Projected
15/01/2011 12:00:00	3123	Projected
15/01/2011 13:00:00	3118	Projected
15/01/2011 14:00:00	3112	Projected
15/01/2011 15:00:00	3106	Projected
15/01/2011 16:00:00	3100	Projected
15/01/2011 17:00:00	3094	Projected
15/01/2011		-
18:00:00 15/01/2011	3088	Projected
19:00:00 15/01/2011	3190	Projected
20:00:00 15/01/2011	3183	Projected
21:00:00 15/01/2011	3176	Projected
22:00:00 15/01/2011	3170	Projected
23:00:00 16/01/2011	3163	Projected
00:00:00	3157	Projected
16/01/2011 01:00:00	3150	Projected
16/01/2011 02:00:00	3143	Projected
16/01/2011 03:00:00	3188	Projected
16/01/2011 04:00:00	3181	Projected
16/01/2011 05:00:00	3174	Projected
16/01/2011 06:00:00	3167	Projected
16/01/2011 07:00:00	3160	Projected
16/01/2011 08:00:00	3153	
16/01/2011		Projected
09:00:00 16/01/2011	3146	Projected
10:00:00 16/01/2011	3139	Projected
11:00:00 16/01/2011	3233	Projected
12:00:00 16/01/2011	3225	Projected
13:00:00 16/01/2011	3217	Projected
14:00:00 16/01/2011	3209	Projected
15:00:00	3202	Projected
16/01/2011 16:00:00	3194	Projected
16/01/2011 17:00:00	3186	Projected
16/01/2011 18:00:00	3178	Projected
16/01/2011 19:00:00	3268	Projected
16/01/2011 20:00:00	3259	Projected
31/03/2011		-

10/01/0011		
16/01/2011 21:00:00	3249	Projected
16/01/2011 22:00:00	3239	Projected
16/01/2011 23:00:00	3228	Projected
17/01/2011 00:00:00	3218	Projected
17/01/2011 01:00:00	3207	Projected
17/01/2011 02:00:00	3196	Projected
17/01/2011 03:00:00	3232	Projected
17/01/2011 04:00:00	3219	Projected
17/01/2011 05:00:00	3207	Projected
17/01/2011 06:00:00	3194	Projected
17/01/2011 07:00:00	3181	Projected
17/01/2011 08:00:00	3169	Projected
17/01/2011 09:00:00	3156	Projected
17/01/2011 10:00:00	3143	Projected
17/01/2011 11:00:00	3221	Projected
17/01/2011 12:00:00	3207	Projected
17/01/2011 13:00:00	3193	Projected
17/01/2011 14:00:00	3179	Projected
17/01/2011 15:00:00	3165	Projected
17/01/2011 16:00:00	3151	Projected
17/01/2011 17:00:00	3137	Projected
17/01/2011		_
18:00:00 17/01/2011	3122	Projected
19:00:00 17/01/2011	3108	Projected
20:00:00 17/01/2011	3007	Projected
21:00:00 17/01/2011	2950	Projected
22:00:00 17/01/2011	2850	Projected
23:00:00 18/01/2011	2708	Projected
00:00:00 18/01/2011	2609	Projected
01:00:00 18/01/2011	2511	Projected
02:00:00 18/01/2011	2369	Projected
03:00:00 18/01/2011	2272	Projected
04:00:00 18/01/2011	2219	Projected
05:00:00 18/01/2011	2120	Projected
06:00:00 18/01/2011	2068	Projected
07:00:00	2016	Projected
18/01/2011		
31/03/2011		

08:00:00	1919	Projected
18/01/2011 09:00:00	1866	Projected
18/01/2011 10:00:00	1818	Projected
18/01/2011 11:00:00	1723	Projected
18/01/2011 12:00:00	1670	Projected
18/01/2011 13:00:00	1619	Projected
18/01/2011 14:00:00	1523	Projected
18/01/2011 15:00:00	1472	Projected
18/01/2011 16:00:00	1422	Projected
18/01/2011 17:00:00	1323	Projected
18/01/2011 18:00:00	1271	Projected
18/01/2011 19:00:00	1219	Projected
18/01/2011 20:00:00	1127	Projected
18/01/2011 21:00:00	1077	Projected
18/01/2011 22:00:00	1026	Projected
18/01/2011 23:00:00	926	Projected
19/01/2011 00:00:00	876	Projected
19/01/2011 01:00:00	825	Projected
19/01/2011 02:00:00	725	Projected
19/01/2011 03:00:00	675	Projected
19/01/2011 04:00:00	625	Projected
19/01/2011 05:00:00	525	Projected
19/01/2011 06:00:00	475	Projected
19/01/2011 07:00:00	432	Projected
19/01/2011 08:00:00	332	Projected
19/01/2011 09:00:00	288	Projected
19/01/2011 10:00:00	242	Projected
19/01/2011 11:00:00	148	Projected
19/01/2011 12:00:00	99	Projected
19/01/2011 13:00:00	49	Projected
19/01/2011 14:00:00	0	Projected
19/01/2011 15:00:00	0	Projected
19/01/2011 16:00:00	0	Projected
19/01/2011 17:00:00	0	Projected
19/01/2011 18:00:00	0	Projected
19/01/2011 19:00:00	0	Projected
31/03/2011		

John Ruffini Duty Engineer Flood Operations Centre

Phone Fax:

From: Duty Engineer Thursday, 13 January 2011 05:45 Sent: To: 'Arminda Roberts (private)'; David Roberts: Paul Bird; 'Paul Bird (Private)'; Peter A rogood; |'Tony avid Pokarier; Jacobs (private)'; John West; Lou van Blerk; Mark Tan; Nev Ablitt; Glenn Patterson; Murray Dunstan; Rob Gorian; Doug Grigg; Graham Francis: Jayam Tennakoon: Matthew O'Reilly

Cc: Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood

Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Subject: FOC Situation Report 0600 13 January 2011

Rainfall

Rainfall in the last 12 hours is generally below 5mm with isolated falls of up to 15mm in the Stanley, Lockyer and Pine River catchments. There is no significant rain expected fin the next 4 days.

Somerset/Wivenhoe

Somerset Dam peaked at 105.11 mAHD at 06:00 on Wednesday 12 January 2011. The current level is 104.34 mAHD. One sluice was opened at 10:30 on 12 January 2011 and the dam is currently discharging 1,130 m3/s. Sluice gates will be utilised to drain of the flood storage compartment during the next 5 days.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s. Wivenhoe Dam was 74.72 m AHD at 06:00 and commence to fall slowly.

The releases from Wivenhoe Dam have been temporarily reduced to 2,500 m3/s at 07:30 on Wednesday 12 January 2011 to allow the peak of Lockyer Creek to enter the Brisbane River. The Brisbane River has peaked at the Port Office Gauge early Thursday morning. Releases from Wivenhoe Dam will be managed to achieve a target flow of around 3,500 m3/s at Moggill. This release will then be maintained to drain the flood storage component within the required 7 days.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

North Pine

At 06:00 North Pine Dam was 39.70 mAHD falling with all gates open 1 increment, releasing about 80 m3/s. North Pine peaked at 41.11 mAHD at 14:00 on Tuesday 11 January 2011 with peak release of 2,800 m3/s. The event has a volume of around 200,000 ML. It is expected that all gates will be closed on Friday.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments and reviewing operating strategy. The FOC will continue to maintain close contact with warning agencies and local councils.

The next report will be issued at 18:00 on Thursday 13 January 2011.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre



Sent: Thursday, 13 January 2011 06:09

To:

Subject: Gauge Height Measurement

FYI

John Tibaldi waded into the Botanic Gardens this morning and measured the highest water level reached on the 1974 memorial as 1.4 metres below the top of the mark. This gives a peak of 4.05 m AHD.

All good news!

Terry Malone

Duty Engineer Flood Operations Centre

Phone

Fax:

Sent: Thursday, 13 January 2011 08:00

To:

Subject: Brisbane City Staff Gauge Reading

John Ruffini and Rob Ayre have just taken a reading at the staff gauge at Thornton St 4.15m at 07:50 13/1/2011

Terry Malone

Duty Engineer Flood Operations Centre

Phone

Fax:

Sent: Thursday, 13 January 2011 11:14

To: 'Flood Information Centre'; Doug Grigg;

Graham Francis; Jayam Tennakoon; Matthew O'Reilly;
Murray Dunstan; Rob Gorian

Subject: Comms Restored

Comms has been restored in the FOC

Terry Malone

Duty Engineer Flood Operations Centre

Phone

Fax:

Duty Engineer From:

Thursday, 13 January 2011 14:32 Sent:

To: 'Flood Information Centre'

Subject: Actual and Projected Wivenhoe Releases

s

•	,	
Wivenhoe Dam Actual Source: Segwater FOC		ojected Releases 13/01/2011 14:31
02/01/2011	,	14.51
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12:00:00	50	Actual
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02/01/2011		
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16:00:00	50	Actual
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22:00:00	50	Actual
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31/03/2011

