



Australian Government
Bureau of Meteorology

Appendix D

Copies of Flood Warnings

December 2010 to January 2011

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LAIDLEY AND WARRILL CREEKS AND THE BREMER AND BRISBANE RIVERS

Issued at 5:19 AM on Monday the 27th of December 2010
by the Bureau of Meteorology, Brisbane.

Moderate to heavy rainfall of between 50-70mm has been recorded in the Bremer River and Lockyer, Laidley and Warrill Creek catchments since 9am Sunday. River level rises causing moderate to major flooding has been recorded along Laidley and Warrill Creeks and along the Bremer River above Ipswich. Minor to moderate flooding is being recorded along Lockyer Creek downstream to Lyon's Bridge.

Further river level rises are expected within the area during Monday with the Bremer River at Ipswich expected to reach the minor flood level of 8 metres Monday evening. A Severe Weather Warning is current for the region with further rainfall expected during Monday.

Predicted River Heights/Flows:
Bremer River:

Ipswich Reach the minor flood level of 8 metres Monday evening.

Weather Forecast:
Rain areas with moderate to locally heavy falls.

Next Issue:
The next warning will be issued at about 10am Monday.

Latest River Heights:

Lockyer Ck at Helidon *	3.93m falling	02:30 AM MON 27/12/10
Lockyer Ck at Helidon #	3.98m steady	04:39 AM MON 27/12/10
Tenthill Ck at Tenthill #	3.82m rising	04:51 AM MON 27/12/10
Lockyer Ck at Gatton *	9.38m rising	02:40 AM MON 27/12/10
Lockyer Ck at Gatton #	13.7m falling	04:46 AM MON 27/12/10
Laidley Ck at Mulgowie *	5.36m falling	03:00 AM MON 27/12/10
Laidley Ck at Laidley	6.8m rising fast	09:10 PM SUN 26/12/10
Laidley Ck at Showground Weir *	9.19m falling	02:40 AM MON 27/12/10
Laidley Ck at Showground Weir #	8.06m falling	04:50 AM MON 27/12/10
Bill Gunn Dam #	110.03m steady	02:16 AM MON 27/12/10
Laidley Ck at Warrego Hwy *	5.59m rising	03:30 AM MON 27/12/10
Lockyer Ck at Glenore Grove #	11.12m rising	04:51 AM MON 27/12/10
Lockyer Ck at Lyons Br #	10.67m rising	04:49 AM MON 27/12/10
Lockyer Ck at Lyons Br #	10.36m rising	04:52 AM MON 27/12/10
Atkinson Dam #	65.77m steady	03:38 AM MON 27/12/10
Lockyer Ck at O'Reilly's Weir *	9.39m steady	03:00 AM MON 27/12/10
Lockyer Ck at O'Reilly's Weir #	9.6m rising	04:49 AM MON 27/12/10
Brisbane R at Lowood Pump Stn #	4.45m falling	04:14 AM MON 27/12/10
Brisbane R at Savages Crossing *	5.42m falling	02:40 AM MON 27/12/10
Brisbane R at Savages Crossing #	5.33m falling	04:39 AM MON 27/12/10



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Brisbane R at Burtons Br #	4.74m falling	04:41 AM MON 27/12/10
Cabbage Tree Ck at L Manchester #	51.51m rising	04:16 AM MON 27/12/10
Brisbane R at Kholo Br #	-1.31m rising	04:38 AM MON 27/12/10
Brisbane R at Mt Crosby #	8.66m rising	04:52 AM MON 27/12/10
Brisbane R at Colleges Crossing #	5.36m rising	04:51 AM MON 27/12/10
Bremer R at Adams Br *	3.13m falling	03:10 AM MON 27/12/10
Bremer R at Adams Br #	3.03m rising	04:34 AM MON 27/12/10
Bremer R at Stokes Crossing #	3.75m falling	04:32 AM MON 27/12/10
Bremer R at Spresters Br #	5.87m rising	04:49 AM MON 27/12/10
Spring Ck at Greys Plains Rd #	2.29m falling	04:40 AM MON 27/12/10
Western Ck at Grandchester #	3.03m rising	04:45 AM MON 27/12/10
Western Ck at Kuss Rd #	7.12m falling	04:51 AM MON 27/12/10
Western Ck at Rosewood WWTP #	6.88m falling	03:37 AM MON 27/12/10
Bremer R at Rosewood	4.3m rising	03:00 PM SUN 26/12/10
Bremer R at Rosewood#	6.06m steady	04:51 AM MON 27/12/10
Bremer R at Rosewood #	6.08m rising	03:42 AM MON 27/12/10
Bremer R at Five Mile Br Walloon #	6.44m rising	04:49 AM MON 27/12/10
Bremer R at Walloon DERM *	6.65m rising	03:00 AM MON 27/12/10
Bremer R at Three Mile Br #	18.2m rising	04:41 AM MON 27/12/10
Reynolds Ck at Moogerah Dam *	1.01m steady	02:30 AM MON 27/12/10
Reynolds Ck at Moogerah Dam #	155.98m rising	04:15 AM MON 27/12/10
Warrill Ck at Toohills Crossing *	1.9m rising	02:40 AM MON 27/12/10
Warrill Ck at Kalbar Weir HW #	77.93m falling	04:39 AM MON 27/12/10
Warrill Ck at Kalbar Weir HW *	78.29m falling	02:30 AM MON 27/12/10
Warrill Ck at Kalbar Weir TW *	7.95m falling	02:40 AM MON 27/12/10
Warrill Ck at Harrisville #	5.38m rising	03:47 AM MON 27/12/10
Warrill Ck at Harrisville#	5.25m rising	04:22 AM MON 27/12/10
Warrill Ck at Churchbank Weir *	2.78m rising	02:15 AM MON 27/12/10
Warrill Ck at Churchbank Weir #	2.87m rising	04:35 AM MON 27/12/10
Warrill Ck at Greens Rd Amberley #	6.18m rising	04:50 AM MON 27/12/10
Warrill Ck at Amberley DNR *	6.92m rising	02:40 AM MON 27/12/10
Purga Ck at Peak Crossing #	3.31m falling	04:43 AM MON 27/12/10
Purga Ck at Loamside #	6.44m steady	04:50 AM MON 27/12/10
Purga Ck at Loamside *		

Warnings and River Height Bulletins are available at
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telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LAIDLEY, LOCKYER AND WARRILL CREEKS AND THE BREMER RIVERS
Issued at 5:21 AM on Monday the 27th of December 2010
by the Bureau of Meteorology, Brisbane.

Moderate to heavy rainfall of between 50-70mm has been recorded in the Bremer River and Lockyer, Laidley and Warrill Creek catchments since 9am Sunday. River level rises causing moderate to major flooding has been recorded along Laidley and Warrill Creeks and along the Bremer River above Ipswich. Minor to moderate flooding is being recorded along Lockyer Creek downstream to Lyon's Bridge.

Further river level rises are expected within the area during Monday with the Bremer River at Ipswich expected to reach the minor flood level of 8 metres Monday evening. A Severe Weather Warning is current for the region with further rainfall expected during Monday.

Predicted River Heights/Flows:
Bremer River:

Ipswich Reach the minor flood level of 8 metres Monday evening.

Weather Forecast:
Rain areas with moderate to locally heavy falls.

Next Issue:
The next warning will be issued at about 10am Monday.

Latest River Heights:

Lockyer Ck at Helidon *	3.93m falling	02:30 AM MON 27/12/10
Lockyer Ck at Helidon #	4m rising	05:12 AM MON 27/12/10
Flagstone Ck at Brown-Zirbels Rd *	4.34m rising	02:40 AM MON 27/12/10
Sandy Creek at Sandy Creek Road #	NA	
Ma Ma Ck at Harm's *	3m falling	02:00 AM MON 27/12/10
Tenthill Ck at Tenthill *	3.74m falling	04:09 AM MON 27/12/10
Tenthill Ck at Tenthill #	3.88m rising	05:18 AM MON 27/12/10
Lockyer Ck at Gatton *	9.38m rising	02:40 AM MON 27/12/10
Lockyer Ck at Gatton	NA	
Lockyer Ck at Gatton #	13.88m rising	05:19 AM MON 27/12/10
Laidley Ck at Thornton	NA	
Laidley Ck at Mulgowie *	5.46m rising	04:30 AM MON 27/12/10
Laidley Ck at Laidley	6.8m rising fast	09:10 PM SUN 26/12/10
Laidley Ck at Showground Weir *	9.19m falling	02:40 AM MON 27/12/10
Laidley Ck at Showground Weir #	7.74m falling	05:20 AM MON 27/12/10
Bill Gunn Dam #	110.03m steady	05:15 AM MON 27/12/10
Laidley Ck at Warrego Hwy *	5.71m rising	04:00 AM MON 27/12/10
Lake Clarendon Dam #	NA	
Lockyer Ck at Glenore Grove #	11.38m rising	05:17 AM MON 27/12/10
Lockyer Ck at Lyons Br	NA	



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Lockyer Ck at Lyons Br #	10.91m rising	05:19 AM MON 27/12/10
Lockyer Ck at Lyons Br #	10.56m rising	05:19 AM MON 27/12/10
Lockyer Ck at Rifle Range Rd *	NA	
Atkinson Dam #	65.77m steady	03:38 AM MON 27/12/10
Buaraba Ck #	NA	
Lockyer Ck at O'Reilly's Weir *	9.53m rising	04:00 AM MON 27/12/10
Lockyer Ck at O'Reilly's Weir #	9.66m rising	05:15 AM MON 27/12/10
Brisbane R at Lowood Pump Stn #	4.45m falling	04:14 AM MON 27/12/10
Brisbane R at Lowood	NA	
Brisbane R at Lowood #	NA	
Brisbane R at Savages Crossing *	5.42m falling	02:40 AM MON 27/12/10
Brisbane R at Savages Crossing #	5.31m falling	05:09 AM MON 27/12/10
Black Snake Ck at Marburg #	NA	
Brisbane R at Burtons Br #	4.72m falling	05:11 AM MON 27/12/10
Cabbage Tree Ck at L Manchester #	51.51m rising	04:16 AM MON 27/12/10
Brisbane R at Kholo Br #	-1.29m rising	04:59 AM MON 27/12/10
Brisbane R at Mt Crosby	NA	
Brisbane R at Mt Crosby *	NA	
Brisbane R at Mt Crosby #	8.68m steady	05:20 AM MON 27/12/10
Brisbane R at Mt Crosby #	8.66m steady	04:59 AM MON 27/12/10
Brisbane R at Colleges Crossing #	5.36m rising	04:51 AM MON 27/12/10
Bremer R at Adams Br *	3.09m falling	04:00 AM MON 27/12/10
Bremer R at Adams Br #	3.05m rising	05:16 AM MON 27/12/10
Bremer R at Stokes Crossing	NA	
Bremer R at Stokes Crossing #	3.65m falling	05:15 AM MON 27/12/10
Bremer R at Spresters Br #	5.82m falling	04:55 AM MON 27/12/10
Spring Ck at Greys Plains Rd #	2.09m falling	05:16 AM MON 27/12/10
Western Ck at Grandchester #	3.13m rising	05:07 AM MON 27/12/10
Western Ck at Kuss Rd	NA	
Western Ck at Kuss Rd #	7.04m falling	05:18 AM MON 27/12/10
Western Ck at Rosewood WWTP #	6.83m falling	04:53 AM MON 27/12/10
Bremer R at Rosewood	4.3m rising	03:00 PM SUN 26/12/10
Bremer R at Rosewood#	6.06m steady	04:51 AM MON 27/12/10
Bremer R at Rosewood #		

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telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LAIDLEY, LOCKYER AND WARRILL CREEKS AND THE BREMER RIVERS
Issued at 10:13 AM on Monday the 27th of December 2010
by the Bureau of Meteorology, Brisbane.

Fast rises are causing areas of moderate to major flooding in Laidley, Lockyer and Warrill Creeks and in the Bremer River. A moderate flood peak is expected in the Bremer River at Ipswich later this afternoon.

LAIDLEY AND LOCKYER CREEKS:

The main flood peak in Lockyer Creek is currently in the Glenore Grove area causing moderate flooding. Rises will continue downstream at Lyons Bridge with a major flood peak expected during Monday afternoon.

Moderate to major flooding has generally peaked in Laidley Creek.

BREMER RIVER:

The main peak in the Bremer River is now in the Walloon area with a moderate flood peak of around 10 metres now expected in the Bremer river at the David Trumpy Bridge later this afternoon. Further heavy rainfall is forecast and higher levels are possible.

Predicted River Heights/Flows:
Bremer River:

Ipswich Reach 10 metres by 3pm Monday.

Weather Forecast:
Rain areas with moderate to locally heavy falls.

Next Issue:
The next warning will be issued at about 2pm Monday.

Latest River Heights:

Lockyer Ck at Helidon *	3.99m falling	08:10 AM MON 27/12/10
Lockyer Ck at Gatton *	9.72m rising	08:20 AM MON 27/12/10
Lockyer Ck at Gatton #	13.94m rising	10:01 AM MON 27/12/10
Laidley Ck at Mulgowie *	5.45m falling	08:00 AM MON 27/12/10
Laidley Ck at Laidley	6.5m falling slowly	07:30 AM MON 27/12/10
Laidley Ck at Showground Weir #	7.32m falling	09:59 AM MON 27/12/10
Laidley Ck at Warrego Hwy *	5.96m steady	08:00 AM MON 27/12/10
Lockyer Ck at Glenore Grove #	12.7m rising	09:57 AM MON 27/12/10
Lockyer Ck at Lyons Br #	12.99m rising	09:58 AM MON 27/12/10
Lockyer Ck at O'Reilly's Weir #	10.16m rising	09:49 AM MON 27/12/10



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Western Ck at Rosewood WWTP # 6.48m falling 09:55 AM MON 27/12/10
Bremer R at Rosewood# 5.76m falling 09:12 AM MON 27/12/10

Bremer R at Five Mile Br Walloon # 6.98m rising 08:49 AM MON 27/12/10
Bremer R at Walloon DERM * 7.81m rising 08:00 AM MON 27/12/10
Bremer R at Three Mile Br # 20.35m rising 09:56 AM MON 27/12/10

Warrill Ck at Kalbar 8.7m falling slowly 09:00 AM MON 27/12/10
Warrill Ck at Amberley DNR * 7.08m rising 08:00 AM MON 27/12/10

Bremer R at Berry's Lagoon * 22.52m rising 08:15 AM MON 27/12/10
Bremer R at One Mile Br # 14.35m rising 10:02 AM MON 27/12/10
Bremer R at Hancocks Br Brassall # 11.13m rising 10:03 AM MON 27/12/10
Bremer R at Ipswich # 6.75m rising 10:03 AM MON 27/12/10

*,# automatic station

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IDQ20805

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Queensland

FLOOD WARNING FOR LAIDLEY, LOCKYER AND WARRILL CREEKS AND THE BREMER RIVERS
Issued at 2:29 PM on Monday the 27th of December 2010
by the Bureau of Meteorology, Brisbane.

Fast rises are causing areas of moderate to major flooding in Laidley, Lockyer and Warrill Creeks and in the Bremer River. A moderate flood peak is expected in the Bremer River at Ipswich during this evening.

LAIDLEY AND LOCKYER CREEKS:

Further rainfall has been recorded since 9am which is producing some renewed rises in the upper reaches of the catchment. The main flood peak in Lockyer Creek is now downstream of the Glenore Grove area. Major flood levels will continue downstream at Lyons Bridge with a peak around 15.2 metres expected overnight Monday.

Moderate to major flooding has peaked in Laidley Creek.

BREMER RIVER:

A major flood peak of about 7 metres has been recorded in the Bremer River at the Five Mile Bridge with a moderate flood peak of around 10 metres now expected in the Bremer river at the David Trumpy Bridge during this evening. Further heavy rainfall is forecast and higher levels are possible.

Predicted River Heights/Flows:
Bremer River:

Ipswich Reach around 10 metres Monday evening.

Weather Forecast:
Rain areas with moderate to locally heavy falls.

Next Issue:
The next warning will be issued at about 6pm Monday.

Latest River Heights:

Lockyer Ck at Helidon #	4.56m rising	01:30 PM MON 27/12/10
Lockyer Ck at Gatton #	13.7m falling	01:13 PM MON 27/12/10
Laidley Ck at Mulgowie *	5.56m rising	12:00 PM MON 27/12/10
Laidley Ck at Laidley	6.5m falling slowly	07:30 AM MON 27/12/10
Laidley Ck at Showground Weir #	7.2m rising	01:29 PM MON 27/12/10
Laidley Ck at Warrego Hwy *	5.84m falling	12:00 PM MON 27/12/10
Lockyer Ck at Glenore Grove #	12.72m falling	01:24 PM MON 27/12/10
Lockyer Ck at Lyons Br #	13.45m rising	01:22 PM MON 27/12/10
Lockyer Ck at O'Reilly's Weir #	10.46m steady	01:17 PM MON 27/12/10



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Western Ck at Rosewood WWTP # 6.43m rising 01:28 PM MON 27/12/10
Bremer R at Rosewood # 5.5m falling 12:51 PM MON 27/12/10

Bremer R at Five Mile Br Walloon # 6.66m steady 01:27 PM MON 27/12/10
Bremer R at Three Mile Br # 20.8m rising 01:26 PM MON 27/12/10

Warrill Ck at Kalbar 8.7m falling slowly 09:00 AM MON 27/12/10
Warrill Ck at Amberley DNR * 7.2m rising 11:40 AM MON 27/12/10

Bremer R at Berry's Lagoon * 23.19m rising 11:30 AM MON 27/12/10
Bremer R at One Mile Br # 14.8m rising 01:13 PM MON 27/12/10
Bremer R at Hancocks Br Brassall # 12.38m rising 01:30 PM MON 27/12/10
Bremer R at Ipswich # 7.75m rising 01:23 PM MON 27/12/10

*,# from automatic station

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LAIDLEY, LOCKYER AND WARRILL CREEKS AND THE BREMER RIVERS
Issued at 5:57 PM on Monday the 27th of December 2010
by the Bureau of Meteorology, Brisbane.

Heavy rainfall during Monday has caused fast rises and areas of moderate to major flooding in Laidley, Lockyer and Warrill Creeks and in the Bremer River. A moderate flood peak is expected in the Bremer River at Ipswich during this evening.

LAIDLEY AND LOCKYER CREEKS:

Further heavy rainfall during the afternoon has caused renewed rises and moderate to major flooding in the upper reaches of Laidley and Lockyer Creeks. Major flood levels will continue downstream at Lyons Bridge with further rises and a peak around 15.2 metres expected overnight Monday.

WARRILL CREEK:

Fast rises and major flooding is occurring in the Warrill Creek from Kalbar Weir to Amberley.

BREMER RIVER:

A major flood peak of about 7 metres has been recorded in the Bremer River at the Five Mile Bridge with a moderate flood peak of around 10 metres now expected in the Bremer river at the David Trumpy Bridge at Ipswich during this evening.

The heavy rainfall has now cleared the area with only lighter rain expected overnight.

Predicted River Heights/Flows:
Bremer River:

Ipswich Reach around 10 metres Monday evening.

Next Issue:
The next warning will be issued at about 9pm Monday.

Latest River Heights:

Lockyer Ck at Helidon #	5.16m falling	04:45 PM MON 27/12/10
Flagstone Ck at Brown-Zirbels Rd *	7.14m falling	02:40 PM MON 27/12/10
Tenthill Ck at Tenthill #	8.7m rising	04:45 PM MON 27/12/10
Lockyer Ck at Gatton #	14.72m falling	04:34 PM MON 27/12/10
Laidley Ck at Mulgowie *	8.97m rising	03:30 PM MON 27/12/10
Laidley Ck at Laidley	6.6m rising slowly	02:15 PM MON 27/12/10
Laidley Ck at Showground Weir #	8.72m rising	04:47 PM MON 27/12/10



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Bill Gunn Dam #	110.07m steady	02:23 PM MON 27/12/10
Laidley Ck at Warrego Hwy *	5.76m falling	03:00 PM MON 27/12/10
Lockyer Ck at Glenore Grove #	12.62m falling	04:42 PM MON 27/12/10
Lockyer Ck at Lyons Br #	13.85m rising	04:40 PM MON 27/12/10
Lockyer Ck at Lyons Br #	11.46m rising	04:46 PM MON 27/12/10
Lockyer Ck at O'Reilly's Weir *	10.67m rising	03:00 PM MON 27/12/10
Lockyer Ck at O'Reilly's Weir #	10.72m rising	04:38 PM MON 27/12/10
Brisbane R at Lowood Pump Stn #	5.45m rising	04:44 PM MON 27/12/10
Bremer R at Adams Br *	4.43m rising	03:00 PM MON 27/12/10
Bremer R at Adams Br #	4.67m rising	04:43 PM MON 27/12/10
Bremer R at Stokes Crossing #	4.55m rising	04:30 PM MON 27/12/10
Bremer R at Spresters Br #	5.52m steady	04:25 PM MON 27/12/10
Spring Ck at Greys Plains Rd #	2.34m falling	04:46 PM MON 27/12/10
Western Ck at Grandchester #	4.43m falling	04:45 PM MON 27/12/10
Western Ck at Kuss Rd #	7.12m rising	04:42 PM MON 27/12/10
Western Ck at Rosewood WWTP #	6.48m rising	04:19 PM MON 27/12/10
Bremer R at Rosewood	5.4m rising slowly	03:05 PM MON 27/12/10
Bremer R at Rosewood#	5.46m steady	01:51 PM MON 27/12/10
Bremer R at Rosewood #	5.46m rising	04:24 PM MON 27/12/10
Bremer R at Five Mile Br Walloon #	6.28m falling	04:46 PM MON 27/12/10
Bremer R at Walloon DERM *	7.78m falling	03:00 PM MON 27/12/10
Bremer R at Three Mile Br #	20.7m falling	04:26 PM MON 27/12/10
Reynolds Ck at Moogerah Dam *	1.92m rising	02:40 PM MON 27/12/10
Reynolds Ck at Moogerah Dam #	157.08m rising	04:35 PM MON 27/12/10
Warrill Ck at Toohills Crossing *	6.07m rising	02:40 PM MON 27/12/10
Warrill Ck at Kalbar Weir HW #	79.73m rising	04:45 PM MON 27/12/10
Warrill Ck at Kalbar Weir HW *	79.24m rising	02:30 PM MON 27/12/10
Warrill Ck at Kalbar Weir TW *	8.55m rising	02:40 PM MON 27/12/10
Warrill Ck at Kalbar	10m rising fast	03:00 PM MON 27/12/10
Warrill Ck at Harrisville #	5.4m rising	04:35 PM MON 27/12/10
Warrill Ck at Churchbank Weir *	2.97m rising	02:00 PM MON 27/12/10
Warrill Ck at Churchbank Weir #	3.07m steady	04:28 PM MON 27/12/10
Warrill Ck at Greens Rd Amberley #	6.64m falling	04:44 PM MON 27/12/10
Purga Ck at Peak Crossing #	3.16m rising	04:41 PM MON 27/12/10
Purga Ck at Loamside #	5.99m steady	04:39 PM MON 27/12/10
Bremer R at Berry's Lagoon *	23.42m rising	02:30 PM MON 27/12/10
Bremer R at One Mile Br #	14.95m falling	04:21 PM MON 27/12/10
Bremer R at Hancocks Br Brassall #	12.63m steady	04:11 PM MON 27/12/10
Bremer R at Ipswich #	8.45m rising	04:46 PM MON 27/12/10

#, * denotes automatic station.

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Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LAIDLEY, LOCKYER AND WARRILL CREEKS AND THE BREMER RIVERS
Issued at 9:23 PM on Monday the 27th of December 2010
by the Bureau of Meteorology, Brisbane.

Moderate to major flooding continues in the Laidley, Lockyer and Warrill Creeks and the Bremer River. A minor flood peak of 8.5 metres is occurring at Ipswich.

LAIDLEY AND LOCKYER CREEKS:

Moderate to major flooding continues in the upper reaches of the Laidley and Lockyer Creeks. Major flood levels will continue downstream at Lyons Bridge with further rises and a peak around 15.2 metres expected overnight Monday.

WARRILL CREEK:

Major flooding in Warrill Creek from Kalbar Weir to Amberley will continue overnight then ease during Tuesday.

BREMER RIVER:

Minor flooding is easing in the upper reaches of the Bremer River. Moderate to major flooding continues between Spressers Bridge and Walloon. The Bremer River at Ipswich is now peaking at 8.5 metres and is expected to remain steady overnight and Tuesday.

The heavy rainfall has now cleared the area with only lighter rain expected overnight.

Next Issue:

The next warning will be issued at about 6am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	5.16m falling	04:45 PM MON 27/12/10
Flagstone Ck at Brown-Zirbels Rd *	7.14m falling	02:40 PM MON 27/12/10
Tenthill Ck at Tenthill #	8.7m rising	04:45 PM MON 27/12/10
Lockyer Ck at Gatton #	14.72m falling	04:34 PM MON 27/12/10
Laidley Ck at Mulgowie *	8.97m rising	03:30 PM MON 27/12/10
Laidley Ck at Laidley	6.6m rising slowly	02:15 PM MON 27/12/10
Laidley Ck at Showground Weir #	8.72m rising	04:47 PM MON 27/12/10
Bill Gunn Dam #	110.07m steady	02:23 PM MON 27/12/10
Laidley Ck at Warrego Hwy *	5.76m falling	03:00 PM MON 27/12/10

Lockyer Ck at Glenore Grove #	12.62m falling	04:42 PM MON 27/12/10
Lockyer Ck at Lyons Br #	13.85m rising	04:40 PM MON 27/12/10
Lockyer Ck at Lyons Br #	11.46m rising	04:46 PM MON 27/12/10



Australian Government

Bureau of Meteorology

Lockyer Ck at O'Reilly's Weir *	10.67m rising	03:00 PM MON 27/12/10
Lockyer Ck at O'Reilly's Weir #	10.72m rising	04:38 PM MON 27/12/10
Brisbane R at Lowood Pump Stn #	5.45m rising	04:44 PM MON 27/12/10
Bremer R at Adams Br *	4.43m rising	03:00 PM MON 27/12/10
Bremer R at Adams Br #	4.67m rising	04:43 PM MON 27/12/10
Bremer R at Stokes Crossing #	4.55m rising	04:30 PM MON 27/12/10
Bremer R at Spresters Br #	5.52m steady	04:25 PM MON 27/12/10
Spring Ck at Greys Plains Rd #	2.34m falling	04:46 PM MON 27/12/10
Western Ck at Grandchester #	4.43m falling	04:45 PM MON 27/12/10
Western Ck at Kuss Rd #	7.12m rising	04:42 PM MON 27/12/10
Western Ck at Rosewood WWTP #	6.48m rising	04:19 PM MON 27/12/10
Bremer R at Rosewood	5.4m rising slowly	03:05 PM MON 27/12/10
Bremer R at Rosewood#	5.46m steady	01:51 PM MON 27/12/10
Bremer R at Rosewood #	5.46m rising	04:24 PM MON 27/12/10
Bremer R at Five Mile Br Walloon #	6.28m falling	04:46 PM MON 27/12/10
Bremer R at Walloon DERM *	7.78m falling	03:00 PM MON 27/12/10
Bremer R at Three Mile Br #	20.7m falling	04:26 PM MON 27/12/10
Reynolds Ck at Moogerah Dam *	1.92m rising	02:40 PM MON 27/12/10
Reynolds Ck at Moogerah Dam #	157.08m rising	04:35 PM MON 27/12/10
Warrill Ck at Toohills Crossing *	6.07m rising	02:40 PM MON 27/12/10
Warrill Ck at Kalbar Weir HW #	79.73m rising	04:45 PM MON 27/12/10
Warrill Ck at Kalbar Weir HW *	79.24m rising	02:30 PM MON 27/12/10
Warrill Ck at Kalbar Weir TW *	8.55m rising	02:40 PM MON 27/12/10
Warrill Ck at Kalbar	10m rising fast	03:00 PM MON 27/12/10
Warrill Ck at Harrisville #	5.4m rising	04:35 PM MON 27/12/10
Warrill Ck at Churchbank Weir *	2.97m rising	02:00 PM MON 27/12/10
Warrill Ck at Churchbank Weir #	3.07m steady	04:28 PM MON 27/12/10
Warrill Ck at Greens Rd Amberley #	6.64m falling	04:44 PM MON 27/12/10
Bremer R at Berry's Lagoon *	23.42m rising	02:30 PM MON 27/12/10
Bremer R at One Mile Br #	14.95m falling	04:21 PM MON 27/12/10
Bremer R at Hancocks Br Brassall #	12.63m steady	04:11 PM MON 27/12/10
Bremer R at Ipswich #	8.45m rising	04:46 PM MON 27/12/10

#, * denotes automatic station.

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND THE BREMER RIVERS
Issued at 5:35 AM on Tuesday the 28th of December 2010
by the Bureau of Meteorology, Brisbane.

Moderate to major flooding continues in the Lockyer and Warrill Creeks and the Bremer River. A minor flood peak of 8.5 metres was recorded at Ipswich during Monday evening with some small further rises expected during Tuesday which will keep Ipswich River levels around the 8 metre mark.

LOCKYER CREEK:

Moderate to major flooding continues in Lockyer Creek. River level rises causing major flooding will continue in the Lyons Bridge area with a peak up to 16 metres expected during Tuesday.

WARRILL CREEK:

Moderate to major flooding is being recorded in Warrill Creek from Kalbar Weir to Amberley. Further small rises are expected during Tuesday morning with river levels expected to commence to ease during Tuesday afternoon.

BREMER RIVER:

Moderate to major flooding continues between Spressers Bridge and Walloon. The Bremer River at Ipswich peaked at 8.5 metres during Monday evening with a smaller second peak expected during Tuesday.

The heavy rainfall has now cleared the area with only lighter rain expected during Tuesday.

Next Issue:

The next warning will be issued at about noon Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	2.34m falling	04:48 AM TUE 28/12/10
Flagstone Ck at Brown-Zirbels Rd *	3.35m falling	02:40 AM TUE 28/12/10
Tenthill Ck at Tenthill #	3.5m falling	04:54 AM TUE 28/12/10
Lockyer Ck at Gatton #	11.54m falling	05:01 AM TUE 28/12/10
Laidley Ck at Mulgowie *	3.91m falling	03:00 AM TUE 28/12/10
Laidley Ck at Laidley	8.8m rising slowly	09:50 PM MON 27/12/10
Laidley Ck at Showground Weir #	5.88m falling	04:56 AM TUE 28/12/10
Bill Gunn Dam #	110.05m steady	02:15 AM TUE 28/12/10
Laidley Ck at Warrego Hwy *	6.37m steady	03:00 AM TUE 28/12/10
Lockyer Ck at Glenore Grove #	13.22m falling	05:03 AM TUE 28/12/10
Lockyer Ck at Lyons Br #	15.37m rising	04:58 AM TUE 28/12/10
Lockyer Ck at O'Reilly's Weir #	11.34m rising	05:04 AM TUE 28/12/10
Brisbane R at Lowood Pump Stn #	6.73m rising	04:50 AM TUE 28/12/10



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Brisbane R at Savages Crossing #	7.01m rising	04:54 AM TUE 28/12/10
Brisbane R at Burtons Br #	5.7m rising	04:56 AM TUE 28/12/10
Brisbane R at Kholo Br #	-0.59m rising	04:42 AM TUE 28/12/10
Brisbane R at Mt Crosby #	8.98m steady	04:59 AM TUE 28/12/10
Brisbane R at Colleges Crossing #	6.26m steady	04:35 AM TUE 28/12/10
Bremer R at Adams Br #	2.03m falling	04:55 AM TUE 28/12/10
Bremer R at Stokes Crossing #	2.65m falling	05:03 AM TUE 28/12/10
Bremer R at Spresters Br #	5.52m falling	05:02 AM TUE 28/12/10
Spring Ck at Greys Plains Rd #	1.19m steady	03:50 AM TUE 28/12/10
Western Ck at Grandchester #	1.23m falling	04:55 AM TUE 28/12/10
Western Ck at Kuss Rd #	4.78m falling	05:02 AM TUE 28/12/10
Western Ck at Rosewood WWTP #	5.98m falling	05:03 AM TUE 28/12/10
Bremer R at Rosewood #	5.5m falling	05:00 AM TUE 28/12/10
Bremer R at Five Mile Br Walloon #	6.76m falling	04:55 AM TUE 28/12/10
Bremer R at Walloon DERM *	7.68m rising	03:00 AM TUE 28/12/10
Bremer R at Three Mile Br #	20.80m rising	04:41 AM TUE 28/12/10

Reynolds Ck at Moogerah Dam #	156.8m falling	04:40 AM TUE 28/12/10
Warrill Ck at Toohills Crossing *	0.83m rising	02:40 AM TUE 28/12/10
Warrill Ck at Kalbar Weir HW #	78.19m falling	05:03 AM TUE 28/12/10
Warrill Ck at Kalbar Weir TW *	8.28m falling	02:20 AM TUE 28/12/10
Warrill Ck at Kalbar	10.6m rising slowly	06:00 PM MON 27/12/10
Warrill Ck at Harrisville #	5.58m steady	05:00 AM TUE 28/12/10
Warrill Ck at Churchbank Weir #	3.32m steady	04:29 AM TUE 28/12/10
Warrill Ck at Greens Rd Amberley #	7.14m rising	04:53 AM TUE 28/12/10
Warrill Ck at Amberley DNR *	8.01m steady	02:40 AM TUE 28/12/10

Bremer R at Berry's Lagoon *	23.14m rising	02:30 AM TUE 28/12/10
Bremer R at One Mile Br #	14.85m steady	05:03 AM TUE 28/12/10
Bremer R at Hancocks Br Brassall #	12.23m rising	04:47 AM TUE 28/12/10
Bremer R at Ipswich #	8.05m rising	04:53 AM TUE 28/12/10

*,# from automatic station

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public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND THE BREMER RIVERS
Issued at 12:03 PM on Tuesday the 28th of December 2010
by the Bureau of Meteorology, Brisbane.

Moderate to major flooding continues in the Lockyer and Warrill Creeks and the Bremer River. A second minor flood peak of 8.5 metres is expected at Ipswich during Tuesday afternoon.

LOCKYER CREEK:

Moderate to major flooding continues in Lockyer Creek. River level rises causing major flooding will continue in the Lyons Bridge area with a peak up to 16 metres expected during Tuesday.

WARRILL CREEK:

Major flooding is being recorded in Warrill Creek from Kalbar Weir to Amberley. Further small rises are expected during Tuesday morning with river levels expected to commence to ease during Tuesday afternoon. Minor flood levels continue to ease in the upper reaches of Warrill Creek between Moogerah Dam and the Junction Weir area.

BREMER RIVER:

Minor to moderate flooding continues between Spresters Bridge and Walloon. The Bremer River at Ipswich continues to slowly rise to a second minor flood peak around the 8.5 metre level during Tuesday.

The heavy rainfall has now cleared the area with only lighter rain is expected during Tuesday.

Next Issue:

The next warning will be issued at about 7pm Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	1.92m falling	11:06 AM TUE 28/12/10
Flagstone Ck at Brown-Zirbels Rd *	3.01m falling	08:10 AM TUE 28/12/10
Tenthill Ck at Tenthill #	3.1m falling	10:57 AM TUE 28/12/10
Lockyer Ck at Gatton #	7.96m steady	11:07 AM TUE 28/12/10
Laidley Ck at Mulgowie *	3.18m falling	09:00 AM TUE 28/12/10
Laidley Ck at Laidley	3.8m falling slowly	08:15 AM TUE 28/12/10
Laidley Ck at Showground Weir #	5.4m falling	11:07 AM TUE 28/12/10
Bill Gunn Dam #	110.03m steady	08:35 AM TUE 28/12/10
Laidley Ck at Warrego Hwy *	5.75m falling	09:00 AM TUE 28/12/10
Lockyer Ck at Glenore Grove #	11.22m falling	11:11 AM TUE 28/12/10
Lockyer Ck at Lyons Br #	15.87m rising	10:58 AM TUE 28/12/10
Lockyer Ck at O'Reilly's Weir #	11.76m falling	11:11 AM TUE 28/12/10



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Brisbane R at Lowood Pump Stn #	7.33m rising	11:05 AM TUE 28/12/10
Brisbane R at Savages Crossing #	7.39m falling	11:12 AM TUE 28/12/10
Brisbane R at Burtons Br #	6m rising	10:59 AM TUE 28/12/10
Brisbane R at Kholo Br #	-0.39m rising	10:47 AM TUE 28/12/10
Brisbane R at Mt Crosby #	9.07m steady	11:05 AM TUE 28/12/10
Brisbane R at Colleges Crossing #	6.51m rising	10:44 AM TUE 28/12/10
Bremer R at Adams Br #	1.85m falling	10:31 AM TUE 28/12/10
Bremer R at Stokes Crossing #	2.15m falling	11:03 AM TUE 28/12/10
Bremer R at Spresters Br #	4.87m falling	11:03 AM TUE 28/12/10
Spring Ck at Greys Plains Rd #	1.09m steady	09:50 AM TUE 28/12/10
Western Ck at Grandchester #	0.98m falling	09:58 AM TUE 28/12/10
Western Ck at Kuss Rd #	3.84m falling	11:07 AM TUE 28/12/10
Western Ck at Rosewood WWTP #	4.83m falling	11:10 AM TUE 28/12/10
Bremer R at Rosewood #	4.72m falling	11:06 AM TUE 28/12/10
Bremer R at Five Mile Br Walloon #	5.48m falling	11:10 AM TUE 28/12/10
Bremer R at Walloon DERM *	7.41m falling	09:00 AM TUE 28/12/10
Bremer R at Three Mile Br #	20.55m rising	11:11 AM TUE 28/12/10
Reynolds Ck at Moogerah Dam #	156.58m falling	10:49 AM TUE 28/12/10
Warrill Ck at Toohills Crossing *	0.06m rising	08:20 AM TUE 28/12/10
Warrill Ck at Kalbar Weir HW #	77.01m falling	11:06 AM TUE 28/12/10
Warrill Ck at Kalbar Weir TW *	7.27m falling	08:20 AM TUE 28/12/10
Warrill Ck at Kalbar	8.7m falling slowly	09:30 AM TUE 28/12/10
Warrill Ck at Harrisville #	5.28m steady	11:00 AM TUE 28/12/10
Warrill Ck at Churchbank Weir #	3.12m falling	10:31 AM TUE 28/12/10
Warrill Ck at Greens Rd Amberley #	7.32m rising	11:11 AM TUE 28/12/10
Warrill Ck at Amberley DNR *	8.15m rising	08:20 AM TUE 28/12/10
Purga Ck at Peak Crossing #	1.61m steady	11:08 AM TUE 28/12/10
Purga Ck at Loamside #	5.07m steady	11:13 AM TUE 28/12/10
Purga Ck at Loamside *	6.53m falling	08:20 AM TUE 28/12/10
Bremer R at Berry's Lagoon *	23.49m falling	08:15 AM TUE 28/12/10
Bremer R at One Mile Br #	14.9m falling	11:04 AM TUE 28/12/10
Bremer R at Hancocks Br Brassall #	12.73m rising	11:05 AM TUE 28/12/10
Bremer R at Ipswich #	8.45m falling	11:08 AM TUE 28/12/10

*,# from automatic station

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public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND THE BRISBANE RIVER BELOW WIVENHOE

Issued at 7:52 PM on Tuesday the 28th of December 2010
by the Bureau of Meteorology, Brisbane.

Moderate to major flooding is easing along Lockyer and Warrill Creeks. Minor flooding is expected along the Brisbane River between Wivenhoe Dam and Mt Crosby Weir this week.

LOCKYER CREEK:

Major flood levels have peak in the Lyons Bridge area at 16 metres. Levels will now fall overnight and during Wednesday.

WARRILL CREEK:

Major flooding is being recorded in Warrill Creek from Harrisville to Amberley. Creek levels are now falling and are expected to continue to do so overnight. Minor flood levels continue to ease in the upper reaches of Warrill Creek between Moogerah Dam and the Kalbar area.

BREMER RIVER:

Flood levels along the Bremer River are expected to fall below minor flood levels overnight.

BRISBANE RIVER BELOW WIVENHOE

SEQ Water advises that releases have started from Wivenhoe dam. The releases, combined with Lockyer Creek flows are expected to result in minor flooding downstream to Mt Crosby Weir into the weekend.

Next Issue:

The next warning will be issued at about 7:30am Wednesday.

Latest River Heights:

Lockyer Ck at Helidon *	1.67m falling	05:40 PM TUE 28/12/10
Lockyer Ck at Helidon #	1.64m falling	06:36 PM TUE 28/12/10
Flagstone Ck at Brown-Zirbels Rd *	2.64m falling	05:20 PM TUE 28/12/10
Ma Ma Ck at Harm's *	2.19m falling	05:10 PM TUE 28/12/10
Tenthill Ck at Tenthill *	2.89m falling	05:00 PM TUE 28/12/10
Tenthill Ck at Tenthill #	2.8m falling	06:39 PM TUE 28/12/10
Lockyer Ck at Gatton *	5.13m falling	05:40 PM TUE 28/12/10
Lockyer Ck at Gatton #	6.62m steady	06:46 PM TUE 28/12/10
Laidley Ck at Mulgowie *	2.7m falling	05:00 PM TUE 28/12/10
Laidley Ck at Laidley	3.8m falling slowly	08:15 AM TUE 28/12/10
Laidley Ck at Showground Weir *	5.22m falling	05:20 PM TUE 28/12/10
Laidley Ck at Showground Weir #	5.2m falling	06:04 PM TUE 28/12/10
Bill Gunn Dam #	110.01m steady	05:17 PM TUE 28/12/10



Australian Government

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Laidley Ck at Warrego Hwy *	4.85m falling	05:00 PM TUE 28/12/10
Lockyer Ck at Glenore Grove #	8.46m falling	06:55 PM TUE 28/12/10
Lockyer Ck at Lyons Br #	15.39m falling	06:49 PM TUE 28/12/10
Lockyer Ck at Lyons Br #	12.62m rising	01:01 AM TUE 28/12/10
Lockyer Ck at Rifle Range Rd *	15.71m falling	05:40 PM TUE 28/12/10
Lockyer Ck at O'Reilly's Weir #	12.1m falling	06:54 PM TUE 28/12/10
Brisbane R at Lowood Pump Stn #	8.31m rising	06:50 PM TUE 28/12/10
Brisbane R at Savages Crossing *	7.98m rising	05:30 PM TUE 28/12/10
Brisbane R at Savages Crossing #	8.15m rising	06:51 PM TUE 28/12/10
Brisbane R at Burtons Br #	6.48m rising	06:50 PM TUE 28/12/10
Cabbage Tree Ck at L Manchester #	51.31m falling	06:10 PM TUE 28/12/10
Brisbane R at Kholo Br #	-0.03m rising	06:46 PM TUE 28/12/10
Brisbane R at Mt Crosby #	9.24m falling	06:56 PM TUE 28/12/10
Brisbane R at Mt Crosby #	9.22m rising	06:22 PM TUE 28/12/10
Brisbane R at Colleges Crossing #	6.76m rising	05:07 PM TUE 28/12/10
Bremer R at Adams Br *	1.71m falling	05:00 PM TUE 28/12/10
Bremer R at Adams Br #	1.69m rising	06:52 PM TUE 28/12/10
Bremer R at Stokes Crossing #	1.85m steady	06:52 PM TUE 28/12/10
Bremer R at Spresters Br #	4.07m falling	06:50 PM TUE 28/12/10
Spring Ck at Greys Plains Rd #	0.99m steady	06:50 PM TUE 28/12/10
Western Ck at Grandchester #	0.73m falling	06:29 PM TUE 28/12/10
Western Ck at Kuss Rd #	3.24m falling	06:56 PM TUE 28/12/10
Western Ck at Rosewood WWTP #	3.73m falling	06:37 PM TUE 28/12/10
Bremer R at Rosewood	4m falling	03:00 PM TUE 28/12/10
Bremer R at Rosewood#	4.06m falling	06:34 PM TUE 28/12/10
Bremer R at Rosewood #	4.08m falling	06:42 PM TUE 28/12/10
Bremer R at Five Mile Br Walloon #	3.94m falling	06:52 PM TUE 28/12/10
Bremer R at Walloon DERM *	5.51m falling	05:00 PM TUE 28/12/10
Bremer R at Three Mile Br #	18.3m falling	06:56 PM TUE 28/12/10
Reynolds Ck at Moogerah Dam *	1.48m falling	05:40 PM TUE 28/12/10
Reynolds Ck at Moogerah Dam #	156.36m falling	06:30 PM TUE 28/12/10
Warrill Ck at Toohills Crossing *	-0.04m falling	05:20 PM TUE 28/12/10
Warrill Ck at Kalbar Weir HW #	76.29m rising	06:45 PM TUE 28/12/10
Warrill Ck at Kalbar Weir HW *	76.33m falling	05:30 PM TUE 28/12/10
Warrill Ck at Kalbar Weir TW *	5.62m falling	05:40 PM TUE 28/12/10
Warrill Ck at Kalbar	7.3m falling slowly	06:00 PM TUE 28/12/10
Warrill Ck at Harrisville #	5.02m falling	06:53 PM TUE 28/12/10
Warrill Ck at Harrisville#	4.9m steady	05:27 PM TUE 28/12/10
Warrill Ck at Churchba		

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND THE BRISBANE RIVER BELOW WIVENHOE

Issued at 6:48 AM on Wednesday the 29th of December 2010
by the Bureau of Meteorology, Brisbane.

Moderate to major flooding continues to ease along Lockyer and Warrill Creeks.
Minor flooding is expected along the Brisbane River between Wivenhoe Dam and Mt Crosby Weir this week.

LOCKYER CREEK:

Major flooding continues to ease in the Lyons Bridge and Rifle Range areas, with river levels expected to fall away quickly during Wednesday.

WARRILL CREEK:

Moderate flood levels continue to ease along Warrill Creek between Harrisville and Amberley.

BREMER RIVER:

River levels along the Bremer River have fallen below minor flood levels overnight.

BRISBANE RIVER BELOW WIVENHOE:

SEQ Water advises that releases have started from Wivenhoe dam. The releases, combined with Lockyer Creek flows are expected to result in minor flooding to develop downstream to Mt Crosby Weir during Wednesday.

Weather Forecast:

A shower or two.

Next Issue:

The next warning will be issued at about 3:30pm Wednesday.

Latest River Heights:

Lockyer Ck at Helidon #	1.4m falling	06:09 AM WED 29/12/10
Flagstone Ck at Brown-Zirbels Rd *	2.31m falling	05:20 AM WED 29/12/10
Ma Ma Ck at Harm's *	2.06m falling	05:00 AM WED 29/12/10
Tenthill Ck at Tenthill #	2.54m falling	06:15 AM WED 29/12/10
Lockyer Ck at Gatton #	5.18m falling	06:19 AM WED 29/12/10
Laidley Ck at Mulgowie *	2.32m falling	05:00 AM WED 29/12/10
Laidley Ck at Showground Weir #	5.06m steady	05:54 AM WED 29/12/10
Laidley Ck at Warrego Hwy *	4.39m falling	05:00 AM WED 29/12/10
Lockyer Ck at Glenore Grove #	6.84m falling	06:18 AM WED 29/12/10
Lockyer Ck at Lyons Br #	13.35m falling	06:22 AM WED 29/12/10
Lockyer Ck at Rifle Range Rd *	13.72m falling	05:40 AM WED 29/12/10
Lockyer Ck at O'Reilly's Weir #	12.06m falling	06:26 AM WED 29/12/10
Brisbane R at Lowood Pump Stn #	9.77m rising	06:23 AM WED 29/12/10
Brisbane R at Savages Crossing #	9.75m rising	06:27 AM WED 29/12/10
Brisbane R at Burtons Br #	7.86m rising	06:11 AM WED 29/12/10



Australian Government

Bureau of Meteorology

Brisbane R at Kholo Br #	1.37m rising	06:26 AM WED 29/12/10
Brisbane R at Mt Crosby #	10.06m rising	06:22 AM WED 29/12/10
Brisbane R at Colleges Crossing #	7.71m rising	06:05 AM WED 29/12/10
Bremer R at Adams Br #	1.55m rising	06:16 AM WED 29/12/10
Bremer R at Stokes Crossing #	1.55m falling	04:54 AM WED 29/12/10
Bremer R at Spresters Br #	3.42m falling	06:11 AM WED 29/12/10
Spring Ck at Greys Plains Rd #	0.94m steady	03:50 AM WED 29/12/10
Western Ck at Grandchester #	0.53m falling	06:23 AM WED 29/12/10
Western Ck at Kuss Rd #	2.32m falling	06:17 AM WED 29/12/10
Western Ck at Rosewood WWTP #	2.78m falling	06:17 AM WED 29/12/10
Bremer R at Rosewood #	3.48m falling	06:15 AM WED 29/12/10
Bremer R at Five Mile Br Walloon #	3.24m falling	06:01 AM WED 29/12/10
Bremer R at Walloon DERM *	4.28m falling	05:00 AM WED 29/12/10
Bremer R at Three Mile Br #	15.75m falling	06:11 AM WED 29/12/10
Warrill Ck at Harrisville#	4.6m steady	06:27 AM WED 29/12/10
Warrill Ck at Churchbank Weir #	2.46m falling	05:37 AM WED 29/12/10
Warrill Ck at Greens Rd Amberley #	5.94m falling	06:23 AM WED 29/12/10
Warrill Ck at Amberley DNR *	6.89m falling	05:40 AM WED 29/12/10
Purga Ck at Peak Crossing #	1.21m steady	05:08 AM WED 29/12/10
Purga Ck at Loamside #	2.74m steady	06:19 AM WED 29/12/10
Bremer R at Berry's Lagoon *	20.17m falling	05:30 AM WED 29/12/10
Bremer R at One Mile Br #	11.3m falling	06:22 AM WED 29/12/10
Bremer R at Hancocks Br Brassall #	8.23m falling	06:18 AM WED 29/12/10
Bremer R at Ipswich #	4.7m falling	06:15 AM WED 29/12/10
Brisbane R at Moggill #	2.82m rising	05:41 AM WED 29/12/10
Brisbane R at Jindalee Br	NA	
Brisbane R at City Gauge #	0.86m falling	06:25 AM WED 29/12/10
Moreton Bay at Whyte Island #	0.59m falling	06:25 AM WED 29/12/10

*,# denotes automatic station.

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR WARRILL CREEK AND THE BRISBANE RIVER BELOW WIVENHOE
Issued at 2:38 PM on Wednesday the 29th of December 2010
by the Bureau of Meteorology, Brisbane.

Moderate to major flooding continues to ease along Lockyer and Warrill Creeks.
Minor flooding is expected along the Brisbane River between Wivenhoe Dam and Mt Crosby Weir this week.

LOCKYER CREEK:

Moderate flooding continues to ease in the Lyons Bridge and Rifle Range areas, with river levels expected to fall away quickly during Wednesday.

WARRILL CREEK:

Moderate flood levels continue to ease along Warrill Creek between Harrisville and Amberley.

BRISBANE RIVER BELOW WIVENHOE:

SEQ Water advises that releases have started from Wivenhoe dam. The releases, combined with Lockyer Creek flows are expected to result in minor flooding downstream to Mt Crosby Weir during Wednesday.

Next Issue:

The next warning will be issued at about 7:30am Thursday.