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07/01/2011 00:00:00	50	Actual
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07/01/2011 18:00:00	220	Actual
07/01/2011 19:00:00	270	Actual
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08/01/2011 03:00:00	689	Actual
08/01/2011 04:00:00	742	Actual
08/01/2011 05:00:00	796	Actual
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09/01/2011 08:00:00	1367	Actual
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09/01/2011 19:00:00	1437	Actual
09/01/2011 20:00:00	1442	Actual
09/01/2011 21:00:00	1448	Actual
09/01/2011 22:00:00	1455	Actual
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11/01/2011 02:00:00	2743	Actual
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11/01/2011 04:00:00	2752	Actual
11/01/2011 05:00:00	2756	Actual
11/01/2011 06:00:00	2762	Actual
11/01/2011 07:00:00	2767	Actual
11/01/2011 08:00:00	2773	Actual
11/01/2011 09:00:00	2996	Actual
11/01/2011 10:00:00	3345	Actual
11/01/2011 11:00:00	3522	Actual
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11/01/2011 17:00:00	6330	Actual
11/01/2011 18:00:00	6661	Actual
11/01/2011 19:00:00	7339	Actual
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11/01/2011 21:00:00	7342	Actual
11/01/2011 22:00:00	7001	Actual
11/01/2011 23:00:00	7000	Actual
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12/01/2011 06:00:00	3699	Actual
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13/01/2011 10:00:00 2539 Actual	
13/01/2011 11:00:00 2538 Actual	
13/01/2011 12:00:00 2537 Actual	
13/01/2011 13:00:00 2595 Actual	
13/01/2011 14:00:00 2654 Actual	
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13/01/2011 16:00:00 2772 Projected	
13/01/2011 17:00:00 2830 Projected	
13/01/2011 18:00:00 2888 Projected	
13/01/2011 19:00:00 2944 Projected	
13/01/2011 20:00:00 3001 Projected	
13/01/2011 21:00:00 3057 Projected	
13/01/2011	
31/03/2011	

22:00:00	3113	Projected
13/01/2011 23:00:00	3168	Projected
14/01/2011 00:00:00	3222	Projected
14/01/2011 01:00:00	3276	Projected
14/01/2011 02:00:00	3330	Projected
14/01/2011 03:00:00	3383	-
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04:00:00 14/01/2011	3435	Projected
05:00:00 14/01/2011	3487	Projected
06:00:00 14/01/2011	3539	Projected
07:00:00 14/01/2011	3590	Projected
08:00:00 14/01/2011	3641	Projected
09:00:00	3634	Projected
14/01/2011 10:00:00	3628	Projected
14/01/2011 11:00:00	3622	Projected
14/01/2011 12:00:00	3615	Projected
14/01/2011 13:00:00	3609	Projected
14/01/2011 14:00:00	3602	Projected
14/01/2011 15:00:00	3596	Projected
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16:00:00 14/01/2011	3589	Projected
17:00:00 14/01/2011	3582	Projected
18:00:00 14/01/2011	3575	Projected
19:00:00 14/01/2011	3568	Projected
20:00:00	3561	Projected
14/01/2011 21:00:00	3554	Projected
14/01/2011 22:00:00	3547	Projected
14/01/2011 23:00:00	3540	Projected
15/01/2011 00:00:00	3532	Projected
15/01/2011 01:00:00	3525	Projected
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08:00:00 15/01/2011	3472	Projected
09:00:00	3464	Projected
31/03/2011		

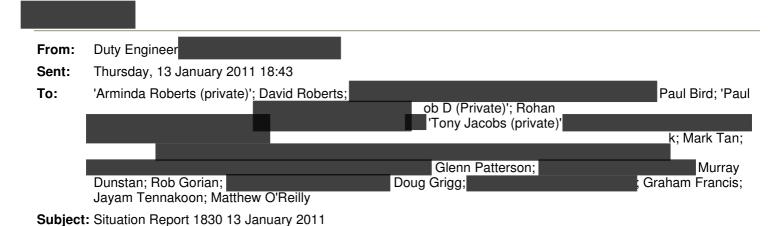
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16/01/2011 18:00:00	3173	Projected
16/01/2011 19:00:00	3162	Projected
16/01/2011 20:00:00	3151	Projected
16/01/2011		
31/03/2011		

21:00:00 16/01/2011	3139	Projected
22:00:00	3128	Projected
16/01/2011 23:00:00	3116	Projected
17/01/2011 00:00:00	3105	Projected
17/01/2011 01:00:00	3093	Projected
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17/01/2011 03:00:00	3070	Projected
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17/01/2011 05:00:00	3044	Projected
17/01/2011 06:00:00	3031	Projected
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13:00:00 17/01/2011	2940	Projected
14:00:00 17/01/2011	2927	Projected
15:00:00 17/01/2011	2914	Projected
16:00:00	2857	Projected
17/01/2011 17:00:00	2802	Projected
17/01/2011 18:00:00	2662	Projected
17/01/2011 19:00:00	2565	Projected
17/01/2011 20:00:00	2469	Projected
17/01/2011 21:00:00	2330	Projected
17/01/2011 22:00:00	2234	Projected
17/01/2011 23:00:00	2182	Projected
18/01/2011 00:00:00	2085	Projected
18/01/2011 01:00:00	2033	Projected
18/01/2011 02:00:00	1983	Projected
18/01/2011 03:00:00	1887	Projected
18/01/2011		
04:00:00 18/01/2011	1835	Projected
05:00:00 18/01/2011	1787	Projected
06:00:00 18/01/2011	1694	Projected
07:00:00 18/01/2011	1642	Projected
08:00:00	1591	Projected
31/03/2011		

18/01/2011 09:00:00	1497	Projected
18/01/2011 10:00:00	1447	Projected
18/01/2011 11:00:00	1398	Projected
18/01/2011 12:00:00	1300	Projected
18/01/2011 13:00:00	1249	Projected
18/01/2011 14:00:00	1199	Projected
18/01/2011 15:00:00	1108	Projected
18/01/2011 16:00:00	1059	Projected
18/01/2011 17:00:00	1008	Projected
18/01/2011 18:00:00	910	Projected
18/01/2011 19:00:00	862	Projected
18/01/2011 20:00:00	811	Projected
18/01/2011 21:00:00	713	Projected
18/01/2011 22:00:00	664	Projected
18/01/2011 23:00:00	614	Projected
19/01/2011 00:00:00	516	Projected
19/01/2011 01:00:00	467	Projected
19/01/2011 02:00:00	424	_
19/01/2011		Projected
03:00:00 19/01/2011	326	Projected
04:00:00 19/01/2011	283	Projected
05:00:00 19/01/2011	238	Projected
06:00:00 19/01/2011	145	Projected
07:00:00 19/01/2011	97	Projected
08:00:00 19/01/2011	49	Projected
09:00:00 19/01/2011	0	Projected
10:00:00 19/01/2011	0	Projected
11:00:00 19/01/2011	0	Projected
12:00:00 19/01/2011	0	Projected
13:00:00 19/01/2011	0	Projected
14:00:00 19/01/2011	0	Projected
15:00:00 19/01/2011	0	Projected
16:00:00	0	Projected
19/01/2011 17:00:00	0	Projected
19/01/2011 18:00:00	0	Projected
19/01/2011 19:00:00	0	Projected

Duty Engineer Flood Operations Centre

Phone Fax:



Rainfall

There has been no significant rainfall in the last 12 hours and none is expected for the next 5 days.

Somerset/Wivenhoe

Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011. The current level is 103.60 mAHD and falling. Four sluices are open and the dam is currently discharging 1,528 m3/s.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s. Wivenhoe Dam was 74.5 mAHD at 18:00 and continuing to fall slowly.

The releases from Wivenhoe Dam are currently 2,888 m3/s and are being managed to achieve a target flow of around 3,500 m3/s at Moggill. This release will then be maintained to drain the flood storage component within the required 7 days.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

North Pine

At 18:00 North Pine Dam was 39.60 mAHD and falling with 5 gates open, releasing about 151 m3/s. North Pine peaked at 41.11 mAHD at 14:00 on Tuesday 11 January 2011 with a peak release of 2,800 m3/s. The flood event volume is estimated to be around 200,000 ML.

All gates will be closed at 05:00 Friday to enable MMRC to consider reopening Youngs Crossing.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments and reviewing operating strategy. The FOC will continue to maintain close contact with warning agencies and local councils.

The next report will be issued at 06:00 on Friday 14 January 2011.

Terry Malone Duty Engineer Flood Operations Centre



From: Duty Engineer
Sent: Thursday, 13 January 2011 20:22
To: Doug Grigg; ham

Subject: Wivenhoe Dam Directive # 38 for Wivenhoe Dam at 20:15 on Thursday 13 January 2011

Attachments: OPS_Directive_Wivenhoe #38.doc

Please find attached a copy of Directive #38 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone Fax:

From: Duty Engineer

Sent: Thursday, 13 January 2011 20:32

To: Doug Grigg; am

Subject: Somerset Dam Directive # 11 at 20:30 on 13 January 2011

Attachments: OPS_Directive_Somerset #11.doc

Please find attached a copy of Directive # 11 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone Fax:

Sent: Friday, 14 January 2011 02:04

To: Glenn Patterson; Murray

Subject: North Pine Dam Directive # 30 at 02:00 on Friday 14 January 2011

Attachments: OPS_Directive_NorthPine #30.doc

Please find attached Directive # 30 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone

Fax:

Duty Engineer From: Friday, 14 January 2011 05:35 Sent: Paul Bird; 'Paul Bird To: 'Arminda Roberts (priv 'Rob D (Private)'; Rohan Thorogood; Tony Jacobs (private); Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina id Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt; son: Murray Dunstan; Rob Gorian; Doug Grigg: Graham Francis; Jayam Tennakoon; Matthew O'Reilly Subject: FOC Situation Report at 06:00 on Friday 14 January 2011

Rainfall

There has been no significant rainfall in the last 12 hours and falls of only 5mm is expected in the next twenty-four hours. Mostly fine conditions are expected over the weekend, but showers will return early next week.

Somerset/Wivenhoe

Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011. The current level is 102.87 mAHD and falling. Four sluices are open and the dam is currently discharging about 1,300 m3/s.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s. At 05:00 Wivenhoe Dam was 74.74.08 mAHD and continuing to fall.

The releases from Wivenhoe Dam are currently about 3,500 m3/s and are being managed to achieve a target flow of around 3,500 m3/s at Moggill. This release will then be maintained to drain the flood storage component by Wednesday.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

North Pine

At 05:00 North Pine Dam was 39.40 mAHD and gate operations have ceased. The current level is expected to increase to just over 39.5 mAHD in the next few days due to base-flow. This could be higher if further rainfall occurs.

Fish recovery has commenced and MBRC have been advised that the gates have been closed. MBRC will inspect Youngs Crossing to determine if the crossing can be re-opened.

North Pine peaked at 41.11 mAHD at 14:00 on Tuesday 11 January 2011 with a peak release of 2,800 m3/s. The flood event volume is estimated to be around 200,000 ML.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments. The FOC will continue to maintain close contact with warning agencies and local councils.

The next report will be issued at 18:00 on Friday 14 January 2011.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre



Duty Engineer From: Sent: Friday, 14 January 2011 05:45 Paul Bird; 'Paul Bird To: 'Arminda Roberts (private)'; David Roberts; 'Rob D (Private)'; Rohan Thorogood; 'Tony Jacobs (private)'; Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi; Pokarier; John Glenn Patterson; Murray Dunstan; Rob Gorian; Doug Grigg; Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: FOC Situation Report at 06:00 on Friday 14 January 2011

Rainfall

There has been no significant rainfall in the last 12 hours and falls of only 5mm is expected in the next twenty-four hours. Mostly fine conditions are expected over the weekend, but showers will return early next week.

Somerset/Wivenhoe

Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011. The current level is 102.87 mAHD and falling. Four sluices are open and the dam is currently discharging about 1,300 m3/s.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s. At 05:00 Wivenhoe Dam was 74.08 mAHD and continuing to fall.

The releases from Wivenhoe Dam are currently about 3,500 m3/s and are being managed to achieve a target flow of around 3,500 m3/s at Moggill. This release will then be maintained to drain the flood storage component by Wednesday.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

North Pine

At 05:00 North Pine Dam was 39.40 mAHD and gate operations have ceased. The current level is expected to increase to just over 39.5 mAHD in the next few days due to base-flow. This could be higher if further rainfall occurs.

Fish recovery has commenced and MBRC have been advised that the gates have been closed. MBRC will inspect Youngs Crossing to determine if the crossing can be re-opened.

North Pine peaked at 41.11 mAHD at 14:00 on Tuesday 11 January 2011 with a peak release of 2,800 m3/s. The flood event volume is estimated to be around 200,000 ML.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments. The FOC will continue to maintain close contact with warning agencies and local councils.

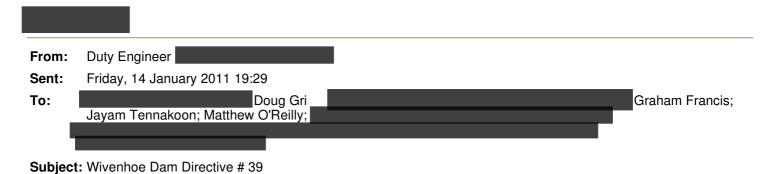
The next report will be issued at 18:00 on Friday 14 January 2011.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone: Fax:

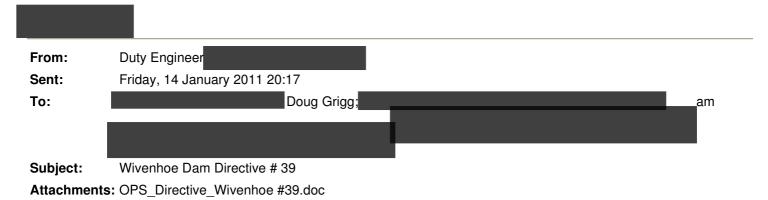


Please find attached a copy of Directive #39.

John Tibaldi

Duty Engineer Flood Operations Centre

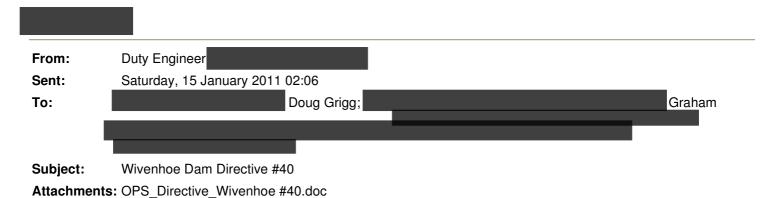




Please find attached a copy of Directive #39.

John Tibaldi Duty Engineer Flood Operations Centre

Phone Fax:



Please find attached a copy of Directive # 40.

John Tibaldi Duty Engineer Flood Operations Centre

Phone Fax:

Duty Engineer From: Sent: Saturday, 15 January 2011 06:36 To: 'Arminda Roberts (priv (Private)'; Peter Allen; 'Rob D (Private)'; Rohan Thorogood; 'Tony Jacobs (private)'; Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; ous; Ken Morris; Robert McGlinn; Santina Pennisi; Al Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt; Murray Dunstan; Rob Gorian; Doug Grigg; Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Situation Report 0630 Saturday 15 January 2011

Rainfall

There has been no significant rainfall in the last 24 hours and no significant rainfall is expected in the next twenty-four hours. Mostly fine conditions are expected over the weekend, but showers will return early next week.

Somerset/Wivenhoe

At 06:00 Somerset Dam was 101.35 mAHD and falling. Four sluices are open and the dam is currently discharging about 920 m3/s. Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011.

At 05:00 Wivenhoe Dam was 72.86 mAHD and continuing to fall. The releases from Wivenhoe Dam are currently about 3,500 m3/s and are being managed to achieve a target flow of around 3,500 m3/s at Moggill. This release level is being maintained to drain the flood storage component by Wednesday.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

North Pine

At 05:00 North Pine Dam was 39.40 mAHD and gate operations have ceased. This level is expected to increase to just over 39.5 mAHD in the next few days due to base-flow. This could be higher if further rainfall occurs.

North Pine peaked at 41.11 mAHD at 14:00 on Tuesday 11 January 2011 with a peak release of 2,800 m3/s. The flood event volume is estimated to be around 200,000 ML.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments and is maintaining close contact with warning agencies and local councils.

The next report will be issued at 18:00 on Saturday 15 January 2011.

Terry Malone Duty Engineer Flood Operations Centre



Sent: Saturday, 15 January 2011 10:02

To:

Subject: Brisbane R model

Any chance of pushing last Brisbane R model run to web-I'd like to compare flood vols. I will discuss prior to comment.

Terry

Duty Engineer Flood Operations Centre

Phone

Fax:

From: **Duty Engineer** Sent: Sunday, 16 January 2011 06:09 Paul To: 'Duty Engineer'; 'Arminda Roberts (pri 'Rob D (Private)'; Rohan Thorogood; Tony Jacobs (private)'; Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi; Al Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Murray Dunstan; Rob Gorian; Doug Grigg; |Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Situation Report 0600 Sunday 16 January 2011

Rainfall

There has been no significant rainfall in the last 24 hours and no significant rainfall is expected in the next twenty-four hours. Mostly fine conditions are expected over the weekend, but showers will return early next week.

Somerset/Wivenhoe

At 06:00 Somerset Dam was 100.01 mAHD and falling. Four sluices are open and the dam is currently discharging about 820 m3/s. Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011.

At 06:00 Wivenhoe Dam was 71.3 mAHD and continuing to fall. The releases from Wivenhoe Dam are currently about 3,477 m3/s and are being managed to achieve a target flow of around 3,500 m3/s at Moggill. This release level is being maintained to drain the flood storage component by Wednesday.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

North Pine

At 06:00 North Pine Dam was 39.46 mAHD. All gates are closed. The lake level is expected to increase to just over 39.5 mAHD in the next few days due to base-flow. This could be higher if further rainfall occurs.

North Pine peaked at 41.11 mAHD at 14:00 on Tuesday 11 January 2011 with a peak release of 2,800 m3/s. The flood event volume is estimated to be around 200,000 ML.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments and is maintaining close contact with warning agencies and local councils.

The next report will be issued at 18:00 on Sunday 16 January 2011.

John Ruffini

Duty Engineer Flood Operations Centre

Phone: Fax:

From: Duty Engineer

Sent: Sunday, 16 January 2011 06:51

To: Glenn Grigg; Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Cc:

You, more than most, know the magnitude and severity of this current event. Our current preliminary assessment suggests that the rainfall totals and runoff volumes make this event larger than the January 1974 flood for the dams. It also approaches the magnitude of the 1893 event.

Certain elements of the media have made assertions about the adopted operational strategy which was used to manage it. It is unfortunate that these reports have removed the focus from the recovery effort.