Latest River Heights:

Lockyer Ck at Helidon *	1.34m steady	11:20 AM WED 29/12/10
Lockyer Ck at Helidon #	1.3m steady	01:39 PM WED 29/12/10
Flagstone Ck at Brown-Zirbels Rd *	2.2m falling	11:30 AM WED 29/12/10
Ma Ma Ck at Harm's *	2.03m steady	08:00 AM WED 29/12/10
Tenthill Ck at Tenthill *	2.48m falling	12:00 PM WED 29/12/10
Tenthill Ck at Tenthill #	2.4m falling	02:12 PM WED 29/12/10
Lockyer Ck at Gatton *	3.78m falling	11:30 AM WED 29/12/10
Lockyer Ck at Gatton #	4.9m rising	02:31 PM WED 29/12/10
Laidley Ck at Mulgowie *	2.18m falling	01:00 PM WED 29/12/10
Laidley Ck at Showground Weir *	5.02m falling	11:40 AM WED 29/12/10
Laidley Ck at Showground Weir #	5.04m steady	11:53 AM WED 29/12/10
Bill Gunn Dam #	109.97m steady	02:16 PM WED 29/12/10
Laidley Ck at Warrego Hwy *	4.18m falling	01:00 PM WED 29/12/10
Lockyer Ck at Glenore Grove #	6.12m falling	02:22 PM WED 29/12/10
Lockyer Ck at Lyons Br #	11.59m falling	02:31 PM WED 29/12/10
Lockyer Ck at Rifle Range Rd *	12.42m falling	11:40 AM WED 29/12/10
Atkinson Dam #	65.76m steady	02:22 PM WED 29/12/10
Lockyer Ck at O'Reilly's Weir *	11.69m falling	12:10 PM WED 29/12/10
Lockyer Ck at O'Reilly's Weir #	11.46m falling	02:30 PM WED 29/12/10
Brisbane R at Lowood Pump Stn #	9.79m rising	02:26 PM WED 29/12/10
Brisbane R at Savages Crossing *	9.95m rising	11:30 AM WED 29/12/10
Brisbane R at Savages Crossing #	9.89m falling	02:27 PM WED 29/12/10
Brisbane R at Burtons Br #	8.02m rising	01:47 PM WED 29/12/10



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Cabbage Tree Ck at L Manchester # 51.17m falling 02:06 PM WED 29/12/10
Brisbane R at Kholo Br # 2.03m rising 02:17 PM WED 29/12/10
Brisbane R at Mt Crosby # 10.71m steady 02:32 PM WED 29/12/10
Brisbane R at Mt Crosby # 10.68m rising 02:22 PM WED 29/12/10
Brisbane R at Colleges Crossing # 8.46m rising 02:09 PM WED 29/12/10
Bremer R at Adams Br * 1.52m steady 12:00 PM WED 29/12/10
Bremer R at Adams Br # 1.49m steady 12:58 PM WED 29/12/10
Bremer R at Stokes Crossing # 1.4m falling 02:05 PM WED 29/12/10
Bremer R at Spresters Br # 3.07m falling 02:24 PM WED 29/12/10
Spring Ck at Greys Plains Rd # 0.89m steady 12:49 PM WED 29/12/10
Western Ck at Grandchester # 0.48m steady 12:55 PM WED 29/12/10
Western Ck at Kuss Rd # 2.04m falling 02:09 PM WED 29/12/10
Western Ck at Rosewood WWTP # 2.38m falling 01:51 PM WED 29/12/10
Bremer R at Rosewood 4m falling 03:00 PM TUE 28/12/10
Bremer R at Rosewood# 3.16m steady 01:51 PM WED 29/12/10
Bremer R at Rosewood # 3.16m steady 02:27 PM WED 29/12/10
Bremer R at Five Mile Br Walloon # 2.92m falling 02:02 PM WED 29/12/10
Bremer R at Walloon DERM * 3.95m falling 12:00 PM WED 29/12/10
Bremer R at Three Mile Br # 14.5m steady 02:25 PM WED 29/12/10
Warrill Ck at Harrisville # 4.42m falling 02:29 PM WED 29/12/10
Warrill Ck at Harrisville# 4.3m falling 02:03 PM WED 29/12/10
Warrill Ck at Churchbank Weir * 2.3m falling 11:00 AM WED 29/12/10
Warrill Ck at Churchbank Weir # 2.27m steady 01:28 PM WED 29/12/10
Warrill Ck at Greens Rd Amberley # 5.46m falling 02:32 PM WED 29/12/10
Warrill Ck at Amberley DNR * 6.5m falling 11:30 AM WED 29/12/10
Bremer R at Berry's Lagoon * 19.4m falling 11:30 AM WED 29/12/10
Bremer R at One Mile Br # 10.25m falling 02:25 PM WED 29/12/10
Bremer R at Hancocks Br Brassall # 6.98m falling 02:10 PM WED 29/12/10
Bremer R at Ipswich # 3.85m falling 02:28 PM WED 29/12/10
Brisbane R at Moggill # 2.67m rising 02:10 PM WED 29/12/10
Brisbane R at Moggill # 2.62m steady 01:17 PM WED 29/12/10
Bris

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR WARRILL CREEK AND THE BRISBANE RIVER BELOW WIVENHOE DAM
Issued at 6:10 AM on Thursday the 30th of December 2010
by the Bureau of Meteorology, Brisbane.

Minor flooding continues to ease along Warrill Creek. Minor flooding is expected to continue along the lower Brisbane River between Wivenhoe Dam and Mt Crosby Weir during this week.

WARRILL CREEK:

Minor flooding continues to ease along Warrill Creek between Harrisville and Amberley.

BRISBANE RIVER BELOW WIVENHOE:

SEQ Water advises that releases will continue from Wivenhoe dam until the weekend. The releases, combined with Lockyer Creek flows are expected to result in minor flooding downstream to Mt Crosby Weir during the remainder of this week.

Next Issue:

The next warning will be issued at about 3:30pm Thursday.

Latest River Heights:

Lockyer Ck at Helidon *	1.17m falling	05:00 AM THU 30/12/10
Tenthill Ck at Tenthill #	2.24m steady	04:48 AM THU 30/12/10
Lockyer Ck at Gatton #	4.28m rising	05:52 AM THU 30/12/10
Laidley Ck at Mulgowie *	2m steady	04:00 AM THU 30/12/10
Laidley Ck at Showground Weir #	4.9m steady	05:53 AM THU 30/12/10
Laidley Ck at Warrego Hwy *	3.5m falling	05:00 AM THU 30/12/10
Lockyer Ck at Glenore Grove #	5.08m falling	05:49 AM THU 30/12/10
Lockyer Ck at Lyons Br #	8.95m falling	05:31 AM THU 30/12/10
Lockyer Ck at Rifle Range Rd *	8.99m falling	05:40 AM THU 30/12/10
Lockyer Ck at O'Reilly's Weir #	11.78m falling	05:48 AM THU 30/12/10
Brisbane R at Lowood Pump Stn #	10.77m steady	05:55 AM THU 30/12/10
Brisbane R at Savages Crossing #	10.71m rising	05:54 AM THU 30/12/10
Brisbane R at Burtons Br #	8.6m rising	05:50 AM THU 30/12/10
Brisbane R at Kholo Br #	2.55m falling	05:53 AM THU 30/12/10
Brisbane R at Mt Crosby #	11.08m rising	05:37 AM THU 30/12/10
Brisbane R at Colleges Crossing #	8.86m rising	05:01 AM THU 30/12/10
Bremer R at Adams Br #	1.37m falling	05:46 AM THU 30/12/10
Bremer R at Stokes Crossing #	1.3m steady	03:52 AM THU 30/12/10
Bremer R at Spresters Br #	2.72m falling	04:36 AM THU 30/12/10
Western Ck at Grandchester #	0.43m steady	03:55 AM THU 30/12/10
Western Ck at Kuss Rd #	1.62m falling	05:52 AM THU 30/12/10
Western Ck at Rosewood WWTP #	1.83m falling	05:10 AM THU 30/12/10
Bremer R at Rosewood#	2.71m falling	05:24 AM THU 30/12/10
Bremer R at Five Mile Br Walloon #	2.42m falling	05:52 AM THU 30/12/10
Bremer R at Walloon DERM *	3.28m falling	05:00 AM THU 30/12/10
Bremer R at Three Mile Br #	12.95m falling	05:10 AM THU 30/12/10



Australian Government

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Warrill Ck at Kalbar Weir TW *	2.52m falling	05:15 AM THU 30/12/10
Warrill Ck at Harrisville #	3.42m falling	05:50 AM THU 30/12/10
Warrill Ck at Churchbank Weir #	1.57m falling	05:18 AM THU 30/12/10
Warrill Ck at Greens Rd Amberley #	4.92m rising	05:53 AM THU 30/12/10
Warrill Ck at Amberley DNR *	5.73m falling	05:30 AM THU 30/12/10
Purga Ck at Peak Crossing #	0.96m steady	05:08 AM THU 30/12/10
Purga Ck at Loamside #	1.83m steady	05:48 AM THU 30/12/10
Bremer R at One Mile Br #	8.8m falling	05:42 AM THU 30/12/10
Bremer R at Hancocks Br Brassall #	5.58m falling	05:39 AM THU 30/12/10
Bremer R at Ipswich #	3.1m rising	05:29 AM THU 30/12/10
Brisbane R at Moggill #	2.87m rising	05:46 AM THU 30/12/10
Brisbane R at City Gauge *	1.23m steady	05:40 AM THU 30/12/10
Moreton Bay at Whyte Island #	1.09m falling	05:50 AM THU 30/12/10

*,# denotes automatic station.

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FINAL FLOOD WARNING FOR WARRILL CREEK AND THE BRISBANE RIVER BELOW WIVENHOE DAM

Issued at 3:06 PM on Thursday the 30th of December 2010
by the Bureau of Meteorology, Brisbane.

Minor flooding continues to ease along Warrill Creek. Minor flooding is expected to continue along the lower Brisbane River between Wivenhoe Dam and Mt Crosby Weir during this week.

SEQ Water advises that releases will continue from Wivenhoe dam until the weekend. The releases, combined with Lockyer Creek flows are expected to result in minor flooding downstream to Mt Crosby Weir during the remainder of this week.

Next Issue:

This is the final warning. River Height Bulletins will continue to be issued.

Latest River Heights:

Brisbane R at Lowood Pump Stn #	10.63m rising	02:50 PM THU 30/12/10
Brisbane R at Savages Crossing #	10.73m falling	02:48 PM THU 30/12/10
Brisbane R at Burtons Br #	8.74m falling	02:47 PM THU 30/12/10
Brisbane R at Kholo Br #	3.03m steady	02:40 PM THU 30/12/10
Brisbane R at Mt Crosby #	11.48m falling	02:49 PM THU 30/12/10
Brisbane R at Colleges Crossing #	9.41m rising	02:48 PM THU 30/12/10
Bremer R at Adams Br #	1.33m falling	02:28 PM THU 30/12/10
Bremer R at Stokes Crossing #	1.25m steady	12:52 PM THU 30/12/10
Bremer R at Spresters Br #	2.52m falling	01:37 PM THU 30/12/10
Bremer R at Rosewood #	2.5m steady	02:27 PM THU 30/12/10
Bremer R at Five Mile Br Walloon #	2.2m falling	02:34 PM THU 30/12/10
Bremer R at Walloon DERM *	3.08m falling	01:00 PM THU 30/12/10
Bremer R at Three Mile Br #	12.05m falling	02:26 PM THU 30/12/10
Warrill Ck at Kalbar Weir HW #	75.51m falling	02:09 PM THU 30/12/10
Warrill Ck at Kalbar Weir TW *	2.14m falling	02:40 PM THU 30/12/10
Warrill Ck at Harrisville #	2.84m falling	02:32 PM THU 30/12/10
Warrill Ck at Churchbank Weir #	1.07m falling	02:44 PM THU 30/12/10
Warrill Ck at Greens Rd Amberley #	4.46m falling	02:47 PM THU 30/12/10
Warrill Ck at Amberley DNR *	5.33m falling	02:30 PM THU 30/12/10
Bremer R at Berry's Lagoon *	17.33m falling	02:30 PM THU 30/12/10
Bremer R at One Mile Br #	8.1m falling	02:20 PM THU 30/12/10
Bremer R at Hancocks Br Brassall #	5.18m falling	02:48 PM THU 30/12/10
Bremer R at Ipswich #	3.2m falling	02:33 PM THU 30/12/10
Brisbane R at Moggill #	2.87m falling	01:51 PM THU 30/12/10
Brisbane R at City Gauge #	0.65m rising	02:49 PM THU 30/12/10
Moreton Bay at Whyte Island #	0.61m rising	02:48 PM THU 30/12/10

*,# from automatic station



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Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND BREMER RIVER
Issued at 10:47 AM on Thursday the 6th of January 2011
by the Bureau of Meteorology, Brisbane.

Heavy rainfall during this morning is expected to lead to fast rises in the Lockyer and Warrill creek catchments and along the Bremer River with some moderate flood levels predicted today and during Friday. Further rises are likely while rainfall continues.

LOCKYER CREEK

Rainfall of up to 50mm in the 3 hours to 10am has resulted in fast rises in the Lockyer Creek catchment. Minor flood levels are likely at Gatton and Laidley later today with moderate flood levels downstream at Rifle Range Rd early on Friday. Higher levels are likely as rainfall continues.

WARRILL CREEK

Fast rises are likely along Warrill Creek following rainfall this morning. At least minor flood levels are predicted later today at Harrisville and Amberley with further rises as rainfall continues.

BREMER RIVER

Some minor to moderate flood levels are likely along the Bremer River during today and Friday.

Next Issue:

The next warning will be issued by 2pm Thursday.

Latest River Heights:

Lockyer Ck at Helidon *	1.25m steady	08:00 AM THU 06/01/11
Lockyer Ck at Helidon #	2.24m rising	10:11 AM THU 06/01/11
Flagstone Ck at Brown-Zirbels Rd *	2.48m falling	08:00 AM THU 06/01/11
Tenthill Ck at Tenthill *	2.14m steady	08:28 AM THU 06/01/11
Lockyer Ck at Gatton *	3.44m rising	08:10 AM THU 06/01/11
Lockyer Ck at Gatton #	5.14m rising	10:13 AM THU 06/01/11
Laidley Ck at Mulgowie *	2.54m falling	08:00 AM THU 06/01/11
Laidley Ck at Showground Weir *	4.87m rising	08:20 AM THU 06/01/11
Laidley Ck at Showground Weir #	5.16m rising	10:01 AM THU 06/01/11
Bill Gunn Dam #	109.9m steady	08:14 AM THU 06/01/11
Laidley Ck at Warrego Hwy *	2.28m rising	08:00 AM THU 06/01/11
Lockyer Ck at Glenore Grove #	5.18m rising	10:14 AM THU 06/01/11
Lockyer Ck at Lyons Br #	5.45m falling	10:15 AM THU 06/01/11
Lockyer Ck at Rifle Range Rd *	5.02m falling	08:00 AM THU 06/01/11
Atkinson Dam #	65.75m steady	10:06 AM THU 06/01/11
Lockyer Ck at O'Reilly's Weir *	9.22m rising	08:00 AM THU 06/01/11
Lockyer Ck at O'Reilly's Weir #	9.14m falling	10:09 AM THU 06/01/11

*automatic station



Australian Government
Bureau of Meteorology

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public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND BREMER RIVER
Issued at 2:27 PM on Thursday the 6th of January 2011
by the Bureau of Meteorology, Brisbane.

Heavy rainfall is continuing to cause fast river level rises in the Lockyer and Warrill creek catchments and along the Bremer River. Some moderate to major flood levels are predicted for later today and during Friday. Further rises are likely while rainfall continues.

LOCKYER CREEK

Rainfall of up to 60mm in the 6 hours to 2pm has resulted in fast rises along Lockyer Creek at Helidon and along Tenthill Creek. Minor, possibly moderate flood levels are likely at Gatton later today. Rises are also occurring along Laidley Creek with major flood levels at Mulgowie above the Laidley Creek Bridge. Major flood levels of above 7 metres are at forecast at Laidley this evening.

Downstream at Lyons Bridge, moderate flood levels are likely during Friday with major flood levels of 13 metres possible.

WARRILL CREEK

Fast rises are likely along Warrill Creek at Kalbar following rainfall this morning. At least minor flood levels are predicted later today at Harrisville and Amberley with further rises as rainfall continues.

BREMER RIVER

Minor flood levels are being observed at Adams Bridge. Minor to moderate flood levels are forecast downstream to Walloon over the next 24 hours.

Next Issue:

The next warning will be issued by 6pm Thursday.

Latest River Heights:

Lockyer Ck at Helidon #	4.36m falling	01:47 PM THU 06/01/11
Flagstone Ck at Brown-Zirbels Rd *	5.88m falling	12:40 PM THU 06/01/11
Tenthill Ck at Tenthill *	3.28m rising	12:20 PM THU 06/01/11
Lockyer Ck at Gatton #	6.06m falling	01:46 PM THU 06/01/11
Laidley Ck at Mulgowie *	5.57m rising	12:30 PM THU 06/01/11
Laidley Ck at Showground Weir #	5.68m rising	01:49 PM THU 06/01/11
Bill Gunn Dam #	109.94m steady	01:14 PM THU 06/01/11
Laidley Ck at Warrego Hwy *	2.52m rising	12:00 PM THU 06/01/11
Lockyer Ck at Glenore Grove #	5.68m rising	01:47 PM THU 06/01/11
Lockyer Ck at Lyons Br #	6.49m rising	01:45 PM THU 06/01/11
Lockyer Ck at Rifle Range Rd *	5.02m falling	08:00 AM THU 06/01/11
Atkinson Dam #	65.76m steady	12:48 PM THU 06/01/11
Lockyer Ck at O'Reilly's Weir *	9.07m steady	12:19 PM THU 06/01/11
Bremer R at Adams Br #	4.41m rising	01:49 PM THU 06/01/11



Australian Government

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Bremer R at Stokes Crossing #	3.15m rising	01:48 PM THU 06/01/11
Bremer R at Spicers Br #	3.82m falling	01:37 PM THU 06/01/11
Spring Ck at Greys Plains Rd #	2.39m falling	01:47 PM THU 06/01/11
Western Ck at Grandchester #	3.38m rising	01:36 PM THU 06/01/11
Western Ck at Kuss Rd #	4m rising	01:47 PM THU 06/01/11
Western Ck at Rosewood WWTP #	3.88m rising	01:50 PM THU 06/01/11
Bremer R at Rosewood#	3.86m falling	12:31 PM THU 06/01/11
Bremer R at Walloon DERM *	3.91m rising	10:40 AM THU 06/01/11
Bremer R at Three Mile Br #	10.8m rising	01:41 PM THU 06/01/11
Reynolds Ck at Moogerah Dam *	0.35m rising	08:00 AM THU 06/01/11
Warrill Ck at Toohills Crossing *	0.3m rising	08:20 AM THU 06/01/11
Warrill Ck at Kalbar Weir HW #	76.85m rising	01:48 PM THU 06/01/11
Warrill Ck at Harrisville #	1.28m rising	01:44 PM THU 06/01/11
Warrill Ck at Churchbank Weir *	0.32m steady	06:00 AM THU 06/01/11
Warrill Ck at Greens Rd Amberley #	2.36m rising	01:44 PM THU 06/01/11
Warrill Ck at Amberley DNR *	3.42m falling	08:20 AM THU 06/01/11

*automatic station

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public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND BREMER RIVER
Issued at 5:25 PM on Thursday the 6th of January 2011
by the Bureau of Meteorology, Brisbane.

Heavy rainfall is continuing to cause fast river level rises in the Lockyer and Warrill creek catchments and along the Bremer River. Some moderate to major flood levels are occurring.

LOCKYER CREEK

Heavy rainfall during Thursday has resulted in fast rises along Lockyer Creek and Tenthill Creek. Moderate flood levels are occurring at Gatton. Rises are also occurring along Laidley Creek with major flood levels at Mulgowie and Showground Weir.

Downstream at Glenore Grove, major flood levels are likely overnight and during Friday at Lyons Bridge.

WARRILL CREEK

Fast rises with moderate flooding are occurring along Warrill Creek at Kalbar following rainfall this morning. Moderate flood levels are predicted later today at Harrisville and minor flood levels predicted at Amberley.

BREMER RIVER

Minor flood levels are being observed at Adams Bridge with moderate flood levels at Kuss Road. Minor to moderate flood levels are forecast downstream to Walloon over the next 24 hours.

Next Issue:

The next warning will be issued by 10pm Thursday.

Latest River Heights:

Lockyer Ck at Helidon *	4.31m rising	02:30 PM THU 06/01/11
Tenthill Ck at Tenthill *	3.66m rising	04:00 PM THU 06/01/11
Lockyer Ck at Gatton #	13.34m rising	05:10 PM THU 06/01/11
Laidley Ck at Mulgowie *	6.2m falling	04:20 PM THU 06/01/11
Laidley Ck at Laidley	5.8m rising fast	02:25 PM THU 06/01/11
Laidley Ck at Showground Weir #	9.26m rising	05:10 PM THU 06/01/11
Bill Gunn Dam #	109.94m steady	04:15 PM THU 06/01/11
Laidley Ck at Warrego Hwy *	3.42m rising	04:00 PM THU 06/01/11
Lockyer Ck at Glenore Grove #	8.36m rising	05:11 PM THU 06/01/11
Lockyer Ck at Lyons Br #	7.35m rising	05:06 PM THU 06/01/11
Lockyer Ck at Rifle Range Rd *	6.06m rising	02:20 PM THU 06/01/11
Atkinson Dam #	65.77m steady	03:37 PM THU 06/01/11
Lockyer Ck at O'Reilly's Weir #	9m rising	04:56 PM THU 06/01/11
Bremer R at Adams Br #	3.79m falling	05:10 PM THU 06/01/11
Bremer R at Stokes Crossing #	4.45m rising	04:47 PM THU 06/01/11
Bremer R at Spressers Br #	4.07m rising	05:05 PM THU 06/01/11



Australian Government

Bureau of Meteorology

Spring Ck at Greys Plains Rd #	1.69m falling	05:02 PM THU 06/01/11
Western Ck at Grandchester #	3.08m rising	04:23 PM THU 06/01/11
Western Ck at Kuss Rd #	7m rising	05:09 PM THU 06/01/11
Western Ck at Rosewood WWTP #	5.53m rising	05:08 PM THU 06/01/11
Bremer R at Rosewood#	4.11m rising	05:01 PM THU 06/01/11
Bremer R at Rosewood #	4.14m rising	05:05 PM THU 06/01/11
Bremer R at Five Mile Br Walloon #	3.36m steady	04:26 PM THU 06/01/11
Bremer R at Walloon DERM *	4.32m steady	04:00 PM THU 06/01/11
Bremer R at Three Mile Br #	11.6m rising	05:10 PM THU 06/01/11
Reynolds Ck at Moogerah Dam *	0.35m rising	08:00 AM THU 06/01/11
Warrill Ck at Toohills Crossing *	0.3m rising	08:20 AM THU 06/01/11
Warrill Ck at Kalbar Weir HW #	77.07m falling	05:09 PM THU 06/01/11
Warrill Ck at Kalbar Weir TW *	0.76m steady	07:05 AM THU 06/01/11
Warrill Ck at Kalbar	7.5m rising	03:00 PM THU 06/01/11
Warrill Ck at Harrisville #	3.06m rising	05:08 PM THU 06/01/11
Warrill Ck at Churchbank Weir #	0.62m rising	05:11 PM THU 06/01/11
Warrill Ck at Greens Rd Amberley #	2.42m falling	05:08 PM THU 06/01/11
Warrill Ck at Amberley DNR *	3.1m steady	02:10 PM THU 06/01/11

*automatic station

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telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND BREMER RIVER
Issued at 9:32 PM on Thursday the 6th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfall has eased during Thursday evening with totals of less than 5mm recorded in the 3 hours to 9:30pm. Moderate and major flooding continues in Lockyer and Laidley Creeks and in the Bremer River, with minor to moderate flooding occurring in Warrill Creek.

LOCKYER CREEK

Minor to moderate flooding has peaked in Lockyer Creek between Helidon and Showground Weir, with moderate flood levels currently easing at Gatton. Major flood levels continue to rise in Laidley Creek at Laidley.

Moderate flooding continues to rise in Lockyer Creek at Glenore Grove, with moderate flood levels also expected overnight downstream at Lyons Bridge.

WARRILL CREEK

Stream levels have either peaked or are nearing a peak along Warrill Creek. Minor to moderate flooding is occurring between Kalbar and Churchbank Weir during Thursday evening, with minor flooding expected overnight at Amberley.

BREMER RIVER

River levels have either peaked or are nearing a peak along the Bremer River. Minor to major flooding is occurring between Kuss Road and Rosewood.

Next Issue:

The next warning will be issued by 7am Friday.

Latest River Heights:

Lockyer Ck at Helidon #	2.56m falling	09:02 PM THU 06/01/11
Tenthill Ck at Tenthill *	3.17m falling	08:00 PM THU 06/01/11
Lockyer Ck at Gatton #	13.3m falling	08:58 PM THU 06/01/11
Laidley Ck at Mulgowie *	4.5m falling	07:30 PM THU 06/01/11
Laidley Ck at Laidley	8.1m falling slowly	06:30 PM THU 06/01/11
Laidley Ck at Showground Weir #	7.44m falling	09:01 PM THU 06/01/11
Laidley Ck at Warrego Hwy *	4.4m rising	07:30 PM THU 06/01/11
Lockyer Ck at Glenore Grove #	11.16m rising	08:59 PM THU 06/01/11
Lockyer Ck at Lyons Br #	9.59m rising	09:00 PM THU 06/01/11
Lockyer Ck at Rifle Range Rd *	8.24m rising	08:40 PM THU 06/01/11
Lockyer Ck at O'Reilly's Weir #	9.54m rising	09:01 PM THU 06/01/11
Brisbane R at Savages Crossing #	3.35m rising	08:54 PM THU 06/01/11
Brisbane R at Burtons Br #	1.98m rising	08:29 PM THU 06/01/11
Brisbane R at Mt Crosby #	7.7m steady	08:58 PM THU 06/01/11
Brisbane R at Colleges Crossing #	2.76m rising	08:52 PM THU 06/01/11
Bremer R at Adams Br #	2.69m falling	08:58 PM THU 06/01/11
Bremer R at Stokes Crossing #	3.7m falling	09:02 PM THU 06/01/11



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Bremer R at Spresters Br #	5.42m rising	09:02 PM THU 06/01/11
Spring Ck at Greys Plains Rd #	1.19m falling	08:45 PM THU 06/01/11
Western Ck at Grandchester #	1.83m falling	08:59 PM THU 06/01/11
Western Ck at Kuss Rd #	6.98m falling	08:28 PM THU 06/01/11
Western Ck at Rosewood WWTP #	6.53m rising	08:53 PM THU 06/01/11
Bremer R at Rosewood #	5.1m rising	08:59 PM THU 06/01/11
Bremer R at Five Mile Br Walloon #	3.66m rising	08:57 PM THU 06/01/11
Bremer R at Walloon DERM *	4.3m steady	08:00 PM THU 06/01/11
Bremer R at Three Mile Br #	11.65m rising	08:55 PM THU 06/01/11
Warrill Ck at Kalbar Weir TW *	5.75m rising	08:40 PM THU 06/01/11
Warrill Ck at Kalbar	7.6m falling	06:00 PM THU 06/01/11
Warrill Ck at Harrisville#	3.8m rising	08:59 PM THU 06/01/11
Warrill Ck at Churchbank Weir #	1.01m rising	08:43 PM THU 06/01/11
Warrill Ck at Greens Rd Amberley #	3.5m rising	09:02 PM THU 06/01/11
Warrill Ck at Amberley DNR *	3.94m rising	08:40 PM THU 06/01/11
Purga Ck at Peak Crossing #	0.71m steady	08:08 PM THU 06/01/11
Purga Ck at Loamside *	1.5m rising	08:30 PM THU 06/01/11
Bremer R at Berry's Lagoon *	15.91m rising	07:45 PM THU 06/01/11
Bremer R at One Mile Br #	6.55m falling	08:09 PM THU 06/01/11
Bremer R at Hancocks Br Brassall #	2.93m steady	07:11 PM THU 06/01/11
Bremer R at Ipswich #	0.45m steady	08:26 PM THU 06/01/11

*,# denotes automatic station.

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telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND BREMER RIVER
Issued at 7:14 AM on Friday the 7th of January 2011
by the Bureau of Meteorology, Brisbane.

40 - 70 mm of rainfall fell over the catchment since 9am Thursday which caused fast rises and minor to moderate flooding with some isolated major flooding in the Bremer River and Lockyer and Laidley Creeks. Rainfall has eased over the area in the past 6 hours and river levels are generally falling.

Further rainfall is expected over the catchment during Friday which could cause renewed river level rises.

LOCKYER CREEK

Minor to moderate flooding is easing on Lockyer Creek between Gatton and Lyons Bridge.

WARRILL CREEK

Minor flooding continues between Harrisville and Amberley.

BREMER RIVER

Moderate to major flooding is easing between Spressers Bridge and Rosewood. Moderate flooding continues between Walloon and Three Mile Bridge.

Weather Forecast:
Rain areas.

Next Issue:
The next warning will be issued by 4pm Friday.

Latest River Heights:

Lockyer Ck at Helidon *	2.65m falling	08:40 PM THU 06/01/11
Lockyer Ck at Helidon #	1.78m falling	04:38 AM FRI 07/01/11
Tenthill Ck at Tenthill *	2.56m falling	05:00 AM FRI 07/01/11
Lockyer Ck at Gatton *	9.09m falling	08:40 PM THU 06/01/11
Lockyer Ck at Gatton #	7.08m steady	06:10 AM FRI 07/01/11
Laidley Ck at Mulgowie *	2.82m falling	04:00 AM FRI 07/01/11
Laidley Ck at Laidley	8.1m falling slowly	06:30 PM THU 06/01/11
Laidley Ck at Showground Weir *	7.69m falling	08:40 PM THU 06/01/11
Laidley Ck at Showground Weir #	5.28m steady	05:53 AM FRI 07/01/11
Laidley Ck at Warrego Hwy *	5.16m falling	05:00 AM FRI 07/01/11
Lockyer Ck at Glenore Grove #	9.44m falling	06:25 AM FRI 07/01/11
Lockyer Ck at Lyons Br #	12.83m falling	06:15 AM FRI 07/01/11
Lockyer Ck at Rifle Range Rd *	8.24m rising	08:40 PM THU 06/01/11
Lockyer Ck at O'Reilly's Weir *	10.49m rising	05:00 AM FRI 07/01/11
Lockyer Ck at O'Reilly's Weir #	10.52m rising	05:55 AM FRI 07/01/11
Brisbane R at Savages Crossing *	3.34m rising	08:40 PM THU 06/01/11



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Brisbane R at Savages Crossing #	4.59m rising	06:21 AM FRI 07/01/11
Brisbane R at Burtons Br #	2.66m rising	06:20 AM FRI 07/01/11
Brisbane R at Mt Crosby #	7.87m steady	06:19 AM FRI 07/01/11
Brisbane R at Mt Crosby #	7.86m rising	05:51 AM FRI 07/01/11
Brisbane R at Colleges Crossing #	3.26m steady	04:34 AM FRI 07/01/11
Bremer R at Adams Br *	1.88m steady	05:20 AM FRI 07/01/11
Bremer R at Adams Br #	1.87m falling	06:25 AM FRI 07/01/11
Bremer R at Stokes Crossing #	2.25m falling	06:11 AM FRI 07/01/11
Bremer R at Spresters Br #	5.22m falling	06:10 AM FRI 07/01/11
Spring Ck at Greys Plains Rd #	0.99m steady	03:49 AM FRI 07/01/11
Western Ck at Grandchester #	0.98m falling	05:41 AM FRI 07/01/11
Western Ck at Kuss Rd #	4.18m falling	06:24 AM FRI 07/01/11
Western Ck at Rosewood WWTP #	5.43m falling	06:14 AM FRI 07/01/11
Bremer R at Rosewood	3.8m rising fast	03:00 PM THU 06/01/11
Bremer R at Rosewood#	5.01m falling	06:17 AM FRI 07/01/11
Bremer R at Rosewood #	5.02m falling	06:23 AM FRI 07/01/11
Bremer R at Five Mile Br Walloon #	5.76m falling	06:24 AM FRI 07/01/11
Bremer R at Walloon DERM *	6.78m rising	05:00 AM FRI 07/01/11
Bremer R at Three Mile Br #	16.05m steady	05:11 AM FRI 07/01/11
Warrill Ck at Toohills Crossing *	0.81m falling	08:40 PM THU 06/01/11
Warrill Ck at Kalbar Weir TW *	5.75m rising	08:40 PM THU 06/01/11
Warrill Ck at Kalbar	7.6m falling	06:00 PM THU 06/01/11
Warrill Ck at Harrisville #	4m falling	05:11 AM FRI 07/01/11
Warrill Ck at Harrisville#	3.9m steady	05:18 AM FRI 07/01/11
Warrill Ck at Churchbank Weir *	0.96m rising	08:30 PM THU 06/01/11
Warrill Ck at Churchbank Weir #	1.91m rising	06:22 AM FRI 07/01/11
Warrill Ck at Greens Rd Amberley #	4.62m falling	06:20 AM FRI 07/01/11
Warrill Ck at Amberley DNR *	3.94m rising	08:40 PM THU 06/01/11
Purga Ck at Peak Crossing #	0.81m rising	05:19 AM FRI 07/01/11
Purga Ck at Loamside #	1.61m steady	05:49 AM FRI 07/01/11
Purga Ck at Loamside *	1.5m rising	08:30 PM THU 06/01/11
Bremer R at Berry's Lagoon *	15.91m rising	07:45 PM THU 06/01/11
Bremer R at One Mile Br #	10.5m rising	06:22 AM FRI 07/01/11
Bremer R at Hancocks Br Brassall #	5.53m rising	06:22 AM FRI 07/01/11
Bremer R at Ipswich #	2.25m rising	06:19 AM FRI 07/01/11

*, # denote automatic

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND BREMER RIVER
Issued at 4:24 PM on Friday the 7th of January 2011
by the Bureau of Meteorology, Brisbane.

Some small renewed rises and minor to moderate flooding is occurring along Lockyer and Warrill Creeks. River rises are also occurring in the Bremer River where minor flooding continues. The rainfall has continued to ease during Friday afternoon, which is expected to result in stream levels to commence to ease during this evening and overnight Friday.

The rainfall has continued to ease during Friday afternoon, with less than 7mm recorded during the previous 3 hours to 4pm. Further small rises are occurring along the upper reaches of the Lockyer and Warrill Creeks and in the Bremer River during Friday afternoon.

LOCKYER CREEK:

Minor to moderate flooding continues on Lockyer Creek between the Warrego Highway and Rifle Range Road.

WARRILL CREEK:

Minor to moderate flooding continues between Kalbar and Amberley.

BREMER RIVER:

Minor flooding continues between Spressers Bridge and Three Mile Bridge.

Weather Forecast:

Rain periods with moderate falls possible and local thunder at times.

Next Issue:

The next warning will be issued at about 9am Saturday, or earlier if heavy rainfall returns to the catchment.

Latest River Heights:

Lockyer Ck at Helidon #	3.3m rising	03:50 PM FRI 07/01/11
Tenthill Ck at Tenthill *	2.49m falling	02:00 PM FRI 07/01/11
Lockyer Ck at Gatton #	6.94m falling	03:49 PM FRI 07/01/11
Laidley Ck at Mulgowie *	2.95m rising	02:30 PM FRI 07/01/11
Laidley Ck at Laidley	8.1m falling slowly	06:30 PM THU 06/01/11
Laidley Ck at Showground Weir #	5.22m rising	03:40 PM FRI 07/01/11
Laidley Ck at Warrego Hwy *	4.71m falling	02:00 PM FRI 07/01/11
Lockyer Ck at Glenore Grove #	7.88m rising	03:47 PM FRI 07/01/11
Lockyer Ck at Lyons Br #	11.97m falling	03:42 PM FRI 07/01/11
Lockyer Ck at Rifle Range Rd *	12.38m steady	08:00 AM FRI 07/01/11
Lockyer Ck at O'Reilly's Weir #	10.56m falling	03:53 PM FRI 07/01/11
Brisbane R at Lowood Pump Stn #	5.43m rising	03:31 PM FRI 07/01/11
Brisbane R at Savages Crossing #	5.65m falling	03:49 PM FRI 07/01/11



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Brisbane R at Burtons Br #	3.88m rising	03:53 PM FRI 07/01/11
Brisbane R at Kholo Br #	-1.97m rising	03:44 PM FRI 07/01/11
Brisbane R at Mt Crosby #	8.34m rising	03:27 PM FRI 07/01/11
Brisbane R at Colleges Crossing #	4.71m rising	03:27 PM FRI 07/01/11
Bremer R at Adams Br #	2.43m falling	03:52 PM FRI 07/01/11
Bremer R at Stokes Crossing #	2.3m rising	03:45 PM FRI 07/01/11
Bremer R at Spresters Br #	4.32m falling	02:53 PM FRI 07/01/11
Spring Ck at Greys Plains Rd #	1.39m falling	03:37 PM FRI 07/01/11
Western Ck at Grandchester #	2.43m falling	03:54 PM FRI 07/01/11
Western Ck at Kuss Rd #	4.6m rising	03:53 PM FRI 07/01/11
Western Ck at Rosewood WWTP #	4.88m rising	03:53 PM FRI 07/01/11
Bremer R at Rosewood #	4.32m steady	02:27 PM FRI 07/01/11
Bremer R at Five Mile Br Walloon #	4.16m falling	03:45 PM FRI 07/01/11
Bremer R at Walloon DERM *	5.77m falling	02:00 PM FRI 07/01/11
Bremer R at Three Mile Br #	14.3m steady	03:26 PM FRI 07/01/11
Warrill Ck at Toohills Crossing *	1.21m rising	08:20 AM FRI 07/01/11
Warrill Ck at Harrisville #	4.32m rising	03:32 PM FRI 07/01/11
Warrill Ck at Churchbank Weir #	1.97m rising	03:38 PM FRI 07/01/11
Warrill Ck at Greens Rd Amberley #	4.92m falling	03:47 PM FRI 07/01/11
Warrill Ck at Amberley DNR *	5.52m steady	08:20 AM FRI 07/01/11
Purga Ck at Peak Crossing #	1.51m rising	03:55 PM FRI 07/01/11
Purga Ck at Loamside #	2.37m steady	03:49 PM FRI 07/01/11
Bremer R at One Mile Br #	10.8m falling	03:43 PM FRI 07/01/11
Bremer R at Hancocks Br Brassall #	7.23m falling	03:42 PM FRI 07/01/11
Bremer R at Ipswich #	4.2m falling	03:46 PM FRI 07/01/11
Brisbane R at Moggill #	2.07m falling	03:42 PM FRI 07/01/11
Brisbane R at City Gauge *	0.62m rising	08:20 AM FRI 07/01/11
Moreton Bay at Whyte Island #	0.07m falling	03:51 PM FRI 07/01/11

*,# denotes automatic station.

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR LOCKYER AND WARRILL CREEKS AND BREMER RIVER
Issued at 9:05 AM on Saturday the 8th of January 2011
by the Bureau of Meteorology, Brisbane.

Minor to moderate flood levels are generally falling along Lockyer and Warrill Creeks and the Bremer River.

LOCKYER CREEK:

Minor to moderate flooding continues along Lockyer Creek between the Warrego Highway and Rifle Range Road. A moderate flood peak is expected this morning at Lyons Bridge of just over 12 metres.

WARRILL CREEK:

Minor to moderate flooding is falling between Harrisville and Amberley.

BREMER RIVER:

Minor flooding continues between Spreessers Bridge and Walloon.

Weather Forecast:

Rain periods with moderate falls possible and local thunder at times.

Next Issue:

The next warning will be issued at about 9am Sunday, or earlier if heavy rainfall returns to the catchment.

Latest River Heights:

Lockyer Ck at Gatton *	4.83m falling	08:20 AM SAT 08/01/11
Laidley Ck at Mulgowie *	2.36m falling	07:00 AM SAT 08/01/11
Laidley Ck at Showground Weir #	5.12m steady	08:53 AM SAT 08/01/11
Laidley Ck at Warrego Hwy *	4.63m falling	08:00 AM SAT 08/01/11
Lockyer Ck at Glenore Grove #	8.2m falling	08:49 AM SAT 08/01/11
Lockyer Ck at Lyons Br #	12.09m falling	08:30 AM SAT 08/01/11
Lockyer Ck at Rifle Range Rd *	11.79m steady	08:00 AM SAT 08/01/11
Lockyer Ck at O'Reilly's Weir #	10.94m rising	08:34 AM SAT 08/01/11
Bremer R at Adams Br #	1.61m falling	08:52 AM SAT 08/01/11
Bremer R at Stokes Crossing #	1.8m falling	08:37 AM SAT 08/01/11
Bremer R at Spreessers Br #	4.27m falling	08:23 AM SAT 08/01/11
Spring Ck at Greys Plains Rd #	0.89m steady	06:49 AM SAT 08/01/11
Western Ck at Grandchester #	0.78m falling	07:43 AM SAT 08/01/11
Western Ck at Kuss Rd #	3.28m falling	08:51 AM SAT 08/01/11
Western Ck at Rosewood WWTP #	3.98m falling	08:41 AM SAT 08/01/11
Bremer R at Rosewood #	4.2m falling	08:41 AM SAT 08/01/11
Bremer R at Five Mile Br Walloon #	4.02m falling	08:33 AM SAT 08/01/11
Bremer R at Walloon DERM *	5.17m falling	08:00 AM SAT 08/01/11
Bremer R at Three Mile Br #	13.85m falling	08:41 AM SAT 08/01/11
Warrill Ck at Toohills Crossing *	0.01m rising	08:10 AM SAT 08/01/11



Australian Government

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Warrill Ck at Harrisville #	4.1m falling	08:47 AM SAT 08/01/11
Warrill Ck at Churchbank Weir #	2.07m steady	07:29 AM SAT 08/01/11
Warrill Ck at Greens Rd Amberley #	5.18m rising	08:50 AM SAT 08/01/11
Warrill Ck at Amberley DNR *	5.99m falling	08:00 AM SAT 08/01/11

*automatic station

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR WARRILL CREEK THE LOWER BRISBANE BELOW WIVENHOE
Issued at 9:13 AM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

Minor flood levels are falling at Amberley along Warrill Creek.

SEQ Water advises releases from Wivenhoe Dam will continue through Sunday. Minor flooding will continue downstream along the Brisbane River to Mt Crosby today and tomorrow.

Weather Forecast:
Rain periods with moderate falls possible.

Next Issue:
The next warning will be issued at about 9am Monday or earlier if needed.

Latest River Heights:

Brisbane R at Savages Crossing *	10.34m falling	08:10 AM	SUN 09/01/11
Brisbane R at Savages Crossing #	10.31m falling	09:03 AM	SUN 09/01/11
Brisbane R at Burtons Br #	7.76m falling	08:59 AM	SUN 09/01/11
Cabbage Tree Ck at L Manchester #	51.19m steady	07:55 AM	SUN 09/01/11
Brisbane R at Kholo Br #	2.61m falling	08:59 AM	SUN 09/01/11
Brisbane R at Mt Crosby #	11.21m steady	08:55 AM	SUN 09/01/11
Brisbane R at Mt Crosby #	11.14m falling	09:06 AM	SUN 09/01/11
Brisbane R at Colleges Crossing #	8.91m steady	09:07 AM	SUN 09/01/11
Warrill Ck at Amberley DNR *	5.07m falling	08:20 AM	SUN 09/01/11

*automatic station

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE LOWER BRISBANE BELOW WIVENHOE
Issued at 10:55 PM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek upstream of Gatton and in the Bremer River in the Rosewood area. Further rainfall is forecast for the region during Monday which may produce higher levels.

LOCKYER CREEK:

Lockyer Creek levels in the Helidon area have peaked at about 7 metres with further rises and moderate to major flooding expected downstream to the O'Reilly's area during Monday.

BREMER RIVER:

River level rises and moderate to major flooding continue in the Rosewood area. Further rises are expected downstream during the next 24 hours with at least minor flood levels expected in the Bremer River at Ipswich during Monday night.

MIDDLE AND LOWER BRISBANE:

SEQ Water advises releases from Wivenhoe Dam will continue. Minor flooding will continue along the middle Brisbane River at Savages and Mt Crosby with moderate flood levels expected at Mt Crosby overnight Monday.

Next Issue:

The next warning will be issued at about 9am Monday.

Latest River Heights:

Lockyer Ck at Helidon #	6.68m falling	10:08 PM SUN 09/01/11
Flagstone Ck at Brown-Zirbels Rd *	4.65m rising	08:40 PM SUN 09/01/11
Sandy Creek at Sandy Creek Road #	4.25m falling	10:03 PM SUN 09/01/11
Ma Ma Ck at Harm's *	1.92m steady	08:00 AM SUN 09/01/11
Tenthill Ck at Tenthill *	2.45m steady	08:33 PM SUN 09/01/11
Lockyer Ck at Gatton #	9.62m falling	09:58 PM SUN 09/01/11
Laidley Ck at Mulgowie *	3.33m rising	08:00 PM SUN 09/01/11
Laidley Ck at Laidley	3.95m falling slowly	08:00 PM SUN 09/01/11
Laidley Ck at Showground Weir #	5.6m falling	08:55 PM SUN 09/01/11
Bill Gunn Dam #	110.06m steady	09:44 PM SUN 09/01/11
Laidley Ck at Warrego Hwy *	4.36m rising	08:00 PM SUN 09/01/11
L Lockyer Ck at Glenore Grove #	8.8m rising	10:09 PM SUN 09/01/11
Lockyer Ck at Lyons Br #	10.03m rising	10:08 PM SUN 09/01/11
Lockyer Ck at Rifle Range Rd *	9.47m rising	08:40 PM SUN 09/01/11
Atkinson Dam #	65.76m steady	09:52 PM SUN 09/01/11
Lockyer Ck at O'Reilly's Weir #	12m rising	10:05 PM SUN 09/01/11
Brisbane R at Lowood Pump Stn #	10.87m falling	10:07 PM SUN 09/01/11
Brisbane R at Savages Crossing #	11.47m rising	10:09 PM SUN 09/01/11
Brisbane R at Burtons Br #	8.78m rising	10:08 PM SUN 09/01/11



Australian Government

Bureau of Meteorology

Cabbage Tree Ck at L Manchester #	51.97m rising	10:10 PM SUN 09/01/11
Brisbane R at Kholo Br #	3.61m rising	10:10 PM SUN 09/01/11
Brisbane R at Mt Crosby #	11.9m rising	10:09 PM SUN 09/01/11
Brisbane R at Colleges Crossing #	9.71m rising	10:11 PM SUN 09/01/11
Bremer R at Adams Br #	2.15m falling	10:03 PM SUN 09/01/11
Bremer R at Stokes Crossing #	2.65m rising	09:53 PM SUN 09/01/11
Bremer R at Spresters Br #	4.87m rising	09:56 PM SUN 09/01/11
Spring Ck at Greys Plains Rd #	1.14m steady	09:48 PM SUN 09/01/11
Western Ck at Grandchester #	3.38m rising	10:07 PM SUN 09/01/11
Western Ck at Rosewood WWTP #	6.43m rising	08:45 PM SUN 09/01/11
Bremer R at Rosewood #	5.02m rising	10:05 PM SUN 09/01/11
Bremer R at Five Mile Br Walloon #	4m rising	10:09 PM SUN 09/01/11
Bremer R at Walloon DERM *	4.54m rising	08:00 PM SUN 09/01/11
Reynolds Ck at Moogerah Dam #	155.5m steady	09:01 PM SUN 09/01/11
Warrill Ck at Kalbar Weir HW #	75.75m steady	09:59 PM SUN 09/01/11
Warrill Ck at Kalbar Weir TW *	5.25m falling	08:40 PM SUN 09/01/11
Warrill Ck at Harrisville#	2.45m rising	10:08 PM SUN 09/01/11
Warrill Ck at Churchbank Weir #	0.76m steady	07:29 PM SUN 09/01/11
Warrill Ck at Greens Rd Amberley #	4.52m rising	10:05 PM SUN 09/01/11
Warrill Ck at Amberley DNR *	5.43m rising	08:40 PM SUN 09/01/11
Purga Ck at Peak Crossing #	1.16m rising	08:08 PM SUN 09/01/11
Purga Ck at Loamside *	4.19m falling	08:40 PM SUN 09/01/11
Bremer R at Berry's Lagoon *	17.66m rising	08:30 PM SUN 09/01/11
Bremer R at One Mile Br #	8.9m rising	10:11 PM SUN 09/01/11
Bremer R at Hancocks Br Brassall #	5.98m steady	10:11 PM SUN 09/01/11
Bremer R at Ipswich #	3.95m rising	09:58 PM SUN 09/01/11
Brisbane R at Moggill #	3.57m rising	09:46 PM SUN 09/01/11
Brisbane R at City Gauge #	0.1m steady	08:12 PM SUN 09/01/11
Moreton Bay at Whyte Island #	0.45m rising	10:07 PM SUN 09/01/11

*,# from automatic station

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE LOWER BRISBANE BELOW WIVENHOE

Issued at 12:36 AM on Monday the 10th of January 2011

by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek upstream of Gatton and in the Bremer River in the Rosewood area. Further heavy rainfall is forecast for the catchments of the Bremer River and Warrill and Lockyer Creeks during Monday.

LOCKYER CREEK:

Moderate to major flood levels have developed in Lockyer Creek upstream of Gatton. Levels in the Helidon area have peaked at about 7 metres and rises continue at Gatton. Rises to major flood levels are expected during Monday at Glenore Grove and Lyons Bridge.

BREMER RIVER:

River level rises and moderate to major flooding continue in the Rosewood area. Further rises are expected downstream during the next 24 hours with at least minor flood levels expected in the Bremer River at Ipswich during Monday night and continuing into Tuesday.

MIDDLE AND LOWER BRISBANE:

SEQ Water advises releases from Wivenhoe Dam will continue. Minor flooding will continue along the middle Brisbane River at Savages and Mt Crosby during Monday with moderate flood levels expected overnight Monday.

Higher than predicted tides are expected to continue in the Lower Brisbane area during Monday. Minor flood levels are possible on the high tide at the Brisbane City (Port Office) gauge during Tuesday and Wednesday.

Next Issue:

The next warning will be issued at about 9.30am Monday.

Latest River Heights:

Lockyer Ck at Helidon #	6.5m rising	11:47 PM SUN 09/01/11
Flagstone Ck at Brown-Zirbels Rd *	4.65m rising	08:40 PM SUN 09/01/11
Sandy Creek at Sandy Creek Road #	4.2m rising	11:39 PM SUN 09/01/11
Lockyer Ck at Gatton #	12.98m steady	11:46 PM SUN 09/01/11
Laidley Ck at Mulgowie *	3.45m rising	10:00 PM SUN 09/01/11
Laidley Ck at Laidley	3.95m falling slowly	08:00 PM SUN 09/01/11
Laidley Ck at Showground Weir *	5.62m falling	08:30 PM SUN 09/01/11
Laidley Ck at Showground Weir #	5.72m rising	11:37 PM SUN 09/01/11
Laidley Ck at Warrego Hwy *	4.75m rising	10:00 PM SUN 09/01/11
Lockyer Ck at Glenore Grove #	9.98m rising	11:48 PM SUN 09/01/11
Lockyer Ck at Lyons Br #	10.73m rising	11:47 PM SUN 09/01/11
Lockyer Ck at Rifle Range Rd *	9.47m rising	08:40 PM SUN 09/01/11
Lockyer Ck at O'Reilly's Weir #	12.34m rising	11:45 PM SUN 09/01/11



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Brisbane R at Lowood Pump Stn #	11.19m falling	11:46 PM SUN 09/01/11
Brisbane R at Savages Crossing #	11.73m rising	11:48 PM SUN 09/01/11
Brisbane R at Burtons Br #	9.06m rising	11:32 PM SUN 09/01/11
Brisbane R at Kholo Br #	3.91m rising	11:44 PM SUN 09/01/11
Brisbane R at Mt Crosby #	12.24m steady	11:49 PM SUN 09/01/11
Brisbane R at Colleges Crossing #	9.91m rising	11:46 PM SUN 09/01/11
Bremer R at Spresters Br #	4.97m rising	11:08 PM SUN 09/01/11
Western Ck at Grandchester #	4.23m rising	11:45 PM SUN 09/01/11
Western Ck at Rosewood WWTP #	6.63m rising	11:49 PM SUN 09/01/11
Bremer R at Rosewood #	5.14m rising	11:41 PM SUN 09/01/11
Bremer R at Five Mile Br Walloon #	4.66m rising	11:48 PM SUN 09/01/11
Bremer R at Walloon DERM *	5.04m rising	10:30 PM SUN 09/01/11
Reynolds Ck at Moogerah Dam #	155.48m falling	11:34 PM SUN 09/01/11
Warrill Ck at Harrisville #	2.74m rising	11:44 PM SUN 09/01/11
Warrill Ck at Harrisville#	2.65m rising	11:32 PM SUN 09/01/11
Warrill Ck at Greens Rd Amberley #	4.4m falling	11:47 PM SUN 09/01/11
Warrill Ck at Amberley DNR *	5.43m rising	08:40 PM SUN 09/01/11
Bremer R at Berry's Lagoon *	17.66m rising	08:30 PM SUN 09/01/11
Bremer R at One Mile Br #	9.25m rising	11:33 PM SUN 09/01/11
Bremer R at Hancocks Br Brassall #	6.23m rising	11:33 PM SUN 09/01/11
Bremer R at Ipswich #	4.1m rising	11:34 PM SUN 09/01/11
Brisbane R at Moggill #	3.72m rising	11:44 PM SUN 09/01/11
Brisbane R at City Gauge #	0.9m rising	11:12 PM SUN 09/01/11

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE

Issued at 10:28 AM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek and along the Bremer River. Moderate flood levels are likely at Ipswich. Further heavy rainfall is forecast for the catchments of the Brisbane and Bremer Rivers and Warrill and Lockyer Creeks during Monday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday. At the Brisbane City Gauge, river levels of about 2.3 metres are expected with the high tides on Tuesday and Wednesday causing minor flooding.

LOCKYER CREEK:

A major flood peak is currently around Glenore Grove of around 13 metres. Rises to around 14.5 metres are expected at Lyons Bridge later today and around 15 metres at Rifle Range Road. Higher levels are possible as rainfall continues.

BREMER RIVER:

River level rises and moderate flooding continue in the Rosewood area. Further rises are expected downstream during the next 24 hours with moderate flood levels of at least 10 metres expected in the Bremer River at Ipswich early on Tuesday.

MIDDLE AND LOWER BRISBANE:

SEQwater advises releases from Wivenhoe Dam will increase during Monday. Minor flooding is expected at Savages and moderate flooding at Mt Crosby overnight tonight.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.3 metres with the high tides on Tuesday and Wednesday. Further rises are possible as rainfall continues.