I can assure you that the adopted strategy was performed in accordance with the Manuals of Operational Procedures and that the affected communities where afforded the highest level of protection available under the circumstances. The magnitude of the event meant that the security of the dams had to be considered in selecting the releases that where required.

You should all be proud of your efforts to date.

I also wish to remind you that we are still operational and will be until at least Wednesday. So let's finish the job in the same way we started.

Thanks and Regards

Rob Ayre, John Ruffini, John Tibaldi, and Terry Malone

Subject: Message from the Senior Flood Operations Engineer

Duty Engineers Flood Operations Centre



Sent: Sunday, 16 January 2011 08:37

To:

Doug Grigg; Graham

Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Wivenhoe Dam Directive # 45 at 08:30 on Sunday 16 January 2011

Attachments: OPS_Directive_Wivenhoe #45.doc

Please find attached Directive # 45 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone

Fax:

Sent: Sunday, 16 January 2011 12:16

To:

Doug Grigg; Graham

Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Wivenhoe Dam Directive #46 at 12:15 on Sunday 16 January 2011

Attachments: OPS_Directive_Wivenhoe #46.doc

Please find attached a copy of Directive #46 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone Fax:

From: Duty Engineer

Sent: Sunday, 16 January 2011 15:18

To: Doug Grigg; Graham

Subject: Wivenhoe Dam Directive # 47 at 15:15 on Sunday 16 January 2011

Attachments: OPS_Directive_Wivenhoe #47.doc

Please find attached a copy of Directive # 47 for your action

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone Fax:

Sent: Sunday, 16 January 2011 18:45

To:

Doug Grigg; Graham

Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Wivenhoe Dam Directive # 48 at 18:45 on Sunday 16 January 2011

Attachments: OPS_Directive_Wivenhoe #48.doc

Please find attached Directive # 48 for your action.

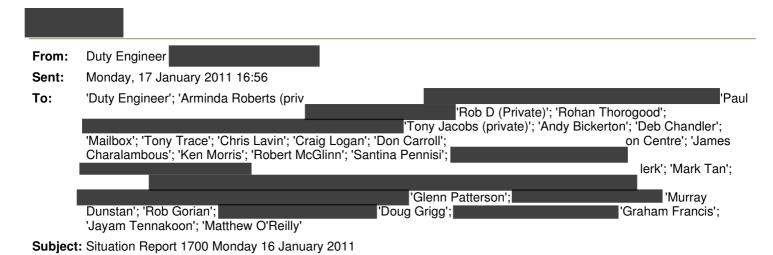
Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone

Fax:



Rainfall

There has been no significant rainfall in the last 24 hours and no significant rainfall is expected in the next twenty-four hours. Mostly fine conditions are expected over the weekend, but showers will return early next week.

Somerset/Wivenhoe

At 16:00 Somerset Dam was 99.02 mAHD and steady. The last sluice gate was closed at 7:00 17/01/2011 and one regulator was opened the base-flow into the Dam. Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011.

At 16:00 Wivenhoe Dam was 68.66 mAHD and continuing to fall. The releases from Wivenhoe Dam are currently about 2946 m3/s. Releases will be steadily reduced before final closure on Thursday morning. The Dam will be near full supply and releases will be made through the regulator to account for ongoing base-flow.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

It should be noted that the automatic recorder currently being reported on the BoM website is currently incorrect and has been since early Tuesday 11 2011.

North Pine

At 09:00 North Pine Dam was 39.5 mAHD. All gates are closed. No further gate operations are expected unless additional rainfall falls.

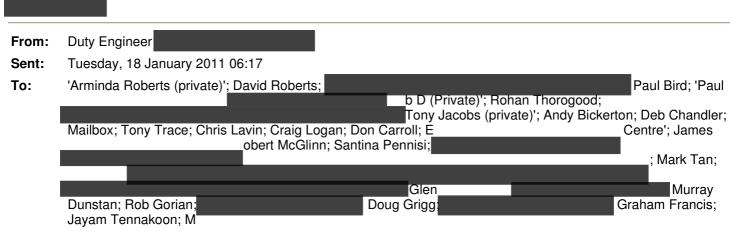
North Pine peaked at 41.11 mAHD at 14:00 on Tuesday 11 January 2011 with a peak release of 2,800 m3/s. The flood event volume is estimated to be around 200,000 ML.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments and is maintaining close contact with warning agencies and local councils. Councils have been informed of the current release strategy. The bridges below Wivenhoe Dam will progressively come out of water over the next few days.

John Ruffini Duty Engineer Flood Operations Centre





Subject: Situation Report 0615 Tuesday 18 January 2011

Rainfall

There has been no significant rainfall in the last 24 hours and no significant rainfall is expected in the next twenty-four hours. Mostly fine conditions are expected over the weekend, but showers will return early next week.

Somerset/Wivenhoe

At 16:00 Monday Somerset Dam was 99.02 mAHD and steady. The last sluice gate was closed at 07:00 17/01/2011 and one regulator remains open managing the base-flow into the Dam. Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011.

At 06:00 Tuesday Wivenhoe Dam was 67.82 mAHD and continuing to fall slowly. Releases were held constant overnight at about 2,050 m3/s to assist water supply pumping at Lowood. Following discussions with water supply operators, it has been decided to resume closing gates at 09:00 Tuesday before final closure on Thursday morning. The Dam will be near full supply and releases will be made through the regulator to account for ongoing base-flow.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

It should be noted that the Seqwater water level gauge currently being reported on the BoM website is currently slightly under reading by about 50mm.

North Pine

At 09:00 North Pine Dam was 39.5 mAHD. All gates are closed. No further gate operations are expected unless additional rainfall falls.

North Pine peaked at 41.11 mAHD at 14:00 on Tuesday 11 January 2011 with a peak release of 2,800 m3/s. The flood event volume is estimated to be around 200,000 ML.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments and is maintaining close contact with warning agencies and local councils. Councils have been informed of the current release strategy.

At 05:00, the Wivenhoe Dam operator reported that the Fernvale Bridge was out of water but water remained over the approaches from Fernvale. He also advised that there were power lines on the bridge and that Energex was advised.

The remaining bridges below Wivenhoe Dam will progressively come out of water over the next few days.

Terry Malone
Duty Engineer
Flood Operations Centre

Phone:

Fax:

Sent: Tuesday, 18 January 2011 08:20

To: Doug Grigg; Graham

Francis; Jayam Tennakoon; Matthew O'Reilly;

Subject: Wivenhoe Dam Directive # 55 at 8:30 on Tuesday 18 January 2011

Attachments: OPS_Directive_Wivenhoe #55.doc

Please find attached Directive # 55 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone

Fax:

From: Duty Engineer
Sent: Tuesday, 18 January 2011 12:07
To: Doug Grigg; am

Subject: Wivenhoe Directive #56 at 12:15 on Tuesday 18 January 2011

Attachments: OPS_Directive_Wivenhoe #56.doc

Please find attached a copy of Directive #56 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone Fax:

Duty Engineer From:

Tuesday, 18 January 2011 13:29 Sent:

Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi To:

Subject: Actual and predicted Release - Wivenhoe Dam at 13:00 on Tuesday 18 January 2011

Wivenhoe	Dam	Actual	and	Projected	d Releas	es
					18/01/20	111

		18/01/2011
Source: Seqwater FO	С	13:28
02/01/2011 09:00:00	50	Actual
02/01/2011	00	riotaai
10:00:00	50	Actual
02/01/2011 11:00:00	50	Actual
02/01/2011	00	riotaai
12:00:00	50	Actual
02/01/2011 13:00:00	50	Actual
02/01/2011	00	Notaai
14:00:00	50	Actual
02/01/2011 15:00:00	50	Actual
02/01/2011	00	Notaai
16:00:00	50	Actual
02/01/2011 17:00:00	50	Actual
02/01/2011	30	Actual
18:00:00	50	Actual
02/01/2011 19:00:00	50	Actual
02/01/2011	50	Actual
20:00:00	50	Actual
02/01/2011 21:00:00	50	Actual
02/01/2011	30	Actual
22:00:00	50	Actual
02/01/2011 23:00:00	50	Actual
03/01/2011	30	Actual
00:00:00	50	Actual
03/01/2011	E0	Antual
01:00:00 03/01/2011	50	Actual
02:00:00	50	Actual
03/01/2011	5 0	A
03:00:00 03/01/2011	50	Actual
04:00:00	50	Actual
03/01/2011		
05:00:00 03/01/2011	50	Actual
06:00:00	50	Actual
03/01/2011		
07:00:00 03/01/2011	50	Actual
08:00:00	50	Actual
03/01/2011		
09:00:00	50	Actual
03/01/2011 10:00:00	50	Actual
03/01/2011	30	Actual
11:00:00	50	Actual
03/01/2011	50	Actual
12:00:00 03/01/2011	50	Actual
31/03/2011		

13:00:00	50	Actual
03/01/2011 14:00:00	50	Actual
03/01/2011 15:00:00	50	Actual
03/01/2011 16:00:00	50	Actual
03/01/2011 17:00:00	50	Actual
03/01/2011 18:00:00	50	Actual
03/01/2011 19:00:00	50	Actual
03/01/2011 20:00:00	50	Actual
03/01/2011 21:00:00	50	Actual
03/01/2011 22:00:00	50	Actual
03/01/2011 23:00:00	50	Actual
04/01/2011 00:00:00	50	Actual
04/01/2011 01:00:00	50	Actual
04/01/2011 02:00:00	50	Actual
04/01/2011 03:00:00	50	Actual
04/01/2011 04:00:00	50	Actual
04/01/2011		
05:00:00 04/01/2011	50	Actual
06:00:00 04/01/2011	50	Actual
07:00:00 04/01/2011	50	Actual
08:00:00 04/01/2011	50	Actual
09:00:00 04/01/2011	50	Actual
10:00:00 04/01/2011	50	Actual
11:00:00 04/01/2011	50	Actual
12:00:00 04/01/2011	50	Actual
13:00:00 04/01/2011	50	Actual
14:00:00 04/01/2011	50	Actual
15:00:00 04/01/2011	50	Actual
16:00:00 04/01/2011	50	Actual
17:00:00 04/01/2011	50	Actual
18:00:00 04/01/2011	50	Actual
19:00:00	50	Actual
04/01/2011 20:00:00	50	Actual
04/01/2011 21:00:00	50	Actual
04/01/2011 22:00:00	50	Actual
04/01/2011 23:00:00	50	Actual
05/01/2011 00:00:00	50	Actual
21/02/2011		

05/01/2011		
01:00:00	50	Actual
05/01/2011 02:00:00	50	Actual
05/01/2011 03:00:00	50	Actual
05/01/2011 04:00:00	50	Actual
05/01/2011 05:00:00	50	Actual
05/01/2011 06:00:00	50	Actual
05/01/2011 07:00:00	50	Actual
05/01/2011 08:00:00	50	Actual
05/01/2011 09:00:00	50	Actual
05/01/2011 10:00:00	50	Actual
05/01/2011 11:00:00	50	Actual
05/01/2011 12:00:00	50	Actual
05/01/2011 13:00:00	50	Actual
05/01/2011 14:00:00	50	Actual
05/01/2011 15:00:00	50	Actual
05/01/2011 16:00:00	50	Actual
05/01/2011 17:00:00	50	Actual
05/01/2011 18:00:00	50	Actual
05/01/2011 19:00:00	50	Actual
05/01/2011 20:00:00	50	Actual
05/01/2011 21:00:00	50	Actual
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06/01/2011 04:00:00		Actual
06/01/2011	50	
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07:00:00 06/01/2011	50	Actual
08:00:00 06/01/2011	50	Actual
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11:00:00	50	Actual
06/01/2011		

12:00:00	50	Actual
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07/01/2011 21:00:00	368	Actual
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21/02/2011		

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09:00:00	1007	Actual
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10/01/2011 02:00:00	1551	Actual
10/01/2011 03:00:00	1619	Actual
10/01/2011 04:00:00	1686	Actual
10/01/2011 05:00:00	1755	Actual
10/01/2011 06:00:00	1823	Actual
10/01/2011 07:00:00	1892	Actual
10/01/2011 08:00:00	1962	Actual
10/01/2011 09:00:00	2032	Actual
10/01/2011 10:00:00	2045	Actual
10/01/2011 11:00:00	2057	Actual
10/01/2011 12:00:00	2069	Actual
10/01/2011 13:00:00	2081	Actual
10/01/2011 14:00:00	2092	Actual
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10/01/2011 19:00:00	2531	Actual
10/01/2011 20:00:00	2710	Actual
10/01/2011 21:00:00	2718	Actual
10/01/2011 22:00:00	2724	Actual
31/03/2011		

10/01/2011		
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12/01/2011 09:00:00	2540	Actual
12/01/2011		
31/03/2011		

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12/01/2011 13:00:00	2549	Actual
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13/01/2011 03:00:00	2554	
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13/01/2011 05:00:00	2553	Actual
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13/01/2011 12:00:00	2545	
13/01/2011 13:00:00	2604	Actual
13/01/2011 14:00:00	2663	
13/01/2011		
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16:00:00 13/01/2011	2782	Actual
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18:00:00 13/01/2011	2898	Actual
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20:00:00 13/01/2011	3129	
21:00:00	3242	Actual
31/03/2011		

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07:00:00 14/01/2011	3543	Actual
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17:00:00 14/01/2011	3486	Actual
18:00:00 14/01/2011	3480	Actual
19:00:00 14/01/2011	3529	Actual
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21:00:00 14/01/2011	3516	Actual
22:00:00 14/01/2011	3509	Actual
23:00:00 15/01/2011	3502	Actual
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02:00:00 15/01/2011	3481	Actual
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15/01/2011 12:00:00	3513	Actual
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15/01/2011 23:00:00	3521	Actual
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16/01/2011 02:00:00	3493	
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16/01/2011 04:00:00	3524	Actual
16/01/2011 05:00:00	3514	
16/01/2011 06:00:00	3504	
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16/01/2011 08:00:00	3484	Actual
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16/01/2011 10:00:00	3513	Actual
16/01/2011 11:00:00	3502	
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16/01/2011		
13:00:00 16/01/2011	3527	Actual
14:00:00 16/01/2011	3515	
15:00:00 16/01/2011	3504	Actual
16:00:00 16/01/2011	3539	Actual
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18:00:00 16/01/2011	3514	
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20:00:00	3536	Actual
31/03/2011		

16/01/2011		
21:00:00	3523	Actual
16/01/2011 22:00:00	3510	Actual
16/01/2011 23:00:00	3450	Actual
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18/01/2011 06:00:00	2043	Actual
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18/01/2011		

31/03/2011

08:00:00	2028	Actual
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18/01/2011 22:00:00	1129	Projected
18/01/2011 23:00:00	1081	Projected
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19/01/2011 01:00:00	1032	Projected
19/01/2011 02:00:00	982	Projected
19/01/2011 03:00:00	981	Projected
19/01/2011 04:00:00	931	Projected
19/01/2011		-
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06:00:00 19/01/2011	882	Projected
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08:00:00 19/01/2011	786	Projected
09:00:00 19/01/2011	785	Projected
10:00:00 19/01/2011	736	Projected
11:00:00	688	Projected
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19/01/2011 16:00:00	543	Projected
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19/01/2011		
18:00:00 19/01/2011	495	Projected
19:00:00	448	Projected
31/03/2011		

19/01/2011		
20:00:00	407	Projected
19/01/2011		•
21:00:00	407	Projected
19/01/2011		
22:00:00	360	Projected
19/01/2011		
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20/01/2011		
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06:00:00	139	Projected
20/01/2011		
07:00:00	93	Projected
20/01/2011		
08:00:00	47	Projected
20/01/2011		
09:00:00	47	Projected

Duty Engineer Flood Operations Centre



Sent: Tuesday, 18 January 2011 15:03

To:

Doug Grigg;
Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Wivenhoe Dam Directive #57 at 15:15 on Tuesday 18 January 2011

Please find attached a copy of Directive # 57 for your action.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

Phone: Fax:

From: **Duty Engineer** Sent: Tuesday, 18 January 2011 17:40 To: 'Arminda Roberts (private)'; David Roberts; Paul Bird; 'Paul Bird (Private)'; Peter Allen; 'Rob D (Private)'; Rohan T 'Tony Jacobs (private)'; k; Mark Tan; Glenn Murray Dunstan; Rob Gorian; Doug Grigg; Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Cc: Andy Bickerton; Deb Chandler; Mailbox; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi; Tony Trace

Subject: FOC Situation Report at 18:00 on Tuesday 18 January 2011

Rainfall

Severe thunderstorms are passing over Wivenhoe, Somerset and North Pine Dams this afternoon. To 17:00 falls of 20 to 30 mm where recorded at isolated locations including Mt Pechey and Kluvers Lookout.

A severe thunderstorm warning remains in place for the Stanley River Valley near Kilcoy.

Somerset/Wivenhoe

At 16:00 Tuesday Somerset Dam was 98.95 mAHD and steady. The last sluice gate was closed at 07:00 17/01/2011 and one regulator remains open managing the base-flow into the Dam. Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011.

At 16:00 Tuesday Wivenhoe Dam was 66.31 mAHD and continuing to fall slowly. Releases were held constant since 15:00 at about 1,450 m3/s to assist water supply pumping at Lowood. The shutdown sequence is scheduled to re-commence at 03:00 on Wednesday 19 January 2011 morning before final closure on Thursday morning. The Dam will be lowered to 66.5 mAHD (95% capacity) and releases will be made through the regulator to account for ongoing base-flow.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s.

The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

It should be noted that the Seqwater water level gauge currently being reported on the BoM website is currently slightly under reading by about 50mm.

North Pine

At 09:00 North Pine Dam was 39.56 mAHD and rising slowly. All gates are closed. No further gate operations are expected unless additional rainfall falls. This situation will be closely monitored whilst storms remain in the vicinity.

North Pine peaked at 41.11 mAHD at 14:00 on Tuesday 11 January 2011 with a peak release of 2,800 m3/s. The flood event volume is estimated to be around 200,000 ML.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments and is maintaining close contact with warning agencies and local councils. Councils have been informed of the current release strategy.

The remaining bridges below Wivenhoe Dam will progressively come out of water over the next few days.

Regards

Rob Ayre

Duty Engineer Flood Operations Centre

31/03/2011



Sent: Tuesday, 18 January 2011 20:42

To:

; Doug Grigg; Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Wivenhoe Dam Directive #58

Attachments: OPS_Directive_Wivenhoe #58.doc

Please find attached a copy of Directive # 58 for your action.