Predicted River Heights/Flows:

Ipswich: Reach at least 9.5 metres (moderate) during the early hours of Tuesday.

Moggill: Reach around 8 metres (below minor) on Tuesday morning.

Jindalee: Reach at least 5 metres (below minor) during Tuesday.

Brisbane: Reach about 2.3 metres (minor) with the high tides on Tuesday and Wednesday.



Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 3:30pm Monday.

Latest River Heights:

Lockyer Ck at Gatton *	9.49m falling	08:20 AM MON 10/01/11
Laidley Ck at Laidley	3.85m steady	08:55 AM MON 10/01/11
Laidley Ck at Showground Weir *	5.3m falling	08:10 AM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.7m steady	08:00 AM MON 10/01/11
Lockyer Ck at Glenore Grove #	12.86m falling	09:18 AM MON 10/01/11
Lockyer Ck at Lyons Br #	14.07m rising	09:17 AM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	13.4m rising	08:20 AM MON 10/01/11
Brisbane R at Lowood Pump Stn #	13.21m rising	09:13 AM MON 10/01/11
Brisbane R at Savages Crossing #	12.95m rising	09:18 AM MON 10/01/11
Brisbane R at Burtons Br #	9.92m rising	09:11 AM MON 10/01/11
Brisbane R at Kholo Br #	5.19m rising	09:12 AM MON 10/01/11
Brisbane R at Mt Crosby #	13.43m rising	09:16 AM MON 10/01/11
Brisbane R at Colleges Crossing #	11.11m rising	09:20 AM MON 10/01/11
Bremer R at Adams Br *	1.93m rising	08:30 AM MON 10/01/11
Bremer R at Stokes Crossing #	2.3m rising	09:01 AM MON 10/01/11
Bremer R at Spresters Br #	5.02m falling	09:03 AM MON 10/01/11
Western Ck at Rosewood WWTP #	6.38m falling	07:09 AM MON 10/01/11
Bremer R at Rosewood #	5.06m falling	09:08 AM MON 10/01/11
Bremer R at Five Mile Br Walloon #	5.42m rising	08:24 AM MON 10/01/11
Bremer R at Walloon DERM *	6.49m rising	08:00 AM MON 10/01/11
Warrill Ck at Harrisville#	2.65m steady	08:17 AM MON 10/01/11
Warrill Ck at Amberley DNR *	5.34m rising	08:10 AM MON 10/01/11
Bremer R at Ipswich #	5.7m rising	09:08 AM MON 10/01/11
Brisbane R at Moggill #	4.72m rising	09:14 AM MON 10/01/11
Brisbane R at Jindalee Br #	2.8m rising	09:17 AM MON 10/01/11
Brisbane R at City Gauge #	0.65m rising	09:09 AM MON 10/01/11

*automatic station

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE

INCLUDING BRISBANE CITY

Issued at 4:16 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Further rainfall during Monday has led to renewed rises in the Lockyer Creek catchment. Rainfall is forecast to continue this evening and a return to moderate to major flood levels is expected overnight and during Tuesday. Major flood levels are expected to continue at Lyons Bridge with rises above 15 metres likely during Tuesday.

BREMER RIVER:

Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:

SEQwater advises releases from Wivenhoe Dam will increase during Monday. Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.



The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.

Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 9pm Monday.

Latest River Heights:

Lockyer Ck at Gatton #	10.36m steady	03:04 PM MON 10/01/11
Laidley Ck at Laidley	6m rising	02:45 PM MON 10/01/11
Laidley Ck at Showground Weir #	6.98m rising	03:07 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.43m falling	01:00 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	11.36m falling	03:05 PM MON 10/01/11
Lockyer Ck at Lyons Br #	14.79m rising	03:02 PM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	13.4m rising	08:20 AM MON 10/01/11
Brisbane R at Lowood Pump Stn #	14.13m falling	03:07 PM MON 10/01/11
Brisbane R at Savages Crossing #	14.15m rising	03:09 PM MON 10/01/11
Brisbane R at Burtons Br #	10.88m rising	03:05 PM MON 10/01/11
Brisbane R at Kholo Br #	6.23m rising	03:06 PM MON 10/01/11
Brisbane R at Mt Crosby #	14.26m rising	03:07 PM MON 10/01/11
Brisbane R at Colleges Crossing #	11.96m rising	03:09 PM MON 10/01/11
Bremer R at Spresters Br #	5.07m rising	03:09 PM MON 10/01/11
Bremer R at Rosewood #	4.94m rising	03:02 PM MON 10/01/11
Bremer R at Five Mile Br Walloon #	5.12m falling	03:09 PM MON 10/01/11
Warrill Ck at Harrisville #	3.82m rising	03:05 PM MON 10/01/11
Warrill Ck at Amberley DNR *	5.34m rising	08:10 AM MON 10/01/11
Bremer R at Ipswich #	6.6m rising	02:40 PM MON 10/01/11
Brisbane R at Moggill #	5.52m rising	02:59 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.7m rising	02:50 PM MON 10/01/11
Brisbane R at City Gauge #	1.36m falling	03:09 PM MON 10/01/11



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*automatic station

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE

INCLUDING BRISBANE CITY

Issued at 6:12 PM on Monday the 10th of January 2011

by the Bureau of Meteorology, Brisbane.

LOCKYER CREEK: Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Laidley Creek at Mulgowie. These will extend to Gatton and areas downstream during the evening and overnight. Severe record major flooding is expected in areas downstream of Gatton overnight and during Tuesday.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Laidley Creek at Mulgowie. These will extend to Gatton and areas downstream during the evening and overnight. High level record major flooding is expected in areas downstream of Gatton overnight and during Tuesday.

BREMER RIVER:

Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley



overnight.

MIDDLE AND LOWER BRISBANE:

SEQwater advises releases from Wivenhoe Dam will increase during Monday. Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.

Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 9pm Monday.

Latest River Heights:

Lockyer Ck at Helidon *	12.66m rising	02:50 PM MON 10/01/11
Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	3.27m falling	08:20 AM MON 10/01/11
Sandy Creek at Sandy Creek Road #	3.8m falling	05:22 PM MON 10/01/11
Ma Ma Ck at Harm's *	2.28m falling	08:10 AM MON 10/01/11
Tenthill Ck at Tenthill *	4.53m rising	04:10 PM MON 10/01/11
Lockyer Ck at Gatton *	9.07m rising	05:30 PM MON 10/01/11
Lockyer Ck at Gatton #	13.22m rising	05:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	7.88m rising	04:00 PM MON 10/01/11
Laidley Ck at Laidley	6m rising	02:45 PM MON 10/01/11
Laidley Ck at Showground Weir *	8.95m rising	05:30 PM MON 10/01/11
Laidley Ck at Showground Weir #	9m rising	05:31 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.28m falling	03:00 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	10.78m falling	05:24 PM MON 10/01/11
Lockyer Ck at Lyons Br #	14.93m rising	05:05 PM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	14.85m rising	05:30 PM MON 10/01/11
Lockyer Ck at O'Reilly's Weir #	16.38m rising	05:29 PM MON 10/01/11



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Brisbane R at Lowood Pump Stn #	14.53m falling	05:28 PM MON 10/01/11
Brisbane R at Savages Crossing #	14.37m rising	05:29 PM MON 10/01/11
Brisbane R at Burtons Br #	11.08m rising	05:23 PM MON 10/01/11
Brisbane R at Kholo Br #	6.63m rising	05:28 PM MON 10/01/11
Brisbane R at Mt Crosby #	14.64m rising	05:31 PM MON 10/01/11
Brisbane R at Mt Crosby #	14.08m falling	04:39 PM MON 10/01/11
Brisbane R at Colleges Crossing #	12.41m rising	05:33 PM MON 10/01/11
Bremer R at Stokes Crossing #	4.6m falling	05:20 PM MON 10/01/11
Warrill Ck at Churchbank Weir *	2.35m rising	05:30 PM MON 10/01/11
Warrill Ck at Greens Rd Amberley #	5.6m rising	05:26 PM MON 10/01/11
Bremer R at One Mile Br #	11.8m steady	05:03 PM MON 10/01/11
Bremer R at Hancocks Br Brassall #	9.28m rising	04:33 PM MON 10/01/11
Bremer R at Ipswich #	6.85m steady	05:27 PM MON 10/01/11
Brisbane R at Moggill #	5.87m rising	05:18 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.75m steady	04:07 PM MON 10/01/11
Brisbane R at City Gauge #	0.81m falling	05:21 PM MON 10/01/11

*automatic station

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IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE

INCLUDING BRISBANE CITY

Issued at 9:44 PM on Monday the 10th of January 2011

by the Bureau of Meteorology, Brisbane.

LOCKYER CREEK: Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Gatton and Laidley Creek at Mulgowie. Lockyer Creek at Gatton reached 19 metres, which is more than 2.5 metres above the previous record.

Rapid stream rises are occurring at Glenore Grove, and the river has reached 14.42 metres at 9pm. A peak in the next few hours is expected, with flood levels in excess of 15 metres possible.

Stream rises in the Lockyer Creek downstream are expected overnight, with the main flood waters reaching Lyons Bridge overnight.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Gatton and Laidley Creek at Mulgowie. These will extend to Lyons Bridge in the next few hours and areas downstream later Monday and early Tuesday. High level major flooding is expected in areas downstream of Gatton overnight and during Tuesday.

BREMER RIVER:

Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday



afternoon. Higher levels are possible.

WARRILL CREEK

Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:

SEQwater advises releases from Wivenhoe Dam will increase during Monday. Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.

Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about midnight Monday.

Latest River Heights:

Lockyer Ck at Helidon *	12.66m rising	02:50 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	4.28m falling	08:40 PM MON 10/01/11
Sandy Creek at Sandy Creek Road #	2.85m falling	08:49 PM MON 10/01/11
Ma Ma Ck at Harm's *	2.28m falling	08:10 AM MON 10/01/11
Tenthill Ck at Tenthill *	4.52m falling	08:40 PM MON 10/01/11
Lockyer Ck at Gatton *	18.92m rising	18:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	6.68m falling	07:30 PM MON 10/01/11
Laidley Ck at Laidley	8.6m rising slowly	06:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	9.22m rising	08:58 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.38m rising	08:00 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	14.42m rising	08:58 PM MON 10/01/11
Lockyer Ck at Lyons Br #	15.07m rising	08:56 PM MON 10/01/11



Australian Government

Bureau of Meteorology

Lockyer Ck at Rifle Range Rd *	14.99m rising	08:40 PM MON 10/01/11
Lockyer Ck at O'Reilly's Weir #	17.14m rising	08:55 PM MON 10/01/11
Brisbane R at Lowood Pump Stn #	15.17m falling	08:58 PM MON 10/01/11
Brisbane R at Savages Crossing *	14.76m falling	08:40 PM MON 10/01/11
Brisbane R at Savages Crossing #	14.87m steady	08:53 PM MON 10/01/11
Brisbane R at Burtons Br #	11.44m rising	08:47 PM MON 10/01/11
Brisbane R at Kholo Br #	7.09m rising	08:47 PM MON 10/01/11
Brisbane R at Mt Crosby #	15.05m rising	08:57 PM MON 10/01/11
Brisbane R at Colleges Crossing #	12.91m rising	09:00 PM MON 10/01/11
Warrill Ck at Greens Rd Amberley #	5.92m falling	08:56 PM MON 10/01/11
Bremer R at One Mile Br #	12.2m rising	08:59 PM MON 10/01/11
Bremer R at Hancocks Br Brassall #	9.58m rising	08:27 PM MON 10/01/11
Bremer R at Ipswich #	7.2m rising	08:56 PM MON 10/01/11
Brisbane R at Moggill #	6.12m rising	08:53 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.75m steady	07:07 PM MON 10/01/11
Brisbane R at City Gauge *	0.41m steady	08:40 PM MON 10/01/11

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public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE

INCLUDING BRISBANE CITY

Issued at 12:06 AM on Tuesday the 11th of January 2011

by the Bureau of Meteorology, Brisbane.

The main flood waters in the Lockyer Creek are now at Glenore Grove, with strong stream rises expected overnight and early Tuesday morning in the Lockyer Creek downstream of Glenore Grove.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton this evening before the station failed. This level is well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently around Glenore Grove, with strong stream rises at Lyons Bridge expected in the next few hours. The Lockyer Creek at Glenore Grove has reached 14.60 metres at 11:30pm. A peak in the next few hours is expected, with flood levels in excess of 15 metres possible.

Renewed stream rises have commenced at the Lockyer River at Lyons Bridge with a peak between 16 and 16.5 metres expected early Tuesday morning.

BREMER RIVER:

The rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels between 5 and 6 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

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The rainfall during Monday has lead to increases in Warrill Creek with Amberley currently peaking around 6 metres.

MIDDLE AND LOWER BRISBANE:

Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 4am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	4.28m falling	08:40 PM MON 10/01/11
Sandy Creek at Sandy Creek Road #	2.45m rising	11:01 PM MON 10/01/11
Ma Ma Ck at Harm's *	2.28m falling	08:10 AM MON 10/01/11
Tenthill Ck at Tenthill *	4.07m falling	10:30 PM MON 10/01/11
Lockyer Ck at Gatton *	18.92m rising	6:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	5.63m falling	10:10 PM MON 10/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	8.56m falling	11:16 PM MON 10/01/11
Bill Gunn Dam #	110.1m steady	11:14 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.8m rising	09:50 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	14.6m rising	11:12 PM MON 10/01/11
Lockyer Ck at Lyons Br #	15.17m rising	10:38 PM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	14.99m rising	08:40 PM MON 10/01/11
Lockyer Ck at O'Reilly's Weir #	17.5m rising	11:16 PM MON 10/01/11
Brisbane R at Lowood Pump Stn #	15.45m rising	11:10 PM MON 10/01/11
Brisbane R at Savages Crossing #	15.25m falling	11:17 PM MON 10/01/11
Brisbane R at Burtons Br #	11.8m rising	11:14 PM MON 10/01/11
Brisbane R at Kholo Br #	7.41m rising	11:15 PM MON 10/01/11
Brisbane R at Mt Crosby #	15.31m rising	11:15 PM MON 10/01/11



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Brisbane R at Colleges Crossing #	13.21m rising	11:18 PM MON 10/01/11
Warrill Ck at Greens Rd Amberley #	5.94m rising	11:08 PM MON 10/01/11
Bremer R at One Mile Br #	12.75m rising	11:08 PM MON 10/01/11
Bremer R at Hancocks Br Brassall #	10.13m rising	11:17 PM MON 10/01/11
Bremer R at Ipswich #	7.6m rising	11:17 PM MON 10/01/11
Brisbane R at Moggill #	6.42m rising	11:14 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.9m rising	10:59 PM MON 10/01/11
Brisbane R at City Gauge #	1.05m rising	11:09 PM MON 10/01/11

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



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Queensland

PRIORITY

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE

INCLUDING BRISBANE CITY

Issued at 4:06 AM on Tuesday the 11th of January 2011

by the Bureau of Meteorology, Brisbane.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge, with strong stream rises expected during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Extremely heavy rainfall during Monday led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton Monday evening before the station failed. This level was well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently arriving at Lyons Bridge, with strong stream rises expected in the next few hours. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood.

Renewed stream rises have commenced in Lockyer Creek at Lyons Bridge with a peak between 16 and 16.5 metres expected Tuesday morning. This is likely to be similar in level to the 1996 flood.

BREMER RIVER:

The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight Monday.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Warrill Creek at Amberley peaked at 5.98 metres around 9pm Monday.

MIDDLE AND LOWER BRISBANE:

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Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 8am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	3.49m falling	02:10 AM TUE 11/01/11
Sandy Creek at Sandy Creek Road #	2.15m falling	03:19 AM TUE 11/01/11
Ma Ma Ck at Harm's *	3.26m rising	02:30 AM TUE 11/01/11
Tenthill Ck at Tenthill *	5.57m rising	02:40 AM TUE 11/01/11
Lockyer Ck at Gatton #	18.92m rising	06:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	6.39m rising	02:20 AM TUE 11/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	7.84m rising	03:25 AM TUE 11/01/11
Laidley Ck at Warrego Hwy *	6.41m rising	02:00 AM TUE 11/01/11
Lockyer Ck at Glenore Grove #	13.8m falling	03:24 AM TUE 11/01/11
Lockyer Ck at Lyons Br #	15.55m rising	03:23 AM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	15.39m rising	02:40 AM TUE 11/01/11
Lockyer Ck at O'Reilly's Weir #	18m falling	03:28 AM TUE 11/01/11
Brisbane R at Lowood Pump Stn #	15.93m falling	03:31 AM TUE 11/01/11
Brisbane R at Savages Crossing #	15.89m rising	03:29 AM TUE 11/01/11
Brisbane R at Burtons Br #	12.22m rising	03:29 AM TUE 11/01/11
Brisbane R at Kholo Br #	7.99m rising	03:29 AM TUE 11/01/11
Brisbane R at Mt Crosby #	15.82m steady	03:30 AM TUE 11/01/11
Brisbane R at Mt Crosby #	14.08m falling	04:39 PM MON 10/01/11
Brisbane R at Colleges Crossing #	13.91m rising	03:32 AM TUE 11/01/11
Bremer R at Rosewood#	5.56m falling	03:11 AM TUE 11/01/11
Bremer R at Five Mile Br Walloon #	6.4m rising	03:15 AM TUE 11/01/11
Warrill Ck at Greens Rd Amberley #	5.84m falling	03:29 AM TUE 11/01/11



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Bremer R at One Mile Br #	13.75m rising	03:31 AM TUE 11/01/11
Bremer R at Hancocks Br Brassall #	11.33m rising	03:22 AM TUE 11/01/11
Bremer R at Ipswich #	8.55m rising	03:31 AM TUE 11/01/11
Brisbane R at Moggill #	7.07m rising	03:29 AM TUE 11/01/11
Brisbane R at Jindalee Br #	4.5m rising	03:29 AM TUE 11/01/11
Brisbane R at City Gauge #	1.4m falling	03:15 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
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Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE

INCLUDING BRISBANE CITY

Issued at 9:28 AM on Tuesday the 11th of January 2011

by the Bureau of Meteorology, Brisbane.

Continuing heavy rainfall in the Lockyer Creek catchment is causing very fast rises along Tenthill Creek.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge, with strong stream rises during Tuesday and levels of above 17 metres are forecast.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and moderate flood levels of 2.6 metres with the overnight high tide. Further rises to 3.5 metres (major) is expected with the high tide on Wednesday afternoon with higher levels likely on Thursday.

LOCKYER CREEK:

Very heavy rainfall is continuing in the Lockyer Creek catchment and further very fast rises are being observed along Tenthill Creek this morning. Renewed rises are likely in the lower catchment during Tuesday prolonging major flooding. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood. Renewed rises are likely at Glenore Grove today with a return to above 14 metres.

The main flood peak from Monday is currently approaching Lyons Bridge, with strong stream rises expected in the next few hours. A peak is expected above 17 metres at Lyons Bridge later today.

BREMER RIVER:

The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight Monday but renewed rises are expected as rainfall continues.

The Bremer River at Ipswich is expected to reach about 16 metres during Wednesday. Higher levels are expected.

WARRILL CREEK

Further rises are likely today as rainfall continues.



MIDDLE AND LOWER BRISBANE:

Moderate flooding will continue to rise at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and moderate flood levels of 2.6 metres with the overnight high tide. Higher flood levels to 3.5 metres (major) are expected with the high tide on Wednesday afternoon. Levels above 3.5 metres are expected on Thursday.

(3.5 metres at the Brisbane City gauge is about 2.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach at least 16 metres (major) during Wednesday; further rises.

Moggill: Reach at least 15 metres (moderate) during Wednesday; further rises.

Jindalee: Reach at least 9 metres (moderate) late Wednesday; further rises.

Brisbane City: Reach about 2.6 metres (moderate) with the overnight high tide tonight. Reach 3.5 metres (major) with the high tides on Wednesday. Higher levels are expected on Thursday with the high tides.

(3.5 metres at the Brisbane City gauge is about 2 metres higher than the highest tide of the year at this location).

Further rises are expected at all four locations with continued rainfall.

Next Issue:

The next warning will be issued at about 3:30pm Tuesday.

Latest River Heights:

Flagstone Ck at Brown-Zirbels Rd *	3.53m rising	05:40 AM TUE 11/01/11
Sandy Creek at Sandy Creek Road #	2.9m rising	06:56 AM TUE 11/01/11
Ma Ma Ck at Harm's *	2.96m rising	05:40 AM TUE 11/01/11
Tenthill Ck at Tenthill *	5.57m rising	05:46 AM TUE 11/01/11
Laidley Ck at Mulgowie *	6.83m rising	05:00 AM TUE 11/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir *	8.74m rising	05:40 AM TUE 11/01/11
Laidley Ck at Warrego Hwy *	6.28m rising	05:00 AM TUE 11/01/11
Lockyer Ck at Glenore Grove #	13.48m rising	06:52 AM TUE 11/01/11
Lockyer Ck at Lyons Br #	16.09m rising	06:56 AM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	15.78m rising	05:40 AM TUE 11/01/11
Brisbane R at Lowood Pump Stn #	16.21m rising	06:55 AM TUE 11/01/11
Brisbane R at Savages Crossing #	16.17m rising	06:53 AM TUE 11/01/11
Brisbane R at Burtons Br #	12.92m rising	06:50 AM TUE 11/01/11
Brisbane R at Mt Crosby #	16.23m rising	06:36 AM TUE 11/01/11
Brisbane R at Colleges Crossing #	14.51m rising	06:57 AM TUE 11/01/11
Bremer R at Rosewood #	5.32m rising	06:41 AM TUE 11/01/11
Warrill Ck at Amberley DNR *	6.78m rising	05:20 AM TUE 11/01/11
Bremer R at Ipswich #	9.25m rising	06:50 AM TUE 11/01/11



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Brisbane R at Moggill #	7.62m rising	06:45 AM TUE 11/01/11
Brisbane R at Jindalee Br #	4.75m rising	06:26 AM TUE 11/01/11
Brisbane R at City Gauge #	0.95m falling	06:30 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



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Australian Government Bureau of Meteorology
Queensland

**PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW
WIVENHOE
INCLUDING BRISBANE CITY**

Issued at 3:24 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected with the overnight high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon. River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will continue to increase flood levels in Brisbane during the next 36 hours.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge and are continuing to increase near record levels.

LOCKYER CREEK:

Very heavy rainfall is continuing in the Lockyer Creek catchment and further very fast rises are being observed. Major flooding will continue this evening throughout the catchment. Flood levels at Glenore Grove were at 15.2 metres at 3pm, which is 0.3 metres above the 1974 flood level.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge and are continuing to increase near record levels.

BREMER RIVER:

The Bremer River at Walloon has exceeded the major flood level. The Bremer River at Rosewood is expected to reach at least 7.6 metres during the next few hours.

The Bremer River at Ipswich is expected to reach about 22 metres during Wednesday. Higher levels are possible as rainfall continues.

WARRILL CREEK

Further rises are likely today as rainfall continues with major flooding from Kalbar to Amberley continuing. Levels at Amberley are expected to reach at least 7.5 metres overnight.

MIDDLE AND LOWER BRISBANE:

Moderate flooding will continue to rise at Savages Crossing and at Mt Crosby Weir with major flood levels exceeded overnight.



At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected tonight with the 3am high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon (3pm). River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Predicted River Heights/Flows:

Ipswich: Reach at least 22 metres (major) during Wednesday; further rises.

Moggill: Reach at least 22 metres (moderate) during Wednesday; further rises.

Jindalee: Reach at least 14.2 metres (moderate) late Wednesday; further rises.

Brisbane City: Reach about 3 metres (moderate) around 3am Wednesday.

Reach 4.5 metres (major) at 3pm Wednesday.

Exceed 1974 flood level (5.45 metres) on Thursday.

Next Issue:

The next warning will be issued at about 7pm Tuesday.

Latest River Heights:

Tenthill Ck at Tenthill *	5.58m rising	02:30 PM TUE 11/01/11
Laidley Ck at Laidley	8.85m steady	01:20 PM TUE 11/01/11
Laidley Ck at Showground Weir #	9.26m rising	03:10 PM TUE 11/01/11
Laidley Ck at Warrego Hwy *	7.37m steady	02:00 PM TUE 11/01/11
Lockyer Ck at Glenore Grove #	15.24m rising	03:04 PM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	16.65m rising	02:20 PM TUE 11/01/11
Brisbane R at Savages Crossing *	20.48m rising	02:40 PM TUE 11/01/11
Brisbane R at Mt Crosby #	20.10m rising	03:20 PM TUE 11/01/11
Brisbane R at Colleges Crossing #	15.41m rising	03:21 PM TUE 11/01/11
Bremer R at Rosewood #	7.48m rising	03:08 PM TUE 11/01/11
Bremer R at Walloon DERM *	9.85m rising	02:40 PM TUE 11/01/11
Warrill Ck at Amberley DNR *	8.09m rising	02:40 PM TUE 11/01/11
Bremer R at Ipswich #	12.05m rising	03:18 PM TUE 11/01/11
Brisbane R at Moggill #	10.22m rising	03:14 PM TUE 11/01/11
Brisbane R at Jindalee Br #	6.7m rising	03:11 PM TUE 11/01/11
Brisbane R at City Gauge #	1.9m rising	01:01 PM TUE 11/01/11

*automatic station

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Australian Government Bureau of Meteorology
Queensland

BROADCASTERS ARE REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY

Issued at 8:05 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected with the overnight high tide. Higher flood levels to about 4.5 metres (major) are expected with the high tide on Wednesday afternoon. River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will continue to increase flood levels in Brisbane during the next 36 hours.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge and are continuing to increase near record levels.

LOCKYER CREEK:

Very heavy rainfall is continuing in the Lockyer Creek catchment and further very fast rises are being observed. Major flooding will continue this evening throughout the catchment. Flood levels at Glenore Grove were at 15.2 metres at 3pm, which is 0.3 metres above the 1974 flood level.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge and are continuing to increase near record levels.

BREMER RIVER:

The Bremer River at Walloon has exceeded the major flood level. The Bremer River at Rosewood has peaked at 7.5 metres around 5pm Tuesday.

The Bremer River at Ipswich is expected to reach around 21.5 metres during Wednesday.

WARRILL CREEK

Further rises are likely today as rainfall continues with major flooding from Kalbar to Amberley continuing. Levels at Amberley are expected to reach at least 8.0 metres overnight.



MIDDLE AND LOWER BRISBANE:

Moderate flooding will continue to rise at Savages Crossing and at Mt Crosby Weir with major flood levels exceeded overnight.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected tonight with the 3am high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon (3pm). River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Predicted River Heights/Flows:

Ipswich: Reach about 21.5 metres (major) during Wednesday; further rises possible.

Moggill: Reach about 21 metres (moderate) during Wednesday; further rises possible.

Jindalee: Reach about 14.2 metres (moderate) late Wednesday; further rises possible.

Brisbane City: Reach about 3 metres (moderate) around 3am Wednesday.
Reach about 4.5 metres (major) at 3pm Wednesday.
Exceed 1974 flood level (5.45 metres) on Thursday.

Next Issue:

The next warning will be issued at about midnight Tuesday.

Latest River Heights:

Tenthill Ck at Tenthill *	5.05m falling	06:20 PM TUE 11/01/11
Laidley Ck at Mulgowie *	1.9m steady	08:50 AM TUE 11/01/11
Laidley Ck at Laidley	8.85m steady	01:20 PM TUE 11/01/11
Laidley Ck at Showground Weir #	9.24m falling	07:31 PM TUE 11/01/11
Laidley Ck at Warrego Hwy *	7.37m steady	06:00 PM TUE 11/01/11
Lockyer Ck at Glenore Grove #	15.26m rising	07:31 PM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	16.66m rising	05:30 PM TUE 11/01/11
Brisbane R at Savages Crossing *	21.67m rising	05:40 PM TUE 11/01/11
Brisbane R at Kholo Br #	12.77m rising	03:28 PM TUE 11/01/11
Brisbane R at Colleges Crossing #	15.81m rising	04:05 PM TUE 11/01/11
Bremer R at Rosewood #	7.24m falling	07:29 PM TUE 11/01/11
Bremer R at Walloon DERM *	11.27m rising	06:00 PM TUE 11/01/11
Warrill Ck at Amberley DNR *	8.69m rising	05:40 PM TUE 11/01/11
Bremer R at Ipswich #	14.85m falling	07:33 PM TUE 11/01/11
Brisbane R at Moggill #	12.17m rising	07:32 PM TUE 11/01/11
Brisbane R at Jindalee Br #	7.95m rising	07:23 PM TUE 11/01/11
Brisbane R at City Gauge #	1.75m falling	06:57 PM TUE 11/01/11

*,# denotes an automatic station

Warnings and River Height Bulletins are available at

Authorised for release to the public by the Bureau of Meteorology, 9 February 2011

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Australian Government Bureau of Meteorology
Queensland

BROADCASTERS ARE REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY

Issued at 12:19 AM on Wednesday the 12th of January 2011
by the Bureau of Meteorology, Brisbane.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected with the overnight high tide. Higher flood levels to about 4.5 metres (major) are expected with the high tide on Wednesday afternoon. River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will continue to increase flood levels in Brisbane during the next 36 hours.

LOCKYER CREEK:

Major flooding will continue tonight in the Lockyer Creek catchment. Flood levels at Glenore Grove peaked at 15.2 metres at 3pm, which is 0.3 metres above the 1974 flood level.

The Lockyer Creek at Lyons Bridge peaked at 17.25 metres around 6pm Tuesday.

WARRILL CREEK:

Major flooding continues from Kalbar to Amberley. Levels at Amberley are expected to reach at least 8.0 metres overnight.

BREMER RIVER:

The Bremer River at Walloon has exceeded the major flood level. The Bremer River at Rosewood has peaked at 7.5 metres around 5pm Tuesday.

The Bremer River at Ipswich is expected to reach around 21.5 metres during Wednesday causing major flooding. This level is 0.8 metres higher than the 1974 flood peak at Ipswich.

MIDDLE AND LOWER BRISBANE:

Major flood levels have been exceeded at Savages Crossing and Mount Crosby Weir, with further rises expected overnight.



At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected tonight with the 3am high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon (3pm). River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Predicted River Heights/Flows:

Ipswich: Reach about 21.5 metres (major) during Wednesday; further rises possible.

Moggill: Reach about 21 metres (moderate) during Wednesday; further rises possible.

Jindalee: Reach about 14.2 metres (moderate) late Wednesday; further rises possible.

Brisbane City: Reach about 3 metres (moderate) around 3am Wednesday.
Reach about 4.5 metres (major) at 3pm Wednesday.
Exceed 1974 flood level (5.45 metres) on Thursday.

Next Issue:

The next warning will be issued at about 4am Wednesday.

Latest River Heights:

Tenthill Ck at Tenthill *	4.71m falling	09:20 PM TUE 11/01/11
Laidley Ck at Mulgowie *	1.9m steady	08:50 AM TUE 11/01/11
Laidley Ck at Laidley	8.85m steady	01:20 PM TUE 11/01/11
Laidley Ck at Showground Weir #	9.24m rising	11:28 PM TUE 11/01/11
Laidley Ck at Warrego Hwy *	7.37m steady	09:00 PM TUE 11/01/11
Lockyer Ck at Glenore Grove #	14.88m falling	11:38 PM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	16.64m steady	08:00 PM TUE 11/01/11
Brisbane R at Savages Crossing *	22.97m rising	08:40 PM TUE 11/01/11
Brisbane R at Kholo Br #	12.77m rising	03:28 PM TUE 11/01/11
Brisbane R at Colleges Crossing #	15.81m rising	04:05 PM TUE 11/01/11
Bremer R at Rosewood #	6.76m falling	11:35 PM TUE 11/01/11
Bremer R at Walloon DERM *	11.07m falling	09:00 PM TUE 11/01/11
Warrill Ck at Amberley DNR *	9m rising	08:40 PM TUE 11/01/11
Bremer R at Ipswich #	16.55m rising	11:36 PM TUE 11/01/11
Brisbane R at Moggill #	13.87m rising	11:32 PM TUE 11/01/11
Brisbane R at Jindalee Br #	9.2m rising	11:35 PM TUE 11/01/11
Brisbane R at City Gauge #	2.26m rising	11:33 PM TUE 11/01/11

*,# automatic station

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

BROADCASTERS ARE REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

PRIORITY - FOR IMMEDIATE BROADCAST

FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY

Issued at 4:02 AM on Wednesday the 12th of January 2011
by the Bureau of Meteorology, Brisbane.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street) rises are expected during Wednesday. River levels around 4.5 metres (major) are expected with the high tide on Wednesday afternoon. River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will continue to increase flood levels in Brisbane during the next 36 hours.

LOCKYER CREEK:

Major flooding will continue tonight in the Lockyer Creek catchment. Flood levels at Glenore Grove peaked at 15.2 metres at 3pm, which is 0.3 metres above the 1974 flood level.

The Lockyer Creek at Lyons Bridge peaked at 17.25 metres around 6pm Tuesday.

WARRILL CREEK:

Major flooding continues from Kalbar to Amberley. Levels at Amberley are expected to reach at least 8.0 metres overnight.

BREMER RIVER:

The Bremer River at Walloon has exceeded the major flood level. The Bremer River at Rosewood has peaked at 7.5 metres around 5pm Tuesday.

The Bremer River at Ipswich is expected to reach around 21.5 metres during Wednesday causing major flooding. This level is 0.8 metres higher than the 1974 flood peak at Ipswich.

MIDDLE AND LOWER BRISBANE:

Major flooding is occurring along the Brisbane River from downstream of Wivenhoe dam to Jindalee, with further rises expected downstream of Savages Crossing during Wednesday.



Major flood levels have been exceeded at Savages Crossing, with a peak recorded early Wednesday morning.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres were recorded with the 3am high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon (3pm). River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Predicted River Heights/Flows:

Ipswich: Reach about 21.5 metres (major) during Wednesday; further rises possible.

Moggill: Reach about 21 metres (moderate) during Wednesday; further rises possible.

Jindalee: Reach about 14.2 metres (moderate) late Wednesday; further rises possible.

Brisbane City: Reach about 3 metres (moderate) around 3am Wednesday.
Reach about 4.5 metres (major) at 3pm Wednesday.
Exceed 1974 flood level (5.45 metres) on Thursday.

Next Issue:

The next warning will be issued at about 8am Wednesday.

Latest River Heights:

Tenthill Ck at Tenthill *	3.03m steady	02:40 AM WED 12/01/11
Laidley Ck at Mulgowie *	1.9m steady	08:50 AM TUE 11/01/11
Laidley Ck at Laidley	8.85m steady	01:20 PM TUE 11/01/11
Laidley Ck at Showground Weir #	8.9m falling	03:25 AM WED 12/01/11
Laidley Ck at Warrego Hwy *	7.2m falling	02:00 AM WED 12/01/11
Lockyer Ck at Glenore Grove #	14.06m falling	03:26 AM WED 12/01/11
Lockyer Ck at Rifle Range Rd *	16.59m falling	02:10 AM WED 12/01/11
Brisbane R at Savages Crossing *	24.13m rising	02:40 AM WED 12/01/11
Brisbane R at Kholo Br #	12.77m rising	03:28 PM TUE 11/01/11
Brisbane R at Colleges Crossing #	15.81m rising	04:05 PM TUE 11/01/11
Bremer R at Rosewood #	6.28m falling	03:23 AM WED 12/01/11
Bremer R at Walloon DERM *	10.27m falling	02:00 AM WED 12/01/11
Warrill Ck at Amberley DNR *	9.13m steady	02:20 AM WED 12/01/11
Bremer R at Ipswich #	18.2m rising	03:19 AM WED 12/01/11
Brisbane R at Moggill #	15.37m rising	03:20 AM WED 12/01/11
Brisbane R at Jindalee Br #	10.35m rising	03:17 AM WED 12/01/11
Brisbane R at City Gauge #	3.01m rising	03:24 AM WED 12/01/11

Warnings and River Height Bulletins are available at

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Australian Government Bureau of Meteorology
Queensland

BROADCASTERS ARE REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY

Issued at 7:33 AM on Wednesday the 12th of January 2011
by the Bureau of Meteorology, Brisbane.

At at 7:30am Wednesday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) was 3.1 metres and rising. Rises will continue during Wednesday and overnight.

At the Brisbane City gauge, river levels of about 4.5 metres (major) are expected with the high tide on Wednesday afternoon. River rises will continue into Thursday with a peak of about 5.5 metres expected with the high tides at 4am and 4pm. Levels will remain high throughout Thursday. This is similar to the 1974 flood peak of 5.45 metres.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will continue to increase flood levels in Brisbane during the next 24 hours.

LOCKYER CREEK:

Major flooding will continue this morning in the Lockyer Creek catchment with levels expected to start falling significantly today. Flood levels at Glenore Grove peaked at 15.2 metres at 3pm Tuesday, which is 0.3 metres above the 1974 flood level.

The Lockyer Creek at Lyons Bridge peaked at 17.25 metres around 6pm Tuesday.

WARRILL CREEK:

Major flooding continues from Kalbar to Amberley. A flood peak to just over 8 metres is occurring at Amberley this morning.

BREMER RIVER

Major flooding is easing along the Bremer River from Rosewood to Walloon.

The Bremer River at Ipswich is expected to peak about 20.5 metres during Wednesday afternoon with major flooding. This is similar to the 1974 flood level.

MIDDLE AND LOWER BRISBANE:

Authorised for release to the public by the Bureau of Meteorology, 9 February 2011

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Major flooding is rising from the Savages Crossing area to Jindalee along the Brisbane River.

At Savages Crossing, a major flood peak of 24.2 metres has been recorded early Wednesday morning, slightly above the 1974 peak level at this location.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres were recorded with the 3am high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon (3pm). River rises will continue into Thursday with a peak of about 5.5 metres expected with the high tides at 4am and 4pm. Levels will remain high throughout Thursday. This is similar to the 1974 flood peak of 5.45 metres.

Predicted River Heights/Flows:

Ipswich: Peak about 20.5 metres (major) during Wednesday afternoon.

Moggill: Peak about 20 metres (moderate) during Wednesday afternoon.

Jindalee: Peak about 14.2 metres (moderate) by midnight.

Brisbane City: Reach about 4.5 metres (major) at 3pm Wednesday.
Peak about 5.5 metres (major) during Thursday.

Next Issue:

The next warning will be issued at about noon Wednesday.

Latest River Heights:

Laidley Ck at Laidley	8.85m steady	01:20 PM TUE 11/01/11
Laidley Ck at Showground Weir #	7.26m falling	06:01 AM WED 12/01/11
Laidley Ck at Warrego Hwy *	6.86m falling	05:00 AM WED 12/01/11
Lockyer Ck at Glenore Grove #	13.42m falling	06:01 AM WED 12/01/11
Lockyer Ck at Rifle Range Rd *	16.55m falling	05:40 AM WED 12/01/11
Brisbane R at Savages Crossing *	23.85m falling	05:40 AM WED 12/01/11
Brisbane R at Kholo Br #	12.77m rising	03:28 PM TUE 11/01/11
Brisbane R at Colleges Crossing #	15.81m rising	04:05 PM TUE 11/01/11
Bremer R at Rosewood #	5.9m falling	06:02 AM WED 12/01/11
Bremer R at Walloon DERM *	9.58m falling	05:40 AM WED 12/01/11
Warrill Ck at Amberley DNR *	9.2m rising	05:20 AM WED 12/01/11
Bremer R at Ipswich #	18.6m rising	05:53 AM WED 12/01/11
Brisbane R at Moggill #	16.27m rising	05:53 AM WED 12/01/11
Brisbane R at Jindalee Br #	11.1m rising	06:02 AM WED 12/01/11
Brisbane R at City Gauge #	3.10m rising	07:30 AM WED 12/01/11

*automatic station

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Australian Government Bureau of Meteorology
Queensland

BROADCASTERS ARE REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY

Issued at 7:56 AM on Wednesday the 12th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: At 7:30 am Wednesday, flood levels at Ipswich are at 19 metres and rising. A peak is expected this afternoon of about 20.5 metres. This is similar to the 1974 flood level.

BRISBANE: At 7:30am Wednesday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) was 3.1 metres and rising. Rises will continue during Wednesday and overnight.

At the Brisbane City gauge, river levels of about 4.5 metres (major) are expected with the high tide on Wednesday afternoon. River rises will continue into Thursday with a peak of about 5.5 metres expected with the high tides at 4am and 4pm. Levels will remain high throughout Thursday. This is similar to the 1974 flood peak of 5.45 metres.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will continue to increase flood levels in Brisbane during the next 24 hours.

LOCKYER CREEK:

Major flooding will continue this morning in the Lockyer Creek catchment with levels expected to start falling significantly today. Flood levels at Glenore Grove peaked at 15.2 metres at 3pm Tuesday, which is 0.3 metres above the 1974 flood level.

The Lockyer Creek at Lyons Bridge peaked at 17.25 metres around 6pm Tuesday.

WARRILL CREEK:

Major flooding continues from Kalbar to Amberley. A flood peak to just over 8 metres is occurring at Amberley this morning.

BREMER RIVER

Major flooding is easing along the Bremer River from Rosewood to Walloon.

The Bremer River at Ipswich is expected to peak about 20.5 metres during



Wednesday afternoon with major flooding. This is similar to the 1974 flood level.

MIDDLE AND LOWER BRISBANE:

Major flooding is rising from the Savages Crossing area to Jindalee along the Brisbane River.

At Savages Crossing, a major flood peak of 24.2 metres has been recorded early Wednesday morning, slightly above the 1974 peak level at this location.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres were recorded with the 3am high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon (3pm). River rises will continue into Thursday with a peak of about 5.5 metres expected with the high tides at 4am and 4pm. Levels will remain high throughout Thursday. This is similar to the 1974 flood peak of 5.45 metres.

Predicted River Heights/Flows:

Ipswich: Peak about 20.5 metres (major) during Wednesday afternoon.

Moggill: Peak about 20 metres (moderate) during Wednesday afternoon.

Jindalee: Peak about 14.2 metres (moderate) by midnight.

Brisbane City: Reach about 4.5 metres (major) at 3pm Wednesday.

Peak about 5.5 metres (major) during Thursday.

Next Issue:

The next warning will be issued at about noon Wednesday.

Latest River Heights:

Tenthill Ck at Tenthill *	2.67m falling	06:00 AM WED 12/01/11
Laidley Ck at Mulgowie *	1.9m steady	08:50 AM TUE 11/01/11
Laidley Ck at Laidley	8.85m steady	01:20 PM TUE 11/01/11
Laidley Ck at Showground Weir #	6.56m falling	07:37 AM WED 12/01/11
Laidley Ck at Warrego Hwy *	6.75m falling	06:00 AM WED 12/01/11
Lockyer Ck at Glenore Grove #	13.04m falling	07:39 AM WED 12/01/11
Lockyer Ck at Rifle Range Rd *	16.55m falling	05:40 AM WED 12/01/11
Brisbane R at Savages Crossing *	23.85m falling	05:40 AM WED 12/01/11
Brisbane R at Kholo Br #	12.77m rising	03:28 PM TUE 11/01/11
Brisbane R at Colleges Crossing #	15.81m rising	04:05 PM TUE 11/01/11
Bremer R at Rosewood #	5.64m falling	07:38 AM WED 12/01/11
Bremer R at Walloon DERM *	9.53m falling	06:00 AM WED 12/01/11
Warrill Ck at Amberley DNR *	9.2m rising	05:20 AM WED 12/01/11
Bremer R at Ipswich #	18.85m rising	07:29 AM WED 12/01/11
Brisbane R at Moggill #	16.72m rising	07:38 AM WED 12/01/11
Brisbane R at Jindalee Br #	11.5m rising	07:41 AM WED 12/01/11
Brisbane R at City Gauge #	3.15m rising	07:39 AM WED 12/01/11

*automatic station



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Australian Government Bureau of Meteorology
Queensland

BROADCASTERS ARE REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY

Issued at 11:56 AM on Wednesday the 12th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: At 11:30 am Wednesday, flood levels at Ipswich are at 19.3 metres and rising. A peak is expected this afternoon of about 20.5 metres. This is similar to the 1974 flood level.

BRISBANE: At 11:45am Wednesday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) was 3.75 metres and rising. Rises will continue during Wednesday afternoon and overnight.

At the Brisbane City gauge, river levels of about 4.5 metres (major) are expected with the high tide on Wednesday afternoon. River rises will continue into Thursday with a peak of about 5.5 metres expected with the high tides at 4am and 4pm. Levels will remain high throughout Thursday. This is similar to the 1974 flood peak of 5.45 metres.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will continue to increase flood levels in Brisbane during the next 24 hours.

LOCKYER CREEK:

Major flooding will continue this morning in the Lockyer Creek catchment with levels expected to start falling significantly today.

WARRILL CREEK:

Major flooding continues from Kalbar to Amberley. A flood peak to just over 8 metres is occurring at Amberley today.

BREMER RIVER

Major flooding is easing along the Bremer River from Rosewood to Walloon.

The Bremer River at Ipswich is expected to peak about 20.5 metres during Wednesday afternoon with major flooding. This is similar to the 1974 flood level.

MIDDLE AND LOWER BRISBANE:

Authorised for release to the public by the Bureau of Meteorology, 9 February 2011

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Major flooding is rising from the Savages Crossing area to Jindalee along the Brisbane River.

At Savages Crossing, a major flood peak of 24.2 metres has been recorded early Wednesday morning, slightly above the 1974 peak level at this location.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres were recorded with the 3am high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon (3pm). River rises will continue into Thursday with a peak of about 5.5 metres expected with the high tides at 4am and 4pm. Levels will remain high throughout Thursday. This is similar to the 1974 flood peak of 5.45 metres.

Predicted River Heights/Flows:

Ipswich: Peak about 20.5 metres (major) during Wednesday afternoon.

Moggill: Peak about 20 metres (moderate) during Wednesday afternoon.

Jindalee: Peak about 14.2 metres (moderate) by midnight.

Brisbane City: Reach about 4.5 metres (major) at 3pm Wednesday.

Peak about 5.5 metres (major) during Thursday.

Fall below major flood level during Friday.

Next Issue:

The next warning will be issued at about 4pm Wednesday.

Latest River Heights:

Laidley Ck at Laidley	5.1m steady	08:45 AM WED 12/01/11
Laidley Ck at Showground Weir #	5.92m falling	11:34 AM WED 12/01/11
Laidley Ck at Warrego Hwy *	6.19m falling	10:00 AM WED 12/01/11
Lockyer Ck at Glenore Grove #	12.02m falling	11:36 AM WED 12/01/11
Lockyer Ck at Rifle Range Rd *	16.5m falling	08:20 AM WED 12/01/11
Brisbane R at Savages Crossing *	23.25m falling	08:20 AM WED 12/01/11
Brisbane R at Kholo Br #	12.77m rising	03:28 PM TUE 11/01/11
Brisbane R at Colleges Crossing #	15.81m rising	04:05 PM TUE 11/01/11
Bremer R at Rosewood #	5.08m falling	11:32 AM WED 12/01/11
Bremer R at Walloon DERM *	8.55m falling	10:30 AM WED 12/01/11
Warrill Ck at Amberley DNR *	9.25m steady	08:00 AM WED 12/01/11
Bremer R at Ipswich #	19.3m rising	11:27 AM WED 12/01/11
Brisbane R at Moggill #	17.42m rising	11:20 AM WED 12/01/11
Brisbane R at Jindalee Br #	12.25m rising	11:35 AM WED 12/01/11
Brisbane R at City Gauge #	3.7m rising	11:15 AM WED 12/01/11

*automatic station

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Queensland

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PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY

Issued at 4:29 PM on Wednesday the 12th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: At 4pm Wednesday, flood levels at Ipswich are at 19.4 metres and steady. Based on upstream peak levels, it is likely to peak at around current levels which will be maintained into this evening.

BRISBANE: At 4pm Wednesday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) was 4.3 metres and rising. Rises will continue during Wednesday afternoon and overnight.

At the Brisbane City gauge, river rises will continue this evening with a peak of about 5.2 metres expected with the high tide at 4am. Levels will remain high throughout Thursday.

This is below the 1974 flood peak of 5.45 metres as releases at Wivenhoe Dam were reduced quickly overnight.

LOCKYER CREEK:

Minor to major flooding will continue this afternoon in the Lockyer Creek catchment with levels expected to start falling significantly today.

WARRILL CREEK:

Major flooding continues from Kalbar to Amberley. A flood peak just over 8 metres occurred at Amberley today.

BREMER RIVER

Moderate to minor flooding is easing along the Bremer River from Rosewood to Walloon.

The Bremer River at Ipswich is currently at 19.4 metres, and is expected to peak up to 19.5 metres during Wednesday evening with major flooding. This is around 1.2 metres below the 1974 flood level.

MIDDLE AND LOWER BRISBANE:

Major flooding is rising from the Moggill area to Brisbane City along the Brisbane River.



At Mount Crosby Weir, a major flood peak of 26.2 metres was recorded on Wednesday morning, slightly below the 1974 peak level at this location.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), flood levels reached 4.2 metres on the 3pm high tide with major flooding. River rises will continue this evening with a peak of about 5.2 metres expected with the high tide at 4am Thursday. This is slightly below to the 1974 flood peak of 5.45 metres. Levels will remain high throughout Thursday.

Predicted River Heights/Flows:

Ipswich: Peak around 19.5 metres (major) during Wednesday evening.

Moggill: Peak around 18.5 metres (major) during Wednesday afternoon.

Jindalee: Peak about 13 metres (major) by midnight.

Brisbane City: Peak about 5.2 metres (major) with the high tide at 4am Thursday.

Fall below major flood level during Friday.

Next Issue:

The next warning will be issued at about 8pm Wednesday.

Latest River Heights:

Laidley Ck at Showground Weir #	5.66m falling	03:10 PM WED 12/01/11
Laidley Ck at Warrego Hwy *	5.56m falling	02:00 PM WED 12/01/11
Lockyer Ck at Glenore Grove #	10.72m falling	03:11 PM WED 12/01/11
Lockyer Ck at Rifle Range Rd *	16.29m rising	02:40 PM WED 12/01/11
Brisbane R at Savages Crossing *	20.62m falling	02:50 PM WED 12/01/11
Brisbane R at Colleges Crossing #	15.81m falling	04:05 PM TUE 11/01/11
Bremer R at Rosewood #	4.7m falling	03:08 PM WED 12/01/11
Bremer R at Walloon DERM *	7.38m falling	02:40 PM WED 12/01/11
Warrill Ck at Amberley DNR *	9.1m falling	02:40 PM WED 12/01/11
Bremer R at Ipswich #	19.4m rising	04:00 PM WED 12/01/11
Brisbane R at Moggill #	17.67m rising	03:11 PM WED 12/01/11
Brisbane R at Jindalee Br #	12.7m rising	03:11 PM WED 12/01/11
Brisbane R at City Gauge #	4.3m rising	04:00 PM WED 12/01/11

*automatic station

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Queensland

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PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY
Issued at 8:11 PM on Wednesday the 12th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: Flood levels at Ipswich peaked at 19.4 metres during Wednesday, and are beginning to fall. River levels are expected to continue falling into Thursday.

BRISBANE: At 8pm Wednesday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) was 4.2 metres.

At the Brisbane City gauge, river rises will continue this evening with a peak of about 5.2 metres expected with the high tide at 4am. Levels will remain high throughout Thursday.

This is below the 1974 flood peak of 5.45 metres as releases at Wivenhoe Dam were reduced quickly during Tuesday night.

LOCKYER CREEK:
Major flooding in the lower Lockyer Creek will continue easing tonight.

WARRILL CREEK:
Moderate to major flooding continues from Kalbar to Amberley, with flood levels now falling.

BREMER RIVER
Minor flooding is easing along the Bremer River from Rosewood to Walloon.

The Bremer River at Ipswich peaked at 19.4 metres Wednesday afternoon, and is continuing to fall. This peak was around 1.3 metres below the 1974 flood level.

MIDDLE AND LOWER BRISBANE:
Major flooding is rising from the Moggill area to Brisbane City along the Brisbane River.

At Mount Crosby Weir, a major flood peak of 26.2 metres was recorded on Wednesday morning, slightly below the 1974 peak level at this location.

At Moggill, a peak of 17.9 metres was observed during Wednesday afternoon. This was about 2 metres below the 1974 peak at this location.



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At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), flood levels reached 4.2 metres on the 3pm high tide with major flooding. River rises will continue this evening with a peak of about 5.2 metres expected with the high tide at 4am Thursday. This is slightly below to the 1974 flood peak of 5.45 metres. Levels will remain high throughout Thursday.

Predicted River Heights/Flows:

Jindalee: Peak about 13 metres (major) by midnight.

Brisbane City: Peak about 5.2 metres (major) with the high tide at 4am Thursday.

Fall below major flood level during Friday.

Next Issue:

The next warning will be issued at about midnight Wednesday.