John Tibaldi Duty Engineer Flood Operations Centre

Phone Fax:

Sent: Tuesday, 18 January 2011 21:38

To:

Doug Grigg;
Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Wivenhoe Dam Directive #59

Attachments: OPS Directive Wivenhoe #59.doc

Please find attached a copy of Directive # 59 for your action.

John Tibaldi Duty Engineer Flood Operations Centre

Phone Fax:

Sent: Tuesday, 18 January 2011 22:42

To:

Doug Grigg;
Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Wivenhoe Dam Directive #60

Attachments: OPS_Directive_Wivenhoe #60.doc

Please find attached a copy of Directive # 60 for your action.

John Tibaldi Duty Engineer Flood Operations Centre

Phone

Fax:

Sent: Wednesday, 19 January 2011 05:28

To: 'Arminda Roberts (private)'; David Roberts; Paul Bird; 'Paul brd; 'Paul Bird; 'Paul brd; 'Paul Bird; 'Paul Brd; 'Paul

'Tony Jacobs (private)';
Al Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan;

Nev Ablitt;

Dunstan; Rob Gorian; Glenn Patterson; Murray

Doug Grigg; Graham Francis;

Jayam Tennakoon; Matthew O'Reilly

Cc: Andy Bickerton; Deb Chandler; Mailbox; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood

Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi; Tony Trace

Subject: FOC Situation Report at 06:00 on Wednesday 19 January 2011

Rainfall

Severe thunderstorms passed over the Wivenhoe, Somerset and North Pine dam catchments yesterday afternoon and evening. Falls of 20mm to 30mm where recorded at isolated locations.

North Pine

A decision was made at 1900 yesterday to drain the dam down to 39.40m AHD overnight to cater for the inflow resulting from yesterday's storms and ensure that Youngs Crossing remains open during the day today. All gates were closed at 0500 today and a fish recovery operation also commenced at this time. Youngs Crossing will be reopened by the MBRC at around 0700. The dam level will rise slowly during the day and further releases may be required again tonight with more rainfall forecast. The current lake level is 39.42m AHD.

Somerset Dam

All regulators were closed at 2000 yesterday. The dam level is currently 98.95m AHD and rising slowly. Further regulator releases will take place today and again over the next few days to maintain the dam at the full supply level. Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011; all sluice gates were closed on Monday 17 January 2011.

Wivenhoe Dam

The Lowood temporary pump station was relocated at 2100 yesterday. This relocation removed the need to continue high flow releases from the dam to ensure treated water supplies to Lowood are maintained. Discussions with BCC last night also concluded that tidal variations are primarily back to normal patterns and having a greater impact on the foundation conditions of Coronation Drive than the tapering of releases from the dam. Accordingly the radial gate close down sequence recommenced at 21:45 last night and all gates will be closed by 1600 today. The dam level when the last gate is closed will be around 66.90m AHD and a fish recovery operation will continue through most of the day during the close down sequence. Releases will continue through the regulator cone valve and possibly the Mini-Hydro (depending on when it can be re-started) to account for ongoing base-flow once all radial gates are closed.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s. The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres. It should be noted that the Seqwater water level gauge currently being reported on the BoM website is currently slightly under reading by about 50mm.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments and is maintaining close contact with warning agencies and local councils. Councils have been informed of the current release strategy. A summary of the bridge status along the Brisbane River between Wivenhoe Dam and Moggill is as follows, with the exact timing of water coming clear of bridges depending on how the radial gate close down sequence progresses during the day:

- Water is clear of Fernvale Bridge and Mt Crosby Weir Bridge.
- Water should be clear of Burtons Bridge, Kholo Bridge and Savages Crossing tonight.
- Water should be clear of Colleges Crossing tomorrow.

• It is not yet certain when water will be clear of Twin Bridges as this will depend on base flow draining requirements and a decision will be made on this later today. The earliest that Twin Bridges would be clear of water is late this afternoon.

John Tibaldi Duty Engineer Flood Operations Centre



Sent: Wednesday, 19 January 2011 05:29

To:

Doug Grigg;

Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Wivenhoe Dam Directive #61

Attachments: OPS_Directive_Wivenhoe #61.doc

Please find attached a copy of Directive # 61 for your action.

John Tibaldi Duty Engineer Flood Operations Centre

Phone

Fax:

Duty Engineer From: Sent: Wednesday, 19 January 2011 13:45 'Arminda Roberts (private)'; David Roberts: Paul Bird; 'Paul To: ob D (Private)'; Rohan Thorogood; 'Tony Jacobs (private)'; Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James obert McGlinn; Santina Pennisi: Al Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt: Glenn Patterson; Murray Dunstan; Rob Gorian: Doug Grigg; Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Situation Report 1345 Wednesday 2011

Rainfall

No significant rainfall has been recorded in Wivenhoe, Somerset and North Pine dam catchments since 0900 Thursday. The forecast rainfall indicates that falls between 15 to 25mm with isolated heavier falls to 50mm are expected in the next 24 hours.

North Pine

A decision was made at 1900 Wednesday to drain the dam down to 39.40m AHD overnight to cater for the inflow resulting from Wednesday's storms and ensure that Youngs Crossing remains open during the day Thursday. All gates were closed at 0500 Thursday and a fish recovery operation also commenced at this time. Youngs Crossing was expected to be reopened by the MBRC at around 0700. The dam level will rise slowly during the day and further releases may be required again tonight with more rainfall forecast. The lake level was 39.43m AHD at 0700.

Somerset Dam

All regulators were closed at 2000 Wednesday. The dam level was 99.00 m AHD at 0700 Thursday and rising slowly. Further regulator releases may take place over the next few days to maintain the dam at the full supply level. Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011; all sluice gates were closed on Monday 17 January 2011.

Wivenhoe Dam

All gates were closed at Wivenhoe at 1200 Thursday, with the dam level at 66.89m AHD at 1300. Following fish recovery and inspections, minor ongoing releases will be made for through the centre gate to account for ongoing small inflows. It is intended to drain down to 95%, approximately 66.5 m AHD.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s. The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres.

Strategy

A summary of the bridge status along the Brisbane River between Wivenhoe Dam and Moggill is as follows, with the exact timing of water coming clear of bridges depending on how the radial gate close down sequence progresses during the day:

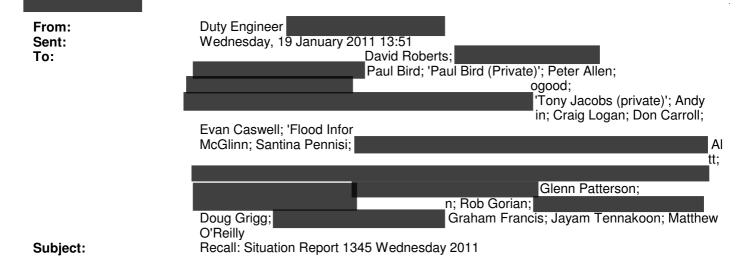
- Water is clear of Fernvale Bridge and Mt Crosby Weir Bridge.
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- It is not yet certain when water will be clear of Twin Bridges as this will depend on base flow draining requirements and a decision will be made on this later Thursday.

The Flood Operations Centre is now closed and control of the dams has reverted to normal Sequater operations. However, the FOC will continue to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments.

Terry Malone Duty Engineer Flood Operations Centre

Phone
Fax:

31/03/2011



Duty Engineer would like to recall the message, "Situation Report 1345 Wednesday 2011".

Duty Engineer From: Sent: Wednesday, 19 January 2011 13:57 Paul Bird; 'Paul To: 'Arminda Roberts (private)'; David Roberts; Bird (Private)'; Peter Allen; 'Rob D (Private)'; Rohan Thorogood; 'Tony Jacobs (private)'; Andy Bickerton; Deb Chandler; Mailbox; Tony Trace; Chris Lavin; Craig Logan; Don Carroll; E Centre'; James obert McGlinn; Santina Pennisi; k; Mark Tan; Nev Ablitt; Glenn Patterson; Murray Dunstan; Rob Gorian; Doug Grigg; Graham Francis; Jayam Tennakoon; Matthew O'Reilly

Subject: Situation Report 1400 Wednesday 19 January 2011

Rainfall

No significant rainfall has been recorded in Wivenhoe, Somerset and North Pine dam catchments since 0900 Wednesday. The forecast rainfall indicates that falls between 15 to 25mm with isolated heavier falls to 50mm are expected in the next 24 hours.

North Pine

A decision was made at 1900 Tuesday to drain the dam down to 39.40m AHD overnight to cater for the inflow resulting from Tuesday's storms and ensure that Youngs Crossing remains open during the day Wednesday. All gates were closed at 0500 Wednesday and a fish recovery operation also commenced at this time. Youngs Crossing was expected to be reopened by the MBRC at around 0700. The dam level will rise slowly during the day and further releases may be required again tonight with more rainfall forecast. The lake level was 39.43m AHD at 0700.

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The Flood Operations Centre is now closed and control of the dams has reverted to normal Sequater operations. However, the FOC will continue to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments.