Latest River Heights:

Laidley Ck at Showground Weir #	5.46m falling	07:37 PM WED 12/01/11
Laidley Ck at Warrego Hwy *	5.2m falling	05:00 PM WED 12/01/11
Lockyer Ck at Glenore Grove #	9.38m falling	07:37 PM WED 12/01/11
Lockyer Ck at Rifle Range Rd *	16.15m falling	05:40 PM WED 12/01/11
Brisbane R at Savages Crossing *	19.52m falling	05:40 PM WED 12/01/11
Bremer R at Rosewood #	4.32m falling	07:26 PM WED 12/01/11
Bremer R at Walloon DERM *	6.52m falling	05:40 PM WED 12/01/11
Warrill Ck at Amberley DNR *	8.84m falling	05:40 PM WED 12/01/11
Bremer R at Ipswich #	19.05m falling	08:00 PM WED 12/01/11
Brisbane R at Moggill #	17.52m falling	07:20 PM WED 12/01/11
Brisbane R at Jindalee Br #	12.9m rising	07:35 PM WED 12/01/11
Brisbane R at City Gauge #	4.2m steady	08:00 PM WED 12/01/11

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/>. Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



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BROADCASTERS ARE REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY
Issued at 12:27 AM on Thursday the 13th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: Flood levels at Ipswich peaked at 19.4 metres during Wednesday, and are beginning to fall. River levels are expected to continue falling into Thursday.

BRISBANE: At 10pm Wednesday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) was 4.2 metres following the high tide. Renewed rises with the tide are expected, with a peak under 5 metres expected with the high tide at 4am. Levels will remain high throughout Thursday.

This is below the 1974 flood peak of 5.45 metres as releases at Wivenhoe Dam were reduced quickly during Tuesday night.

LOCKYER CREEK:

Major flooding in the lower Lockyer Creek will continue easing into Thursday.

WARRILL CREEK:

Moderate to major flooding continues from Kalbar to Amberley, with flood levels now falling.

BREMER RIVER

Minor flooding is easing along the Bremer River from Rosewood to Walloon.

The Bremer River at Ipswich peaked at 19.4 metres Wednesday afternoon, and is continuing to fall. This peak was around 1.3 metres below the 1974 flood level.

MIDDLE AND LOWER BRISBANE:

Major flooding continues from the Mount Crosby area to Brisbane City along the Brisbane River.

At Mount Crosby Weir, a major flood peak of 26.2 metres was recorded on Wednesday morning, slightly below the 1974 peak level at this location.

At Moggill, a peak of 17.9 metres was observed during Wednesday afternoon. This was about 2 metres below the 1974 peak at this location.

At Jindalee, a peak of 13 metres was observed at about 7pm Wednesday.



At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), flood levels reached 4.2 metres on the 3pm high tide with major flooding. River rises will continue with a peak under 5 metres expected with the high tide about 4am Thursday. This is below the 1974 flood peak of 5.45 metres. Levels will remain high throughout Thursday.

Predicted River Heights/Flows:

Brisbane City: Peak under 5 metres (major) with the high tide at 4am Thursday.

Fall below major flood level by Friday.

Next Issue:

The next warning will be issued at about 4am Thursday.

Latest River Heights:

Laidley Ck at Laidley	5.1m steady	08:45 AM WED 12/01/11
Laidley Ck at Showground Weir #	5.36m falling	10:31 PM WED 12/01/11
Laidley Ck at Warrego Hwy *	4.85m falling	10:00 PM WED 12/01/11
Lockyer Ck at Glenore Grove #	8.68m falling	11:28 PM WED 12/01/11
Lockyer Ck at Rifle Range Rd *	15.96m falling	08:40 PM WED 12/01/11
Brisbane R at Savages Crossing *	18.48m falling	08:40 PM WED 12/01/11
Bremer R at Rosewood #	4.1m steady	11:26 PM WED 12/01/11
Bremer R at Walloon DERM *	5.59m falling	10:00 PM WED 12/01/11
Warrill Ck at Amberley DNR *	8.48m falling	08:40 PM WED 12/01/11
Bremer R at Ipswich #	18.55m falling	11:34 PM WED 12/01/11
Brisbane R at Moggill #	17.02m falling	11:29 PM WED 12/01/11
Brisbane R at Jindalee Br #	12.75m falling	11:23 PM WED 12/01/11
Brisbane R at City Gauge #	4.25m rising	11:45 PM WED 12/01/11

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Queensland

BROADCASTERS ARE REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW WIVENHOE INCLUDING BRISBANE CITY

Issued at 3:52 AM on Thursday the 13th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: Flood levels at Ipswich are falling strongly, and have fallen below 18 metres around 3am Thursday. River levels will continue falling during Thursday, and drop below major flood level later Thursday.

BRISBANE: At 3:30am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) was 4.45 metres and rising with the high tide. A peak slightly above this level is expected in the next few hours.

This is below the 1974 flood peak of 5.45 metres as releases at Wivenhoe Dam were reduced quickly during Tuesday night.

LOCKYER CREEK:

Major flooding in the lower Lockyer Creek will continue easing during Thursday.

WARRILL CREEK:

Moderate to major flooding continues from Kalbar to Amberley, with flood levels now falling.

BREMER RIVER

Minor flooding is easing along the Bremer River from Rosewood to Walloon.

The Bremer River at Ipswich is falling strongly, and has fallen below 18 metres at around 3am Thursday. River levels will continue falling during Thursday.

MIDDLE AND LOWER BRISBANE:

Major flooding continues along the Brisbane River from the Mount Crosby area to Brisbane City.

At Mount Crosby Weir, a major flood peak of 26.2 metres was recorded on Wednesday morning, slightly below the 1974 peak level at this location.

At Moggill, a peak of 17.9 metres was observed during Wednesday afternoon. This was about 2 metres below the 1974 peak at this location.

At Jindalee, a peak of 13 metres was observed at about 7pm Wednesday.



At 3:30am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) was 4.45 metres and rising with the high tide. A peak slightly above this level is expected in the next few hours.

Predicted River Heights/Flows:

Brisbane City: Peak around 4.6 metres (major) with the high tide about 4am Thursday.

Fall below major flood level by Friday.

Next Issue:

The next warning will be issued at about 8am Thursday.

Latest River Heights:

Tenthill Ck at Tenthill *	1.74m falling	02:00 AM THU 13/01/11
Laidley Ck at Laidley	5.1m steady	08:45 AM WED 12/01/11
Laidley Ck at Showground Weir #	5.32m falling	03:25 AM THU 13/01/11
Laidley Ck at Warrego Hwy *	4.68m falling	02:00 AM THU 13/01/11
Lockyer Ck at Glenore Grove #	8.2m falling	03:15 AM THU 13/01/11
Lockyer Ck at Rifle Range Rd *	15.06m falling	02:40 AM THU 13/01/11
Brisbane R at Savages Crossing *	16.7m falling	02:40 AM THU 13/01/11
Bremer R at Rosewood #	3.92m falling	03:14 AM THU 13/01/11
Bremer R at Walloon DERM *	5.01m falling	02:00 AM THU 13/01/11
Warrill Ck at Amberley DNR *	7.71m falling	02:40 AM THU 13/01/11
Bremer R at Ipswich #	17.85m falling	03:16 AM THU 13/01/11
Brisbane R at Moggill #	16.27m falling	03:14 AM THU 13/01/11
Brisbane R at Jindalee Br #	12.45m falling	02:59 AM THU 13/01/11
Brisbane R at City Gauge #	4.45m rising	02:57 AM THU 13/01/11

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**PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW
WIVENHOE
INCLUDING BRISBANE CITY**

Issued at 8:40 AM on Thursday the 13th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: Flood levels at Ipswich are falling and have fallen below 17 metres at 8am Thursday. River levels will drop below major flood level overnight.

BRISBANE: At 4am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) peaked at 4.46 metres. At 8am Thursday, the Brisbane City gauge was 4.2 metres and falling. A return to flood levels of around 4.2 metres is expected with the high tide at 4pm Thursday.

The flood peak was below the 1974 flood peak of 5.45 metres as releases at Wivenhoe Dam were reduced quickly during Tuesday night.

LOCKYER CREEK:

Major flooding in the lower Lockyer Creek will continue easing during Thursday.

WARRILL CREEK:

Moderate flooding continues from Kalbar to Amberley, with flood levels now falling.

BREMER RIVER

Minor flooding is easing along the Bremer River from Rosewood to Walloon.

The Bremer River at Ipswich has fallen below 17 metres at 8am Thursday. River levels will continue falling during Thursday with levels of about 15 metres

MIDDLE AND LOWER BRISBANE:

Major flooding continues along the Brisbane River from the Mount Crosby area to Brisbane City.

At Savages Crossing, a major flood peak of 24.1 metres was recorded on Wednesday morning, slightly higher than the 1974 peak level (23.8m) at this location.

At Moggill, a peak of 17.9 metres was observed during Wednesday afternoon. Flood levels of around 14.5 metres are expected by 4pm Thursday.

At Jindalee, a peak of 13 metres was observed at about 7pm Wednesday. Flood levels of around 11 metres are expected by around 4pm Thursday.

At 4am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) peaked at 4.46 metres. Flood levels will recede this morning before rising again to around 4.2 metres with the high tide at 4pm today. Flood levels of around 3.1 metres



Predicted River Heights/Flows:

Ipswich: Fall to around 15 metres by 4pm Thursday, then about 11 metres by 5am Friday.

Moggill: Fall to about 14.5 metres by 4pm Thursday, then about 10 metres by 5am Friday.

Jindalee: Fall to about 11 metres by 4pm Thursday, then about 6 metres by 5am Friday.

Brisbane City: Fall this morning before rising again with the tide to around 4.2 metres by 4pm, then about 3.2 metres with the 5am high tide on Friday.

Next Issue:

The next warning will be issued at about 1pm Thursday.

Latest River Heights:

Laidley Ck at Laidley	5.1m steady	08:45 AM WED 12/01/11
Laidley Ck at Showground Weir #	5.26m falling	06:19 AM THU 13/01/11
Laidley Ck at Warrego Hwy *	4.57m falling	06:00 AM THU 13/01/11
Lockyer Ck at Glenore Grove #	7.84m falling	07:39 AM THU 13/01/11
Lockyer Ck at Rifle Range Rd *	14.46m falling	05:40 AM THU 13/01/11
Brisbane R at Savages Crossing *	16.06m rising	05:40 AM THU 13/01/11
Bremer R at Rosewood #	3.74m falling	07:17 AM THU 13/01/11
Bremer R at Walloon DERM *	4.59m falling	06:00 AM THU 13/01/11
Warrill Ck at Amberley DNR *	7.39m falling	05:40 AM THU 13/01/11
Bremer R at Ipswich #	16.9m falling	07:35 AM THU 13/01/11
Brisbane R at Moggill #	15.27m falling	07:41 AM THU 13/01/11
Brisbane R at Jindalee Br #	11.85m falling	07:32 AM THU 13/01/11
Brisbane R at City Gauge #	4.26m falling	07:24 AM THU 13/01/11

*automatic station

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**PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW
WIVENHOE
INCLUDING BRISBANE CITY**

Issued at 12:57 PM on Thursday the 13th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: Flood levels at Ipswich are falling and have fallen below 17 metres at 8am Thursday. River levels will drop below major flood level overnight.

BRISBANE: At 4am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) peaked at 4.46 metres. At noon Thursday, the Brisbane City gauge was 3.91 metres steady. A return to flood levels of around 4.2 metres are expected with the high tide at 4pm Thursday.

The flood peak was below the 1974 flood peak of 5.45 metres as releases at Wivenhoe Dam were reduced quickly during Tuesday night.

LOCKYER CREEK:

Major flooding in the lower Lockyer Creek will continue easing during Thursday.

WARRILL CREEK:

Moderate flooding continues from Kalbar to Amberley, with flood levels now falling.

BREMER RIVER

Minor flooding is easing along the Bremer River from Rosewood to Walloon.

The Bremer River at Ipswich has fallen below 17 metres at 8am Thursday. River levels will continue falling during Thursday with levels of about 15 metres

MIDDLE AND LOWER BRISBANE:

Major flooding continues along the Brisbane River from the Mount Crosby area to Brisbane City.

At Savages Crossing, a major flood peak of 24.1 metres was recorded on Wednesday morning, slightly higher than the 1974 peak level (23.8m) at this location.

At Moggill, a peak of 17.9 metres was observed during Wednesday afternoon. Flood levels of around 10 metres are expected by 5am Friday.

At Jindalee, a peak of 13 metres was observed at about 7pm Wednesday. Flood levels of around 11 metres are expected by around 4pm Thursday.

At 4am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) peaked at 4.46 metres. Flood levels will rise again to around 4.2 metres with the high tide at 4pm today. Flood levels of around 3.2 metres are expected with the high tide at 5am Friday.



Predicted River Heights/Flows:

Ipswich: Fall to around 15 metres by 4pm Thursday, then about 11 metres by 5am Friday.

Moggill: Fall to about 14.5 metres by 4pm Thursday, then about 10 metres by 5am Friday.

Jindalee: Fall to about 11 metres by 4pm Thursday, then about 6 metres by 5am Friday.

Brisbane City: Rise again this afternoon with the tide to around 4.2 metres by 4pm, then about 3.2 metres with the 5am high tide on Friday.

Next Issue:

The next warning will be issued at about 6pm Thursday.

Latest River Heights:

Tenthill Ck at Tenthill *	1.58m falling	11:00 AM THU 13/01/11
Laidley Ck at Showground Weir #	5.22m falling	12:19 PM THU 13/01/11
Laidley Ck at Warrego Hwy *	4.47m falling	11:00 AM THU 13/01/11
Lockyer Ck at Glenore Grove #	7.44m falling	12:35 PM THU 13/01/11
Lockyer Ck at Rifle Range Rd *	13.14m falling	11:40 AM THU 13/01/11
Brisbane R at Savages Crossing *	15.01m rising	11:30 AM THU 13/01/11
Bremer R at Rosewood #	3.52m falling	12:35 PM THU 13/01/11
Bremer R at Walloon DERM *	4.26m falling	11:00 AM THU 13/01/11
Warrill Ck at Amberley DNR *	6.89m falling	11:40 AM THU 13/01/11
Bremer R at Ipswich #	15.6m falling	12:37 PM THU 13/01/11
Brisbane R at Moggill #	14.02m falling	12:41 PM THU 13/01/11
Brisbane R at Jindalee Br #	10.95m falling	12:26 PM THU 13/01/11
Brisbane R at City Gauge #	3.9m falling	12:03 PM THU 13/01/11

*automatic station

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**PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW
WIVENHOE
INCLUDING BRISBANE CITY**

Issued at 5:41 PM on Thursday the 13th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: Flood levels at Ipswich fell below 15 metres at 3pm Thursday. River levels will fall below major flood level overnight.

BRISBANE: At 4am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) peaked at 4.46 metres. At 5pm Thursday the Brisbane City gauge was 3.6 metres and falling, and will continue to fall during Thursday evening.

The flood peak was below the 1974 flood peak of 5.45 metres as releases at Wivenhoe Dam were reduced quickly during Tuesday night.

LOCKYER CREEK:

Moderate flooding in the lower Lockyer Creek will continue easing during Thursday evening.

WARRILL CREEK:

Moderate flooding continues from Harrisville to Amberley, with flood levels falling steadily.

BREMER RIVER

The Bremer River from Rosewood to Walloon continues to fall and is now below minor flood level.

Major flood levels in the Bremer River at Ipswich continue to fall. The level at Ipswich passed through 15 metres at 2:45 pm Thursday and will fall below major flood level overnight Thursday.

MIDDLE AND LOWER BRISBANE:

Moderate to major flooding continues along the Brisbane River from the Mount Crosby area to Brisbane City.

At Moggill, a peak of 17.9 metres was observed during Wednesday afternoon. Flood levels of around 11 metres are expected by 5am Friday.

The flood level at Jindalee at 5:30pm Thursday was 9.9 metres and continuing to fall.

At 4am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) peaked at 4.46 metres. Flood levels had dropped to 3.75 metres with the high tide at 4pm Thursday. Flood levels of around 3 metres are expected with the high tide at 5am Friday.



Predicted River Heights/Flows:

Ipswich: Fall to around 12 metres by 5am Friday.

Moggill: Fall to about 11 metres by 5am Friday.

Jindalee: Fall to about 7 metres by 5am Friday.

Brisbane City: Fall to about 3 metres with the 5am high tide on Friday.

Next Issue:

The next warning will be issued at about 10pm Thursday.

Latest River Heights:

Tenthill Ck at Tenthill *	1.47m falling	04:00 PM THU 13/01/11
Laidley Ck at Showground Weir #	5.16m falling	05:16 PM THU 13/01/11
Laidley Ck at Warrego Hwy *	4.43m steady	04:00 PM THU 13/01/11
Lockyer Ck at Glenore Grove #	7.12m falling	05:19 PM THU 13/01/11
Lockyer Ck at Rifle Range Rd *	12.54m falling	02:40 PM THU 13/01/11
Brisbane R at Savages Crossing *	14.5m falling	02:30 PM THU 13/01/11
Bremer R at Rosewood #	3.36m falling	05:17 PM THU 13/01/11
Bremer R at Walloon DERM *	4.03m falling	04:00 PM THU 13/01/11
Warrill Ck at Amberley DNR *	6.69m falling	02:40 PM THU 13/01/11
Bremer R at Ipswich #	14.2m falling	05:22 PM THU 13/01/11
Brisbane R at Moggill #	12.77m falling	05:20 PM THU 13/01/11
Brisbane R at Jindalee Br #	9.95m falling	05:14 PM THU 13/01/11
Brisbane R at City Gauge #	3.61m falling	05:24 PM THU 13/01/11

*automatic station

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**PRIORITY - FOR IMMEDIATE BROADCAST
FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER BELOW
WIVENHOE
INCLUDING BRISBANE CITY**

Issued at 10:06 PM on Thursday the 13th of January 2011
by the Bureau of Meteorology, Brisbane.

IPSWICH: Flood levels at Ipswich fell below 13 metres at 9pm Thursday. River levels will fall below the major flood level (11.7 metres) Friday morning.

BRISBANE: At 4am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) peaked at 4.46 metres. At 9pm Thursday the Brisbane City gauge was 3.06 metres and falling, and will continue to fall overnight Thursday.

The flood peak was below the 1974 flood peak of 5.45 metres as releases at Wivenhoe Dam were reduced quickly during Tuesday night.

LOCKYER CREEK:

Minor flooding in the lower Lockyer Creek will continue easing overnight Thursday.

WARRILL CREEK:

Minor to moderate flooding continues from Harrisville to Amberley, with flood levels falling steadily.

BREMER RIVER:

Major flood levels in the Bremer River at Ipswich continue to fall. The level at Ipswich passed through 13 metres at 9pm Thursday and will fall below major flood level (11.7 metres) Friday morning.

MIDDLE AND LOWER BRISBANE:

Moderate flooding continues along the Brisbane River from the Mount Crosby area to Brisbane City.

At Moggill, minor flood levels of around 11 metres are expected by 5am Friday.

The flood level at Jindalee at 9:30pm Thursday was 9 metres and continuing to fall with moderate flooding.

At 4am Thursday, the Brisbane City gauge (lower end of Edward Street and at Thornton Street) peaked at 4.46 metres. Flood levels of around 2.8 metres are expected with the high tide at 5am Friday.

Predicted River Heights/Flows:

Ipswich: Fall to around 12 metres by 5am Friday. Fall to about 9.5 metres on the 5pm Friday high tide.



Moggill: Fall to about 11 metres by 5am Friday. Fall to about 9.5 metres on the 5pm Friday high tide.

Jindalee: Fall to about 7 metres by 5am Friday. Fall to about 6 metres on the 5pm Friday high tide.

Brisbane City: Fall to about 2.8 metres with the 5am high tide on Friday. Fall below the moderate flood level (2.6 metres) by 5pm Friday with the high tide.

Next Issue:

The next warning will be issued at about 7am Friday.

Latest River Heights:

Tenthill Ck at Tenthill *	1.42m falling	08:00 PM THU 13/01/11
Laidley Ck at Showground Weir #	5.12m steady	08:52 PM THU 13/01/11
Laidley Ck at Warrego Hwy *	4.43m steady	08:00 PM THU 13/01/11
Lockyer Ck at Glenore Grove #	6.86m falling	09:29 PM THU 13/01/11
Lockyer Ck at Rifle Range Rd *	11.29m falling	08:40 PM THU 13/01/11
Brisbane R at Savages Crossing *	14.26m rising	08:30 PM THU 13/01/11
Bremer R at Rosewood #	3.26m falling	09:11 PM THU 13/01/11
Bremer R at Walloon DERM *	3.89m falling	08:00 PM THU 13/01/11
Warrill Ck at Amberley DNR *	6.36m falling	08:40 PM THU 13/01/11
Bremer R at Ipswich #	12.85m falling	09:40 PM THU 13/01/11
Brisbane R at Moggill #	11.62m falling	09:35 PM THU 13/01/11
Brisbane R at Jindalee Br #	8.95m falling	09:32 PM THU 13/01/11
Brisbane R at City Gauge #	3.01m falling	09:24 PM THU 13/01/11

*,# from automatic station

Warnings and River Height Bulletins are available at

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Appendix E

Report on the Meteorology of the rainfall associated with the December 2010 – January 2011 floods across Queensland

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Report on the meteorological conditions for the Queensland Floods: December 2010 – January 2011.

This Appendix is a supporting document for the Bureau of Meteorology Submission to the Commission of Inquiry. So that it stands as a self-contained document, in some parts it duplicates figures and discussion from the main submission

1. Overview of Queensland rainfall during December 2010 and January 2011

The state-wide flooding across Queensland during December 2010 and January 2011 consisted of a number of different types of rainfall and flooding events.

Event one: 28 November through 22 December 2010. The first three weeks of December were characterised by a continuous sequence of large-scale rainfall events occurring across the state. While no individual event in this period was unusual for the time of year, the cumulative effect was one of record rainfall for the month. This sequence of heavy December rain followed immediately after four prior months of record state-wide rainfall. Thus the catchments were already wet with high levels of flow. The added rainfall over the state led to many rivers having high flood levels.

Event Two: 23 December through 28 December 2010. This sequence of six days was one of record rainfall across Queensland. This was a large scale rainfall event with more than 200 mm falling over central eastern Queensland and extending up the coast as far as Cairns. Falls exceeded 400 mm in many parts of the State. The rains from 23 to 28 December resulted in exceptional flooding in many parts of central and southern Queensland with many rivers reaching record levels. Properties were inundated in at least 17 towns in Queensland and adjacent border areas of New South Wales, with the largest impacts in the towns of Theodore, Dalby, Chinchilla, Emerald, Bundaberg and Rockhampton. The most widespread intense rainfall was on the 27th, where a number of stations in the Carnarvon Range area set

all-time daily records with daily totals in excess of 200 mm, peaking at 273.6 mm at Carnarvon Station. Except for the southeast coastal fringe south of Maryborough, almost every river in Queensland that is south of the Tropic of Capricorn and east of Charleville and Longreach reached major flood level at some stage during the period from 26 November to 7 January, mostly between 23 December and 4 January.

Event Three: 10-12 January 2011. The flooding of the cities of Ipswich and Brisbane. The rainfall over these three days was responsible for the flooding of the cities of Ipswich and Brisbane. This is a different type of rainfall event with the major rain system having a scale of only several hundred kilometres, in this case over a concentrated region of southeastern Queensland. Despite the regional scales of the rainfall, it occurred in the location of the catchments feeding the Brisbane River.

Event Four: The flash floods in Toowoomba and the Lockyer Valley on 10 January 2011 (a subset of Event three). A flash flood is a small scale weather event, occurring on the scale of an individual thunderstorm complex. It is generally caused by heavy rainfall of the order of 50 to 200 mm occurring over a period of one to 2 hours from a single slow moving thunderstorm or by a series of thunderstorms affecting a single location. It occurs over regions with topography that channels the runoff from the rainfall into local creek and river systems, leading to flooding occurring with hours of the rain falling. Intense rainfall of 60 mm in one hour was measured at the Toowoomba automatic weather station.

2. Large scale meteorological reasons for the state-wide flooding

Heavy rainfall in prior months

A major contributor to the December and January floods across the state is the record rainfall that occurred through the preceding four months. This is illustrated in the sequence of maps shown in Figure 1. The figure shows for each individual month from August through December the area of the State receiving more than twice the long-term average rainfall for that calendar month. As can be seen large areas of state received double the normal rainfall in each of this sequence of five months. Of particular note is the month of September 2010 for which most of the state received more than four times the normal rainfall for that time of year.

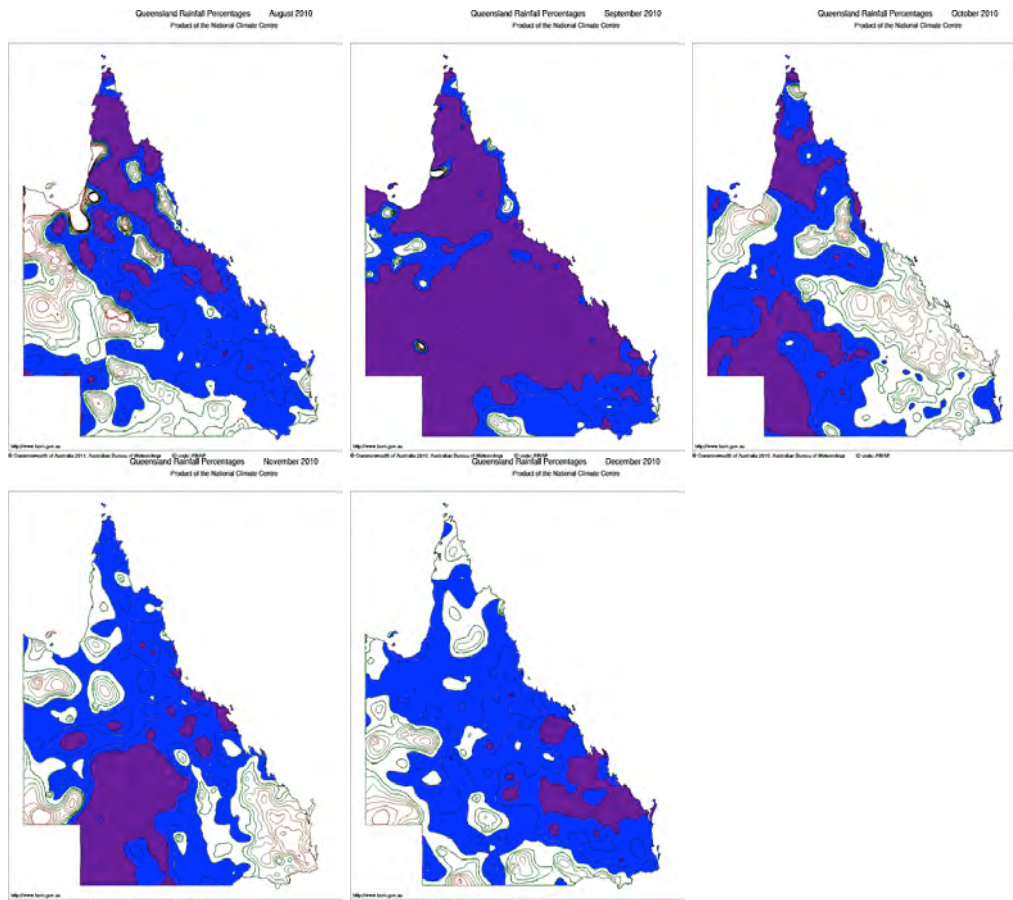


Figure 1. The region of the state of Queensland receiving more than twice its normal rainfall (blue) and more than four times it normal rainfall (purple) for that calendar month, for the sequence August through December 2010.

Record rainfalls occurred in many locations across the state during the period of major flooding, that is during December and January. Averaged across the state, it was the wettest December on record. Figure 2 shows a decile representation of the rainfall during December 2010 (left) and January 2011 (right). The December figure shows large regions of the state with highest on record rainfall and almost the entire state above the 8th decile, i.e., in the top 20% of all Decembers for rainfall totals. In contrast, the high decile rainfalls in January are mainly in the southwest and southeast corners of the state, signifying the different characters to the flooding events in the two months.

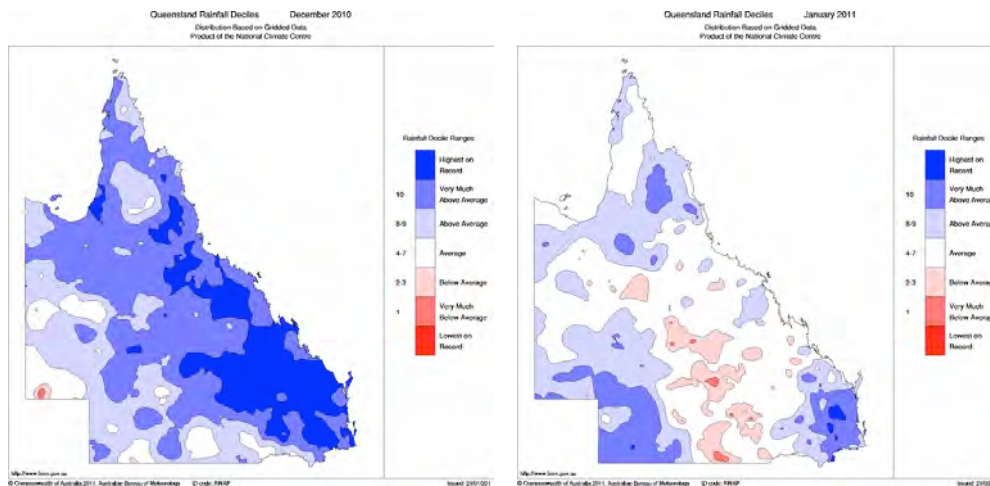


Figure 2. Queensland rainfall during December 2010 (left) and January 2011 (right) expressed as deciles. The light blue shading (deciles 8 – 10) signifies the region is in the upper 20 percent of rainfall for all Decembers (Januaries) in the historic record. The dark blue shading signifies a region where the rainfall was highest on record for that location for that calendar month.

The monsoon or wet season

Heavy rainfall is not unusual over Queensland in the summer months, as the state experiences a “monsoonal climate” with a summer wet season and winter dry season. The large rain accumulation that can occur in the wet season is shown in the left hand panel of Fig. 3 which is the 80th percentile December rainfall for Queensland, meaning the rain occurring for the top 20 percent of years at each location. As can be seen over the eastern and northern two thirds of the State, one in five Decembers have more than 100 mm monthly rainfall. This heavy climatological rainfall leads to regular seasonal flooding for many of the state’s rivers. This is shown in Fig. 4 which shows peak river height for the past six Januaries. The last panel for January 2011 shows the extent and severity of flooding for the 2011 event. The other 5 panels, however, make the point that major flooding across the state is part of the background climatology at this time of year.

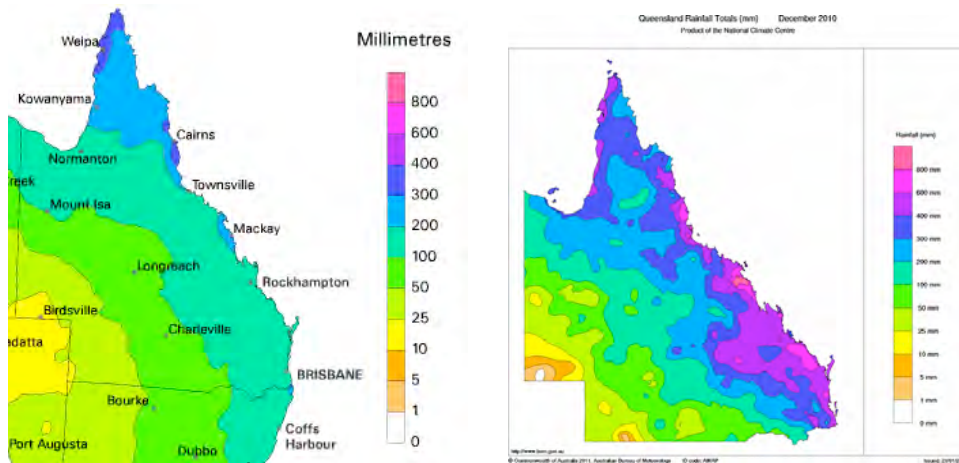


Figure 3. The 80th percentile December rainfall for Queensland (left) and the rainfall totals during December 2010 (right).

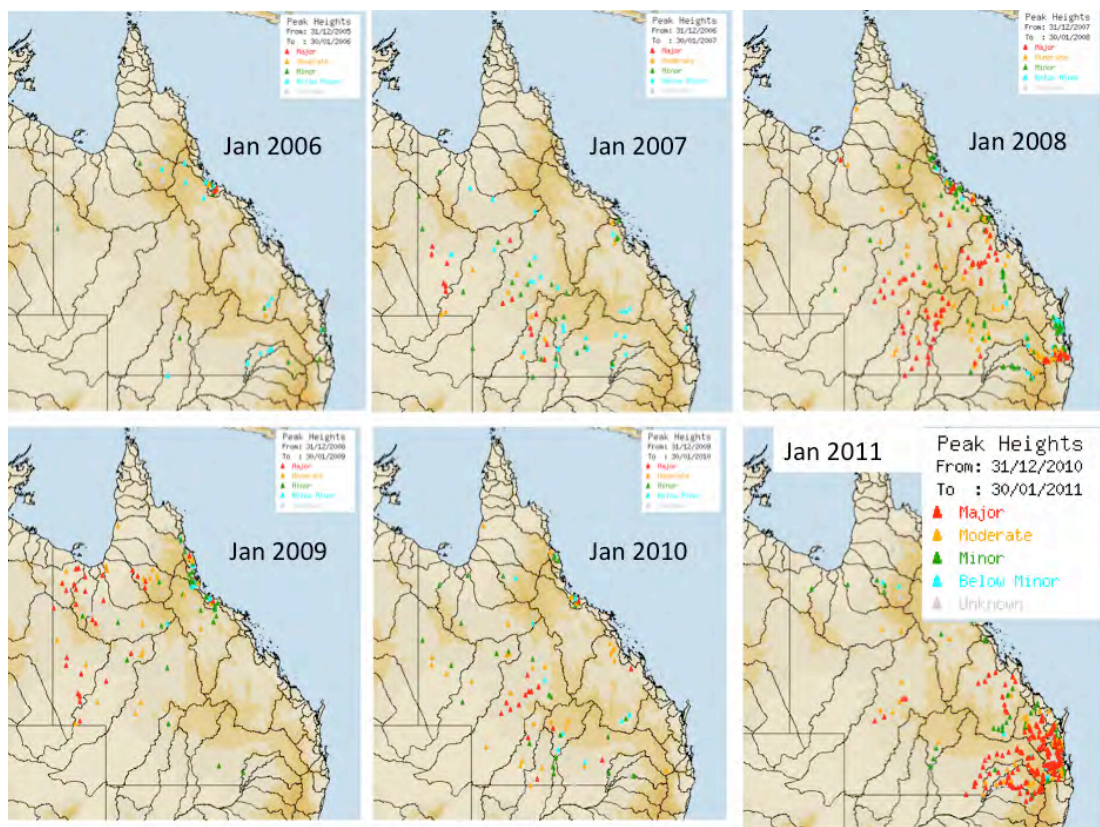


Figure 4. Peak river heights for the month of January for each of the past six years.

Northern Australian rainfall is influenced by the Australian monsoon. This is part of the global monsoon system whereby the inter-tropical convergence zone (ITCZ) or global belt of heavy equatorial rainfall is located over northern Australia. A characteristic feature of a monsoon is that it experiences “active” and “break” monsoon phases. When the monsoon is active, the circulation is characterised by a

monsoon trough, which is a region of low pressure with easterly trade winds to the south and monsoonal westerly winds to the northern (equatorward) side. Figure 5 depicts an active monsoon trough across northern Australia on 25 December 2010, a day of major large scale rainfall across Queensland during the 2010-11 statewide flooding event.

The strength of the north Australian monsoon is monitored through the strength of the westerly component of the 850 hPa wind at Darwin. By this measure there was an active monsoon from 20 December through all of January. Thus, the active monsoon contributed directly to events two and three.

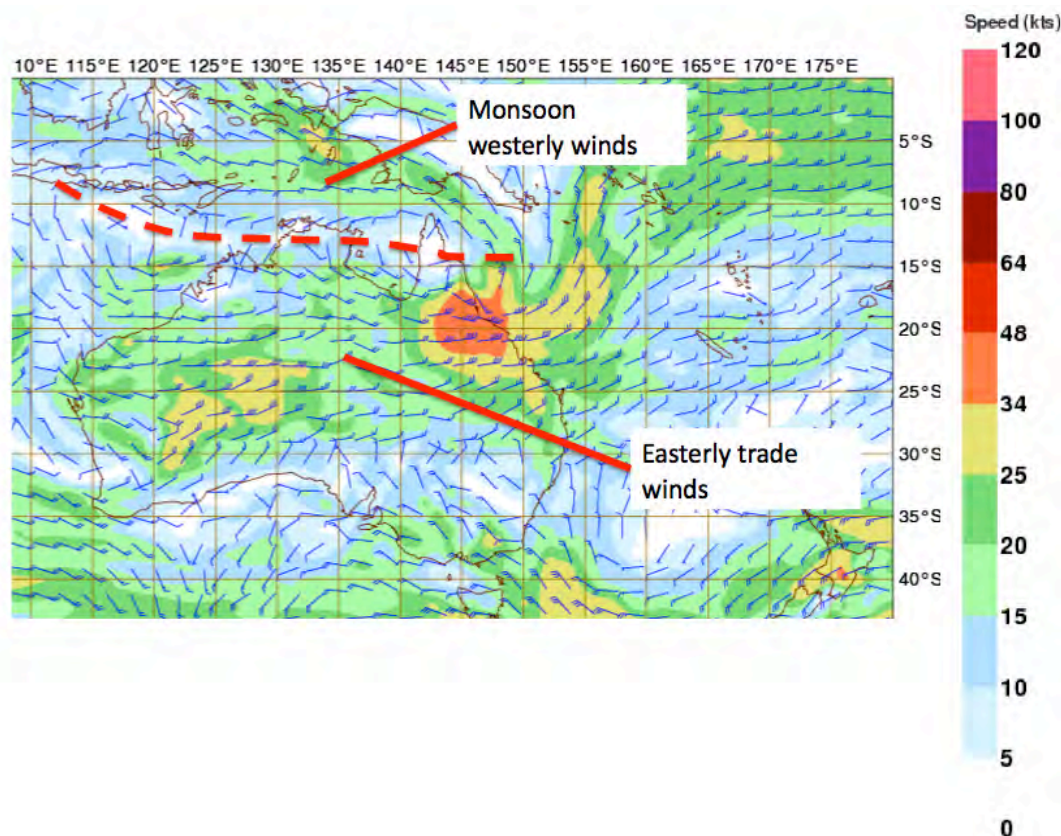


Figure 5 Wind flow at the 850 hPa pressure level (approximately 1.5 km above sea level) on 25 December 2010. The dashed line shows the location of the monsoon trough across Northern Australia, separating monsoon westerlies from trade-wind easterlies.

The La Niña event

When meteorological records occur, it is normal to inspect anomaly maps of the surface pressure and upper level winds to investigate the structure and large scale

patterns of the weather event. Figure 6 shows the anomaly from the long-term mean of mean sea level pressure during the period 15 December 2010 to 15 January 2011. As can be seen the period was characterised by a very large scale low pressure anomaly covering northern Australia, and extending across the Indian Ocean and northward through Indochina. A large region of anomalously high pressure is seen over the eastern Pacific Ocean. This large scale structure characterises a La Niña event, which is part of the global phenomenon known as El Niño Southern Oscillation, or ENSO. The ENSO phenomenon has two major phases: *El Niño* which normally brings drought to Australia, and *La Niña* which normally brings above normal rainfall to Australia.

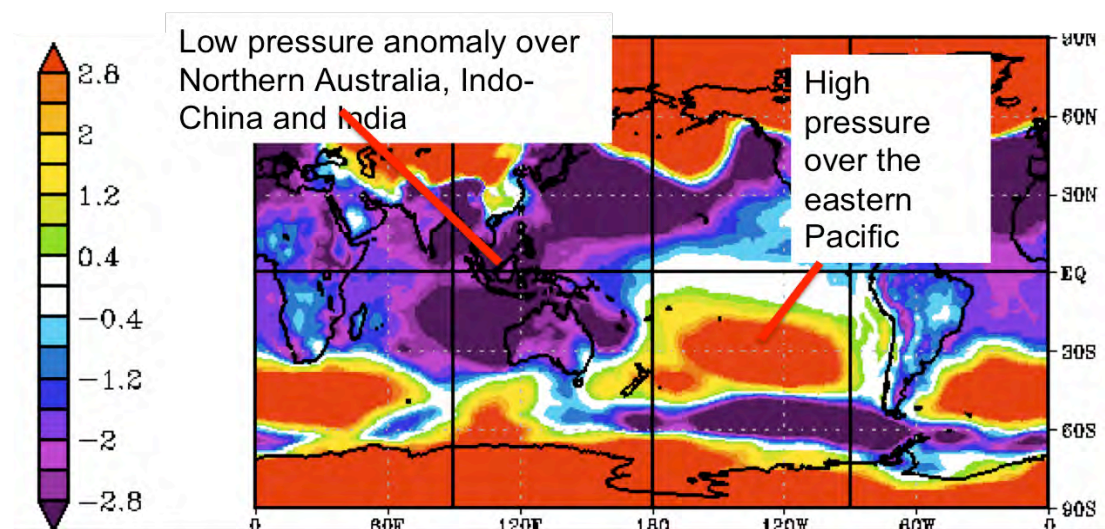


Figure 6. Anomalies from the long-term mean of mean sea level pressure over the 30 days from 17 December 2010 to 15 January 2011. The very large scale of the pressure anomalies represents the pressure pattern of a La Niña event.

The index used by the Bureau of Meteorology to monitor ENSO is the Southern Oscillation Index, or SOI. This is a normalised pressure difference that is proportional to the pressure anomaly at Tahiti minus the pressure anomaly at Darwin. Figure 7 shows the Southern Oscillation Index over the past four years. As can be seen the index is positive through all of the year 2010, indicating a La Niña. It is noted that the SOI is a slowly varying index, such that El Niño and La Niña events last of the order of 9 months or more. The fact that it varies so slowly combined with the large scale of the pressure patterns (Figure 6) is the primary reason it exerts a control over rainfall over a period of several months.

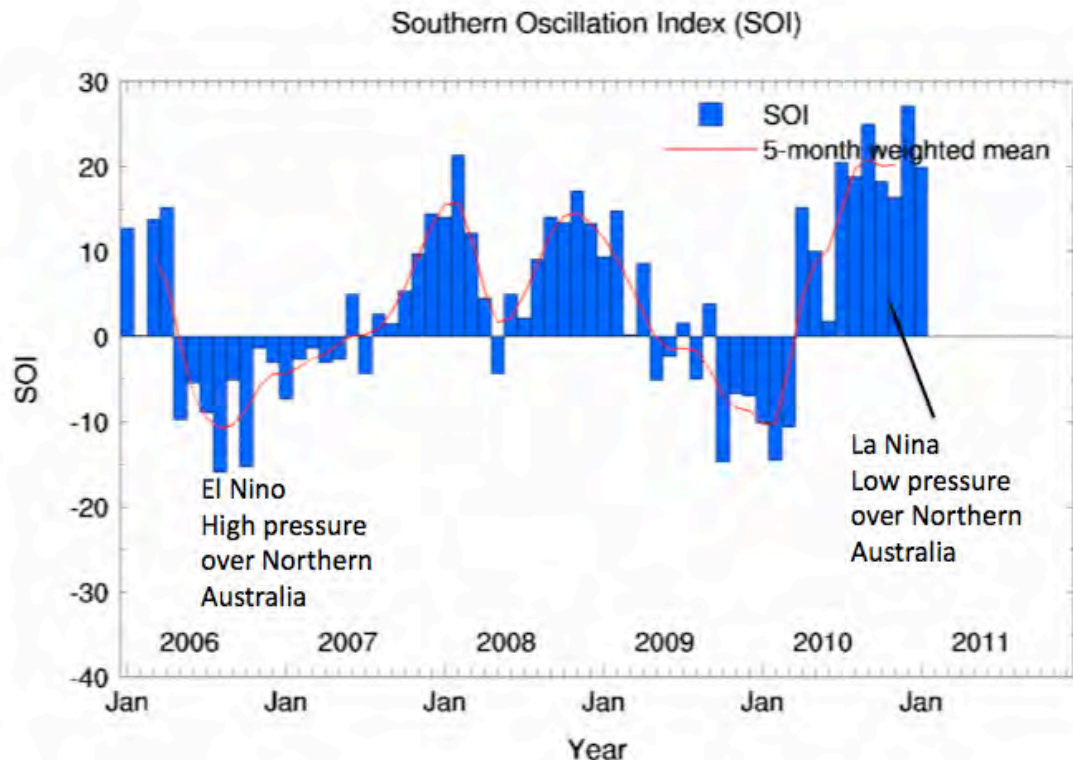


Figure 7. Time series of the Southern Oscillation Index (SOI) over recent years, showing the current La Niña.

It is well established that the ENSO phenomenon is the major control of Australian drought years and flood years, though other phenomena do play a part. Besides the current La Niña event, previous strong La Niña events, such as those of 1973/74 and 1955, have also been associated with widespread and severe flooding in eastern Australia. In particular the previous occasion the Brisbane River reached record flood levels was during the 1973/1974 La Niña.

Despite the fact ENSO exerts a large influence on Australian rainfall, the mechanisms through which it does the modulation are not completely understood. One physically intuitive mechanism is through ENSO's impact on sea surface temperature in the Australian region. Through the principle of thermodynamic equilibrium between the atmosphere and ocean, higher sea surface temperatures lead to higher water vapour contents in the vertical column of atmosphere above. Thus when sea surface temperatures in a region are high, weather systems in that region operate on an atmosphere containing more water vapour and so higher rainfalls are produced. The opposite is true for colder sea surface temperatures, leading to lower rainfall.

The Sea surface temperature anomaly pattern (departure from long term mean) for December 2010 is shown in Figure 8. The major feature is the anomaly pattern characteristic of the La Niña event. This consists of a large wedge-shaped region of cold sea surface temperature along the equator and in the eastern and central parts of the Pacific. To the west, marked by a red line, is a “boomerang-shaped” anomaly pattern of opposite sign. Thus in a El Niño, the boomerang region is cold bringing less rainfall to Australia. During a la Niña, as in December 2010, the sea surface temperatures in the boomerang region are above normal, and are associated with and possibly the major cause of the increased rainfall. It is noteworthy that the temperatures of the global oceans have been increasing steadily over recent decades in response to global warming. This effect is added to the characteristic warm anomaly associated with the La Niña. As a result of the superposition (global warming plus La Niña), sea surface temperatures surrounding Northern Australia in December 2010 were the highest for all years of record.

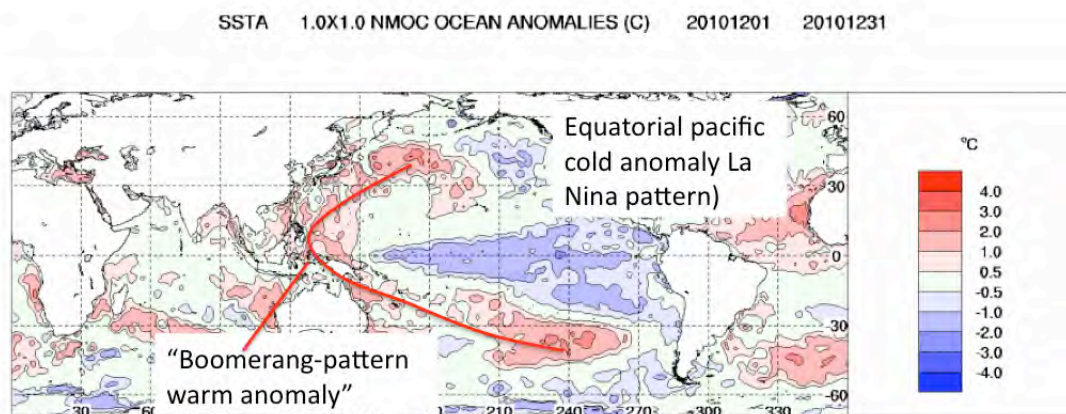


Figure 8. Global sea surface temperature anomalies for December 2010.

The Madden Julian Oscillation

The major global weather pattern influencing tropical rainfall on the time scale below that of the seasons is a phenomenon known as the Madden Julian Oscillation (MJO).

The MJO varies on a time scale of several weeks. Development in the Bureau of Meteorology by Wheeler and Hendon has led to the development of an index of the MJO which is now used globally to monitor its activity. When the MJO is in phases 4, 5 and 6 (out of a possible 8) it enhances the strength of the Australian monsoon and brings an increased probability of high rainfall across northern Australia. The

MJO spanned an active phase (4 and 5) during the period 3 to 14 December 2010. Thus upward motion in the ITCZ and monsoon trough during the first event (28 November through 22 December) was enhanced by the MJO. The active (phase 6) MJO from 9 January 2011 onwards may also have influenced event 3, the Brisbane flood event.

3. Types of weather system present during the December-January rain events

For large scale heavy rainfall to occur in the Australian tropics, two fundamental ingredients are required. The first is a source of high moisture content air. This requires weather systems or flow patterns that bring in moist air from the equatorial oceans over the region. The second ingredient is a source of upward motion to cause condensation. This brought about by the structure or dynamics of the weather system.

The major weather systems affecting Queensland during December 2010 and January 2011 will be described in the following sections. The discussion is easier if first we establish a terminology by defining the major weather systems involved. The major role of these weather systems is usually to provide the second ingredient, a source of upward motion over a region of the atmosphere.

Upper Level Troughs

The most common source of vertical motion is an upper level trough in the circumpolar westerlies between 500 hPa and 200 hPa, that is, between 5 km and 10 km above the earth's surface. The upper level circumpolar westerlies are concentrated in the two jet streams circling the globe: the polar jet stream and the subtropical jet stream. Undulations on this jet stream flow are referred to as Rossby waves. Rossby waves have a characteristic vertical motion field whereby there is upward motion on the eastern half of a trough and downward motion on the western half (Figure 9). Over north eastern Australia during the summer wet season, Rossby waves provide an important source of upward motion. In addition, southward flow on the eastern side of the trough brings moist tropical air from the north over the Australian landmass, thus providing a source of moisture for the rain systems.

An example of a westerly trough with the rainfall occurring on its eastern side is shown in Figure 10, which is one of the sequence of rainfall events forming event-one of the December floods.

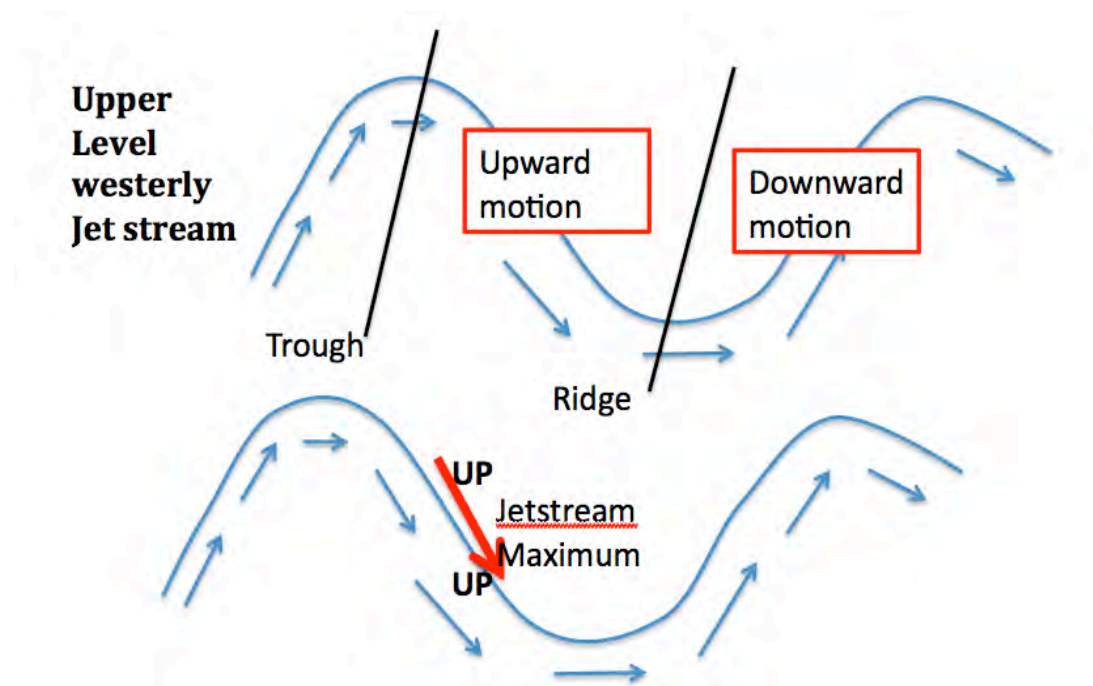


Figure 9. Schematic representation of the flow field in a Rossby wave on the upper level jet stream flow. The black lines represent a trough and a ridge of the wave. As depicted in the upper panel, there is upward atmospheric flow on the eastern side of a westerly trough in the Rossby wave. The lower panel schematically includes a region of localised strong winds or a jet stream maximum. As depicted the upward vertical motion is strongly enhanced in the left entrance and right exit of a jet stream core.

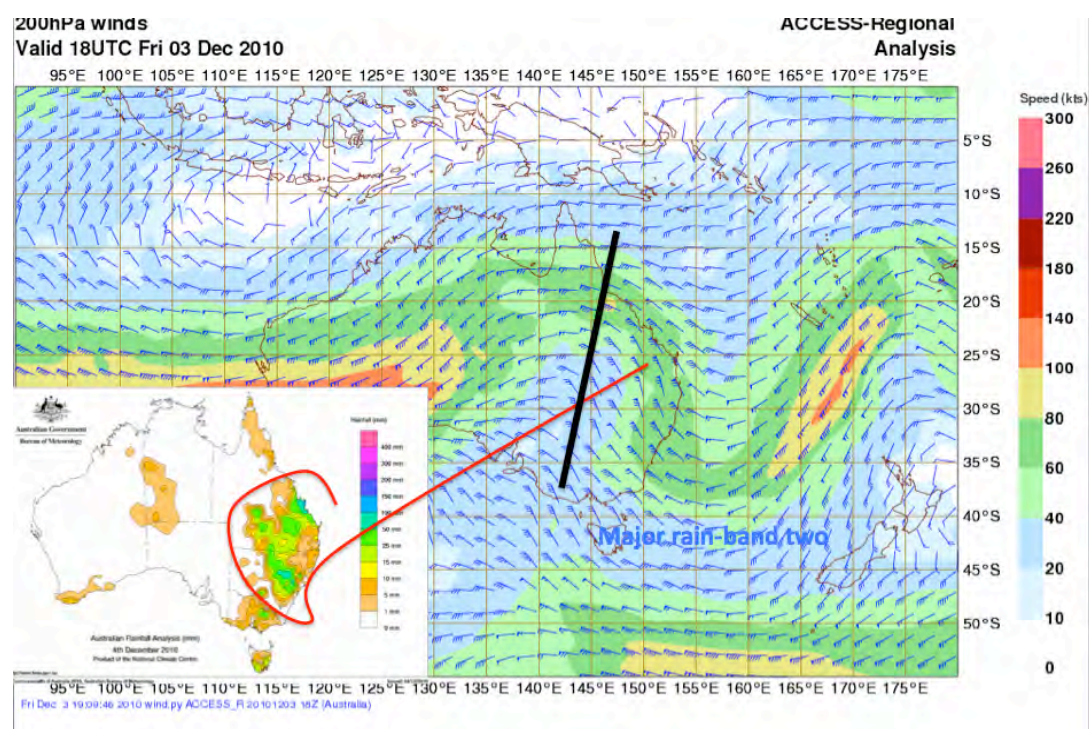


Figure 10. The 200 hPa wind field on the evening of 3 December 2010 showing the presence of an upper level westerly trough, marked by a black line. The rainfall for that day is inserted showing that it occurs in the region of upward motion east of the trough axis.

Monsoon surge

As described above, Northern Australia is influenced by the Australian monsoon. This is structured around the monsoon trough with easterly trade winds to the south and monsoonal westerly winds to the northern or equatorward side. It has been shown in a number of Australian studies by both the Bureau of Meteorology and the CSIRO that large-scale rainfall in the monsoon responds to increases in the monsoon westerly flow. Thus the 850 hPa wind at Darwin is the most common index of monsoon strength. There are a number of phenomena that can cause monsoon surges, or increases in the westerly current over a period of several days to a week. These include surges north of the equator in the China Sea and passages of eastward moving large scale equatorial convective systems associated with the MJO.

Monsoon lows or rainfall depression

A monsoon low or tropical rainfall depression is a weather system of horizontal scale approximately 500 to 1000 km and so is of a similar size to a tropical cyclone. In many cases a tropical cyclone undergoes a transition to a monsoon low after it makes landfall, though occasionally the opposite occurs. Monsoon lows have a similar structure to tropical cyclones. They are confined to the troposphere, and they have a so called “warm-core” at upper levels whereby the central region at the 300 hPa level of the upper troposphere can be a degree or more warmer than surrounding regions at distances 400 km or so away. The major difference is that a monsoon low does not have an eye wall nor a central core of extreme wind speeds near the surface. Though infrequent, monsoon lows are major rainfall producers for northern Australia. December 2010 featured a monsoon low that travelled along the coastline of Western Australia in mid December. This system can be seen off the Western Australia coast on the mean sea level pressure charts for 16 and 17 December shown in Figure 11. This monsoon low caused a one day rainfall total of 207 mm at the WA coastal town of Carnarvon, a location whose median annual rainfall is close to the same amount.

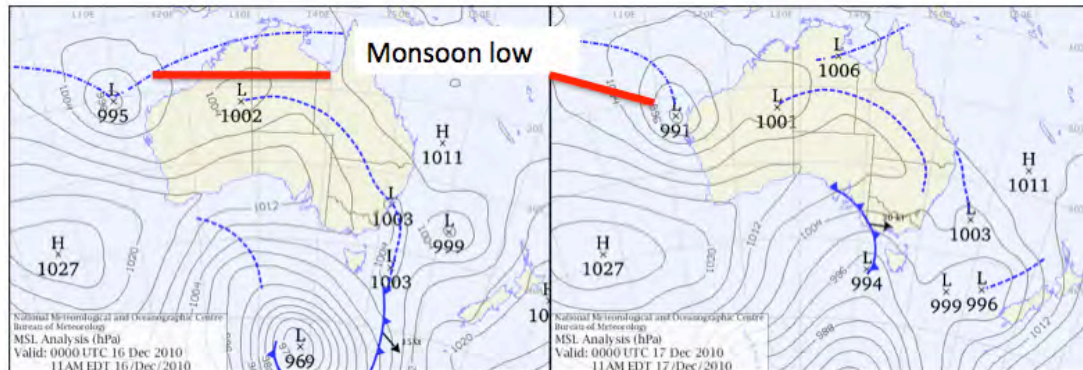


Figure 11. Mean sea level analyses for 16 and 17 December 2010 showing a monsoon low off the coast of Western Australia

Inland trough

A weather system often responsible for widespread rainfall across Queensland is the inland trough. An example from the 2010 rain event is shown in Figure 12, where the inland trough is depicted by the blue dashed line across Queensland and extending westward to link with the heat trough over Western Australia. The inland trough is partly a climatological feature, and so is common on daily

weather maps over the summer months. Its cause is partly “heat-low” and as such is a response to the inland warming of the continent. It is also partly a dynamical lee wave response to the flow of easterly trade winds across the mountain range along the coastal strip.

In terms of triggering rainfall, the inland trough is a source of convergence or “inflow”. Thus it is a preferred region for the development of thunderstorms during the afternoon in response to surface heating. The strength and location of the trough respond to surrounding weather systems. In the example shown the trough extends across the entire state in response to the passage of a frontal system south of the continent. The state-wide scale of the inland trough has the consequence that convergence or upward motion near the surface also extends across the state. Thus when afternoon convection or thunderstorms develop, they do so on a state-wide scale and so bring heavy rain cross the state.

During the rain events of December 2010, the individual inland troughs formed and lasted over a period of a week or more. The troughs provided a source of thunderstorms and low level convergence. When upper level troughs moved across they provided vertical motion at upper levels, which linked with the thunderstorm development in the inland trough. This phase-locking of upper and lower troposphere disturbances produced major rain systems.

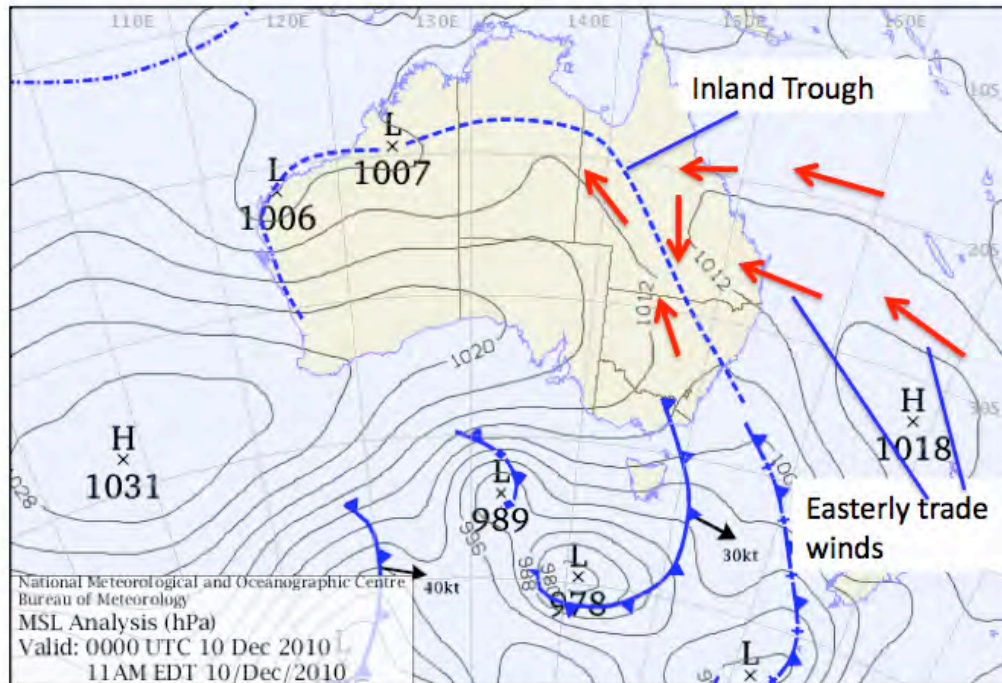


Figure 12. The mean sea level pattern for 9 am 10 Dec 2010, showing an example of an inland trough. The red arrows denote the direction of wind flow near the surface.

Easterly trade winds, associated with a ridge in the Tasman

Globally the “trade wind flow” is the zone of easterly winds directed towards the tropics across the major oceans of the globe. The persistence and ocean-wide scale of these wind systems made them important for trade in the era of sailing vessels. Across Australia, the trade wind flow occurs during the summer in the zone of easterly flow equatorward of the subtropical high pressure system. The easterly trades are marked in Figure 5 where an example of the monsoon trough is shown and in Figure 12 where an inland trough is shown.

As discussed earlier, the role of weather systems during the wet season is to provide a source of moisture and to provide uplift. The moisture source for the majority of rainfall events across Queensland comes from the east in the trade winds. The strength and orientation of the trade flow responds to surrounding weather systems, including monsoon activity and the passage of fronts to the south. The High pressure system in the Tasman Sea in Figure 12 is a climatological feature during

the Summer months. When this High is present, a moist trade wind flow extends along the entire Queensland coastline.

4. The meteorology of the major rainfall events

4.1. Event One: 28 November to 22 December 2010. A sequence of large scale rainfall events occurring across the state over several weeks

As discussed in the Introduction and shown in Figure 13 this three and a half week period was characterised by an almost continuous sequence of separate rain systems across the State. Using the weather system terminology described above, the events of the first two weeks (from 28 November 2010 onwards) involved an inland trough. In each case the low-level instability triggering thunderstorms in the trough was complemented by the passage of upper level troughs. Thus the major forcing in this sequence was the passage of upper level troughs across the state. In the last week of the sequence (from 16 December 2010 onwards), monsoon westerlies extended across the northern half of the state. Large scale rainfall occurred in the monsoon trough, again supported by the passage of an upper-level trough.

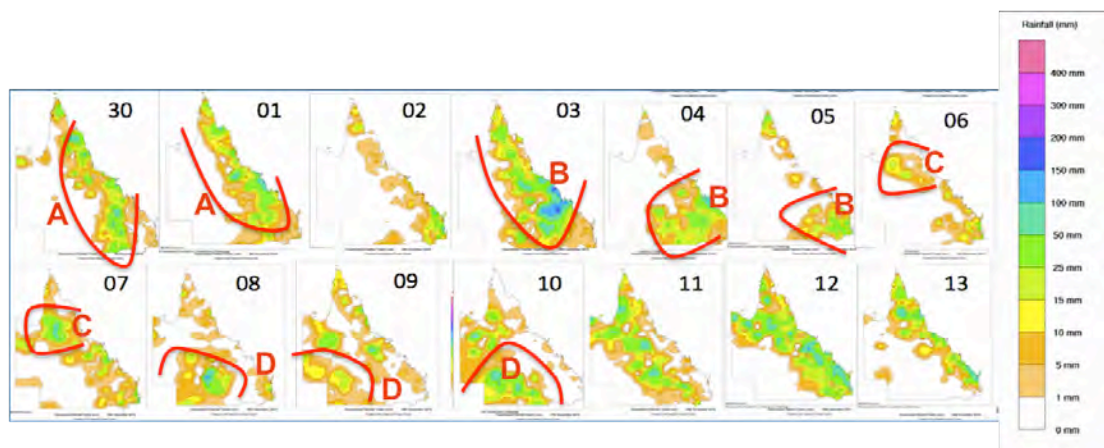


Figure 13. Map of daily rainfall for the 24 hours ending at 9am 30 November 2010, 9am 1 December, through to 9am 13 December 2010. The maps show the character of the rain during the first weeks of December with widespread rainfall on most days, and a number of separate rain events (A, B, C, etc.), each lasting several days.

Going over the event in finer detail, from 28 November into December, a surface inland-trough lay through the western interior and an upper trough approached the state from the west. Moisture laden northeasterly winds extending to the inland trough and an unstable upper atmosphere resulted in showers, and thunderstorms and rain areas developed across most of the state. Widespread rain areas persisted for the next two weeks, as a series of upper troughs moved through, enhancing existing flooding or triggering new flooding in many river systems. Two of the heaviest daily falls during this period were at Escott Station in the southern Gulf of Carpentaria where 266 mm was recorded on the 11th from a line of slow moving storms and at Mount Charlton with 228 mm on the 3rd.

On approximately 14 December, a monsoon low developed in the Indian Ocean west of Australia. As the low moved inland to Western Australia the monsoon westerlies extended across northern Australia. While this occurred a stream of upper level moisture spread across the country into Queensland; and an east-west oriented inland trough extended into Queensland. This situation is shown in Figure 14. Severe convective storms produced large hail, damaging wind and torrential rain in the southeast during the 15 and 18 December 2010.

An upper level trough moved across the state during 18 to 20 December 2010 producing wide spread rainfall in the east-west extending inland trough. Over the 48 hours ending 9am 20 December 2010, much of southern Queensland received a further 50 to 100 mm to add to the rainfall received in the preceding 3 weeks.

Following this extended period of wet weather the following flood warnings were current for the 20 December: Barcoo, Bulloo, Don, Condamine, Balonne, Moonie, Paroo, Warrego, the Fitzroy River basin, Brisbane River above Wivenhoe Dam, the Burnett Catchment, Mary River and Cooper Creek, Laidley and Warril Creeks and the Bremer River.

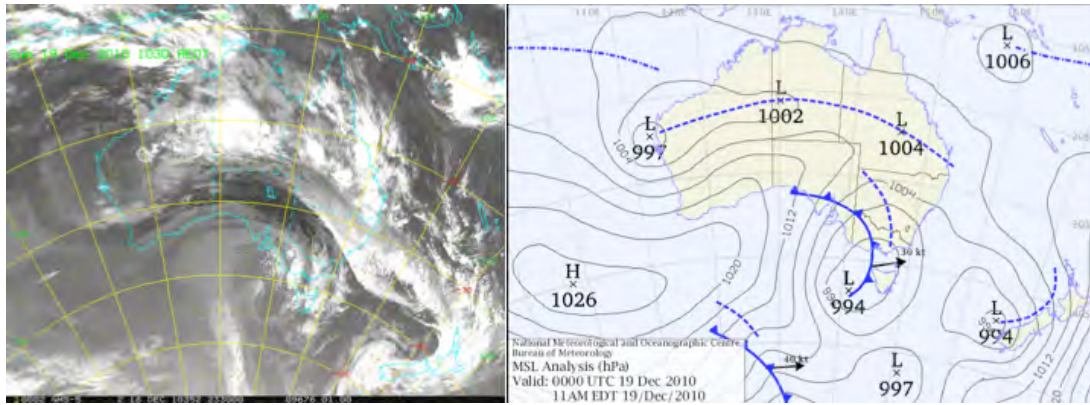


Figure 14 Satellite image and mean sea level analysis for the morning of 19 December 2010. The satellite image shows a stream of moisture in the inland trough across the northern half of the continent. The trough itself can be seen on the pressure analysis as the series of Low pressure centres along the west-east extending dashed blue line.

4.2. Event Two: 23 – 28 December 2010. A large scale rainfall event bringing record rains across the state

The meteorology of this record rainfall event began with a stream of easterly trade wind flow bringing moist air across the state. Widespread rainfall occurred on the 22 and 23 of December 2010 as an inland trough developed ahead of an upper level westerly trough crossing the state. This setup is shown in the four panels of Figure 15.

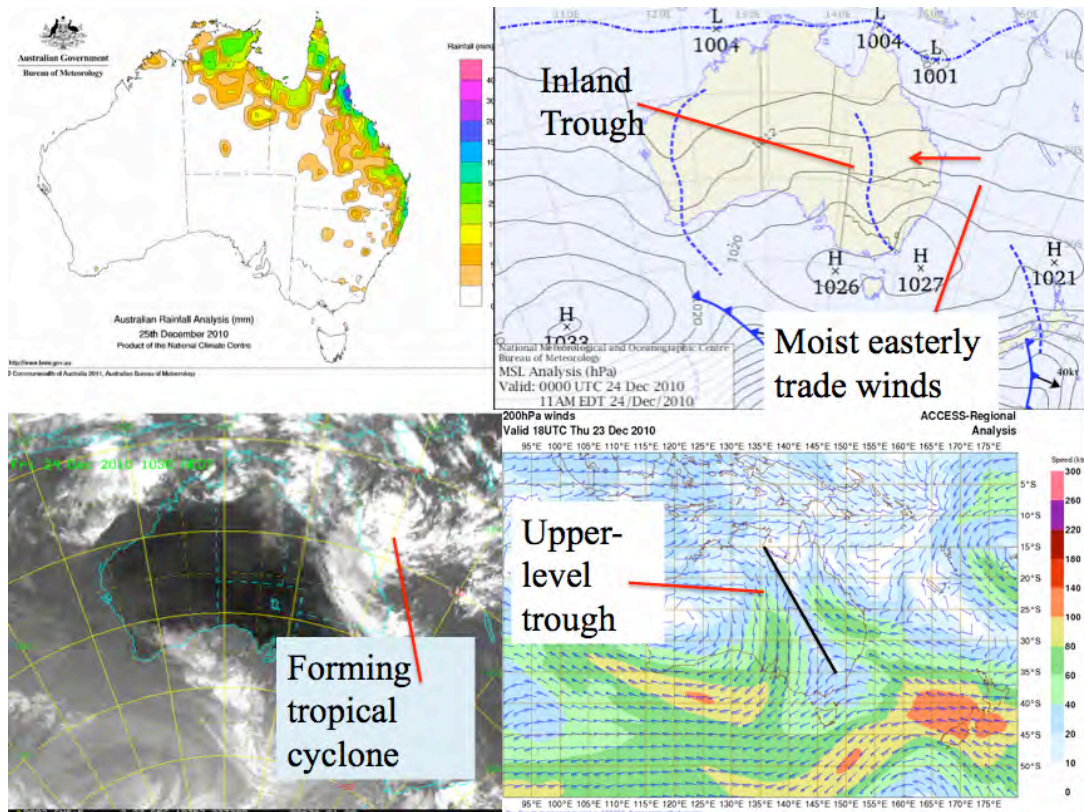


Figure 15. The atmospheric structure early in the six-day record rainfall sequence on 23 to 28 December. The structure here is for 23 December. The upper left panel is 24 hour rainfall accumulated to 9 am on 24 December. Top right is the mean sea level analysis for the morning of 23 December. Bottom left is the infrared satellite image. Bottom right is the upper level (200hPa) flow.

The east-west dashed line extending across the top of the mean sea level pressure map is the monsoon trough. During this sequence Tropical Cyclone Tasha formed within the monsoon trough off the eastern coastline. The cyclone moved westward and made landfall south of Cairns on the morning of 25 December, causing heavy rainfall along the coastline. Tasha then moved inland and transformed into a large scale monsoon low, bringing widespread rainfall across the region over the subsequent 48 hours.

On the next day, 26 December, a westerly trough from the jet stream south of Australia moved northward and interacted with the monsoon depression. Through this interaction, a deep Rossby wave trough formed over the continent with moist tropical air from the monsoon low on the eastern side of the trough. This process is shown schematically in Figure 16. A consequence of this interaction is that the eastern end of the monsoon trough was advected southwards in the flow field east of the westerly trough. Thus by the 27 December the monsoon trough was distorted

and had a north-south orientation across Queensland. This is shown in the 850 hPa flow pattern in the left side of Figure 17. The right side shows the temperature field at the same level 850 hPa. It is noteworthy that the upper level trough had brought cold air northward across the centre of the continent.

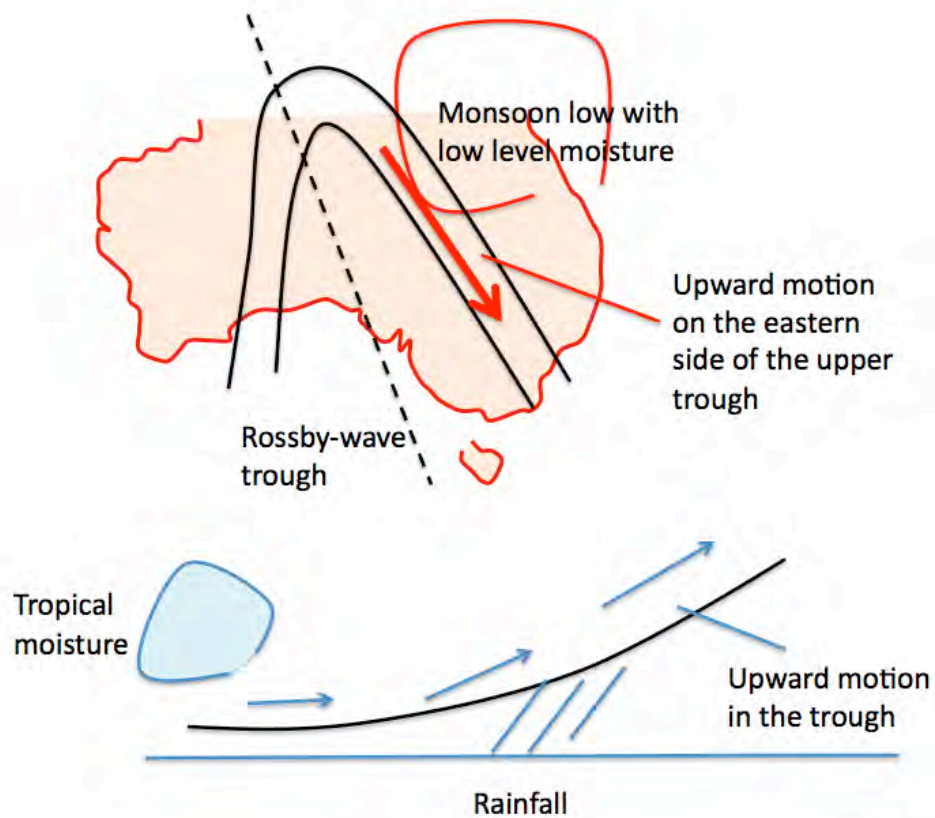


Figure 16. Schematic representation of the interaction between the monsoon low over Northern Australia and the upper level westerly trough occurring on 26 December 2010.

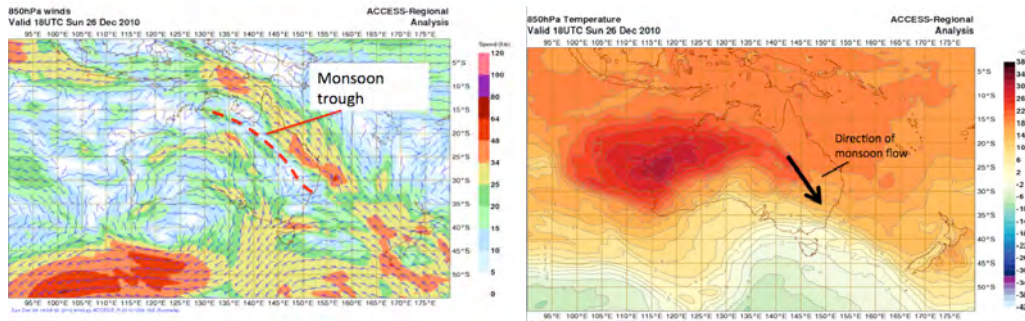


Figure 17. The flow at 850 hPa on the evening of 26 December 2010, the day of record large scale rainfall across Queensland. The left-hand figure shows the wind field. The red dashed line is the location of the monsoon trough. The right panel is temperature. The large arrow represents the direction of the westerly monsoon flow that has been diverted towards the south.

The arrow on the temperature chart shows the direction of the monsoon flow east of this trough, in the direction of warm to cold. Atmospheric flow tends to be “isentropic” meaning it flows along surfaces of constant potential temperature. When the air is flowing from cold to warm as in the figure, to remain at the same “isentropic temperature” it has to move to a lower pressure, that means it moves upwards in the atmosphere. Thus the configuration on the 27 December had the monsoon trough extending across the state, had large areas of moist air associated with the monsoon low, and had a large region of upward motion associated with the large scale flow from warm regions to cold regions. These ingredients led to the record rainfalls across the state on 26-26 of December.

4.3 Event Three: The rainfall over the Brisbane Catchment from 10-12 January 2011

As discussed above, and shown in Figure 18, the rain leading to the Brisbane floods occurred over three days and was associated with heavy rain across a scale of several hundred kilometres. Such a rainfall pattern along the east coast is a classical east coast rainfall situation. It always occurs at the northern edge of the easterly trade wind belt and is almost always associated with a westerly trough protruding up

over the tropics and with a jet streak giving enhanced upward motion, with either an equatorial jet entrance or a polar jet exit (as illustrated in Figure 9).

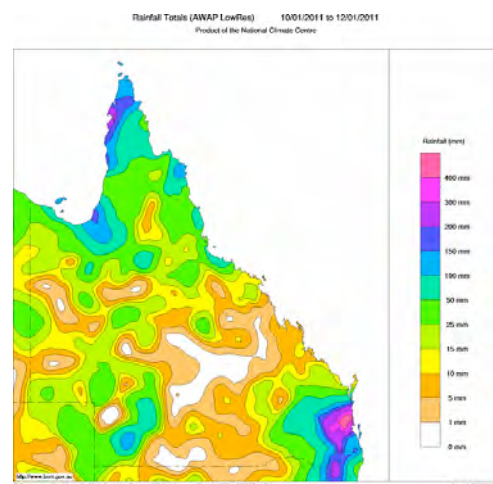


Figure 18. Rainfall over the three days leading to the flooding of the city of Brisbane and to the Toowoomba and Lockyer Valley flash floods ending 9 am, 12 January 2011.

The 24 hour rainfall for this event as simulated by the Bureau of Meteorology Numerical Weather Prediction (NWP) model ACCESS is shown in Figure 19. This shows the nature of the rainfall event and its location on the coastline, eastward of the Dividing Range and at the northern edge of the trade winds.

The upper level flow, however, is quite different to the normal configuration. The flow at 200 hPa is shown in the left panel of Figure 20. Rather than a westerly trough there is a separate low pressure system, known as a cut-off low. This low is not a tropical type low. Rather it is what is known as a baroclinic upper level disturbance, which is characterised by stratospheric air within the core of the low. Such systems develop from a process termed “Rossby–wave breaking” of the jet stream flow along the circumpolar westerly jet streams. The right hand side of Figure 20 shows a map of relative humidity at the 200 hPa level (10 km above the surface) as the cutoff low was developing late on 8 January 2011. The brown shading represents very dry air, and at this level represents air from the stratosphere. The wave-breaking action producing a discrete baroclinic cutoff low curling around into the tropics can be seen along the Queensland coastline.

Thus the key meteorology of the event is a classical easterly trade wind event, but with the additional uplift provided by an upper level low resulting from higher latitude global dynamics. The heavy rainfall can thus be considered to result from an

interaction between the tropical moist air in the trade wind system and a higher latitude system extruding into the tropics to tap this moisture source.

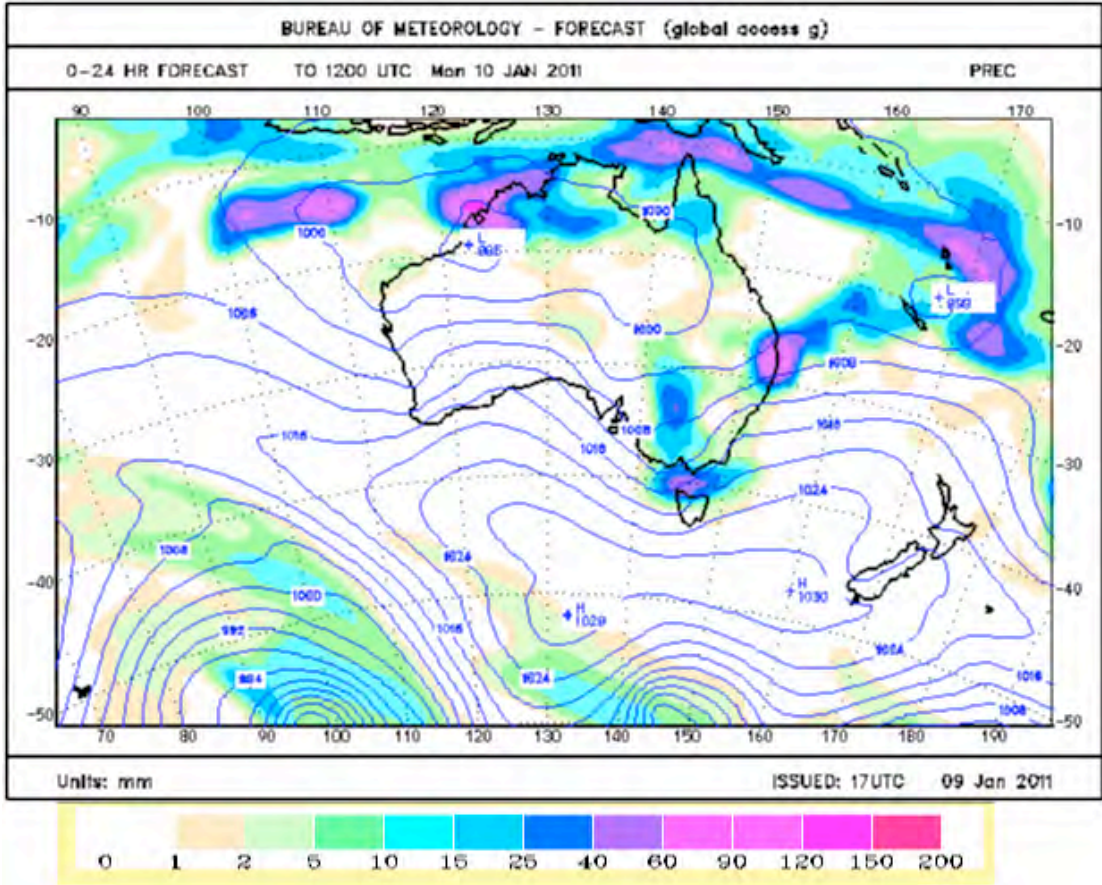


Figure 19. A model simulation showing the 24 hour rainfall on 10 January overlaid on the mean sea level pressure analysis.

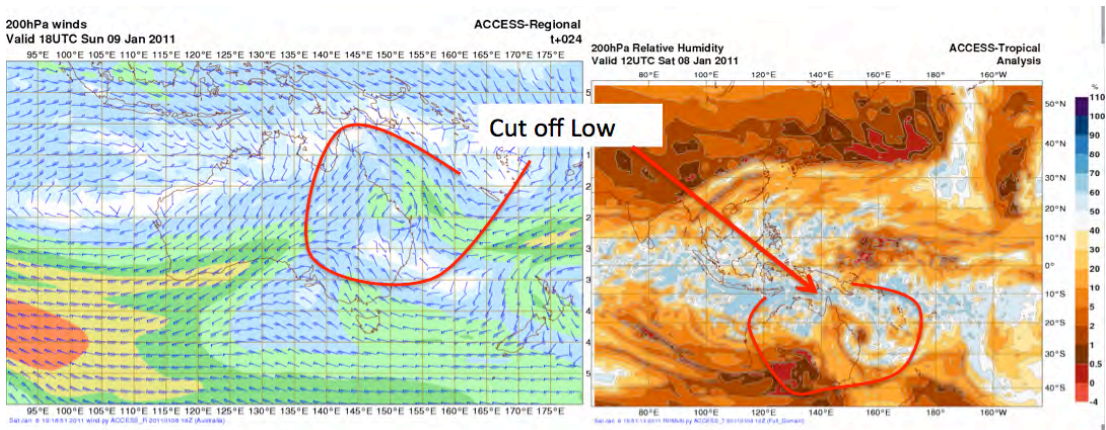


Figure 20. Upper level flow on 9 January showing the upper level cutoff low that provided vertical motion associated with the rainfall at the time of Brisbane flood event. The left hand panel shows the wind at 200 hPa, with the low pressure system circled. The right hand panel is a larger-scale view of the relative humidity at 200hPa. The brown shading represents very dry air, and so is associated with stratospheric air at this level surrounding the poles at top and bottom of the figure. The cut-off low can be seen to form from a “wave-breaking” at the equatorward edge of this zone of stratospheric air.

4.4 Event four: The meteorology of the Toowoomba and Lockyer Valley flash flood event

The flash flooding events at Toowoomba and in the Lockyer Valley occurred during the afternoon of 10 January, approximately between 1 and 6 pm local time (0300 and 0700 Universal time, UTC). As discussed in the introductory section, a flash flood event is generally associated with very heavy rainfall over a small area and is usually caused by a localised complex of intense thunderstorm complex. The flooding occurs within a time frame of from 30 minutes to several hours after the rainfall.

The large scale environment for the event is that described in Section 4.3 for the Brisbane floods, as the flash flood occurred during the same sequence. An infrared satellite image and a mean sea level pressure analysis for the morning of 10 January are shown in Figure 21. The satellite image shows a discrete complex of cloud and rain in the location of the rainfall shown in Figure 19. As discussed earlier the mean sea level pattern shows that this location is within the moist easterly trade wind flow.

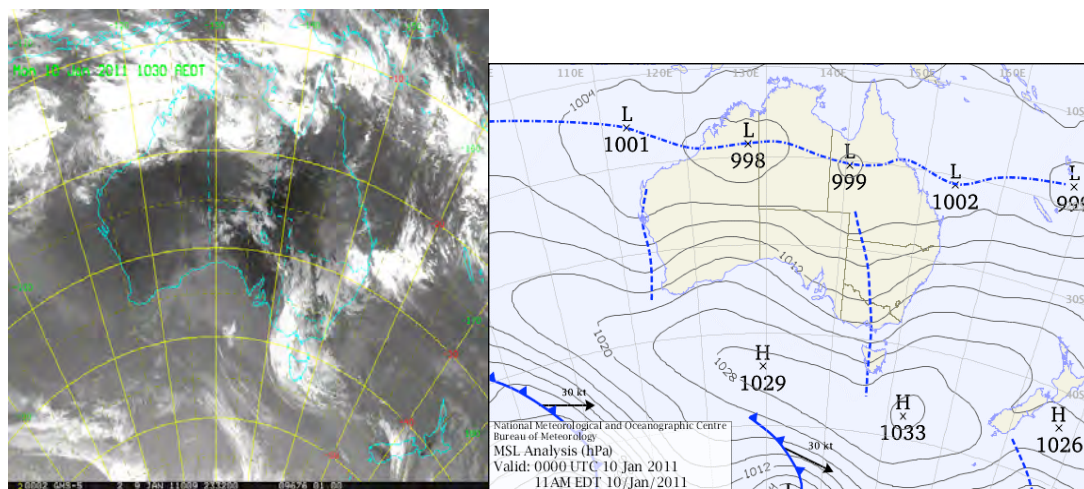


Figure 21. An infrared satellite image (left) and mean sea level pressure analysis (right) for the morning of 10 January 2011, the day of the Toowoomba and Lockyer Valley flash flood event.

On 10 January 2011 the storms that later combined to cause the significant flash flooding in the Toowoomba and Lockyer Valley region had their origins before 10:00am as separate storm cells just north of Maroochydore and near Redcliffe. The storms moved towards the southwest and west-southwest respectively. The storms later merged east of Lake Wivenhoe and increased in size and intensity as they approached the steeply rising topography while also slowing in their overall progress to the southwest.

At this point the motion of the storms became dominated by the location of the strongest updraft zone rather than simply steering with the average upper winds. The ranges played a significant role in controlling the development of the storms and in slowing the subsequent propagation to the southwest. The strongest part of the storm updraft was likely forming based on a complex interaction between the topography and the low level winds.

At around 10:40am, the area covered by the most intense rainfall started growing rapidly. It is inferred that this was due to the interaction of the two cells mentioned previously and the close proximity of the ranges. It was from around this time that rainfall rates increased at the Redbank Creek gauge with over 80mm of rain falling in the following 60 minutes.

Analysis of the radar data suggests that the rainfall intensity and apparent movement of the storm was not uniform before 1:00pm and the storm was continually undergoing local scale development which affected the area of severe weather.

Some of the most intense rainfall rates are likely to have been experienced along a line stretching to the southwest of Esk. At 12:30pm, very intense rainfall was falling to the northeast of Murphy's Creek

Based on rain gauge information, the heavy rainfall in Toowoomba fell between just prior to 1:00pm until around 2:00pm. The storm intensified further following interaction with the previously mentioned wind change boundary then relatively rapidly decayed once it moved off the topography and lost the additional uplift provided by the boundary.



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Appendix F

Table and map of flood affected towns and Local Government Areas

December 2010 to January 2011

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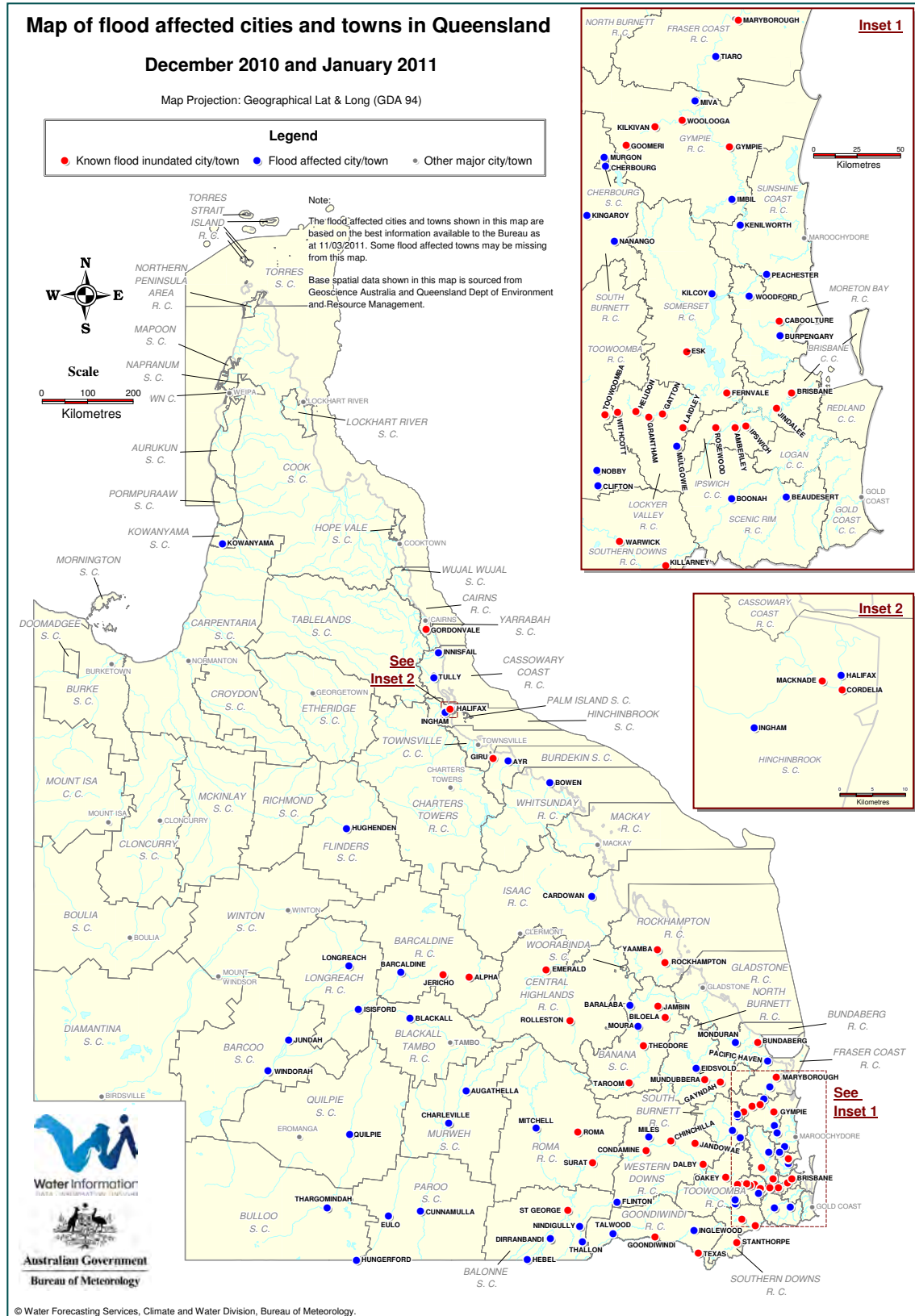
Appendix F.1: Flood affected towns with Local Government Areas

LOCAL GOVERNMENT AREA	CATCHMENT OR RIVER	TOWN NAME	INUNDATION OF PROPERTIES
Balonne Shire	Balonne Minor River	Dirranbandi	
	Bokhara River	Hebel	
	Balonne River	St George	Yes
	Moonie River	Nindigully	
	Moonie River	Thallon	
Banana Shire	Dawson River	Baralaba	
	Dawson River	Biloela	Yes
	Don River	Jambin	Yes
	Dawson River	Moura	
	Dawson River	Taroom	Yes
	Dawson River	Theodore	Yes
Barcaldine Regional	Barcoo River	Barcaldine	
	Jordan River	Jericho	Yes
	Alpha Creek	Alpha	Yes
Barcoo Shire	Barcoo River	Jundah	
	Cooper Creek	Windorah	
Blackall Tambo Regional	Barcoo River	Blackall	
Brisbane City	Brisbane River	Brisbane	Yes
	Brisbane River	Jindalee	Yes
Bulloo Shire	Bulloo River	Thargomindah	
	Paroo River	Hungerford	
Bundaberg Regional	Burnett River	Bundaberg	Yes
	Kolan River	Monduran	
Burdekin Shire	Burdekin River	Ayr	
	Haughton River	Giru	Yes
Cairns Regional	Mulgrave River	Gordonvale	Yes
Cassowary Coast Regional	Johnstone River	Innisfail	
	Tully River	Euramo	
Central Highlands Regional	Nogoa River	Emerald	Yes
	Comet River	Rolleston	Yes
Cherbourg Shire	Barker Creek	Cherbourg	
Flinders Shire	Flinders River	Hughenden	
Fraser Coast Regional	Mary River	Maryborough	Yes
	Mary River	Tiaro	
	Cherwell River	Pacific Haven	
Goondiwindi Regional	Macintyre River	Goondiwindi	Yes
	Macintyre Brook	Inglewood	
	Weir River	Talwood	
	Dumaresq River	Texas	Yes

LOCAL GOVERNMENT AREA	CATCHMENT OR RIVER	TOWN NAME	INUNDATION OF PROPERTIES
Gympie Regional	Boonara Creek	Goomeri	Yes
	Mary River	Gympie	Yes
	Imbil Creek	Imbil	
	Wide Bay Creek	Kilkivan	Yes
	Mary River	Miva	
	Wide Bay Creek	Woolooga	Yes
Hinchinbrook Shire	Herbert	Cordelia	Yes
	Herbert	Halifax	
	Herbert	Ingham	
	Herbert	Macknade	Yes
Ipswich City	Warrill Creek	Amberley	Yes
	Bremer River	Ipswich	Yes
	Bremer River	Rosewood	Yes
Isaac Regional	Connors River	Cardowan	
Kowanyama Shire	Mitchell River	Kowanyama	
Lockyer Valley Regional	Lockyer Creek	Gatton	Yes
	Lockyer Creek	Grantham	Yes
	Lockyer Creek	Helidon	Yes
	Laidley Creek	Laidley	Yes
	Laidley Creek	Mulgowie	
	Gatton Creek	Withcott	Yes
Longreach Regional	Barcoo River	Isisford	
	Thomson River	Longreach	
Moreton Bay Regional	Stanley River	Woodford	
	Burpengary Creek	Burpengary	
	Caboolture River	Caboolture	Yes
Murweh Shire	Warrego River	Augathella	
	Warrego River	Charleville	
North Burnett Regional	Burnett River	Eidsvold	
	Burnett River	Gayndah	Yes
	Burnett River	Mundubbera	Yes
Paroo Shire	Paroo River	Eulo	
	Warrego River	Cunnamulla	
Quilpie Shire	Bulloo River	Quilpie	
Rockhampton Regional	Fitzroy River	Rockhampton	Yes
	Fitzroy River	Yaamba	Yes
Roma Regional	Maranoa River	Mitchell	
	Bungil Creek	Roma	Yes
	Balonne River	Surat	Yes
Scenic Rim Regional	Albert River	Beaudesert	
	Teviot Brook	Boonah	
Somerset Regional	Esk Creek	Esk	Yes
	Bremer River	Fernvale	Yes
	Kilcoy Creek	Kilcoy	

LOCAL GOVERNMENT AREA	CATCHMENT OR RIVER	TOWN NAME	INUNDATION OF PROPERTIES
South Burnett Regional	Barker Creek	Nanango	
	Stuart River	Kingaroy	
	Barambah Creek	Murgon	
Southern Downs Regional	Condamine River	Killarney	Yes
	Condamine River	Warwick	Yes
	Quart Pot Creek	Stanthorpe	Yes
Sunshine Coast Regional	Stanley River	Peachester	
	Mary River	Kenilworth	
Toowoomba Regional	Kings Creek	Clifton	
	Kings Creek	Nobby	
	Oakey Creek	Oakey	Yes
	East and West Creeks	Toowoomba	Yes
Western Downs Regional	Charleys Creek	Chinchilla	Yes
	Condamine River	Condamine	Yes
	Myall Creek	Dalby	Yes
	Oakey Creek	Jondaryan	Yes
	Dogwood Creek	Miles	
	Moonie River	Flinton	
Whitsunday Regional	Don River	Bowen	

Appendix F2: Flooded towns on LGA boundaries





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Appendix G

Table of regions based on flood classifications

December 2010 to January 2011

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Appendix G: Table of regions, catchments and severity based on the recorded flood classifications.

REGIONAL AREA	CATCHMENTS	HIGHEST FLOOD CLASSIFICATION REACHED
North Tropical Coast	Johnstone	Major in tributaries
	Herbert, Murray, Russell-Mulgrave	Major
	Tully	Moderate
Central Coast	Pioneer	Major in tributaries
	Don, Lower Burdekin	Minor
	Haughton, Belyando	Major
Coastal Streams Mackay to Maryborough	Nogoa, Mackenzie, Connors/Isaac, Dawson, Fitzroy, Kolan, Burnett, Baffle Creek, Burrum	Major
Coastal streams Maryborough to the Gold Coast	Mary, Caboolture, Brisbane, Bremer, Lockyer Creek, Pine	Major
	Mooloolah, Maroochy, Noosa, Logan-Albert	Moderate in tributaries
Border Rivers including the Darling Downs	Upper Condamine, Myall Creek, Charleys Creek, Condamine, Balonne, Moonie, Macintyre	Major
	Maranoa	Moderate
South West	Warrego, Bulloo, Barcoo, Cooper Creek	Major
	Paroo, Thompson	Moderate



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Appendix H

Selection of record flood peak heights

December 2010 to January 2011

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Appendix H: A selection of record flood peak heights reached during December 2010 and January 2011.