Terry Malone
Duty Engineer
Flood Operations Centre



Fax:

<u> </u>	From	Subject	Received A	Si	7
Date	: Older				
	Peter Baddiley	RE: SitRep Clarification [SEC=UNCLASSIFIED]	Fri 7/01/2011 20:57	4 KB	8
	Peter Baddiley	RE: Actual and Projected Wivenhoe Releases [SEC=UNCLASSIFIED]	Sun 9/01/2011 21:08	6 KB	8
! 🚕 0	Peter Baddiley	URGENT ATTENTION: Helidon to Gatton FLASH FLOOD [SEC=UNCLASSIFI	Mon 10/01/2011 17:31	223	8
	James Stuart	RE: For your consideration [SEC=UNCLASSIFIED]	Wed 12/01/2011 09:43	12 KB	8
	James Stuart	RE: Brisbane R model [SEC=UNCLASSIFIED]	Sat 15/01/2011 11:45	4 KB	8
! 🙈	Peter Baddiley	Post-fitting to Brisbane River flood - estimation of peak flows [SEC=UNCLA	Sun 16/01/2011 07:57	9 KB	8
	Peter Baddiley	RE: FOC Situation Report at 06:00 on Wednesday 19 January 2011 [SEC=	Wed 19/01/2011 05:42	12 KB	8

1

3/04/2011 07:42

From: Sent: To: Peter Baddiley Friday, 7 Janua

Cc:

Subject:

RE: SitRep Clarification [SEC=UNCLASSIFIED]

Thank you for advice. The protocol needs some tweaking. The Bureau is constantly being asked by BCC to approve information that they are proposing to release. My understanding is that there was an explicit intention not to have this occur ... that the technical staff would agree in principle & each agnecy would develop its own messages.

For further discussion when things quieten

Peter Baddiley Regional Hydrology Manager Climate & Water Division Bureau of Meteorology Level 21, 69 Ann Street

EMAIL for flood matters:

WWW : www.bom.gov.au

From: Duty Engineer Sent: Friday, 7 Janu

To:

Cc:

Subject: SitRep Clarification

BCC pointed out that they have not done any analysis and do not necessarily agree with the 50 to 100mm but have accepted the BoM and Segwater estimate.

Terry Malone

Duty Engineer Flood Operations Centre

Phone:

Fax:

From:

Peter Baddiley

Sent:

Sunday, 9 January 2011 21:08

To:

Cc: Subject:

RE: Actual and Projected Wivenhoe Releases [SEC=UNCLASSIFIED]

Tks Terry

I am just having a bit of look from home – getting interesting, so I will go to bed & sleep thru it :-)

Rainband doesn't look like going away anytime soon.

Jimmy will start at about 04-30 in the morning.

cheers, peter

Peter Baddiley Regional Hydrology Manager Climate & Water Division Bureau of Meteorology Level 21, 69 Ann Street

GPO Box 413, BRISBANE, QLD, AUSTRALIA 4001

EMAIL for flood matters:

WWW : www.bom.gov.au

From: Duty Engineer

Sent: Sunday, 9 Janu

To: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James

Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Subject: Actual and Projected Wivenhoe Releases

Wivenhoe Dam Actual and Projected Releases

Source: Seqwater FOC

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Duty Engineer Flood Operations Centre

Phone:

Fax:

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From:

Peter Baddiley

Sent:

Sunday, 9 January 2011 21:08

To:

Cc:

Subject:

RE: Actual and Projected Wivenhoe Releases [SEC=UNCLASSIFIED]

Tks Terry

I am just having a bit of look from home – getting interesting, so I will go to bed & sleep thru it :-)

Rainband doesn't look like going away anytime soon.

Jimmy will start at about 04-30 in the morning.

cheers, peter

Peter Baddiley Regional Hydrology Manager Climate & Water Division Bureau of Meteorology Level 21, 69 Ann Street

GPO Box 413, BRISBANE, QLD, AUSTRALIA 4001

EMAIL for flood matters:

WWW : www.bom.gov.au

From: Duty Engineer

Sent To:

: Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; James

Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi

Subject: Actual and Projected Wivenhoe Releases

Wivenhoe Dam Actual and Projected Releases

Source: Seqwater FOC

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1710

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17/01/2011 08:00:00

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Projected

Duty Engineer Flood Operations Centre

Phone:

Fax:

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From: Peter Baddiley

Sent: Monday, 10 January 2011 17:32

To:

Cc: Rob Vertessy; Dasarath

Jayasuriya; Jim Elliott; 'Duty Engineer'

Subject: URGENT ATTENTION: Helidon to Gatton FLASH FLOOD [SEC=UNCLASSIFIED]

Importance: High

Attachments: Helidon_to_Gatton map.jpg

Security Classification: UNCLASSIFIED

Serious flash flooding at Toowooba this afternoon - only seen images on tv!

Rapid rise in Lockyer Creek at Helidon between 2pm to 3pm; auto gauge indicates it rose about 8 metres. Accuracy unknown.

Flash flood arriving in Gatton area now. Has now risen 2 metres in one hour and continuing.

Helidon catchment area 440km2; Gatton catchment 1500 km2 creek at Gatton is larger, so impact at Gatton should be less, but how high Gatton will get is UNKNOWN.

Highway is immediately downstream of Gatton need closing or Police attention.

Fast rises will extend along Lockyer Creek from Gatton to Glenore Grove/Lyons Bridge tonight - magnitude unknown at this stage but will model once we see Gatton rises.

Map attached.

See flash flood warning at http://www.bom.gov.au/cgi-bin/wrap_fwo.pl?IDQ20780.html

Peter Baddiley
Regional Hydrology Manager
Climate & Water Division
Bureau of Meteorology

Level 21, 69 Ann Street

GPO Box 413, BRISBANE, QLD, AUSTRALIA 4001

EMAIL for flood matters:

WWW: www.bom.gov.a

From: James Stuart

Wednesday, 12 January 2011 09:43 Sent:

To: 'Duty Engineer' Cc: Peter Baddiley

Subject: RE: For your consideration [SEC=UNCLASSIFIED]

Security Classification: UNCLASSIFIED

cheers, Terry! This was our latest - looks similar... Peak stage says higher though so we're running with that.

jimmy

LOWER BRISBANE RIVER

LOWER BRISBANE R (no forecast rainfall)

RUN DATED: Wed Jan 12 09:22:49 2011

FORECAST RUN FROM Sat Jan 1 09:00:00 2011 N/A

DATA PARAMETERS: Locations = 16 Values = 877,528 Data Interval = 0.500 hours

MODEL PARAMETERS: alpha = 0.1400 m = 0.80 beta = 2.500 IL = 15.0 CL = 2.00

LOCATION	Time of Peak	Peak Discharge cumecs	Peak Height metres
UPPER Tue Jan 11	21:00:00 7416	.00 N/A	
WIVENHOE Tue Jan 11	21:00:00 7416	.00 67.56	N/A
OREILLYS Wed Jan 12	17:00:00 2221	.10 16.90	N/A
LOWOOD Tue Jan 11	21:00:00 9494	.59 23.14	Major
LOWOOD_A Tue Jan 11	21:00:00 9494	.59 23.46	Major
SAVAGES Wed Jan 12	01:30:00 8111	.00 24.11	Major
MT_CROSB Wed Jan 12	09:00:00 8117	.85 26.44	Major
AMBER_TM Wed Jan 12	08:00:00 810	.32 9.25	Major
WALLOON_ Tue Jan 11	20:00:00 1603	.05 11.65	Major
THREE_MI Tue Jan 11	21:00:00 1612	.73 22.16	Major
LOAMSIDE Tue Jan 11	18:30:00 133	.68 7.53	Moderate
ONE_MILE Tue Jan 11	23:00:00 2489	.04 21.96	Major
HANCOCKS Tue Jan 11	23:30:00 2509	.10 19.66	Major
IPSWICH Wed Jan 12	10:00:00 2511	.06 20.94	Major
MOGGILL Wed Jan 12	10:30:00 10277	.39 20.28	Major
JINDALEE Wed Jan 12	21:00:00 10109	13.96	Major
BRISBANE Thu Jan 13	12:30:00 9681	.31 5.21	Major
BAR Wed Jan 19	09:00:00	N/A 2.94	

From: Duty Engineer [mail

Sent: Wednesday, 12 January 2011 9:40 AM

To:

Subject: For your consideration

To achieve this result I've reduced the outflows from Wivenhoe by 0.15 (loss=0.15)

LOWER BRISBANE RIVER

LOWER BRISBANE RIVER (no forecast rainfall)

RUN DATED: Wed Jan 12 2011 09:03

FORECAST RUN FROM Sun Jan 02 2011 09:00

DATA PARAMETERS: Locations = 18 Values = 407 Data Interval = 1.000 hours MODEL PARAMETERS: alpha = 0.1300 m = 0.80 beta = 3.000 IL = 10.0 CL = 2.00