RIVER	LOCATION	PEAK HEIGHT (M)	DATE	PREVIOUS RECORD (M)	LENGTH OF RECORD
Dawson	Utopia Downs TM	14.25m	28-Dec	12.82m (27/04/1989)	1970
Dawson	Tarana Crossing	12.50m	28-Dec	12.09m (26/05/1983)	1983
Dawson	Windamere TM	10.52m	27-Dec	10.28m (03/05/1983)	1975
Dawson	Chilgerrie Hill	10.85m	27-Dec	10.60m (28/08/1998)	1983
Dawson	La Palma TM	7.70m	28-Dec	7.39m (23/02/1971)	1956
Dawson	Glebe Weir TW TM	18.81m	31-Dec	15.19m (06/05/1983)	1983
Dawson	Glebe Weir HW TM	9.62m	31-Dec	6.15m (06/05/1983)	1983
Dawson	Gyranda Weir TM	4.80m	27-Dec	3.94m (07/03/2010)	1988
Dawson	Isla-Delusion Crossing TM	11.21m	31-Dec	10.89m (27/12/2010)	1993
Dawson	Theodore	14.7m	1-Jan	14.07m (14/2/1956)	1924
Dawson	Woodleigh TM	18.45m	2-Jan	18.34m (29/12/2010)	1986
Dawson	Redcliff TM	9.01m	28-Jan	8.21m (24/12/2010)	1958
Dawson	Bindaree TM	15.85m	29-Jan	15.35m (25/12/2010)	2005
Dawson	Beckers TM	19.47m	30-Jan	15.75m (04/05/1983)	1965
Dawson	Newlands TM	17.84m	30-Jan	13.94m (12/03/2010)	1998
Nogoa	Raymond AL/TM	Above 12m	28-Jan	11.41m (25/11/1950)	1947
Nogoa	Craigmore AL/TM	18.16m	29-Dec	16.25 (20/01/2008)	1972
Nogoa	Emerald	16.05m	31-Dec	15.70 (27/11/1950)	1950
Comet	Rewan TM	Above 11.3m	27-Dec	10.97m (19/04/1990)	1987
Comet	Rolleston	~ 8.2m	28-Dec	5.87m (19/2/2010)	1958
Comet	The Lake AL/TM	17.27m	28-Dec	14.37m (20/02/2010)	1972
Comet	Springsure Ck Jct AL/TM	12.50m	29-Dec	10.92m (21/02/2010)	2007
Comet	Comet Weir AL/TM	13.94m	29-Dec	13.19m (11/02/1954)	1922
Mackenzie	Riley's Crossing AL/TM	22.76m	30-Dec	20.44m (24/01/2008)	2006
Mackenzie	Bedford Weir TW AL/TM	22.29m	1-Jan	20.05m (25/01/2008)	1998
Mackenzie	Bingegang	17.45m	2-Jan	17.23m (06/02/1978)	1974
Fitzroy	South Yaamba TM	12.60m	4-Jan	10.03m (24/02/2008)	1998
Barker	Glenmore TM	4.45m	28-Dec	4.11m (10/02/1999)	1988
Barker	Bjelke Petersen Dam HW TM	1.89m	28-Dec	1.10m (10/02/1999)	1996
Boyne	Boondooma Dam HW TM	3.46m	28-Dec	3.15m (24/12/2010)	1983
Boyne	Cooranga TM	13.36m	27-Dec	11.75m (24/12/2010)	1995
Boyne	Derra TM	14.60m	28-Dec	10.07m (24/12/2010)	1992
Auburn	Glenwood	14.70m	29-Dec	13.11m (05/02/1971)	1971
Burnett River	Monto	6.49m	28-Dec	5.96m (09/01/1996)	1990
Burnett River	Lands End TM	6.81m	27-Dec	6.45m (07/02/2003)	1987
Burnett River	John Goleby Weir HW TM	5.24m	29-Dec	0.82m (16/02/1998)	1997
Burnett River	Wuruma Dam HWTM	3.38m	28-Dec	0.59m (10/02/1971)	1971
Burnett River	Eidsvold TM	14.28m	28-Dec	12.36m (08/02/2003)	1963
Burnett River	Gayndah Flume TM	16.34m	28-Dec	14.20m (05/02/1971)	1971
Burnett River	Paradise Dam HWTM	73.56m	29-Dec	70.89m (24/12/2010)	2010

RIVER	LOCATION	PEAK HEIGHT (M)	DATE	PREVIOUS RECORD (M)	LENGTH OF RECORD
Burnett River	Coringa TM	10.09m	27-Dec	8.47m (16/03/1992)	1986
Burnett River	Fig Tree TM	12.74m	25-Dec	11.23m (23/12/2010)	1997
Burnett River	Walla TM	20.10m	29-Dec	18.07m (05/02/1971)	1968
Burnett River	Walla Weir HW TM	29.11m	29-Dec	23.69m (26/12/2010)	2003
Burnett River	Walla Weir TW TM	15.41m	26-Dec	15.30m (25/12/2010)	2010
Condamine	Connolly Dam AL	1.08m	27-Dec	0.48m (06/05/1996)	1996
Condamine	Yangan AL	7.65m	27-Dec	6.60m (06/05/1996)	1996
Condamine	Murray's Bridge AL	8.40m	27-Dec	7.85m (06/05/1996)	1995
Condamine	Victoria Hill TM	5.05m	27-Dec	5.05m (20/12/2010)	2009
Condamine	Leyburn TM	4.90m	27-Dec	4.90m (11/02/1976)	1972
Condamine	Centenary Bridge Millmerran)	8.3m	28-Dec	8.20m (February 1976)	1976
Condamine	Clydesdale AL	4.78m	27-Dec	4.65m (03/05/1996)	1971
Condamine	Loudoun Bridge	11.20m	29-Dec	10.89m (13/02/1976)	1956
Condamine	Warra-Kogan Road Bridge	15.00m	30-Dec	14.00m (1956)	1956
Condamine	Brigalow Bridge TM	14.84m	30-Dec	13.99m (14/02/1976)	1972
Condamine	Beruna	7.95m	28-Dec	7.20m (08/02/1981)	1962
Condamine	Chinchilla Weir TM	15.38m	31-Dec	13.97m (08/04/1988)	1956
Condamine	Condamine	15.25m	1-Jan	14.25m (13/02/1942)	1924
Condamine	Cotswold TM	17.82m	2-Jan	16.13m (08/05/1983)	1967
Balonne	Warkon	12.03m	3-Jan	11.88m (13/01/1996)	1941
Balonne	Surat	12.75m	4-Jan	12.40m (3/3/2010)	1910
Moonie	The Deep Crossing	5.65m	27-Dec	4.45m (10/01/1996)	1970
Moonie	Tartha	7.00m	28-Dec	6.75m (1956)	1956
Weir	O'Connor TM	14.58m	28-Dec	14.57m (Jan 1956)	1956
Boyne	Milton TM	7.77m	28-Dec	6.86m (06/02/2003)	1992
Boyne	Awoonga Dam HW TM	4.16m	28-Dec	1.74m (07/01/1991)	1987
Kolan	Fred Haigh Dam HW TM	3.85m	29-Dec	1.73m (12/03/1977)	1977
Mary	Kenilworth Homestead AL	15.75m	10-Jan	6.17m (10/01/2011)	2004
Mary	Kilkivan TM	8.99m	7-Jan	7.86m (03/04/1989)	1975
Mary	Brooyar TM	12.94m	7-Jan	10.54m (18/12/1988)	1967
Mary	Teddington Weir HW TM	11.48m	8-Jan	11.12m (27/08/2007)	1995
Pine/Caboolture	Wamuran AL	30.67m	11-Jan	30.61m (12/02/1972)	1972
Pine/Caboolture	Upper Caboolture AL/TM	13.01m	11-Jan	11.76m (12/12/1991)	1967
Pine/Caboolture	Caboolture WTP AL	10.94m	11-Jan	9.91m (??/02/1972)	1972
Pine/Caboolture	Burpengary (Dale St) AL	11.19m	11-Jan	11.15m (??/02/1972)	1972
Pine/Caboolture	Baxters Creek AL	9.20m	11-Jan	4.95m (14/04/2009)	2009
Pine/Caboolture	Kobble Creek AL	5.72m	11-Jan	Only Height	2011
Pine/Caboolture	North Pine Dam AL	41.08m	11-Jan	40.10m (11/10/2010)	2009
Pine/Caboolture	Youngs Crossing	13.27m	11-Jan	8.27m (11/10/2010)	2009
Pine/Caboolture	Lawnton AL	5.92m	11-Jan	4.12m (11/10/2010)	2010
Pine/Caboolture	Cedar Creek Road AL	5.31m	11-Jan	3.81m (11/10/2010)	2009
Pine/Caboolture	Cash's Crossing AL	5.60m	11-Jan	5.10m (11/10/2010)	2009
Pine/Caboolture	Normanby Way AL	4.99m	11-Jan	3.69m (11/10/2010)	2009
Pine/Caboolture	John Brae Park AL	2.65m	11-Jan	2.05m (20/05/2009)	2009

RIVER	LOCATION	PEAK HEIGHT (M)	DATE	PREVIOUS RECORD (M)	LENGTH OF RECORD
Pine/Caboolture	Murrumba Downs AL	3.74m	11-Jan	1.74m (11/10/2010)	2009
Brisbane	Cooyar Creek AL/TM	11.02m	11-Jan	9.33 (27/01/1974)	1965
Brisbane	Linville AL/TM	11.00m	11-Jan	8.93 (09/02/1999)	1964
Brisbane	Devon Hills AL	11.25m	9-Jan	10.80 (09/02/1999)	1985
Brisbane	Boat Mountain AL/TM	11.02m	10-Jan	9.61 (27/01/1974)	1965
Brisbane	Gregor Creek AL/TM	14.56m	9-Jan	14.53 (09/02/1999)	1962
Brisbane	Falls Road TM	8.84m	10-Jan	4.84m (11/10/2010)	2009
Brisbane	Rosentreter's Bridge AL/TM	6.80m	10-Jan	4.74m (08/02/1999)	1991
Lockyer Creek	Helidon AL/TM	13.88m	10-Jan	7.55m (27/1/1974)	1972
Lockyer Creek	Gatton AL/TM	16.50m	11-Jan	13.68m (27/12/2010)	1999
Lockyer Creek	Glenore Grove AL	15.34m	11-Jan	14.50m (27/12/2010)	1994
Lockyer Creek	Lyons Bridge AL	17.25m	11-Jan	16.40m (05/05/1996)	1995
Lockyer Creek	Glenore Grove AL	15.34m	11-Jan	14.50m (27/12/2010)	1994
Laidley Creek	Laidley	8.85m	11-Jan	8.80m (27/12/2010)	1996
Brisbane	Savages Crossing	24.15m	12-Jan	23.79 (28/01/1974)	1959



Appendix I

Location specific flood summaries

December 2010 to January 2011

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Appendix Identifier	Location
I-1	Brisbane
I-2	Bundaberg
I-3	Caboolture
I-4	Chinchilla
I-5	Condamine Township
I-6	Dalby
I-7	Emerald
I-8	Goondiwindi
I-9	Gympie
I-10	Ipswich
I-11	Jericho and Alpha
I-12	Lockyer Creek
I-13	Maryborough
I-14	Rockhampton
I-15	Rolleston
I-16	St George
I-17	Stanthorpe
I-18	Surat
I-19	Taroom
I-20	Texas
I-21	Theodore
I-22	Toowoomba
I-23	Warwick
I-24	Yaamba

Flood summary for the Brisbane River at Brisbane City

- The city of Brisbane is in the lower Brisbane River catchment.
- The flood heights at Brisbane are measured using an automatic gauge located at the Thornton Street Ferry which is owned by Seqwater (Bureau station number: 540198). There are a set of manual staff gauges at this site which is owned by the Bureau of Meteorology.
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

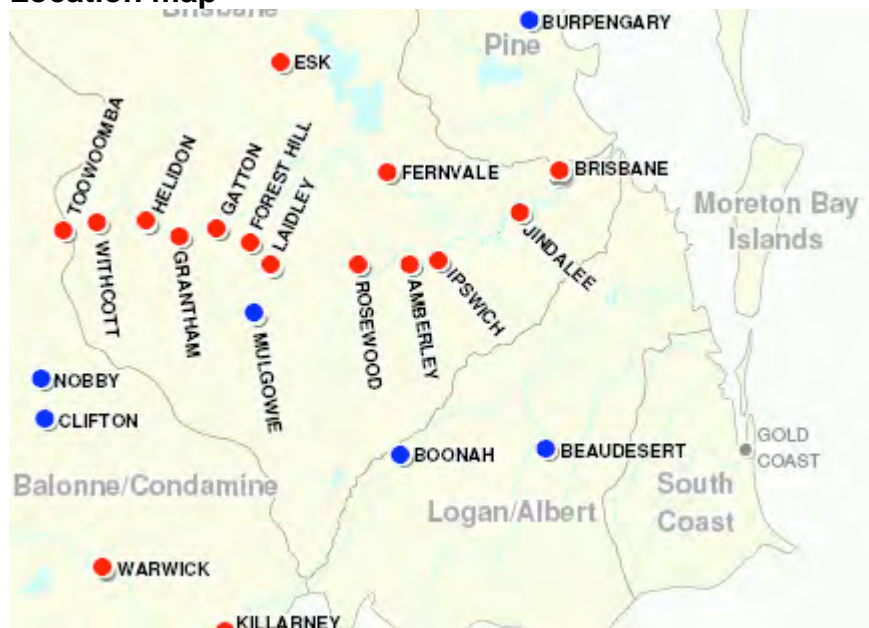
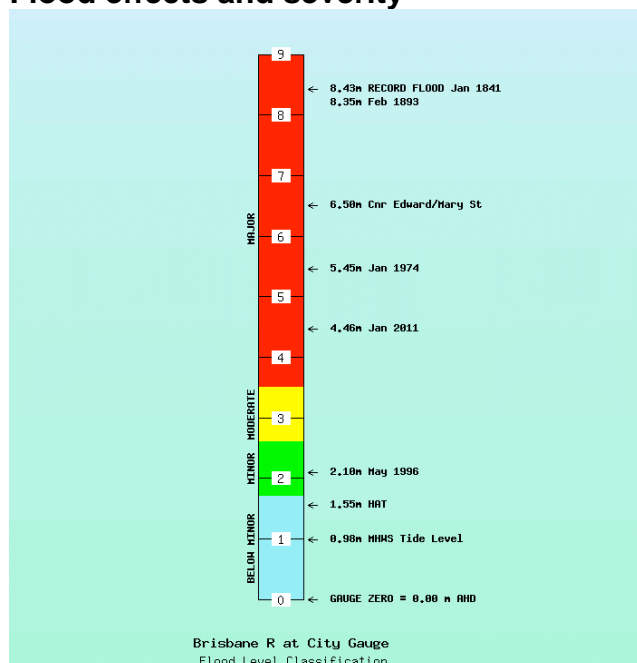


Figure 1. Map showing location of Brisbane.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



- **Peaked at 4.46 metres on 13/01/2011.**
- Minor: 1.7 metres
Moderate: 2.6 metres
Major: 3.5 metres.
- Gauge zero is 0.0 metres AHD.
- Estimated 26600 houses and 5000 businesses affected during the flood. (Source BCC)
- Estimated 12500 properties were inundated by flood waters (Source BCC)
- Above major flood level (3.5 metres) from 12/01/2011 to 13/01/2011.
- Remained above minor flood level (1.7 metres) from 11/01/2011 to 14/01/2011.

Figure 2. Flood level classifications and flood effects for Brisbane.

Rainfall summary

- Rainfalls of between 600-1000mm were recorded in most of the Brisbane catchment during December 2010 and January 2011.
- Most of this rainfall fell between 09/01/2011 and 13/01/2011 with over 600mm recorded in parts of the Stanley River catchment during this period.

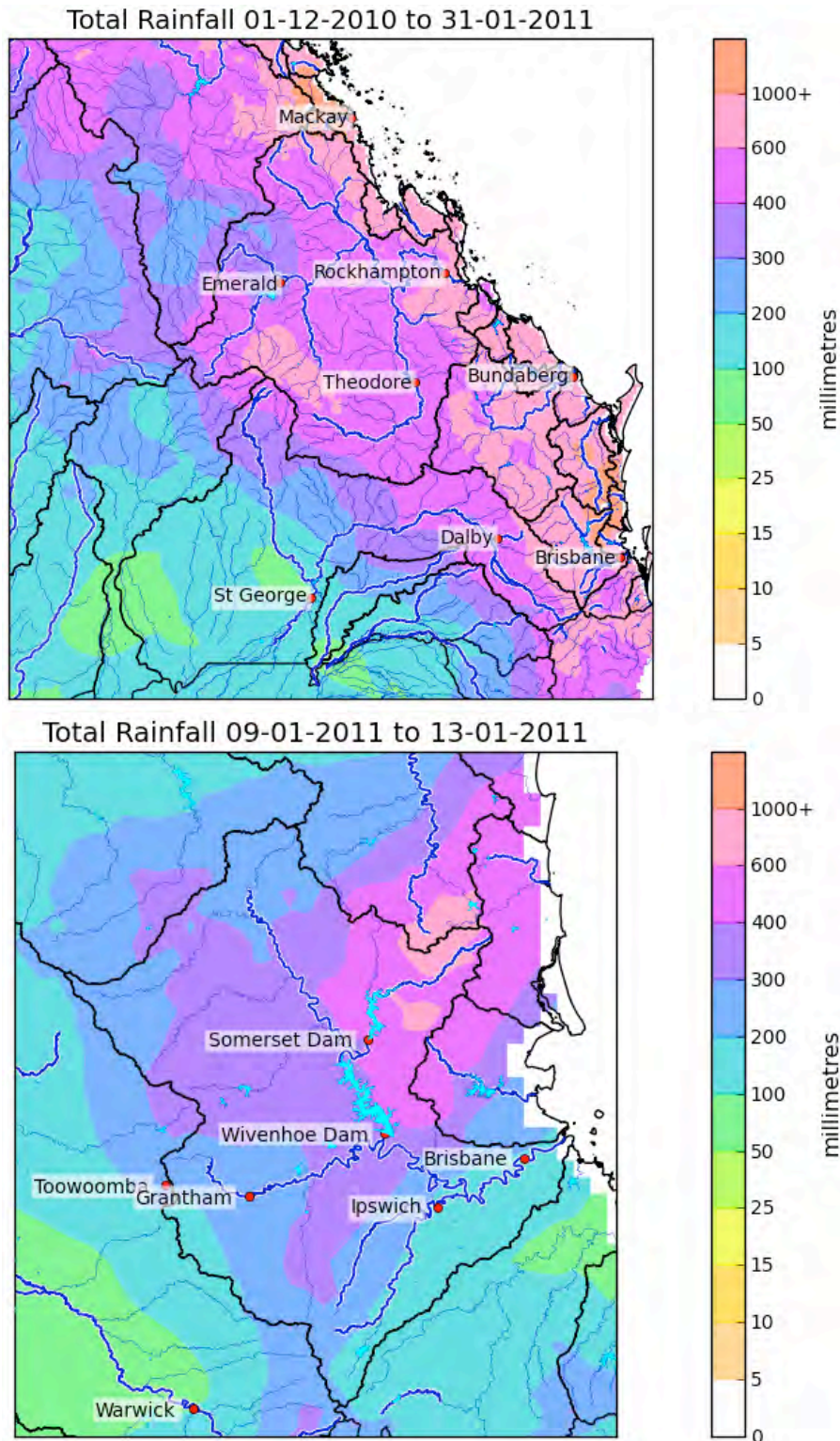


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the 96 hours to 9am on 13/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for two selected stations at Savages Crossing AL and Mt Glorious AL-P on the lower Brisbane River are shown in Table 1.
- The most significant rainfall intensities for Savages Crossing AL in January 2011 occurred on the 11/01/2011 and 12/01/2011. Intensities for all durations from 1 to 72 hours exceeded the 1% Annual Exceedence Probability (100 year Average Recurrence Interval) intensities.
- The most significant rainfall intensities for Mt Glorious AL-P in January 2011 occurred on the 11/01/2011. Intensities for durations from 3 to 48 hours exceeded the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded Maximum Rainfall Intensities for Savages Crossing AL and Mt Glorious AL-P in the Brisbane River catchment for January 2011.

Rainfall Duration	Savages Crossing AL			Mt Glorious AL-P		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
5 min	10	8:25 AM 11/01/2011	1-2	12	8:30 AM 11/01/2011	2
6 min	12	8:26 AM 11/01/2011	1-2	14	8:31 AM 11/01/2011	2-5
10 min	21	8:25 AM 11/01/2011	2-5	24	8:35 AM 11/01/2011	5-10
20 min	41	8:25 AM 11/01/2011	10-20	37	8:35 AM 11/01/2011	5-10
30 min	57	8:35 AM 11/01/2011	20-50	50	8:35 AM 11/01/2011	10-20
1hr	104	8:40 AM 11/01/2011	>100	83	8:40 AM 11/01/2011	20-50
2hr	186	8:50 AM 11/01/2011	>100	132	8:35 AM 11/01/2011	50-100
3hr	211	9:30 AM 11/01/2011	>100	188	10:25 AM 11/01/2011	>100
6hr	293	1:10 PM 11/01/2011	>100	298	12:35 PM 11/01/2011	>100
12hr	368	2:10 PM 11/01/2011	>100	408	2:30 PM 11/01/2011	>100
24hr	378	2:05 PM 11/01/2011	>100	438	6:55 PM 11/01/2011	>100
48hr	485	2:15 PM 11/01/2011	>100	630	2:30 PM 11/01/2011	>100
72hr	507	2:00 AM 12/01/2011	>100	698	5:05 AM 12/01/2011	50-100

Note: The frequency analysis in this report is for rainfall only. A flood frequency analysis would be required to assess the probability of flood levels reached at each location.

Flood event timeline

Table 2. Flood event timeline for Brisbane City.

Time/Date	Event Description	Gauge height (metres)	Comment
09/01/2011	First warning issued	0.61	
11/01/2011	First time it exceeded minor flood level	1.70	Remained above minor flood levels for ~3.5 days.
12/01/2011	First time it exceeded moderate flood level	2.60	Remained above moderate flood levels for ~2.5 days.
12/01/2011	First time it exceeded major flood level	3.50	Remained above major flood levels for ~1.5 days.
3:00 AM 13/01/2011	Major flood peak	4.46	Highest since 1974.
13/01/2011	Final fall below major	3.50	
14/01/2011	Final fall below moderate	2.60	
14/01/2011	Final fall below minor	1.70	River level exceeded the minor flood level on the high tide on the 15/01/2011.
8:18 AM 19/01/2011	Final warning issued		

Flood Heights at Brisbane City

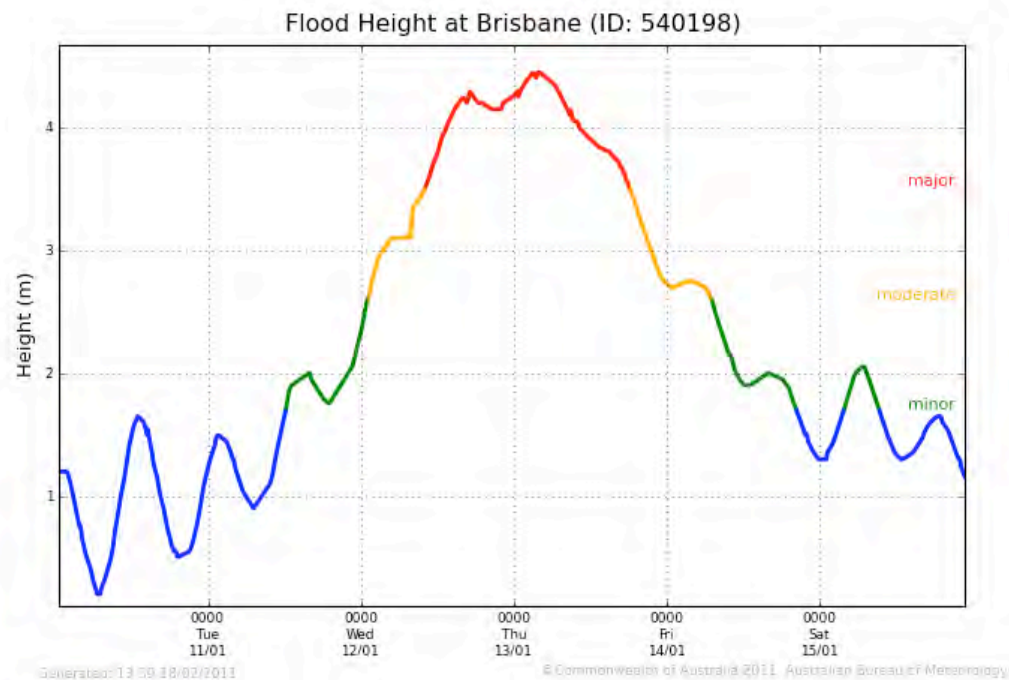


Figure 4. Flood Heights at Brisbane City (Thornton Street Ferry) gauge for January 2011.

Comparison with previous floods

- River height records for Brisbane commenced in 1841 with 13 major flood peaks since that time, three of these occurring in 1893.
- The last major flood recorded at Brisbane was the large scale flood event in January 1974 of 5.45 metres. The record flood at Brisbane was 8.43 metres in 1841.

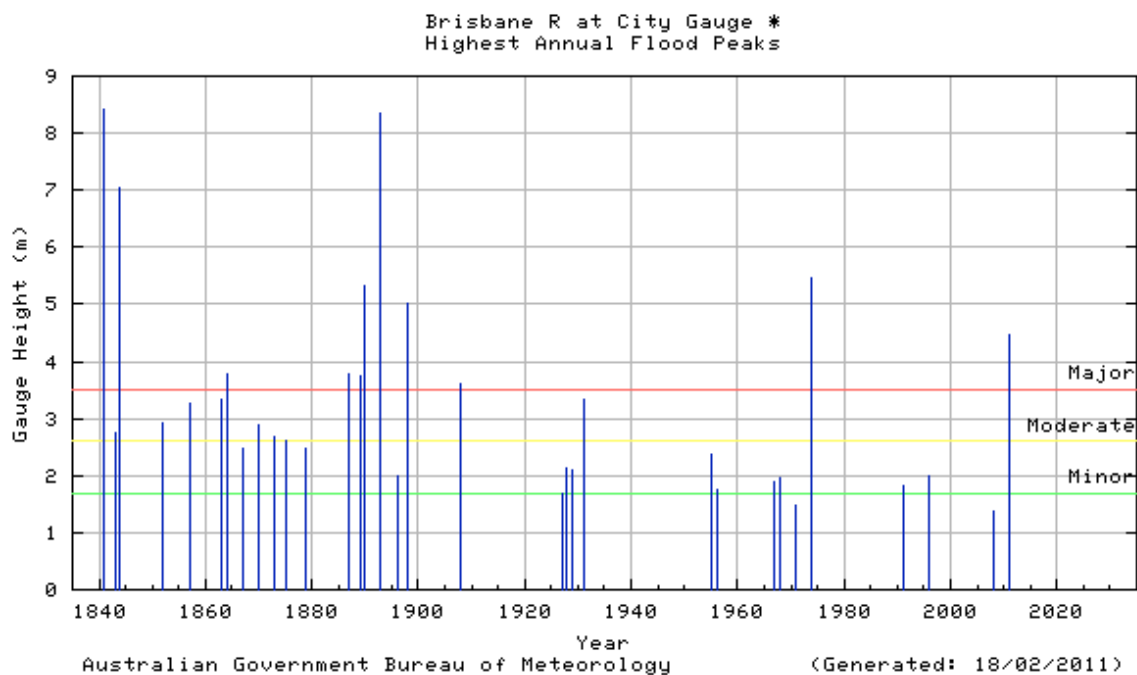


Figure 5. Highest annual flood peaks for the Brisbane River at Brisbane.

Warning and Forecast Service

- Significant runoff commenced during October with flood warnings for the Stanley, upper Brisbane and Bremer Rivers and Lockyer Creek issued between 10/10/2010 and 19/10/2010. This included the first large scale release from Wivenhoe Dam since 2001.
- A total of 96 warnings were issued for the Brisbane River during December 2010 and January 2011.

Table 3. Table of peak height predictions for Brisbane.

Time of Height Forecast	Forecast/Time	Peak
First warning issued 09/01/2011		
12:36 AM on Monday the 10th of January 2011	Higher than predicted tides are expected to continue in the Lower Brisbane area during Monday. Minor flood levels are possible on the high tide at the Brisbane City (Port Office) gauge during Tuesday and Wednesday.	Rising limb forecasts – reach a level and expected to continue rising
10:28 AM on Monday the 10th of January 2011	Reach about 2.3 metres (minor) with the high tides on Tuesday and Wednesday. Further rises are possible as rainfall continues.	
4:16 PM on Monday the 10th of January 2011	Reach about 2.1 metres with the afternoon high tide on Tuesday. Reach about 3 metres with the high tides on Wednesday causing moderate flooding.	
9:28 AM on Tuesday the 11th of January 2011	Reach about 2.6 metres (moderate) with the overnight high tide tonight. Reach 3.5 metres (major) with the high tides on Wednesday. Higher levels are expected on Thursday with the high tides.	
3:24 PM on Tuesday the 11th of January 2011	Reach about 3 metres (moderate) around 3am Wednesday. Reach 4.5 metres (major) at 3pm Wednesday. Exceed 1974 flood level (5.45 metres) on Thursday.	
7:33 AM on Wednesday the 12th of January 2011	Reach about 4.5 metres (major) at 3pm Wednesday. Peak about 5.5 metres (major) during Thursday.	Reached 4.3 metres at 5:00 PM Wed 12/01/2011
11:56 AM on Wednesday the 12th of January 2011	Reach about 4.5 metres (major) at 3pm Wednesday. Peak about 5.5 metres (major) during Thursday. Fall below major flood level during Friday.	
4:29 PM on Wednesday the 12th of January 2011	Peak about 5.2 metres (major) with the high tide at 4am Thursday. Fall below major flood level during Friday.	
12:27 AM on Thursday the 13th of January 2011	Peak under 5 metres (major) with the high tide at 4am Thursday. Fall below major flood level by Friday.	Peaked at 4.46 metres at 3:00 AM Thurs 13/01/2011
3:52 AM on Thursday the 13th of January 2011	Peak around 4.6 metres (major) with the high tide about 4am Thursday. Fall below major flood level by Friday.	
Final warning issued 21/01/2011		

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Burnett River at Bundaberg

- The town of Bundaberg is on the Burnett River in the Burnett catchment
- The flood heights at Bundaberg are measured on a manual gauge owned by the Bureau of Meteorology (Bureau station number: 039170).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map



Figure 1. Map showing location of Bundaberg.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

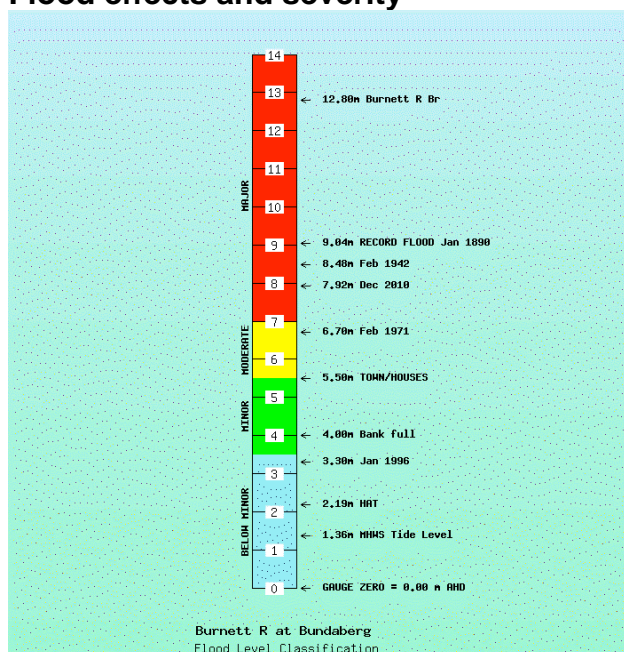


Figure 2. Flood level classifications and flood effects for Bundaberg.

- **Peaked at 7.92 metres on 30/12/2010**
- Minor: 3.5 metres
Moderate: 5.5 metres
Major: 7.0 metres.
- Gauge zero is 0.0 metres AHD.
- Houses begin to be effected at 5.50 metres.
- Estimated 300 houses and 120 businesses inundated (ABC News).
- A moderate flood peak of 5.76 metres occurred on 13/01/2011.
- Above major flood level (7 metres) from 29/12/2010 to 31/12/2010.
- Remained above minor flood level (3.5 metres) from 25/12/2010 to 02/01/2011 and again from 10/01/2011 to 15/01/2011.

Rainfall summary

- Over 600mm recorded throughout most of Burnett catchment during December 2010 to January 2011
- Heavy rainfall of over 100mm throughout most of Burnett catchment between 9am on 26/12/2010 and 9am on 29/12/2010. The southern part of the Burnett catchment recorded over 300mm between 9am on 07/01/2011 and 9am on 13/01/2011.

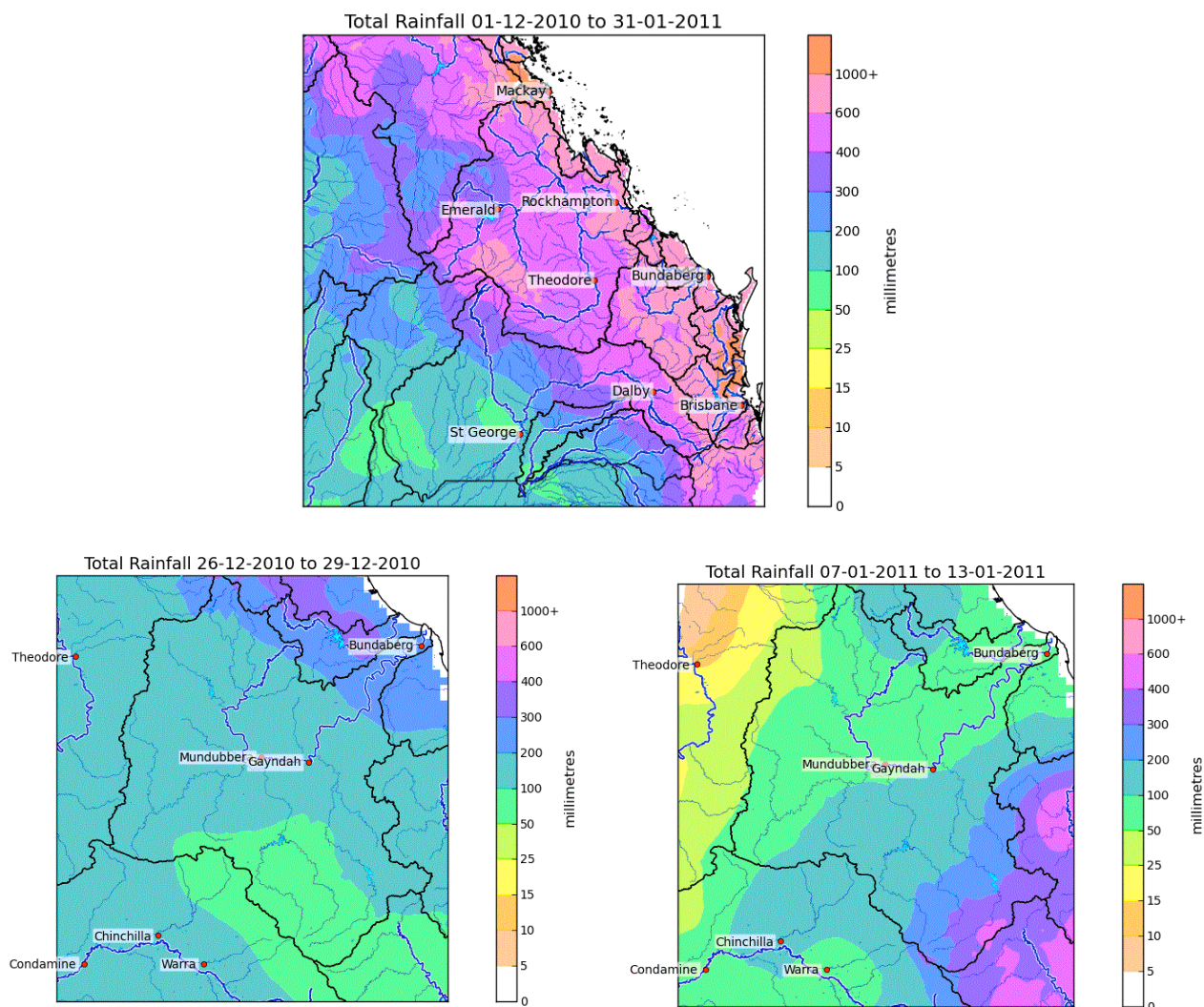


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the 72 hours to 9am on 29/12/2010 (bottom left) and for 9am on 07/01/2011 to 9am on 13/01/2011 (bottom right).

Rainfall Intensity

- Maximum rainfall intensities for two selected stations at Bungadoo TM in the Lower Burnett River catchment and Glenmore TM on Barker Creek in the Upper Burnett River catchment are shown in Table 1.
- The most significant rainfall intensities for December 2010 and January 2011 occurred in the 12 hour duration period ending on the 11/01/2011, with less than a 1% Annual Exceedence Probability (greater than 100 year Average Recurrence Interval).

Table 1. Recorded Maximum Rainfall Intensities for Bungadoo TM and Glenmore TM in the Burnett River catchment for December 2010 and January 2011.

Rainfall Duration	Bungadoo TM			GlenmoreTM		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
12hr				184	4:50 AM 11/01/2011	> 100
24hr	167	9:00 AM 28/12/2010	5-10	187	4:50 AM 11/01/2011	50-100
48hr	262	9:00 AM 28/12/2010	10-20	235	4:50 AM 11/01/2011	20-50
72hr	300	9:00 AM 28/12/2010	10-20	246	4:50 AM 11/01/2011	20-50

Flood event timeline

Table 1. Flood timeline for Bundaberg

Time/Date	Event Description	Gauge Height (metres)	Comment
10:35 PM 19/12/2010	First warning issued		
25/12/2010	First time it exceeded minor flood level	3.50	Remained above minor flood level for ~9 days
28/12/2010	First time it exceeded moderate flood level	5.50	Remained above moderate flood level for ~5 days
29/12/2010	First time it exceeded major flood level	7.00	Remained above major flood level for ~3 days
10:00 AM 30/12/2010	Major flood peak	7.92	Highest since 1942
31/12/2010	Fall below major	7.00	
01/01/2011	Fall below moderate	5.50	
02/01/2011	Fall below minor	3.50	
10/01/2011	Exceeded minor flood level	3.50	Remained above minor flood level for ~6 days
12:00 PM 10/01/2011	Minor flood peak	4.03	
13/01/2011	Exceeded moderate flood level	5.50	Remained above moderate flood level for ~2 days
13/01/2011	Moderate flood peak	5.76	
14/01/2011	Final fall below moderate	5.50	
15/01/2011	Final fall below minor	3.50	
10:04 AM 15/01/2011	Final warning issued		

Flood Heights at Bundaberg

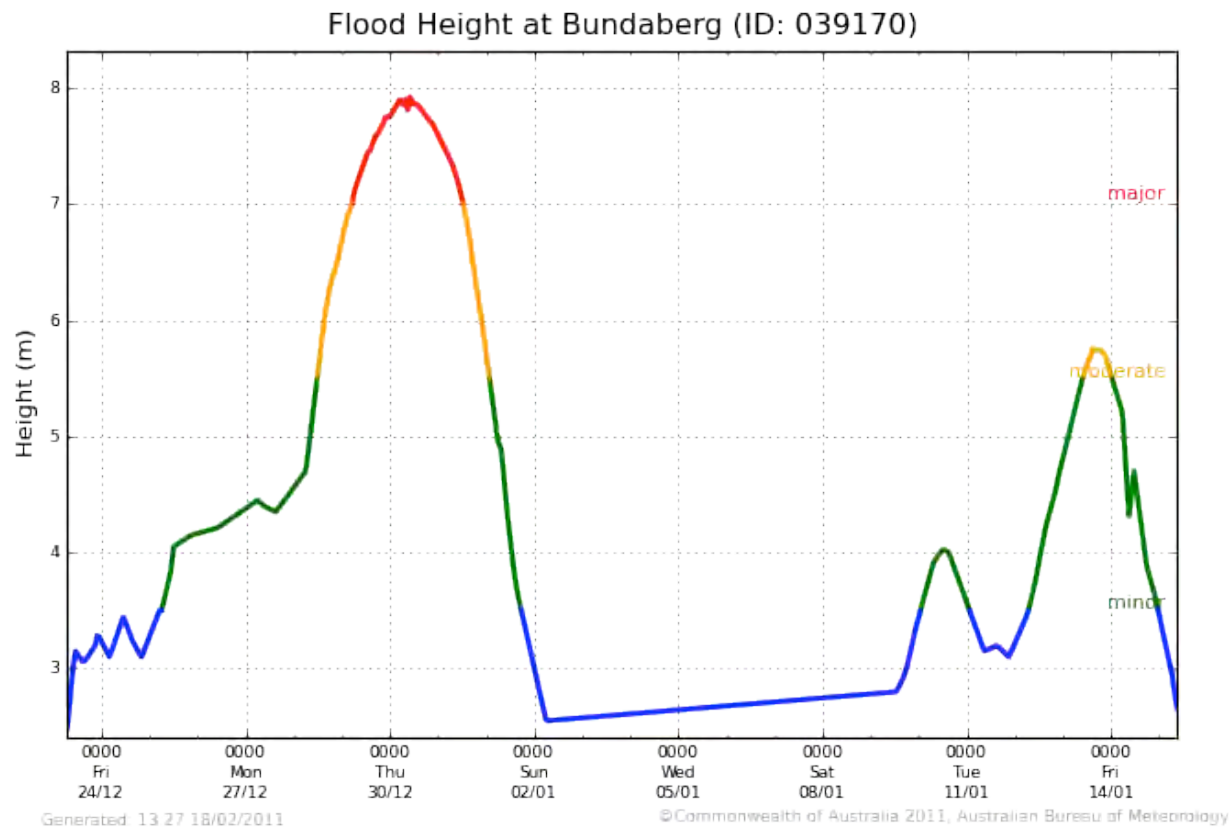


Figure 4. Flood heights for the Bundaberg manual gauge.

Comparison with previous floods

- Start of record 1875 with 9 major flood peaks in the record including 3 major flood peaks in 1893.
- Last major flood was 7.26 metres July 1954 but previous to that was 8.48 metres in February 1942.

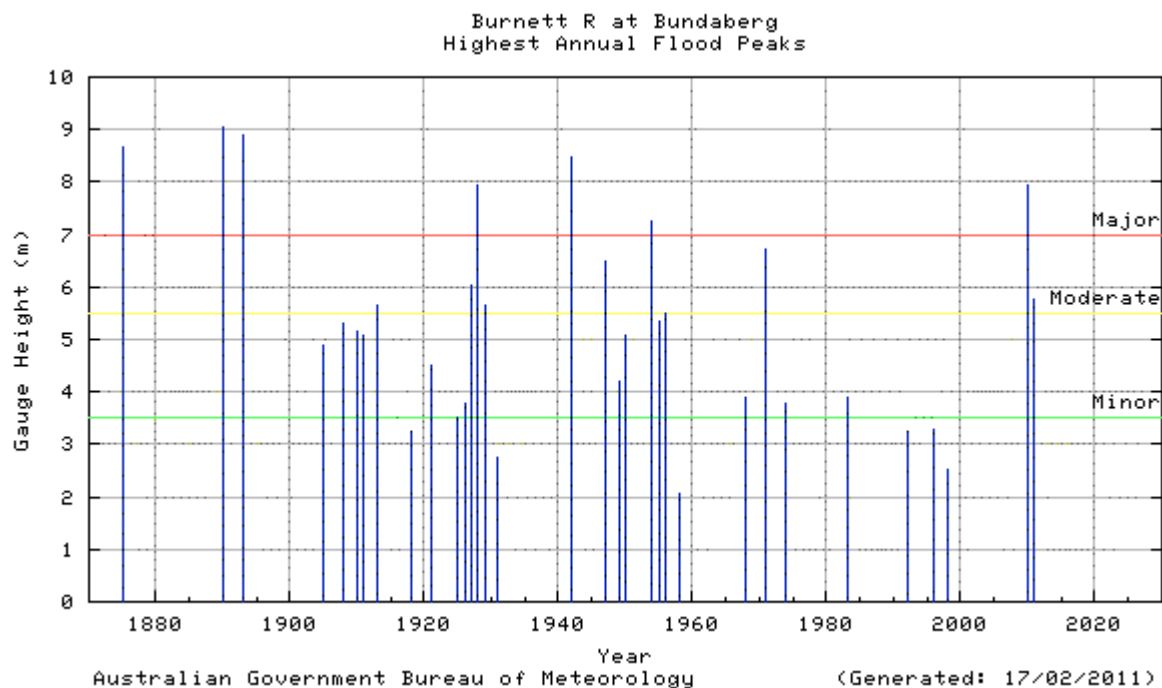


Figure 5. Highest annual flood peaks for the Burnett River at Bundaberg.

Warning and Forecast Service

- Significant runoff commenced during December with flood warnings for the Burnett River catchment issued between 12/12/2010 and 15/12/2010.
- Heavy rainfall occurred in December with warnings commencing on 19/12/2010 and continuing through to 17/1/2011.
- A total of 56 warnings were issued for the Burnett River system including the Burnett River during December 2010 and January 2011.

Table 2. Table of peak height predictions for Bundaberg

Time of Height Forecast	Forecast	Peak
First warning issued 19/12/2010.		
11:37 PM on Monday the 27th of December 2010	Exceed moderate flood level of 5.5 metres during Wednesday.	6.00 metres at 3:00 PM Tues 28/12/2010
8:00 AM on Tuesday the 28th of December 2010	Exceed moderate flood level (5.5 metres) during Wednesday. Further rises and major flood levels possible during Thursday	
12:35 PM on Tuesday the 28th of December 2010	Reach about the major flood level of 7 metres by Wednesday afternoon. Remain high during Thursday. Peak prediction for Bundaberg will be updated as upstream peaks are recorded.	7.00 metres at 5:00 AM Wed 29/12/2010 7.50 metres at 3:00 PM Wed 29/12/2010
5:07 PM on Tuesday the 28th of December 2010	Exceed the major flood level of 7 metres overnight tonight. Reach about 7.5 metres on Wednesday. Remain high until at least Thursday night.	
10:20 PM on Tuesday the 28th of December 2010	Exceed the major flood level of 7 metres overnight tonight. Reach about 7.5 metres on Wednesday. Remain high until at least Thursday night.	
12:31 AM on Wednesday the 29th of December 2010	Exceed the major flood level of 7 metres overnight tonight. Reach about 7.5 metres on Wednesday. Remain high until at least Thursday night.	7.50 metres at 3:00 PM Wed 29/12/2010
6:09 AM on Wednesday the 29th of December 2010	Peak at about 7.5 metres during Wednesday or overnight tonight. Remain high until Friday.	
12:02 PM on Wednesday the 29th of December 2010	Peak at about 7.8 metres overnight Wednesday. River levels to remain high until Friday.	7.90 metres at 5:00 AM Thurs 30/12/2010
5:47 PM on Wednesday the 29th of December 2010	Peak at about 7.8 metres overnight Wednesday. River levels to remain high until Friday.	
10:52 PM on Wednesday the 29th of December 2010	Peak at about 7.8 metres overnight Wednesday. River levels to remain high until Friday.	
7:16 AM on Thursday the 30th of December 2010	Remain around its current level during Thursday and overnight. River levels at Bundaberg should commence falling slowly overnight or during Friday morning.	7.92 metres at 10:00 AM Thurs 30/12/2010
12:23 PM on Thursday the 30th of December 2010	Remain around its current level during Thursday and overnight. River levels at Bundaberg should commence falling slowly overnight or during Friday morning.	
4:56 PM on Thursday the 30th of December 2010	Remain around its current level during Thursday and overnight. River levels at Bundaberg should commence falling slowly overnight or during Friday morning.	
11:00 AM on Tuesday the 11th of January 2011	Reach about 5 metres overnight Thursday.	5.25 metres at 6:00 AM Thurs 13/01/2011
10:25 PM on Wednesday the 12th of January 2011	Reach 5.5 metres overnight Thursday with further rises.	5.62 metres at 12:00 PM Thurs 13/01/2011
8:28 AM on Thursday the 13th of January 2011	Exceed 5.5 metres later Thursday morning. Reach about 5.75 metres (moderate peak) at about 5pm	5.76 metres at 3:00 PM Thurs

	Thursday.	13/01/2011
1:48 PM on Thursday the 13th of January 2011	Peak at about 5.75 metres (moderate peak) at about 6pm Thursday.	5.75 metres at 6:00 PM Thurs 13/01/2011
6:40 PM on Thursday the 13th of January 2011	Currently reaching a moderate flood peak at 5.75 metres.	
Last warning issued 15/01/2011.		

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Caboolture River at Caboolture

- The town of Caboolture is located on the Caboolture River in the Caboolture River catchment.
- The flood heights at Caboolture are measured on an alert gauge called Caboolture WTP (Water Treatment Plant) that is owned by the Moreton Bay Regional Council (Bureau station number: 540243).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map



Figure 1. Map showing location of Caboolture.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

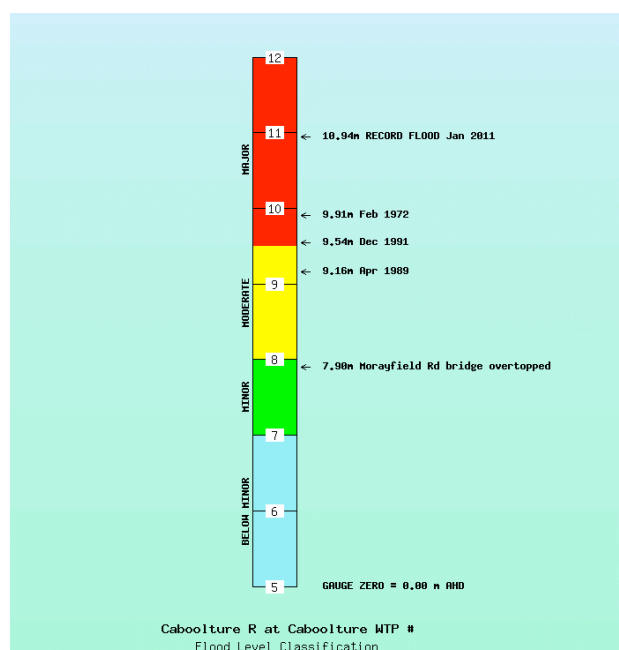


Figure 2. Flood level classifications and flood effects for Caboolture.

- **Peaked at 10.94 metres on 11/01/2011.**
- Minor: 7 metres
Moderate: 8 metres
Major: 9.5 metres.
- Gauge zero is 0.00 metres AHD.
- Estimated 300 houses and also roads and public infrastructure affected in the Caboolture area (Courier Mail).
- On 11/01/2011 Caboolture exceeded minor flood level (7 metres), peaked at 10.94 metres (major) and fell below minor flood level (7 metres).

Rainfall summary

- Over 600mm of rainfall was recorded throughout most of the Caboolture catchment with totals of over 1000mm in the upper parts of the catchment during December 2010 to January 2011.
- Over 400mm of rainfall was recorded in the Upper Caboolture catchment for the 48 hours to 9am on 12/01/2011.

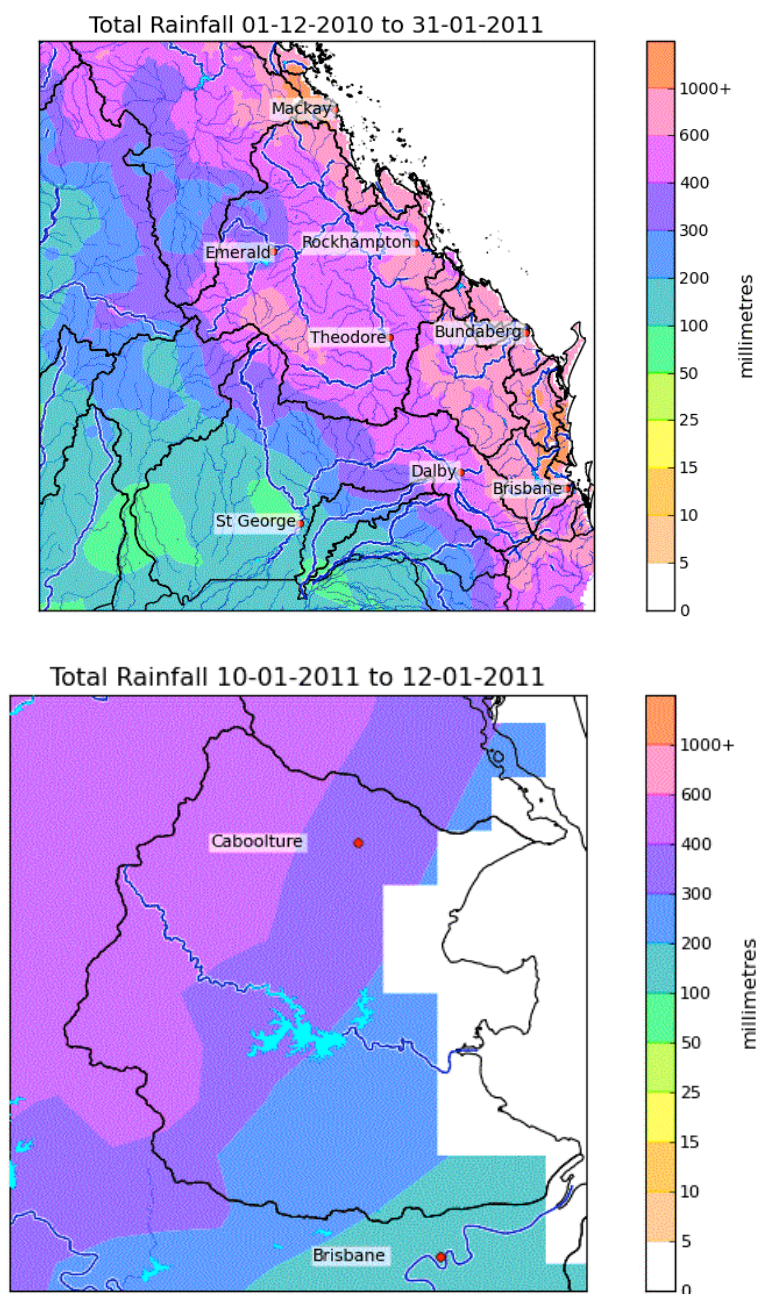


Figure 3. Rainfall map for December 2010 and January 2011 (top) and rainfall map for the 48 hours to 9am on 12/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for four selected stations at Wamuran AL on Waraba Creek, Caboolture WTP AL and Upper Caboolture AL on the Caboolture River and Moorina AL near Burpengary Creek are shown in Tables 1 and 2.
- The most significant rainfall intensities for December 2010 and January 2011 at all four sites occurred on the 11/01/2011. An exception to this was the 24 hour rainfall intensity at Caboolture WTP for the period ended 5:55 PM on the 11/01/2011 which equalled the 5-10% Annual Exceedence Probability (10-20 year Average Recurrence Interval).

Table 1. Recorded Maximum Rainfall Intensities for Caboolture WTP AL and Upper Caboolture AL on the Caboolture River for December 2010 and January 2011.

Rainfall Duration	Caboolture WTP AL			Upper Caboolture AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
3 hr	154	9:55 AM 11/01/2011	50-100	160	10:05 AM 11/01/2011	100
6 hr	222	10:05 AM 11/01/2011	> 100	262	10:45 AM 11/01/2011	> 100
12hr	266	2:00 PM 11/01/2011	50-100	308	2:20 PM 11/01/2011	> 100
24hr	272	5:55 PM 11/01/2011	10-20	315	6:05 PM 11/01/2011	20-50
48hr	397	1:45 PM 11/01/2011	20-50	434	1:50 PM 11/01/2011	20-50
72hr	451	9:05 PM 11/01/2011	20-50	483	9:20 PM 11/01/2011	20-50

Table 2. Recorded Maximum Rainfall Intensities for Wamuran AL on Waraba Creek and Moorina AL near Burpengary Creek for December 2010 and January 2011.

Rainfall Duration	Wamuran AL			Moorina AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
60 min	77	10:40 AM 11/01/2011	20	103	9:35 AM 11/01/2011	> 100
2 hr	129	10:30 AM 11/01/2011	50-100	179	10:20 AM 11/01/2011	> 100
3 hr	176	10:45 AM 11/01/2011	> 100	214	10:15 AM 11/01/2011	> 100
6 hr	280	11:10 AM 11/01/2011	> 100	310	10:50 AM 11/01/2011	> 100
12hr	351	2:40 PM 11/01/2011	> 100	395	2:45 PM 11/01/2011	> 100
24hr	369	6:50 PM 11/01/2011	50-100	406	7:15 PM 11/01/2011	> 100
48hr	530	1:25 PM 11/01/2011	> 100	537	1:55 PM 11/01/2011	> 100
72hr	598	6:50 PM 11/01/2011	50-100	580	3:35 PM 11/01/2011	50-100

Flood event timeline

Table 3. Flood timeline for Caboolture.

Time/Date	Event Description	Gauge Height (metres)	Comment
9:58 AM 11/01/2011	First warning issued		
11/01/2011	First time it exceeded minor flood level	7.0	Remained above minor flood level for ~1 day
11/01/2011	First time it exceeded moderate flood level	8.0	Total time above moderate flood was ~1 day
11/01/2011	First time it exceeded major flood level	9.5	Total time above major flood was ~1 day
1:20 PM 11/01/2011	Major flood peak	10.94	New record
11/01/2011	Final fall below major	9.5	
11/01/2011	Final fall below moderate	8.0	
11/01/2011	Final fall below minor	7.0	
7:03 AM 13/01/2011	Final warning issued		

Flood Heights at Caboolture

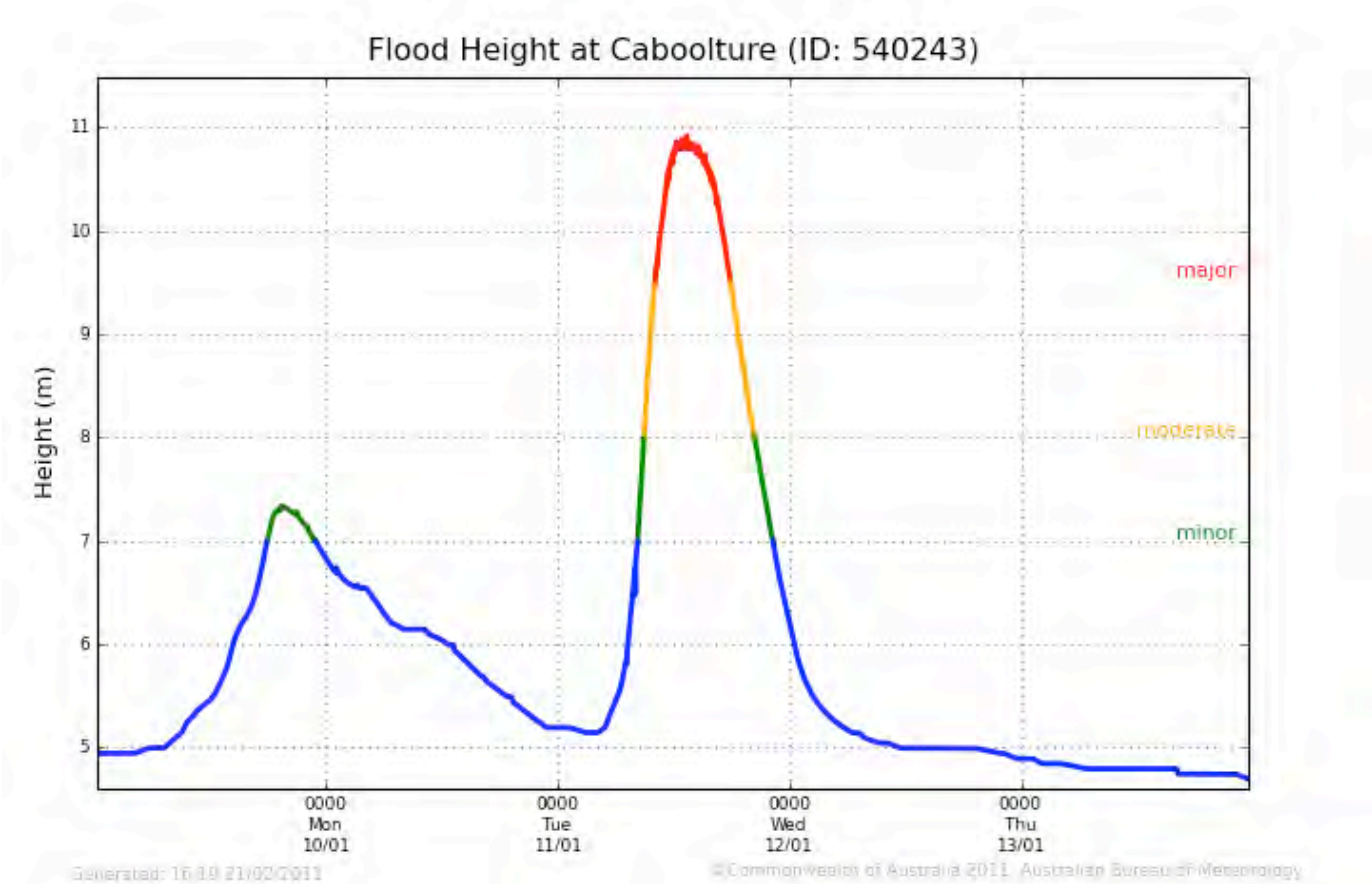


Figure 4. Flood heights for Caboolture alert gauge.

Comparison with previous floods

- Start of record 1972 with 3 major flood peaks in the record
- Last major flood was 9.54 metres December 1991 but previous to that was 9.91 metres in February 1972.

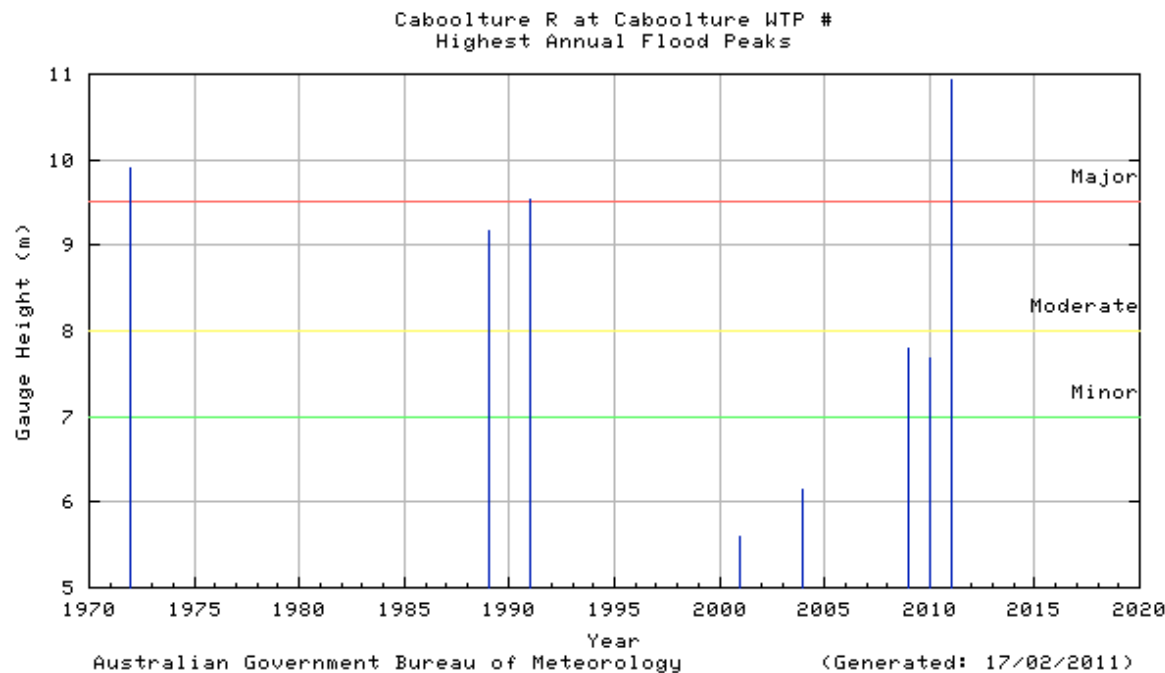


Figure 5. Highest annual flood peaks for the Caboolture River at Caboolture.

Warning and Forecast Service

- Heavy rainfall occurred in January 2011 with warnings commencing 11/1/2011 and continuing through to 13/1/2011.
- A total of 7 warnings were issued for the Pine River system including the Caboolture River during January 2011.
- The Bureau does not provide a quantitative forecasting service for the Caboolture River.

Table 4. Summary of warnings that referred to flooding at Caboolture.

Time of warning	Warning text	Peak
9:58 AM on Tuesday the 11th of January 2011	Very heavy rainfall during Tuesday morning has resulted in fast river rises and moderate to major flooding along the Caboolture River. At 9:50am Tuesday, the river level at Caboolture was 9.34 metres and rising with moderate flooding.	
11:24 AM on Tuesday the 11th of January 2011	Very heavy rainfall during Tuesday morning has resulted in extreme river rises and widespread major flooding along the Caboolture River and in Burpengary Creek. At 11:15am Tuesday, the river level at Caboolture was 10.44 metres and rising with major flooding.	
2:09 PM on Tuesday the 11th of January 2011	Major flooding continues at Caboolture, where at 1:40pm Tuesday the river level was 10.79 metres and near a peak.	10.94 metres at 1:20 PM Tues 11/01/2011

Note: This table does not include all forecasts issued during these flood events.

Flood summary for Charleys Creek at Chinchilla

- The town of Chinchilla is on Charleys Creek in the Condamine and Balonne catchment.
- The flood heights at Chinchilla are measured with a combination of an automatic gauge owned by the Department of Environment and Resource Management and a manual gauge owned by the Bureau of Meteorology (Bureau station number: Automatic - 541074, Manual - 041351).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

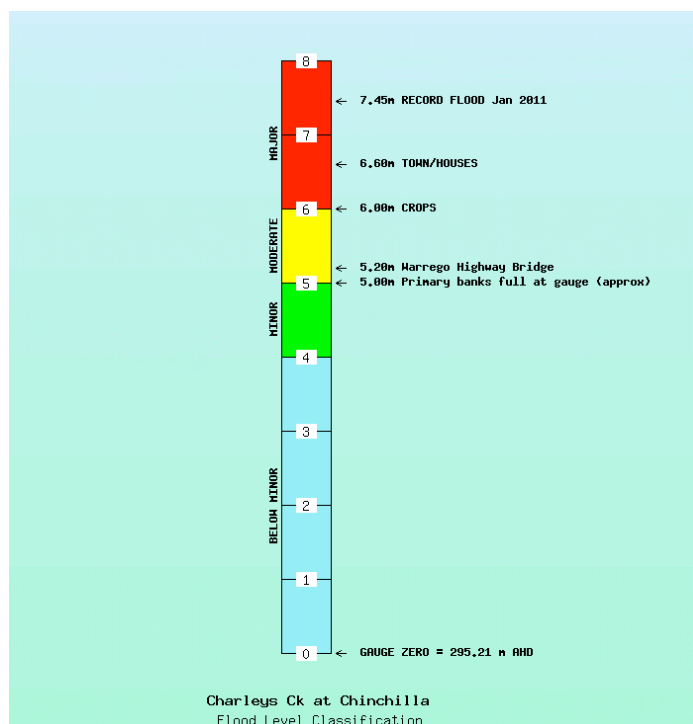
Location map



Figure 1. Map showing location of Chinchilla.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



- **Peaked at 7.24 metres on 28/12/2010**
Peaked at 7.45 metres on the 12/01/2011.
- Minor: 4 metres
Moderate: 5 metres
Major: 6 metres.
- Gauge zero is 295.215 metres AHD
- Houses begin to be affected at 6.6 metres.
- 36 properties were affected. (Courier Mail)
- Chinchilla was above major flood level (6 metres) between the 27/12/2010 and 01/01/2011 and then again from 11/01/2011 to 14/01/2011.
- Chinchilla remained above minor flood level (4 metres) between the 21/12/2010 and 06/01/2011 and then again from 10/01/2011 to 18/01/2011.

Figure 2. Flood level classifications and flood effects for Chinchilla.

Rainfall summary

- Between 300 to 400 millimetres of rainfall was recorded over the Condamine River and nearby creeks during the month of December 2010. Further heavy rain and falls between 200 and 400 millimetres were recorded during early January 2011.
- The heaviest rainfall periods during December 2010 and January 2011 occurred between the 06/01/2011 to 12/01/2011 with falls between 200 and 400 millimetres.

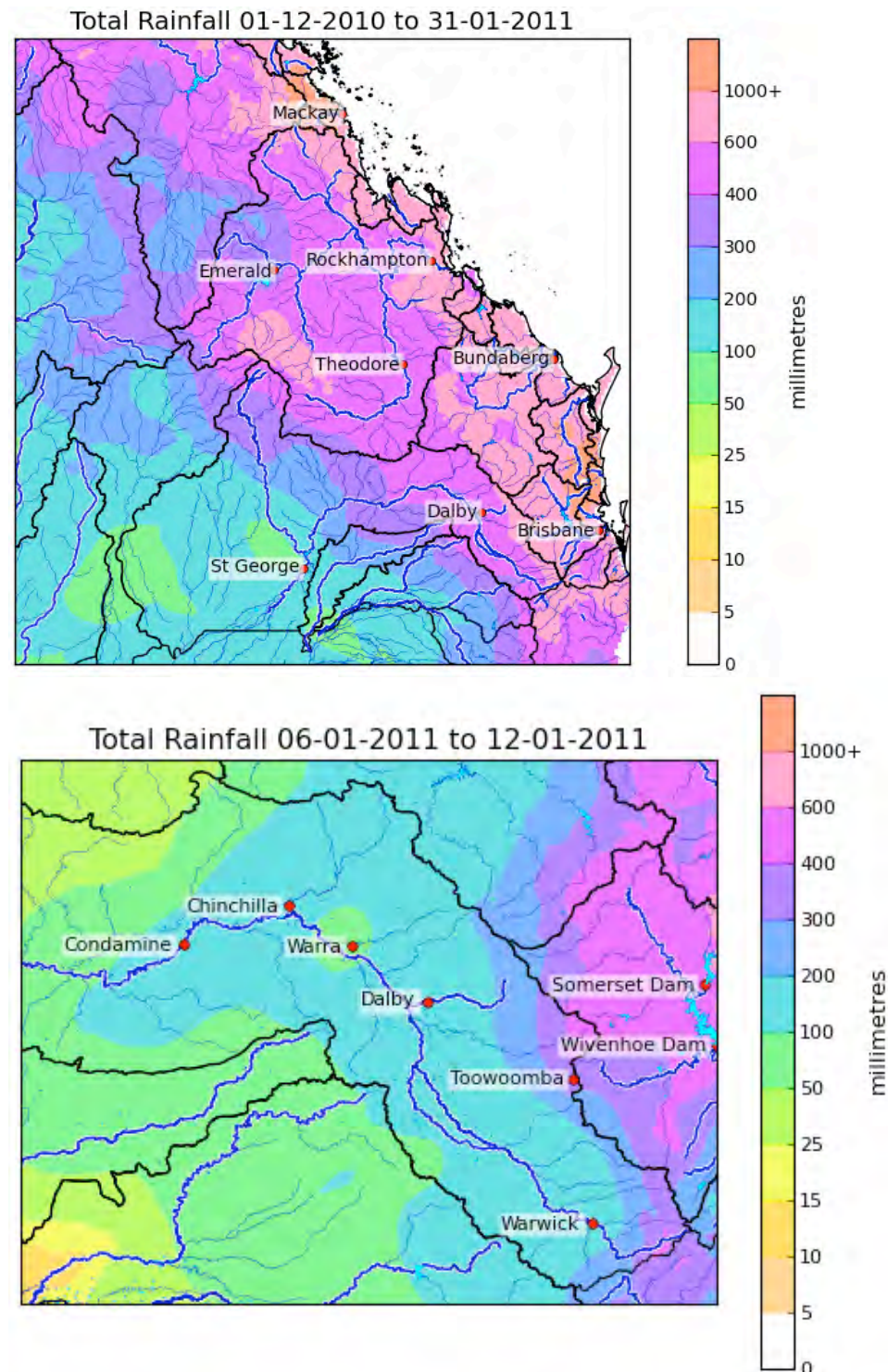


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the period between 06/01/2011 and 12/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for two selected stations at Ballon TM and Horse Creek TM in Charley's Creek catchment are shown in Table 1.
- The most significant rainfall intensities for Ballon TM in January 2011 occurred on the 10/01/2011 and 11/01/2011. Intensities for all durations did not exceed the 1% Annual Exceedence Probability (100 year Average Recurrence Interval) intensities.
- The most significant rainfall intensities for Horse Creek TM in January 2011 occurred on the 10/01/2011 and 11/01/2011. Intensities for durations did not exceed the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded Maximum Rainfall Intensities for Ballon TM and Horse Creek TM on the Brisbane River for January 2011.

Rainfall Duration	Ballon TM			Horse Creek TM		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
2hr	64	5:25 PM 10/01/2011	10-20	61	6:00 PM 10/01/2011	5-10
3hr	71	6:25 PM 10/01/2011	10-20	85	7:00 PM 10/01/2011	20-50
6hr	115	8:35 PM 10/01/2011	50-100	114	7:45 PM 10/01/2011	50-100
12hr	124	8:35 PM 10/01/2011	20-50	118	8:20 PM 10/01/2011	20-50
24hr	125	12:00 AM 11/01/2011	10-20	118	12:00 AM 11/01/2011	5-10

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood event timeline for Chinchilla.

Time/Date	Event Description	Gauge height (metres)	Comment
19/12/2010	First warning issued	Below minor	
21/12/2010	Exceeded minor flood level	4.00	Remained above minor flood levels for ~14 days.
26/12/2010	Exceeded moderate flood level	5.00	Remained above moderate flood levels for ~7 days and 16 hours.
27/12/2010	Exceeded major flood level	6.00	Remained above major flood levels for ~5 days.
6:00 AM 28/12/2010	Major flood peak	7.24	Highest flood recorded since the start of record in 1970*.
01/01/2011	Fell below major flood level	6.00	
03/01/2011	Fell below moderate flood level	5.00	
03/01/2011	Fell below flood minor	4.00	
10/01/2011	Exceeded minor flood level	4.00	Remained above minor flood levels for ~7 days.
10/01/2011	Exceeded moderate flood level	5.00	Remained above moderate flood levels for ~6.5 days.
11/01/2011	Exceeded major flood level	6.00	Remained above major flood levels for ~3.5 days.
10:15 AM 12/01/2011	Major flood peak	7.45	New Record.
14/01/2011	Fell below major flood level	6.00	
17/01/2011	Fell below moderate flood level	5.00	
17/01/2011	Fell below minor flood level	4.00	
9:00 AM 17/01/2011	Final warning issued		

Flood heights at Chinchilla

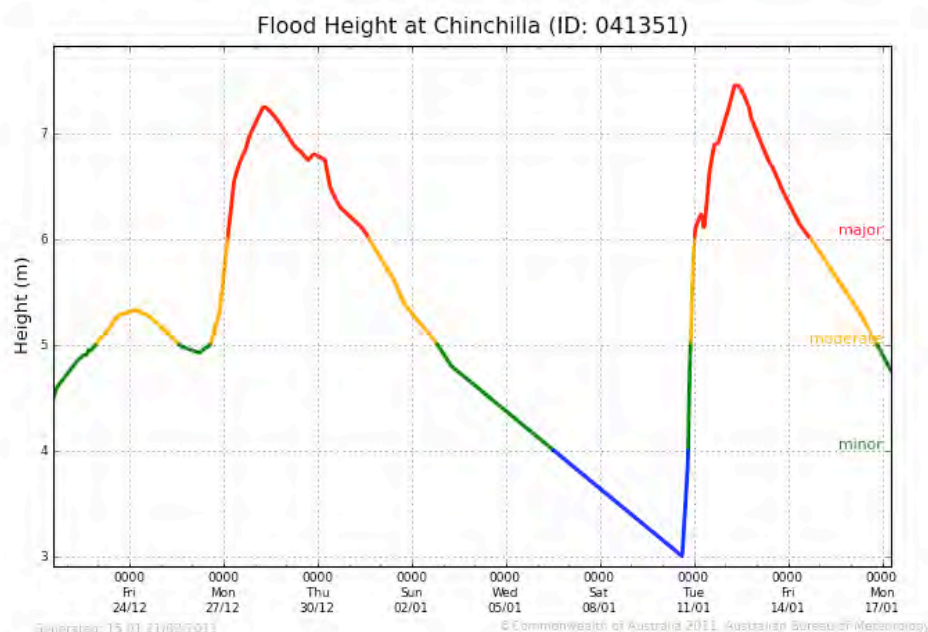


Figure 4. Flood heights at the Chinchilla manual gauge.

Comparison with previous floods

- Start of record 1970. Chinchilla manual station has peak heights dating back to 1893 however the station was re-located in 1970 and heights before this date cannot be compared.
- 5 major flood peaks in the record
- The last major flood recorded at Chinchilla was 6.60 metres in May 1983 with major floods also occurring in 1981 (6.15 metres) and 1970 (6.17 metres). The record flood of February 1942 was 8.33 metres, however this was recorded at a different location and heights can't be related.

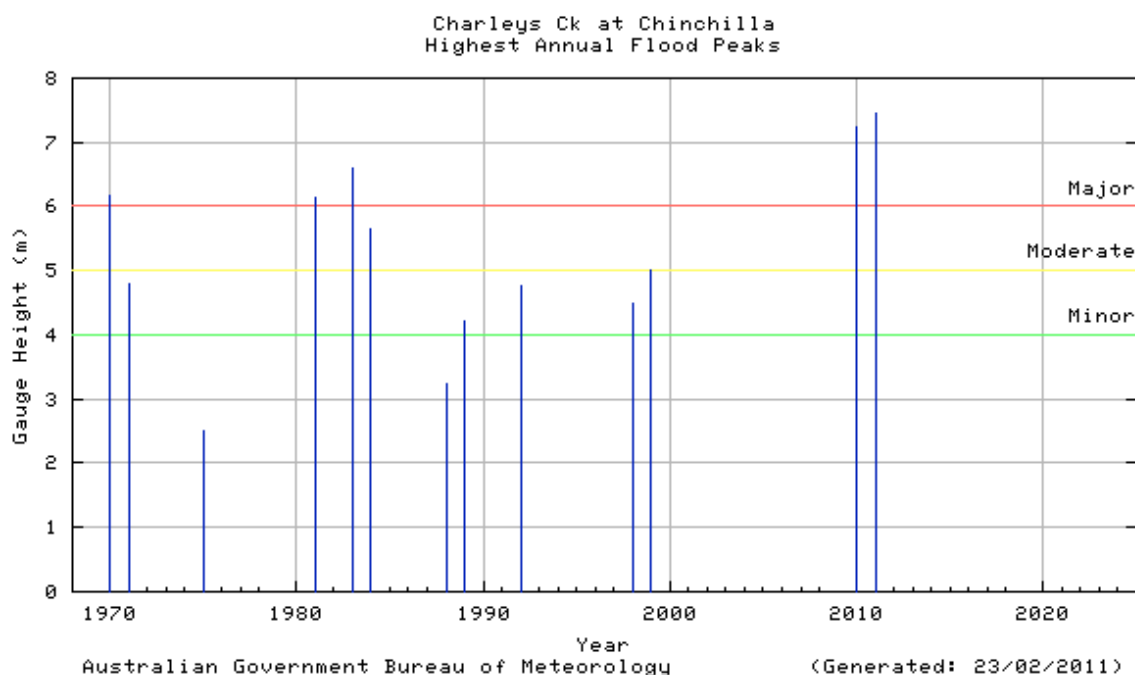


Figure 5. Highest annual flood peaks for Charleys Creek at Chinchilla.

Warning and Forecast Service

- The catchments started to become saturated during October with flood warnings for the Condamine and Balonne Rivers issued between 10/10/2010 and 25/10/2010.
- A total of 103 warnings were issued for the Condamine and Balonne River during December 2010 and January 2011.

Table 3. Table of peak height predictions for Chinchilla.

Time of Height Forecast	Forecast	Peak
05/12/2010 First warning issued. Height at the time was below minor.		
12:03 PM on Tuesday the 21st of December 2010	Creek levels are expected to continue rising at Chinchilla with a peak just over 6 metres estimated during the next 36 hours.	7.24 metres at 6:00 AM Tue 28/12/2010
9:27 AM on Wednesday the 22nd of December 2010	Creek levels are expected to continue rising at Chinchilla with a peak just over 6 metres estimated overnight tonight.	
11:02 AM on Thursday the 23rd of December 2010	Moderate flood levels are rising slowly at Chinchilla with higher levels possible during the next few days from overnight rainfall.	
4:29 PM on Thursday the 23rd of December 2010	At 4pm, the level at Chinchilla was 5.28 metres and rising slowly. Further heavy falls were recorded in the catchment although this is unlikely to affect the peak at Chinchilla.	
10:09 AM on Friday the 24th of December 2010	Moderate flood levels are slowly approaching a peak at Chinchilla.	
10:59 AM on Saturday the 25th of December 2010	River levels at Chinchilla will fall today before rising again. A flood peak of up to 6 metres is possible on Monday. River levels will be higher than Friday's peak.	
10:07 AM on Sunday the 26th of December 2010	A major flood peak of up to 6 metres is possible on Monday-Tuesday, with levels higher than the Friday peak.	
6:47 AM on Monday the 27th of December 2010	Major flooding is rising fast at Chinchilla with levels expected to be higher than the 1983 peak of 6.6 metres.	
12:36 PM on Monday the 27th of December 2010	Creek levels at Chinchilla have already exceeded the 1983 peak of 6.6 metres, with strong rises continuing during Monday.	
5:26 PM on Monday the 27th of December 2010	Charleys Creek at Chinchilla is expected to peak at 7 metres or above during Monday night and Tuesday morning.	7.45 metres at 10:15 AM Wed 12/01/2011
10:32 PM on Monday the 10th of January 2011	Reach 7 metres (major) during Tuesday morning. Possibly reach 7.5 metres Tuesday afternoon	
2:15 PM on Tuesday the 11th of January 2011	Reach 7 metres (major) during Tuesday night. Possibly reach 7.5 metres overnight and Wednesday.	
11:07 PM on Tuesday the 11th of January 2011	Possibly reach 7.5 metres during Wednesday.	
7:28 AM on Wednesday the 12th of January 2011	Further rises to around 7.5 metres during Wednesday morning.	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Condamine River at Condamine

- The town of Condamine is on the Condamine River in the Condamine-Balonne River catchment.
- The flood heights at Condamine are measured on a manual gauge owned by the Bureau of Meteorology (Bureau station number: 042048).
- Condamine experienced record flooding in January 2011 with two major peaks and a new peak height record of 15.25 metres on 01/01/2011.
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

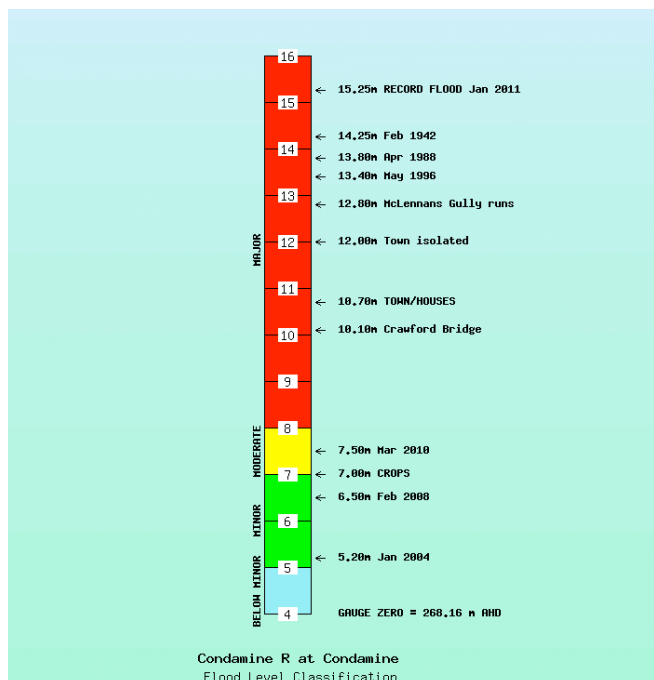
Location map



Figure 1. Map showing location of Condamine.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



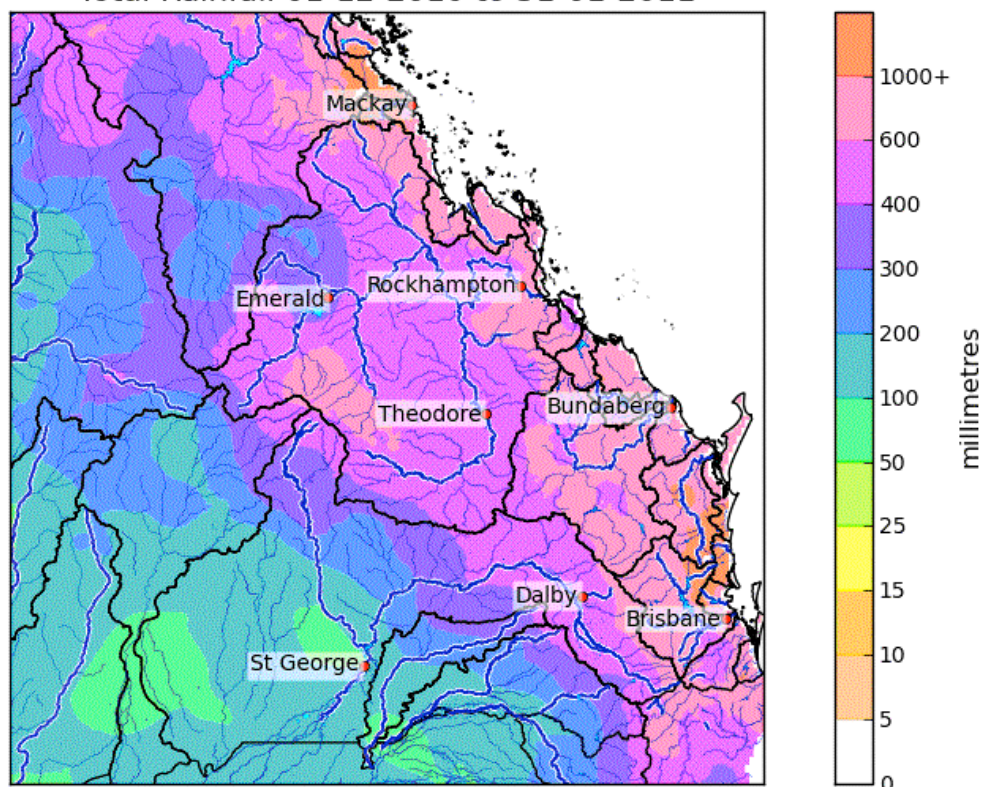
- **Peaked at 15.25 metres on 01/01/2011 (new record) and 14.67 metres on 16/01/2011.**
- Minor: 5 metres
Moderate: 7 metres
Major: 8 metres
- Gauge Zero is 268.163 metres AHD.
- All 100 residents were evacuated to Dalby on 30/12/2010 and again on 11/01/2011 for the two major flood peaks (Source: ABC).
- Both flood peaks exceeded any previous river height recorded for Condamine with the peak on 01/01/2011 setting the new peak height record for the town.
- Above major flood level (8 metres) from 24/12/2010 to 22/01/2011.
- Above minor flood level (5 metres) from 20/12/2010 to 24/01/2011.

Figure 2. Flood level classifications and flood effects for Condamine

Rainfall summary

- Between 300 and 600 millimetres of rainfall was recorded over the Condamine River catchment from the start of December 2010 to the end of January 2011 with falls greater than 600mm over the far east of the catchment.
- The heaviest rainfall periods during December occurred from the 26/12/2010 to 28/12/2010 with falls between 100 and 200 millimetres.

Total Rainfall 01-12-2010 to 31-01-2011



Total Rainfall 26-12-2010 to 28-12-2010

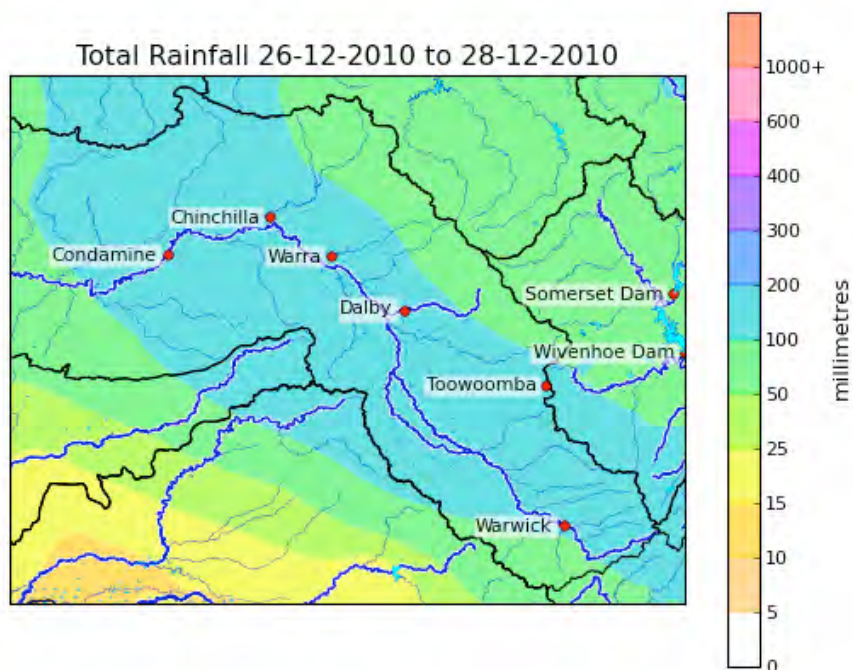


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the period from the 26/12/2010 to 28/12/2010 (bottom).

Rainfall Intensity

- The December and January floods at Condamine Town were not caused by local area intense rainfall and rainfall intensity analysis of single sites in the large catchment above Condamine Town is not informative.
- The flood levels at Condamine Town were the result of the combination of large flows in Charleys Creek, Myall Creek and the Upper Condamine River.

Flood event timeline

Table 2. Flood timeline for Condamine

Time/Date	Event Description	Gauge Height (metres)	Comment
7:48 AM 05/12/2010	First warning issued		
20/12/2010	River level first exceeds the minor flood level.	5.00	Remained above the minor flood level for 35 days.
23/12/2010	River level first exceeds the moderate flood level	7.00	Remained above the moderate flood level for 31 days.
9:00 AM 24/12/2010	River level first exceeds the major flood level	8.00	Remained above the major flood level for 29 days.
6:15 AM 01/01/2011	First major flood peak	15.25	Record Flood Peak for Condamine.
9:00 AM 16/01/2011	Second major flood peak	14.67	Second highest peak on record.
22/01/2011	Final fall below major	8.00	
23/01/2011	Final fall below moderate	7.00	
24/01/2011	Final fall below minor	5.00	
24/01/2011	Final warning issued for Condamine Town.		

Flood Heights at Condamine

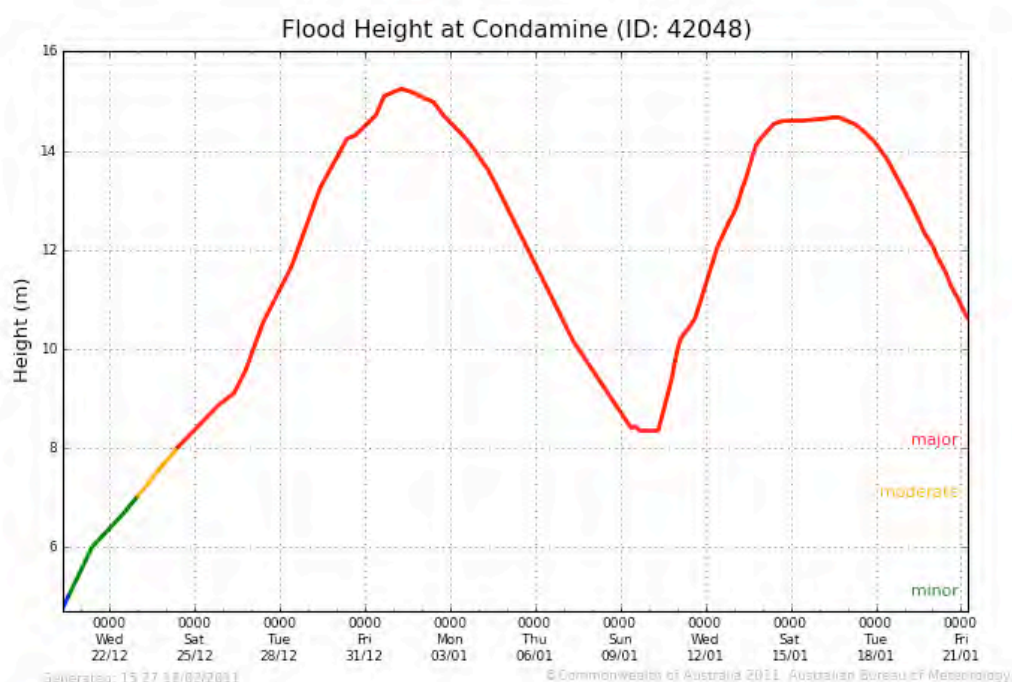


Figure 4. Flood Heights at Condamine manual gauge for December 2010 and January 2011

Comparison with previous floods

- River height records for Condamine commenced in 1922.
- River height peaks in January 2011 rank as the two highest flood peaks recorded for the town with the peak of 15.25 metres recorded on 01/01/ 2011 the new highest peak on record.
- The previous time the river level at Condamine exceeded 14 metres was in May 1983.

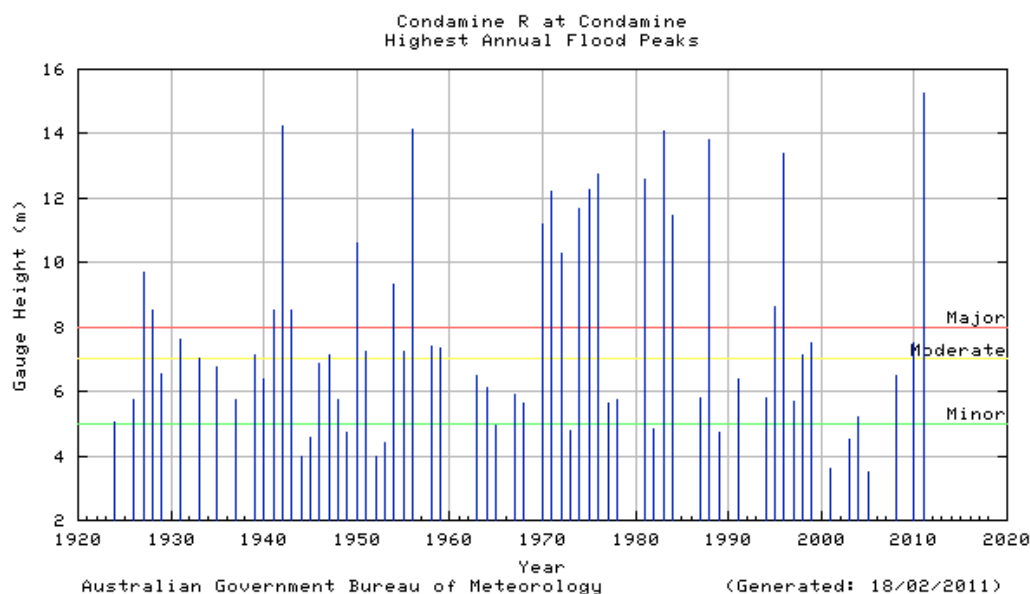


Figure 5. Highest annual flood peaks for the Condamine River at Condamine

Warning and Forecast Service

- The first warning for the Condamine-Balonne River was issued on 05/12/2010 for minor flooding in the Condamine River and more significant flooding in the Maranoa and Balonne Rivers. However, further rainfall in December saw the continuation of the Condamine-Balonne River Flood Warning through to 10/02/2011.
- Major flooding was first predicted for Condamine in the Flood Warning issued at 10 PM on 19/12/2010. Renewed rises were caused by widespread thunderstorm activity over the upper Condamine catchment including Myall and Charleys Creek.
- A total of 103 warnings were issued for the Condamine-Balonne River system during December 2010 and January 2011.

Table 3. Table of peak height predictions for Condamine

Time of Height Forecast	Forecast	Peak
05/12/2010 First warning issued. Condamine Manual Station has not commenced reporting at this time.		
12:03 PM on Tuesday the 21st of December 2010	A major flood peak is expected at Condamine of at least 9 to 10 metres during the weekend	Rising limb forecasts – reach a level and expected to continue rising.
10:59 AM on Saturday the 25th of December 2010	A major flood peak of between 9 and 10 metres is expected at Condamine on Sunday	
10:07 AM on Sunday the 26th of December 2010	A major flood peak of around 10 metres is expected at Condamine on Monday	
6:47 AM on Monday the 27th of December 2010	A major flood peak of between 10 to 11 metres is now expected on Wednesday at Condamine township	
12:36 PM on Monday the 27th of December 2010	A major flood peak of between 11 to 12 metres is now expected on Tuesday at Condamine township	

5:26 PM on Monday the 27th of December 2010	Further river rises are expected to extend downstream to the Condamine Town area and Cotswold area during this week. Major flooding is expected to continue for at least the next 2 weeks.	
7:08 AM on Tuesday the 28th of December 2010	Major flooding is expected to continue for at least the next 2 weeks.	
10:19 AM on Wednesday the 29th of December 2010	Record flood levels at Condamine are expected during the weekend and into next week.	
12:48 PM on Wednesday the 29th of December 2010	Flood levels to reach around 14 metres. Levels may reach or just exceed the 1942 flood record height of 14.25 metres.	
7:55 AM on Friday the 31st of December 2010	Reach about 15 metres (major) later this weekend.	New Record 15.25 metres at 6:15 AM Sat 01/01/2011
12:50 PM on Friday the 31st of December 2010	Condamine Township Reach, and possibly exceed, 15 metres (major) during this weekend.	
7:11 PM on Friday the 31st of December 2010	Continue rising at record levels. Peak during Sunday.	
6:19 PM on Saturday the 1st of January 2011	The river level at Condamine Township at 2pm Saturday was 15.2m and steady with levels expected to remain steady overnight Saturday.	
3:40 PM on Sunday the 2nd of January 2011	Continue falling slowly during this week.	River levels falling.
7:27 AM on Sunday the 9th of January 2011	Further rain is forecast for the eastern Darling Downs area from today through to Tuesday which will cause renewed rises in creeks in the area, and may produce renewed Condamine River rises.	Rising limb forecasts reach a level and expected to continue rising
6:44 PM on Tuesday the 11th of January 2011	Exceed 13 metres during Thursday. Reach higher levels going into the weekend.	
7:28 AM on Wednesday the 12th of January 2011	Exceed 13 metres during Thursday with further rises and levels to around 14.8 metres by the weekend.	14.67 metres at 9:00 AM Sun 16/01/2011
10:10 AM on Thursday the 13th of January 2011	Reach around 14.8 metres (major flood) during the weekend.	
10:55 AM on Saturday the 15th of January 2011	Peak around 15 metres overnight Sunday.	
8:28 AM on Sunday the 16th of January 2011	Peak to about 14.8 metres (major) during Sunday.	
9:00 AM on Monday the 17th of January 2011	A major flood peak of 14.67 metres was recorded at Condamine Township during Sunday. River levels to ease below 13.0 metres late Tuesday.	
10/02/2011 Final warning issued for the Condamine-Balonne River System.		

Note: This table does not include all forecasts issued during these flood events.

Flood summary for Myall Creek at Dalby

- The town of Dalby is on Myall Creek in the Condamine and Balonne catchment.
- The flood heights at Dalby are measured with a combination of a manual and an automatic gauge co-owned by the Bureau of Meteorology and the Western Downs Regional Council (Bureau station number: manual gauge – 041478 and automatic gauge – 541041).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

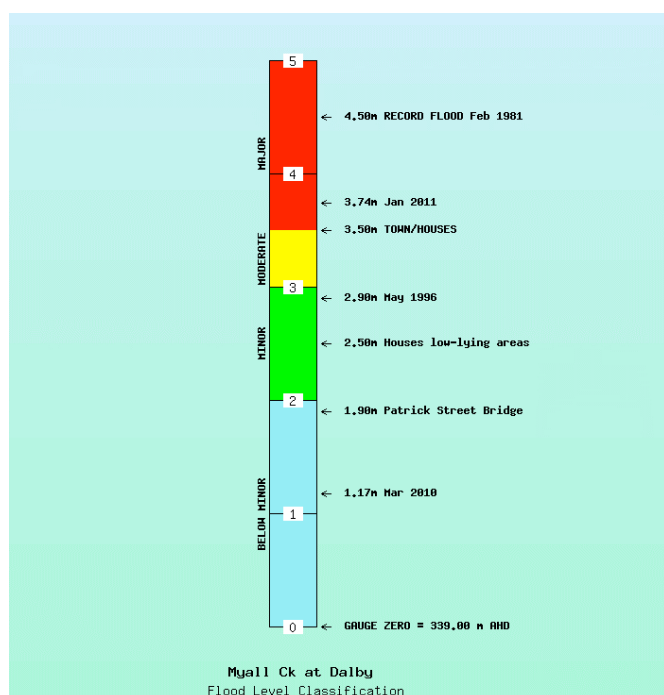
Location map



Figure 1. Map showing location of Dalby.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



- The river peaked at:
2.94 metres on 20/12/2010,
3.54 metres on 27/12/2010,
3.74 metres on 10/01/2011,
3.49 metres on 12/01/2011.
- Minor: 2.0 metres
Moderate: 3.0 metres
Major 3.5: metres
- Gauge zero is 339.0 metres AHD.
- Houses in low lying areas begin to be affected at 3.5 metres.
- 100 properties inundated during the 3.54 metre peak on 27/12/2010 (Courier Mail).
- Dalby was above major flood level (3.5 metres) on the 27/12/2010 and again from 10/01/2011 to 11/01/2011.
- It remained above minor flood level (2.0 metres) for about 7.5 days total over the four main flood peaks.

Figure 2. Flood level classifications and flood effects for Dalby

Rainfall summary

- Between 300 and 600 millimetres of rainfall was recorded over the Condamine River and nearby creeks during the month of December 2010. Further heavy rain and falls between 200 and 400 millimetres were recorded during early January 2011.
- The heaviest rainfall periods during December 2010 and January 2011 occurred from the 06/01/2011 to 12/01/2011 with falls between 200 and 400 millimetres.

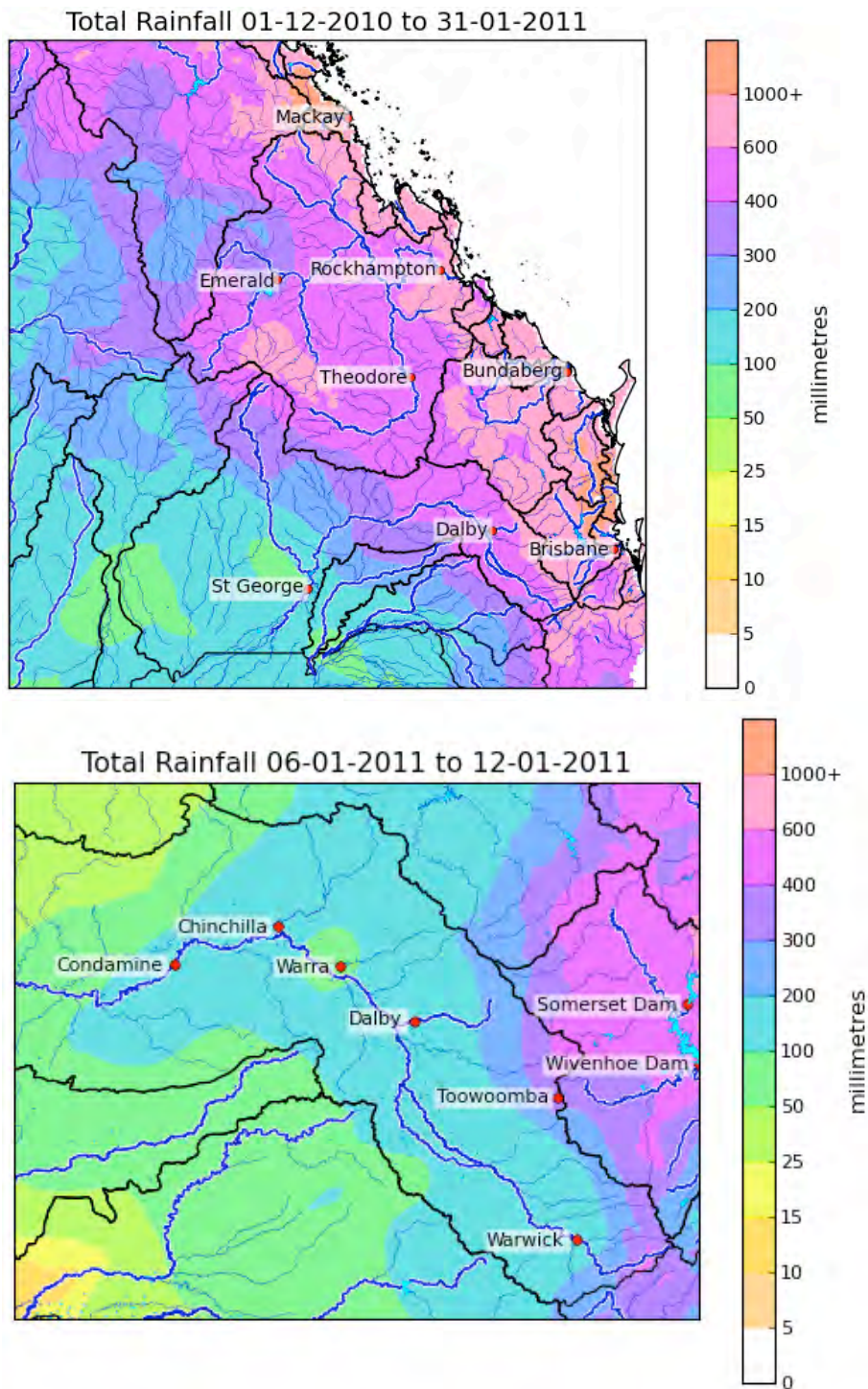


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the period between 06/01/2011 and 12/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for two selected stations at Cooringa AL and Mt Brigalow AL in the upper Myall Creek catchment are shown in Table 1.
- The most significant rainfall intensities for Cooringa AL in January 2011 occurred on the 06/01/2011, and 09/01/2011 – 11/01/2011. Intensities for all durations were well below the 1% Annual Exceedence Probability (100 year Average Recurrence Interval) intensities.
- The most significant rainfall intensities for Mt Brigalow AL in January 2011 occurred on the 11/01/2011. Intensities for all durations were well below the 1% Annual Exceedence Probability (100 year Average Recurrence Interval) intensities.

Table 1. Recorded Maximum Rainfall Intensities for Cooringa AL and Mt Brigalow AL on Myall Creek for January 2011.

Rainfall Duration	Cooringa AL			Mt Brigalow AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
3hr	36	10:55 06/01/2011	<1	63	03:50 11/01/2011	5-10
6hr	52	19:50 09/01/2011	1-2	75	04:00 11/01/2011	5-10
12hr	63	22:35 09/01/2011	1-2	82	06:10 11/01/2011	2-5
24hr	67	00:40 10/01/2011	1-2	93	06:10 11/01/2011	2-5
48hr	104	05:45 11/01/2011	2-5	174	10:20 11/01/2011	20-50
72hr	107	05:45 11/01/2011	2-5	187	14:30 11/01/2011	20-50

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood event timeline for Dalby.

Time/Date	Event Description	Gauge height (metres)	Comment
18/12/2010	First warning issued	1.34	
27/12/2010	Exceeded minor flood level	2.00	Remained above minor flood levels for ~2 days.
27/12/2010	Exceeded moderate flood level	3.00	Remained above moderate flood levels for ~1.5 days.
27/12/2010	Exceeded major flood level	3.50	Remained above major flood levels for ~5 hours.
6:48 PM 27/12/2010	Major flood peak	3.54	Equal 10th highest on record.
27/12/2010	Fell below major flood level	3.50	
28/12/2010	Fell below moderate flood level	3.00	
29/12/2010	Fell below minor flood level	2.00	
09/01/2011	Exceeded minor flood level	2.00	Remained above minor flood levels for ~3 days.
10/01/2011	Exceeded moderate flood level	3.00	Remained above minor flood levels for ~2.5 days.
10/01/2011	Exceeded major flood level	3.50	Remained above minor flood levels for ~18 hours.
4:45 PM 10/01/2011	Major flood peak	3.74	Largest since 1983 and 5 th highest on record.
11/01/2011	Fell below major flood level	3.50	
12/01/2011	Fell below moderate flood level	3.00	
13/01/2011	Fell below minor flood level	2.00	
7:41 AM 14/01/2011	Final warning issued		

Flood heights at Dalby

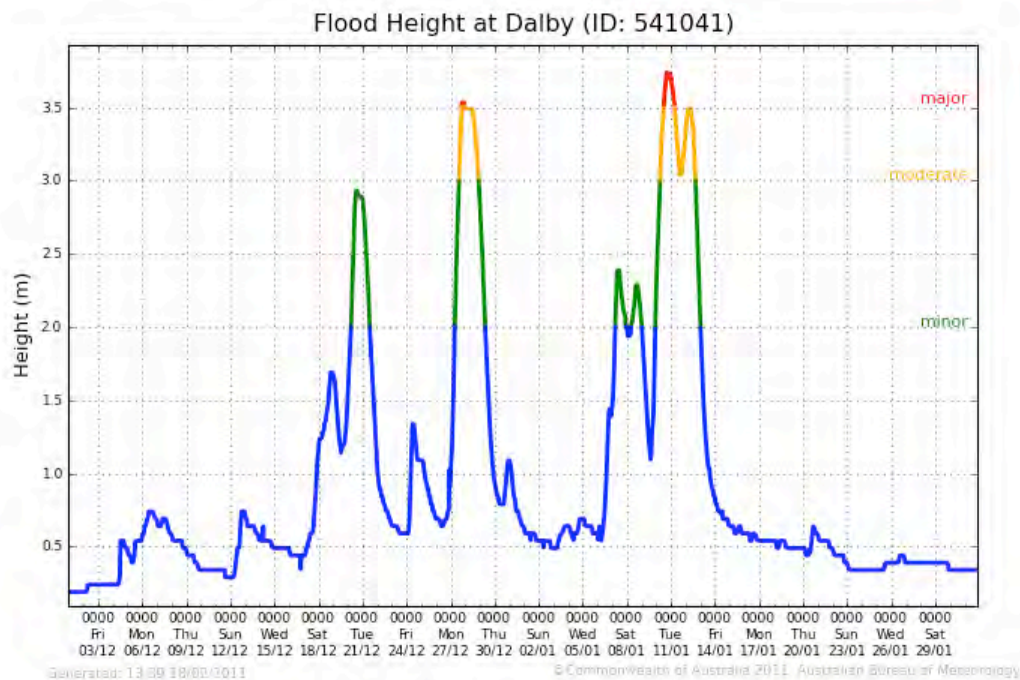


Figure 4. Flood heights at the Dalby AL gauge.