Time of Peak LOCATION Peak Discharge

Peak Height cumecs metres

WD_OUTFLOW	Tue Jan 1	1 2011	21:00	7416.00	N/A	*
OREILLYS_WEIR	Wed Jan 1	2 2011	05:00	3272.60	23.96	
L_PUMP_STN	Wed Jan 1	2 2011	03:00	8231.07	39.33	
SAVAGES_XING	Wed Jan 1	2 2011	04:00	8295.82	24.23	
BURTONS_BR	Wed Jan 1	2 2011	06:00	8380.03	25.14	
L_MANCHESTER	Tue Jan 1	1 2011	17:00	N/A	53.43	
L_MANCHESTER	Tue Jan 1	1 2011	17:00	390.76	53.45	
KHOLO_BR	Wed Jan 1	2 2011	09:00	8494.16	28.10	
MT_CROSBY_WEIR	Wed Jan 1	2 2011	11:00	8479.41	27.32	
COLLEGES_XING	Wed Jan 1	2 2011	11:00	8482.12	30.54	
WALLOON	Tue Jan 1	1 2011	22:00	1654.60	11.77	
AMBERLEY	Wed Jan 1	2 2011	07:00	757.57	9.09	
LOAMSIDE	Tue Jan 1	1 2011	21:00	170.11	7.67	
ONE_MILE_BR	Wed Jan 1	2 2011	00:00	2573.66	22.29	
HANCOCKS_BR	Wed Jan 1	2 2011	00:00	2600.05	20.05	
IPSWICH	Wed Jan 1	2 2011	15:00	2598.47	20.57	
MOGGILL	Wed Jan 1	2 2011	16:00	9563.23	20.01	
JINDALEE	Wed Jan 1	2 2011	19:00	9577.34	13.88	
BRISBANE	Thu Jan 1	3 2011	02:00	9556.60	5.23	*
BAR	Mon Jan 0	3 2011	09:00	N/A	2.45	*

Terry

From: James Stuart

Sent: Saturday, 15 January 2011 11:45

To: 'Duty Engineer'

Subject: RE: Brisbane R model [SEC=UNCLASSIFIED]

Security Classification: UNCLASSIFIED

All done Terry,

jimmy

From: Duty Engineer [ma

Sent: Saturday, 15 January 2011 10:02 AM

To:

Subject: Brisbane R model

Any chance of pushing last Brisbane R model run to web-I'd like to compare flood vols. I will discuss prior to comment.

Terry

Duty Engineer Flood Operations Centre

Phone

Fax:

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From: Peter Baddiley

Sent: Sunday, 16 January 2011 07:57

To: 'Duty Engineer';

Subject: Post-fitting to Brisbane River flood - estimation of peak flows [SEC=UNCLASSIFIED]

Importance: High

Security Classification: UNCLASSIFIED

Terry, John and others

Hope this adds some value ... I think it is getting closer

Effectively a Muskingum channel routing model with timing adjusted to get a close? approximation to storage in play. Needs further refinemnt re hydrograph shapes etc but for a later time.

If we match (accept these hydrographs/ratings) on:

Rifle Range Road (my confidence is lowest here - but it is in the ballpark)

Wivenhoe releases (? others to say)

Walloon (confidence quite high - we have done a lot of modelling for this location over the years)
Amberley (confidence quite high - we have done a lot of modelling for this location over the years)

and, importantly, adjust channel routing such that timings of rises/peaks are fitting this 2011 flood

(this should get close to effect of storage, although other refinements involving shape fitting are required, which we had to do for the Balonne R model recently to good effect)

then the peak flows are modelled as in this table (but disregard peak heights as this now throws into question the accepted ratings to date):

LOWER BRISBANE RIVER

LOWER BRISBANE R (no forecast rainfall)

RUN DATED: Sun Jan 16 07:35:56 2011

LOAMSIDE Tue Jan 11 18:30:00

FORECAST RUN FROM Sat Jan 1 09:00:00 2011 N/A

DATA PARAMETERS: Locations = 16 Values = 1063,715 Data Interval = 0.500

hours N/A

MODEL PARAMETERS: alpha = 0.1300 m = 0.80 beta = 2.500 IL = 15.0 CL = 2.00

LOCATI	ION			Time of	Peak		Discharge nmecs	Peak Height metres	
UPPER	Tue	Jan	11	21:00:00	7342.	00	N/A		
WIVENHOE	Tue	Jan	11	21:00:00	7342.	00	67.17	N/A	
OREILLYS	Tue	Jan	11	15:00:00	2263.	04	17.03	N/A	
LOWOOD	Tue	Jan	11	21:00:00	9347.	46	23.03	Major	
LOWOOD_A	Tue	Jan	11	21:00:00	9347.	46	23.33	Major	
SAVAGES	Wed	Jan	12	00:30:00	9651.	43	25.65	Major	
MT_CROSB	Wed	Jan	12	09:30:00	9483.	25	28.08	Major	
AMBER_TM	Wed	Jan	12	10:00:00	814.	80	9.27	Major	
WALLOON_	Tue	Jan	11	19:00:00	1436.	58	11.27	Major	
THREE_MI	Tue	Jan	11	21:00:00	1423.	90	21.53	Major	

133.64

7.53

Moderate

Just another input to the many others. No doubt we will work together on Brisbane R modelling & do a round with the BCC 2d inundation modelling.

regards, peter

Peter Baddiley Regional Hydrology Manager Climate & Water Division Bureau of Meteorology Level 21, 69 Ann Street

GPO Box 413, BRISBANE, QLD, AUSTRALIA 4001

Phone: EMAIL

EMAIL for flood matters: WWW: www.bom.gov.au

From: Peter Baddiley

Sent: Wednesday, 19 January 2011 05:42

To: 'Duty Engineer'

Subject: RE: FOC Situation Report at 06:00 on Wednesday 19 January 2011 [SEC=UNCLASSIFIED]

Security Classification: UNCLASSIFIED

Thanks JT hope you have had the best sleep

regards, peter

Peter Baddiley

Regional Hydrology Manager Climate & Water Division **Bureau of Meteorology** Level 21, 69 Ann Street

GPO Box 413, BRISBANE, QLD, AUSTRALIA 4001

Phone: EMAIL:

EMAIL for flood matters: WWW: www.bom.gov.au

From: Duty Engineer [ma Sent: Wednesday, 19 January 2011 5:28 AM To: 'Arminda Roberts (private)'; David Roberts; flood 'Paul Bird (Private)'; Peter Allen; rdru ob D (Private)'; Rohan Thorogood; v Jacobs (private)'; K Al Navaruk; Bill Stephens; David Pokarier; John West; Lou van Blerk; Mark Tan; Nev Ablitt; Glenn ob Gorian; Patterson; ml Dunstan; R g Grigg; Francis; Jayam Tenn akoon; Matthew O'Reilly

Cc: Andy Bickerton; Deb Chandler; Mailbox; Chris Lavin; Craig Logan; Don Carroll; Evan Caswell; 'Flood Information Centre'; James Charalambous; Ken Morris; Robert McGlinn; Santina Pennisi; Tony Trace

Subject: FOC Situation Report at 06:00 on Wednesday 19 January 2011

Rainfall

Severe thunderstorms passed over the Wivenhoe, Somerset and North Pine dam catchments yesterday afternoon and evening. Falls of 20mm to 30mm where recorded at isolated locations.

North Pine

A decision was made at 1900 yesterday to drain the dam down to 39.40m AHD overnight to cater for the inflow resulting from yesterday's storms and ensure that Youngs Crossing remains open during the day today. All gates were closed at 0500 today and a fish recovery operation also commenced at this time. Youngs Crossing will be reopened by the MBRC at around 0700. The dam level will rise slowly during the day and further releases may be required again tonight with more rainfall forecast. The current lake level is 39.42m AHD.

Somerset Dam

All regulators were closed at 2000 yesterday. The dam level is currently 98.95m AHD and rising slowly. Further regulator releases will take place today and again over the next few days to maintain the dam at the full supply level. Somerset Dam peaked at 105.11 mAHD at 18:00 on Wednesday 12 January 2011; all sluice gates were closed on Monday 17 January 2011.

Wivenhoe Dam

The Lowood temporary pump station was relocated at 2100 yesterday. This relocation removed the need to continue high flow releases from the dam to ensure treated water supplies to Lowood are maintained. Discussions with BCC last night also concluded that tidal variations are primarily back to normal patterns and having a greater impact on the foundation conditions

of Coronation Drive than the tapering of releases from the dam. Accordingly the radial gate close down sequence recommenced at 21:45 last night and all gates will be closed by 1600 today. The dam level when the last gate is closed will be around 66.90m AHD and a fish recovery operation will continue through most of the day during the close down sequence. Releases will continue through the regulator cone valve and possibly the Mini-Hydro (depending on when it can be re-started) to account for ongoing base-flow once all radial gates are closed.

Wivenhoe Dam peaked at 74.97 mAHD at 19:00 on Tuesday 11 January 2011 with a corresponding discharge of 7,450 m3/s. The combined flood event volume in Somerset and Wivenhoe Dams is estimated to be in excess of 2.6 million megalitres. It should be noted that the Seqwater water level gauge currently being reported on the BoM website is currently slightly under reading by about 50mm.

Strategy

The Flood Operations Centre is continuing to monitor rainfalls and water levels throughout the Brisbane and Pine River catchments and is maintaining close contact with warning agencies and local councils. Councils have been informed of the current release strategy. A summary of the bridge status along the Brisbane River between Wivenhoe Dam and Moggill is as follows, with the exact timing of water coming clear of bridges depending on how the radial gate close down sequence progresses during the day:

- Water is clear of Fernvale Bridge and Mt Crosby Weir Bridge.
- Water should be clear of Burtons Bridge, Kholo Bridge and Savages Crossing tonight.
- Water should be clear of Colleges Crossing tomorrow.
- It is not yet certain when water will be clear of Twin Bridges as this will depend on base flow draining requirements and a decision will be made on this later today. The earliest that Twin Bridges would be clear of water is late this afternoon.

John Tibaldi Duty Engineer Flood Operations Centre



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