Comparison with previous floods

- Start of record 1908 with 11 major flood peaks in the record with 2 occurring in 1956 and 2 also in 1981.
- The last major flood recorded at Dalby was 3.80 metres in June 1983 and the record flood is 4.50 metres in February 1981.

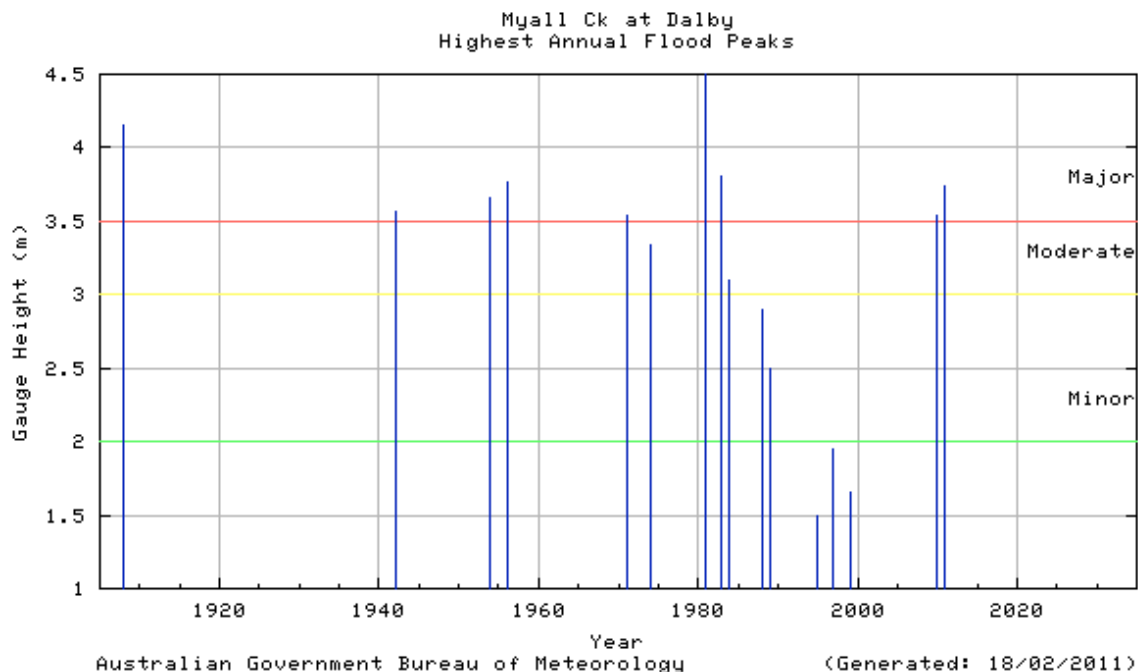


Figure 5. Highest annual flood peaks for Myall Creek at Dalby.

Warning and Forecast Service

- The catchment started to become saturated during October with flood warnings for the Condamine and Balonne Rivers issued between 10/10/2010 and 25/10/2010.
- A total of 103 warnings were issued for the Condamine and Balonne River during December 2010 and January 2011.

Table 3. Table of peak height predictions for Dalby.

Time of Height Forecast	Forecast	Peak
18/12/2010 First warning issued. Height at the time was 1.34m (below minor)		
6:43 PM on Sunday the 19th of December 2010	At Dalby, a level of at least 2.5 metres is forecast with higher levels likely. Forecasts will be updated as upstream peaks are observed.	2.94 metres at 1:25 PM Mon 20/12/2010.
9:01 AM on Monday the 20th of December 2010	At Dalby, a level of at least 3.2 metres is forecast with higher levels likely. Major flood levels are possible. Forecasts will be updated as upstream peaks are observed.	
6:47 AM on Monday the 27th of December 2010	River levels downstream at Dalby are rising with minor flood levels expected to about 2.6 metres during Monday afternoon.	3.54 metres at 6:50 PM Mon 27/12/2010.
12:36 PM on Monday the 27th of December 2010	Minor flood levels downstream at Dalby continue to rise with moderate flooding and higher levels possible during Monday afternoon.	
5:26 PM on Monday the 27th of December 2010	A peak of about 3.8 metres at Dalby is expected by midnight tonight causing major flooding.	
11:46 PM on Sunday the 9th of January 2011	Reach 3 metres (moderate) by midday Monday. Possibly reach 3.5 metres (major) Monday night.	3.74 metres at 4:45 PM Mon 10/01/2011.
1:44 AM on Monday the 10th of January 2011	Peak up to 3 metres (moderate flood level) by 8am Monday.	
6:13 AM on Monday the 10th of January 2011	Reach 3.5 metres (major flood level) by midday Monday.	
5:25 PM on Monday the 10th of January 2011	Major flood peak in the next 3 to 6 hours. Remain high during Tuesday.	
10:32 PM on Monday the 10th of January 2011	Further rises and high level major flooding possible if heavy rainfall returns to the catchment.	3.49 metres at 3:30 AM Wed 12/01/2011.
6:55 AM on Tuesday the 11th of January 2011	Fall this morning before rising again with a peak expected overnight to around 3.7 metres again.	
2:15 PM on Tuesday the 11th of January 2011	Fall this morning before rising again with a peak expected overnight to around 3.8 metres.	
6:44 PM on Tuesday the 11th of January 2011	Reach 3.8 metres (major) during Wednesday morning.	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Nogoa River at Emerald

- The town of Emerald is on the Nogoa River in the Fitzroy catchment
- The flood heights at Emerald are measured using a combination of an automatic gauge owned by the Central Highlands Regional Council and a manual gauge owned by the Bureau of Meteorology (Bureau station number: Automatic – 535076, Manual - 053260).
- Emerald recorded major flooding in December 2010 causing significant inundation to the town.
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map



Figure 1. Map showing location of Emerald.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

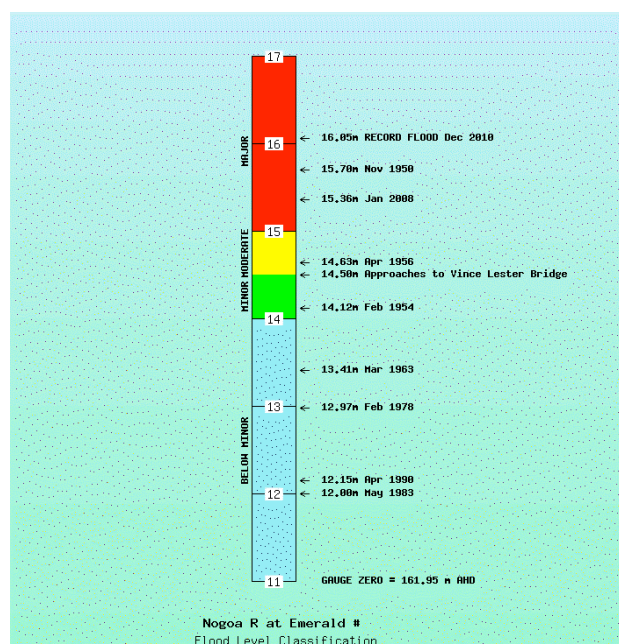


Figure 2. Flood level classifications and flood effects for Emerald.

- **Peaked at 16.05 metres on 31/12/2010.**
- Minor: 14 metres
Moderate: 14.5 metres
Major: 15 metres.
- Gauge zero is 161.95 metres AHD.
- Estimated 1000 houses and 95% of properties inundated (ABC News).
- The river peaked at 16.05 metres on 31/12/2010. This peak is a new record, higher than the previous record of 15.7 metres in 1950.
- Above major flood level (15 metres) from 30/12/2010 to 02/01/2011.
- Remained above minor flood level (14 metres) from 29/12/2010 to 03/01/2011.

Rainfall summary

- Over 600mm was recorded in parts of the Nogoa River catchment during December 2010 and January 2011.
- Very heavy rainfall of over 400mm in the Carnarvon ranges between 9am on 26/12/2010 and 9am on 28/12/2010.

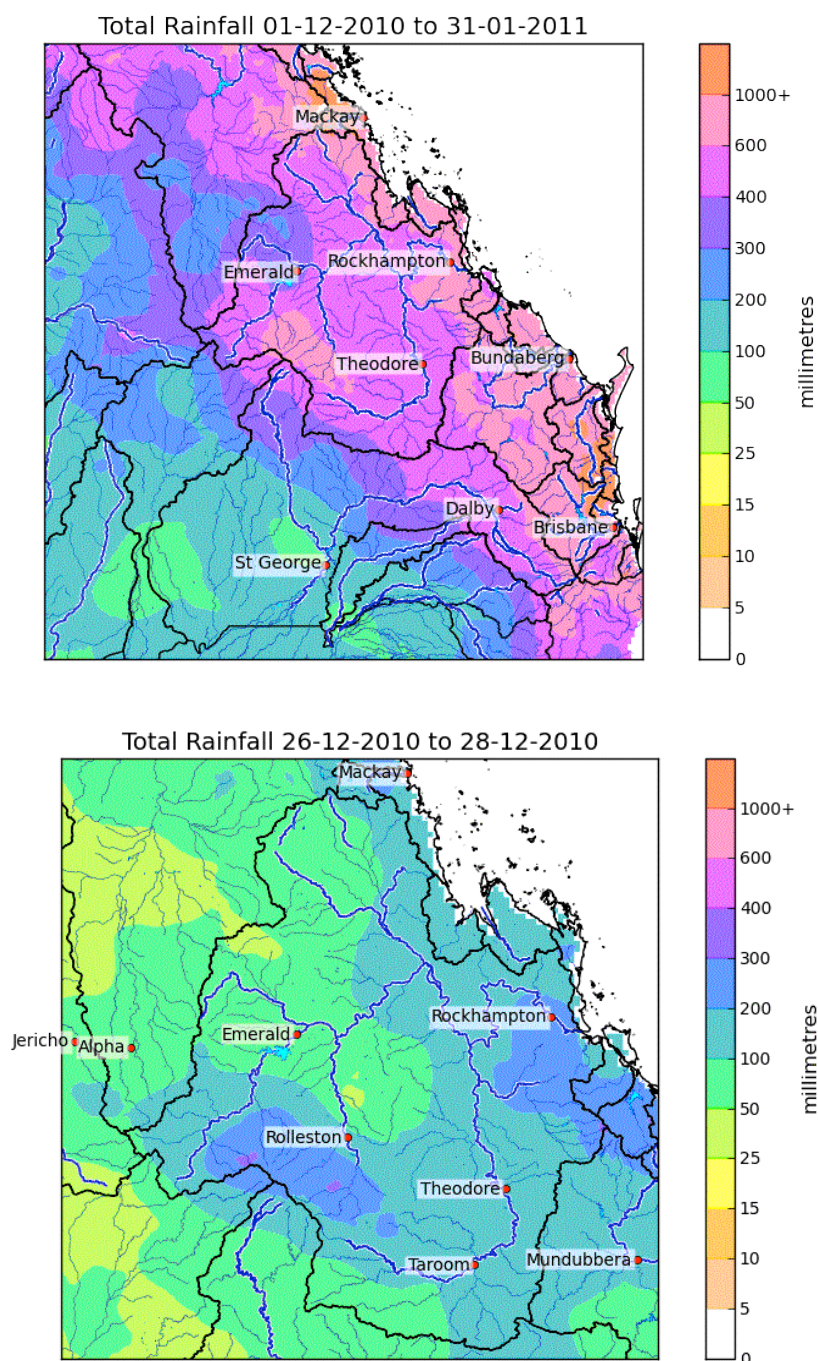


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the 48 hours to 9am on 28/12/2010 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for four selected stations at Penjobe TM on Cona Creek, Upper Van Dyke AL near Vandyke Creek, Upper Claude AL near Clyde River and Glen Rock AL are shown in Tables 1 and 2.
- The most significant rainfall intensities for December 2010 and January 2011 occurred in the 12 to 72 hours prior to the 27/12/2010, with mainly a 1-2% Annual Exceedence Probability (50-100 year Average Recurrence Interval).

Table 1. Recorded maximum rainfall intensities for Penjobe TM on Cona Creek and Upper Van Dyke AL near Vandyke Creek for December 2010 and January 2011.

Rainfall Duration	Penjobe TM			Upper Van Dyke AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
12hr	158	11:55 AM 27/12/2010	50-100	189	5:55 AM 27/12/2010	> 100
24hr	239	12:35 PM 27/12/2010	> 100	248	1:05 PM 27/12/2010	> 100
48hr	261	12:35 PM 27/12/2010	50-100	268	2:55 PM 27/12/2010	> 100
72hr	264	1:30 PM 27/12/2010	50-100	272	3:30 PM 27/12/2010	50-100

Table 2. Recorded maximum rainfall intensities for Upper Claude AL near Clyde River and Glen Rock AL for December 2010 and January 2011.

Rainfall Duration	Upper Claude AL			Glen Rock AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
12hr	180	1:10 AM 27/12/2010	> 100	210	5:40 AM 27/12/2010	> 100
24hr	198	12:35 PM 27/12/2010	50-100	271	12:25 PM 27/12/2010	> 100
48hr	221	2:30 PM 27/12/2010	20-50	290	2:25 PM 27/12/2010	> 100
72hr	222	2:30 PM 27/12/2010	20-50	292	2:25 PM 27/12/2010	> 100

Flood event timeline

Table 3. Flood timeline for Emerald

Time/Date	Event Description	Gauge Height (metres)	Comment
6:51 AM 27/12/2010	First warning issued	10.65	First warning issued with reference to Emerald flooding.
29/12/2010	First time it exceeded minor flood level	14.0	Remained above minor flood level for ~6 days
29/12/2010	First time it exceeded moderate flood level	14.5	Total time above moderate flood was ~ 5 days
30/12/2010	First time it exceeded major flood level	15.00	Total time above major flood was ~4 days
4:00AM 31/12/2010	Major flood peak	16.05	New record
02/01/2011	Final fall below major	15.00	
02/01/2011	Final fall below moderate	14.5	
03/01/2011	Final fall below minor	14.0	
6:01 PM 03/01/2011	Final warning issued		

Flood Heights at Emerald

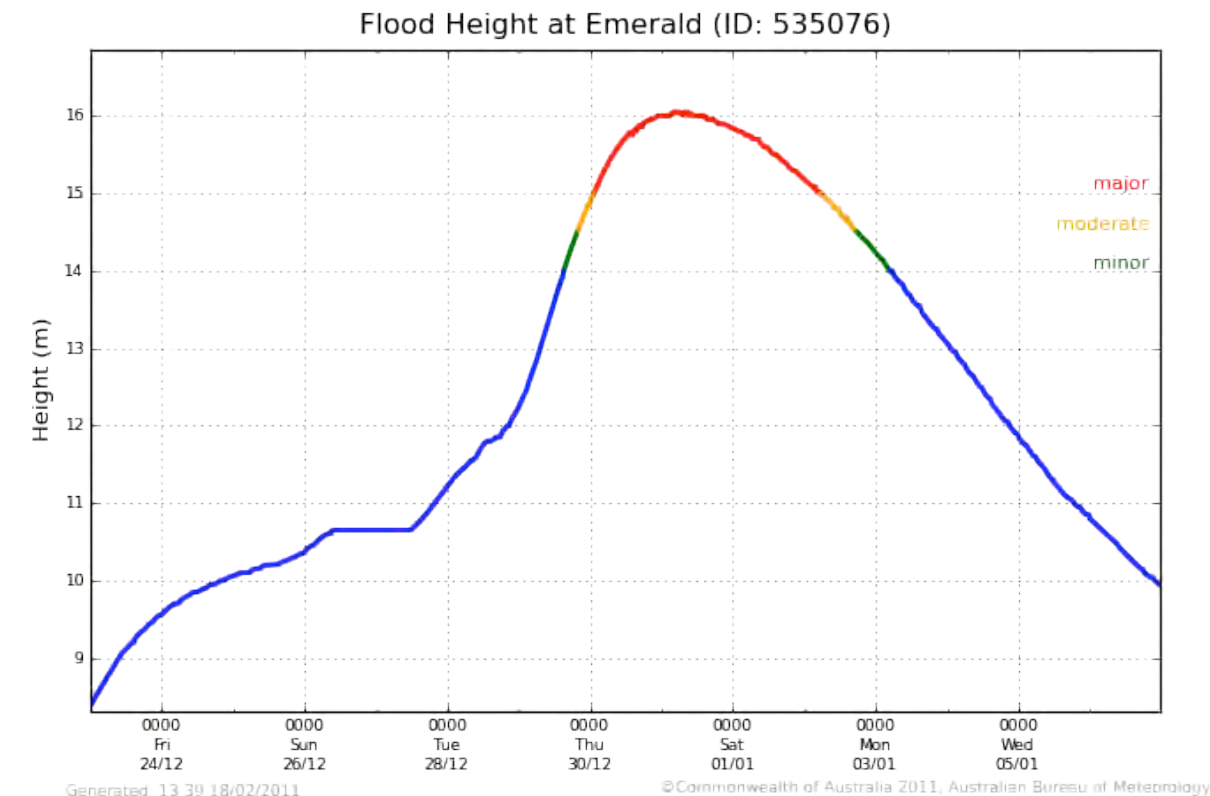


Figure 4. Flood Heights for the Emerald Alert.

Comparison with previous floods

- Start of record 1950 with 3 major flood peaks in the record
- Last major flood was 15.36 metres January 2008 but previous to that was 15.7 metres in 1950.

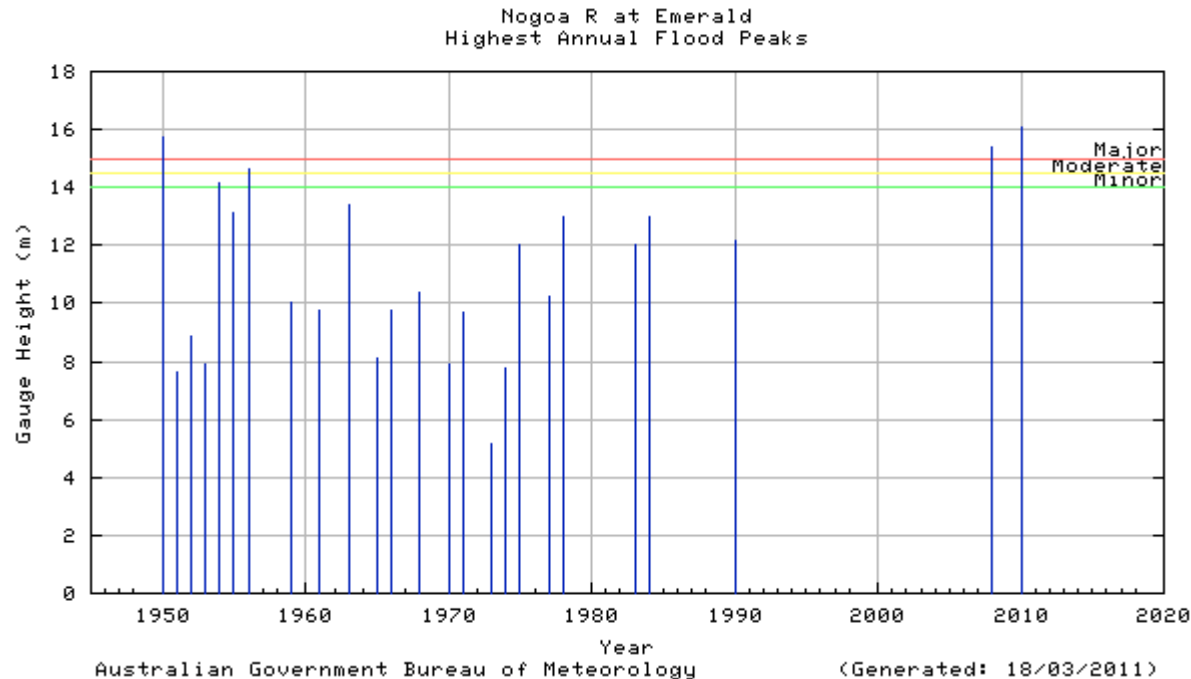


Figure 5. Highest annual flood peaks for the Nogoa River at Emerald.

Warning and Forecast Service

- Significant runoff commenced during early December with flood warnings for the Nogoa River issued between 03/12/2010 and 06/12/2010.
- Heavy rainfall occurred in late December with warnings commencing 27/12/2010 and continuing through to 03/01/2011.
- A total of 79 warnings were issued for the Fitzroy River system including the Nogoa River during December 2010 and January 2011.

Table 4. Table of peak height predictions for Emerald.

Time of Height Forecast	Forecast	Peak
27/12/2010 First warning issued. Height at the time was 10.65m (below minor)		
7:06 AM on Tuesday the 28th of December 2010	Exceed 14.5 metres (moderate) early Thursday	Rising limb forecasts – reach a level and expected to continue rising
1:09 PM on Tuesday the 28th of December 2010	Exceed 14.5 metres (moderate) late Wednesday. Reach near 15.3 metres (major) during Friday.	
6:51 PM on Tuesday the 28th of December 2010	Exceed 15 metres (major) overnight Wednesday. Reach near 15.3 metres (major) during Friday.	14.55 metres at 8:10 PM Wed 29/12/2010 15.0 metres at 1:15 AM Thurs 30/12/2010 15.3 metres at 4:36 AM Thurs 30/12/2010
8:59 AM on Wednesday the 29th of December 2010	Reach about 15.7 metres during Friday.	15.7 metres at 11:18 AM Thurs 30/12/2010
9:59 PM on Wednesday the 29th of December 2010	Reach up to 15.9 metres during Friday.	15.9 metres at 5:16 PM Thurs 30/12/2010
7:12 AM on Thursday the 30th of December 2010	Reach up to 16.2 metres during Friday.	16.05 metres at 4:00 AM Fri 31/12/2010
7:34 AM on Friday the 31st of December 2010	Currently peaking at Emerald with latest reading of 16.05 metres at 6am Friday.	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Macintyre River at Goondiwindi

- The town of Goondiwindi is in the Macintyre River catchment.
- The flood heights at Goondiwindi are measured using a combination of an automatic gauge which is owned by the Department of Environment and Resource Management (DERM) and a manual station which is co-owned by the Bureau of Meteorology and DERM (Bureau station number: automatic gauge – 041500 and manual gauge – 041350).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

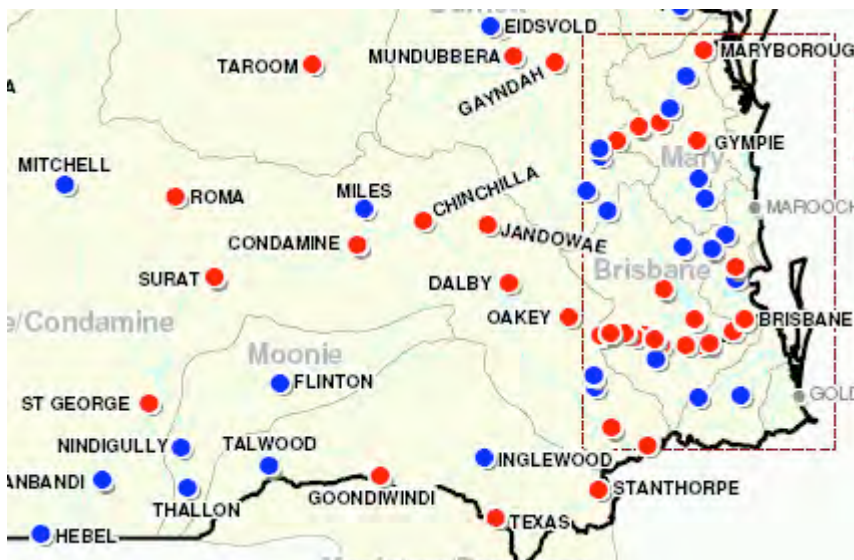


Figure 1. Map showing location of Goondiwindi.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

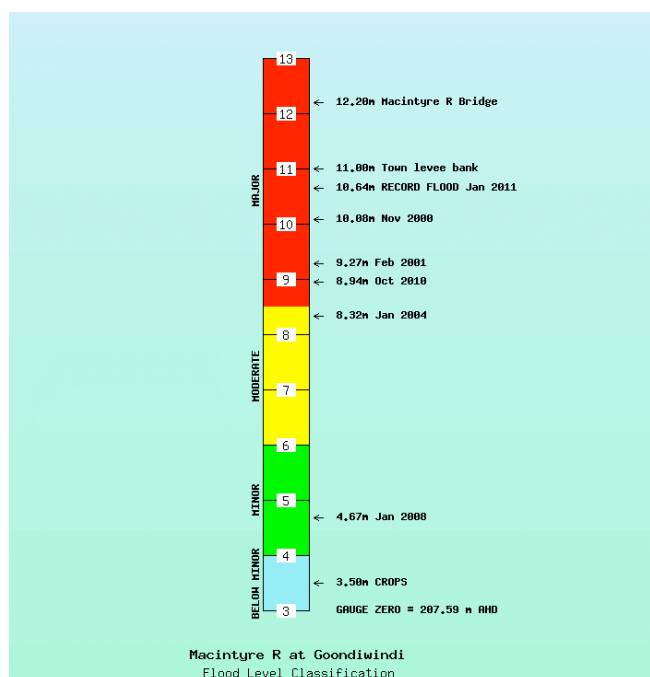


Figure 2. Flood level classifications and flood effects for Goondiwindi.

- **Peaked at 10.64 metres on 14/01/2011.**
- Minor: 4.0 metres
Moderate: 6.0 metres
Major: 8.5 metres.
- Gauge zero is 207.590 metres AHD.
- Goondiwindi Hospital and Aged Care Facility were evacuated. (WDRC)
- Goondiwindi was above major flood level (8.5 metres) from 09/01/2011 to 10/01/2011 and between the 13/01/2011 and 17/01/2011.
- It remained above minor flood level (4.0 metres) from 06/01/2011 to 23/01/2011.

Rainfall summary

- In excess of 400mm or rainfall was recorded in the Macintyre River catchment during December 2010 and January 2011.
- The vast majority of this rainfall fell between 09/01/2011 and 13/01/2011.

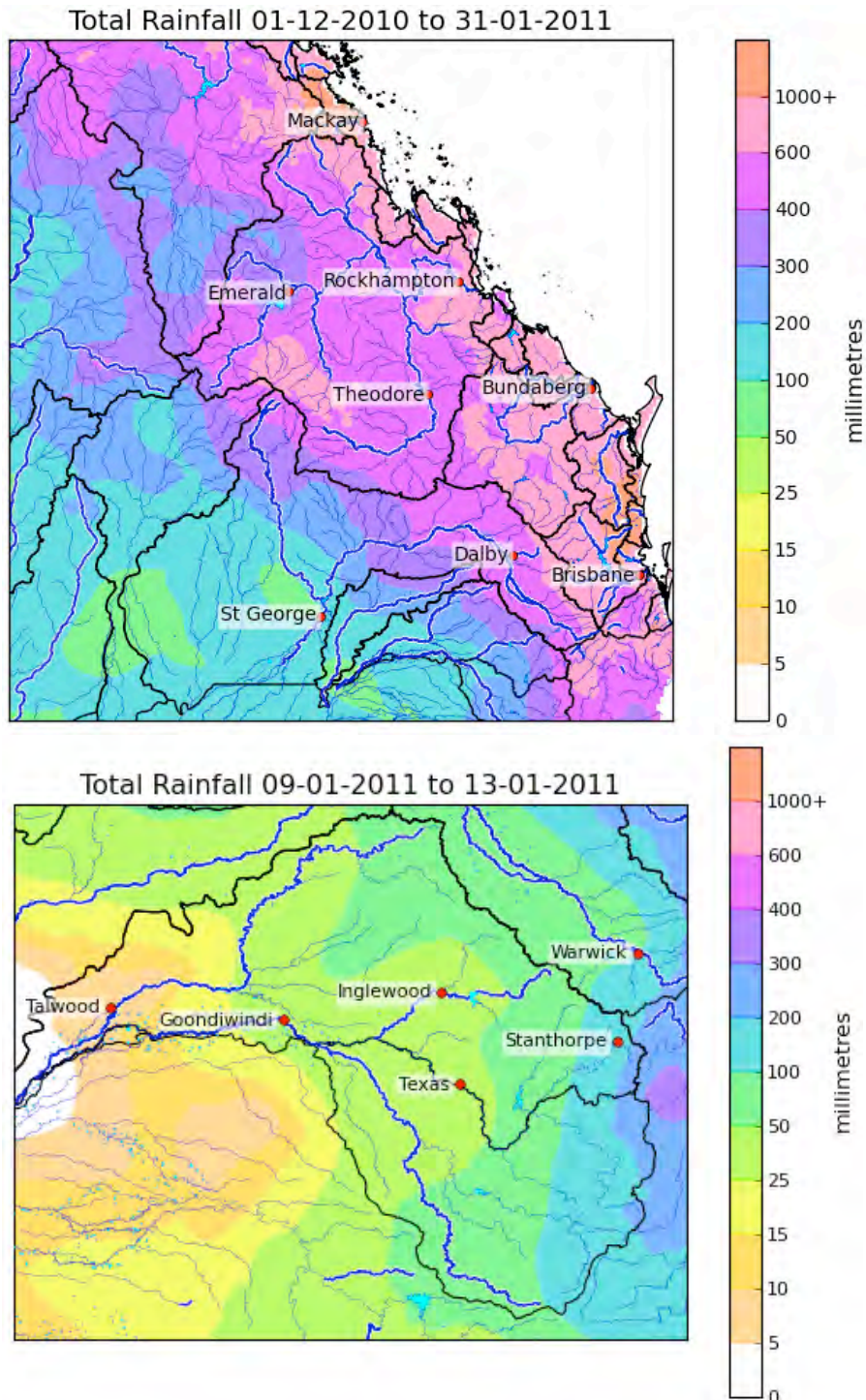


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the period 09/01/2011 to the 13/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for Broadwater Creek AL and Amiens Knob AL on the upper Dumaresq River which is in the Macintyre River catchment are shown in Table 1.
- The most significant rainfall intensity for Broadwater Creek AL in January 2011 occurred in the 20 minutes ending 3:10pm on 03/01/2011 producing a 10-20 ARI, however all periods were well below the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).
- The most significant rainfall intensity for Amiens Knob AL in January 2011 occurred in the 30 minutes to 2:45pm on 03/01/2011 producing a 50-100 ARI, which represents close to a 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded maximum rainfall intensities for Broadwater Creek AL and Amiens Knob AL on the Macintyre River for January 2011.

Rainfall Duration	Broadwater Creek AL			Amiens Knob AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
5 min	11	3:05 PM 03/01/2011	5	11	2:25 PM 03/01/2011	5
6 min	12	3:06 PM 03/01/2011	5	13	2:26 PM 03/01/2011	5-10
10 min	18	3:05 PM 03/01/2011	5-10	19	2:45 PM 03/01/2011	10
20 min	29	3:10 PM 03/01/2011	10-20	36	2:40 PM 03/01/2011	20-50
30 min	31	3:20 PM 03/01/2011	5-10	49	2:45 PM 03/01/2011	50-100
1hr	33	3:45 PM 03/01/2011	2-5	57	3:15 PM 03/01/2011	20-50
2hr	35	4:30 PM 03/01/2011	1-2	58	4:15 PM 03/01/2011	10-20
3hr	36	5:05 PM 03/01/2011	1-2	59	4:20 PM 03/01/2011	5-10
6hr	36	5:05 PM 03/01/2011	<1	60	4:20 PM 03/01/2011	2-5
12hr	50	12:50 PM 27/12/2010	<1	61	10:35 PM 03/01/2011	1-2
24hr	63	12:50 PM 27/12/2010	1	61	10:35 PM 03/01/2011	1
48hr	92	11:30 PM 11/01/2011	1-2	72	10:45 PM 11/01/2011	<1
72hr	104	4:40 PM 11/01/2011	1-2	98	1:10 PM 06/01/2011	1-2

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood event timeline for Goondiwindi.

Time/Date	Event Description	Gauge height (metres)	Comment
27/12/2010	First warning issued	2.94	
06/01/2011	First time it exceeded minor flood level	4.00	Remained above minor flood levels for ~16 days.
07/01/2011	First time it exceeded moderate flood level	6.00	Remained above moderate flood levels for ~10.5 days.
09/01/2011	First time it exceeded major flood level	8.50	Remained above major flood levels for ~1.5 days.
7:00 PM 09/01/2011	Major flood peak	8.94	
10/01/2011	Fell below major	8.50	
13/01/2011	First time it exceeded major flood level	8.50	Remained above major flood levels for ~4 days.
7:00 AM 14/01/2011	Major flood peak	10.64	Highest on record.
16/01/2011	Final fall below major	8.50	
18/01/2011	Final fall below moderate	6.00	
23/01/2011	Final fall below minor	4.00	River level exceeded the minor flood level on the high tide on the 15/01/2011.
7:43 AM 21/01/2011	Final warning issued		

Flood Heights at Goondiwindi

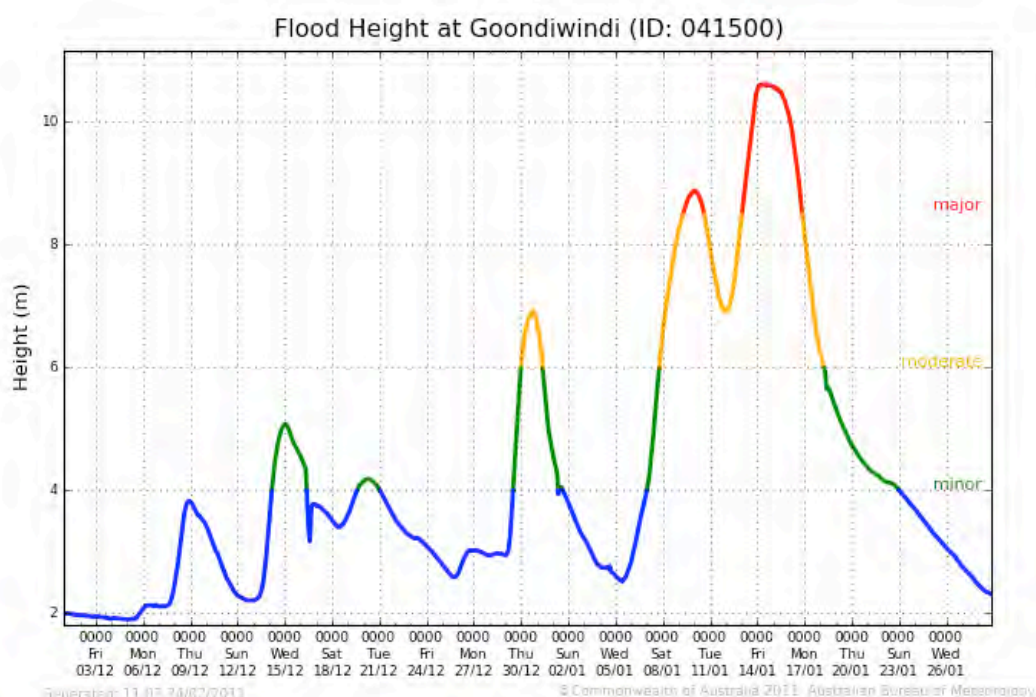


Figure 4. Flood Heights at the Goondiwindi TM gauge for December 2010 and January 2011.

Comparison with previous floods

- River height records for Goondiwindi commenced in 1886 with 82 major flood peaks since that time, with many occurring in the same year.
- The peak of 10.64 metres recorded at Goondiwindi in January has replaced the previous record flood of 10.60 metres recorded in 1996.

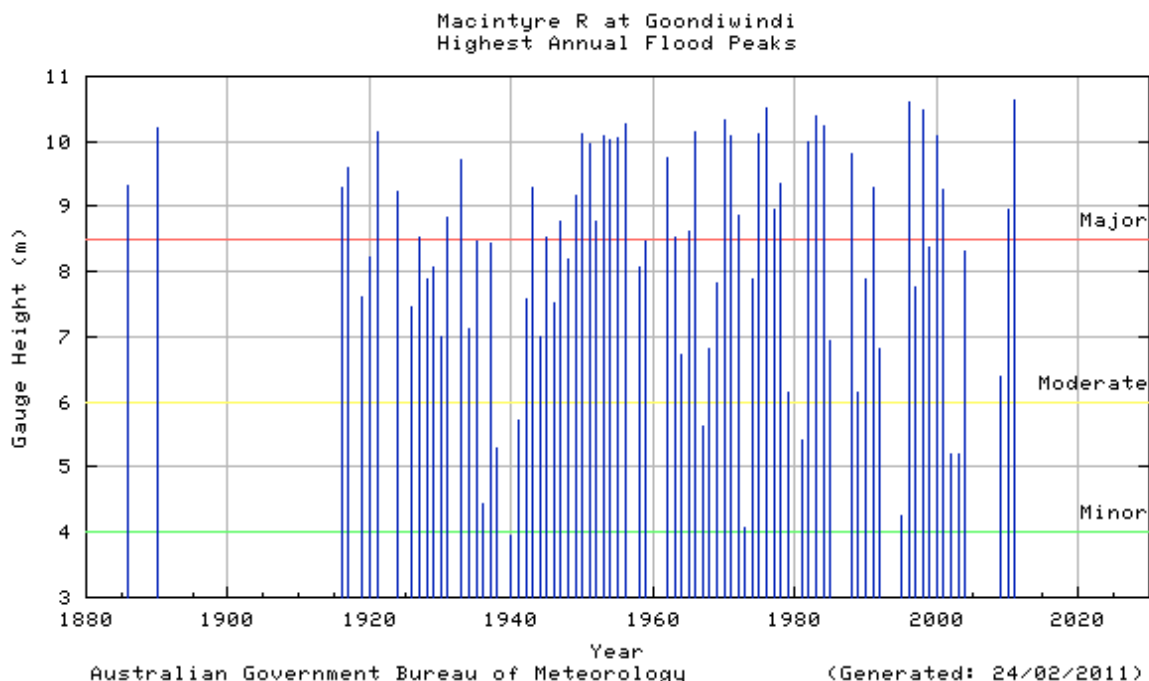


Figure 5. Highest annual flood peaks for the Macintyre River at Goondiwindi.

Warning and Forecast Service

- The catchment received well above average rainfall and subsequently recorded multiple flood peaks throughout August, September and October with 6 periods of flood warnings issued for the Border Rivers during this period.
- Flood warnings for the Border Rivers were next issued between the 11/12/2010 and 15/12/2010 and begun again on the 27/12/2010 and continued until the 30/01/2011.
- A total of 59 warnings were issued for the Border Rivers during December 2010 and January 2011.

Table 3. Table of peak height predictions for Goondiwindi.

Time of Height Forecast	Forecast	Peak
27/12/2011 First warning issued. Height at the time was 2.94m (below minor)		
1:44 AM on Thursday the 6th of January 2011	Minor flooding to develop going into the weekend between New Kildonan and Goondiwindi.	Rising limb forecasts
4:17 PM on Thursday the 6th of January 2011	Moderate flood levels during the weekend.	
6:22 AM on Friday the 7th of January 2011	Major flood levels above 9 metres expected during the weekend.	
6:51 AM on Saturday the 8th of January 2011	Major flood peak around 9.2 metres during Sunday.	8.94 metres at 7:00 PM Thurs 09/01/2011
6:32 AM on Sunday the 9th of January 2011	Major flood peak of about 8.8 metres today.	
11:13 AM on Tuesday the 11th of January 2011	Major flood levels are expected along the lower Macintyre River from Glenarbon to Goondiwindi during the next 48 hours.	Rising limb forecasts
5:48 PM on Tuesday the 11th of January 2011	At Goondiwindi, river levels have eased below the major flood level but are expected to rise again and peak around the January 1996 flood level of 10.6 metres late Thursday.	
11:31 PM on Tuesday the 11th of January 2011	Peak around the January 1996 flood level of 10.6 metres late Thursday.	10.64 metres at 7:00 AM Thurs 14/01/2011
7:23 PM on Wednesday the 12th of January 2011	Reach around the January 1996 flood level of 10.6 metres late Thursday with further rises possible.	
12:09 PM on Thursday the 13th of January 2011	Reach above the 1996 flood level of 10.6 metres late Thursday. A record flood peak is expected.	
2:04 PM on Thursday the 13th of January 2011	Reach above the 1996 flood level of 10.6 metres late Thursday. A record flood peak of 10.85 metres with possible further rises.	
8:14 PM on Thursday the 13th of January 2011	Reach above the 1996 flood level of 10.6 metres overnight Thursday. A record flood level of higher than 10.85 metres is likely.	
7:28 AM on Friday the 14th of January 2011	Rises continuing this morning. Record flood peak today of 10.85 metres, possibly higher.	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Mary River at Gympie

- The town of Gympie is on the Mary River in the Mary catchment
- The flood heights at Gympie are measured by an alert gauge (Bureau station number: 040993) and a manual gauge (Bureau station number: 040426) both owned by the Bureau of Meteorology.
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

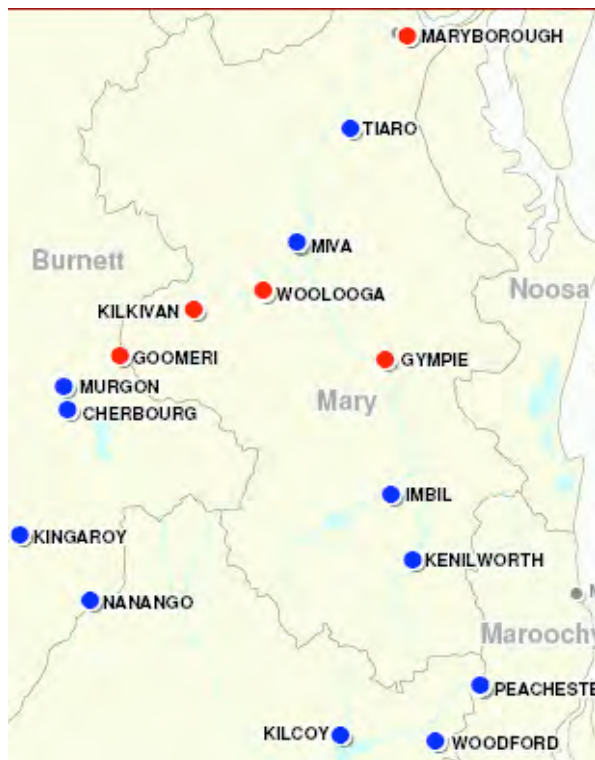
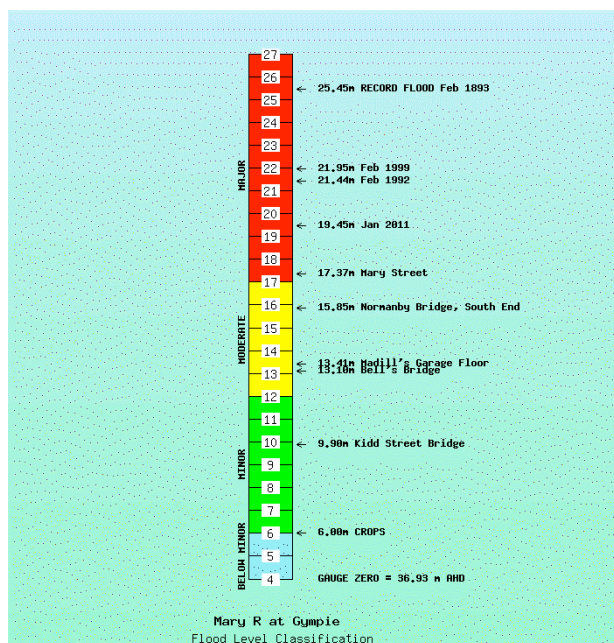


Figure 1. Map showing location of Gympie.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



- **Peaked at 19.45 metres on 11/01/2011.**
- Minor: 6 metres
Moderate: 12 metres
Major: 17 metres.
- Gauge zero is 36.93 metres AHD.
- Houses and businesses in the main street of Gympie were inundated. (Total properties affected is unknown at this stage.)
- Above major flood level (17 metres) from 10/01/2011 to 12/01/2011.
- Remained above minor flood level (6 metres) from 27/12/2010 to 31/12/2010 and again from 06/01/2011 to 15/01/2011.

Figure 2. Flood level classifications and flood effects for Gympie.

Rainfall summary

- Over 400mm recorded in the Mary River catchment during December 2010 and January 2011.
- Very heavy rainfall of over 600mm in the Upper Mary between 9am on 06/01/2011 and 9am on 13/01/2011. Most of the Mary catchment received over 400mm between 9am on 06/01/2011 and 9am on 13/01/2011.

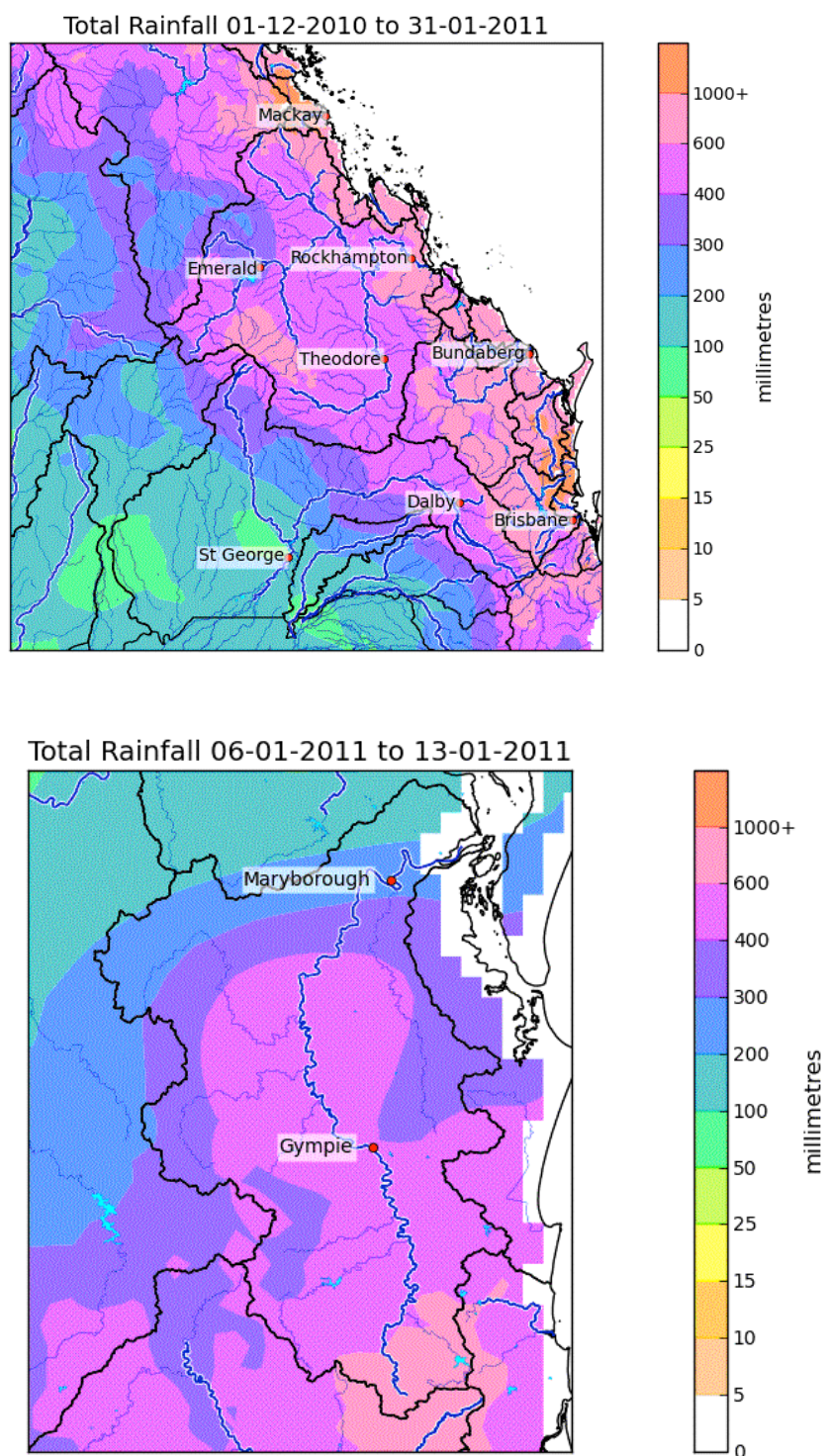


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for 9am on 06/01/2011 to 9am on 13/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for one selected station at West Bellthorpe AL in the upper part of the Mary River catchment, is shown in Table 1.
- The most significant rainfall intensities for December 2010 and January 2011 occurred in the 12 to 72 hour duration periods ending on the 12/01/2011, with less than a 1% Annual Exceedence Probability (greater than 100 year Average Recurrence Interval).

Table 1. Recorded maximum rainfall intensities for West Bellthorpe AL in the upper part of the Mary River catchment for December 2010 and January 2011.

Rainfall Duration	West Bellthorpe AL		
	Rainfall (mm)	Period ending	ARI (years)
12hr	245	9:05 PM 09/01/2011	50-100
24hr	349	4:20 AM 10/01/2011	> 100
48hr	481	4:35 AM 11/01/2011	> 100
72hr	605	1:20 AM 12/01/2011	> 100

Flood event timeline

Table 2. Flood timeline for Gympie

Time/Date	Event Description	Gauge Height (metres)	Comment
8:17 AM 27/12/2011	First time it exceeded minor flood level	6.0	Remained above minor flood level for ~5 days
31/12/2011	Fall below minor	6.0	
5:19 PM 06/01/2011	First warning issued		
06/01/2011	Exceeded minor flood level	6.0	Remained above minor flood level for ~10 days
07/01/2011	First time it exceeded moderate flood level	12.0	Total time above moderate flood was ~8 days
10/01/2011	First time it exceeded major flood level	17.0	Total time above major flood was ~2 days
5:00 AM 11/01/2011	Major flood peak	19.45	
12/01/2011	Final fall below major	17.0	
14/01/2011	Final fall below moderate	12.0	
15/01/2011	Final fall below minor	6.0	
8:54 AM 15/01/2011	Final warning issued		

Warning and Forecast Service

- Significant runoff commenced during early December with flood warnings for the Mary River issued between 12/12/2010 and 14/12/2010 and again between 19/12/2010 and 22/12/2010.
- Further heavy rainfall occurred in early January with warnings commencing on 06/01/2011 and continuing through to 15/01/2011.
- A total of 43 warnings were issued for the Mary River system including Gympie during December 2010 and January 2011.

Table 3. Table of peak height predictions for Gympie

Time of Height Forecast	Forecast	Peak
06/01/2011 First warning issued. Height at the time was 6.14m (minor)		
2:25 PM on Friday the 7th of January 2011	Reach at least 12 metres overnight Friday with further rises as rainfall continues.	Rising limb forecasts – reach a level and expected to continue rising
7:12 PM on Friday the 7th of January 2011	Reach at least 12 metres (moderate flood level) overnight Friday, with further rises and 13 metres possible as the heavy rainfall remains in the catchment.	
11:15 PM on Friday the 7th of January 2011	Further rises to 13 metres likely as the heavy rainfall remains in the catchment.	
2:09 AM on Saturday the 8th of January 2011	Further rises to above 13 metres expected. Peak around 13.5 metres during Saturday morning.	12.04 metres at 9:15 PM Fri 07/01/2011 13.09 metres at 3:36 AM Sat 08/01/2011 13.54 metres at 6:24 AM Sat 08/01/2011
5:57 AM on Saturday the 8th of January 2011	Reach at least 14 metres during Saturday with further rises possible.	14.04 metres at 11:04 AM Sat 08/01/2011
10:05 AM on Saturday the 8th of January 2011	Peak around 14.3 metres during Saturday.	14.34 metres at 3:16 PM Sat 08/01/2011
6:36 PM on Saturday the 8th of January 2011	14.4 metres at 4:30pm and close to peak.	14.44 metres at 5:53 PM Sat 08/01/2011
6:08 AM on Sunday the 9th of January 2011	Remain above 13 metres today with further rises possible as rainfall continues.	
11:01 AM on Sunday the 9th of January 2011	Reach at least 16 metres overnight. A major flood level above 17 metres is possible if rainfall continues.	16.04 metres at 5:22 AM Mon 10/01/2011
1:55 PM on Sunday the 9th of January 2011	Reach at least 17 metres early on Monday. Higher levels above 17 metres are likely as rainfall continues.	17.04 metres at 9:51 AM Mon 10/01/2011
5:50 PM on Sunday the 9th of January 2011	Exceed 17 metres early Monday. Higher levels expected during Monday.	
10:10 PM on Sunday the 9th of January 2011	Exceed 17 metres early Monday. Reach at least 19 metres during Monday afternoon.	19.04 metres at 9:40 PM Mon 10/01/2011
6:12 AM on Monday the 10th of January 2011	Exceed 20 metres overnight Monday.	19.45 metres at 5:00 AM Tues 11/01/2011
11:29 AM on Monday the 10th of January 2011	Reach around 20 metres overnight Monday.	
11:00 PM on Monday the 10th of January 2011	Peak around 20 metres overnight Monday.	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Bremer River at Ipswich

- The city of Ipswich is on the Bremer River in the Brisbane River catchment.
- The flood heights at Ipswich are measured with a combination of a manual and an automatic gauge co-owned by the Bureau of Meteorology and the Ipswich City Council (Bureau station number: manual gauge – 040101 and automatic gauge – 040831).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

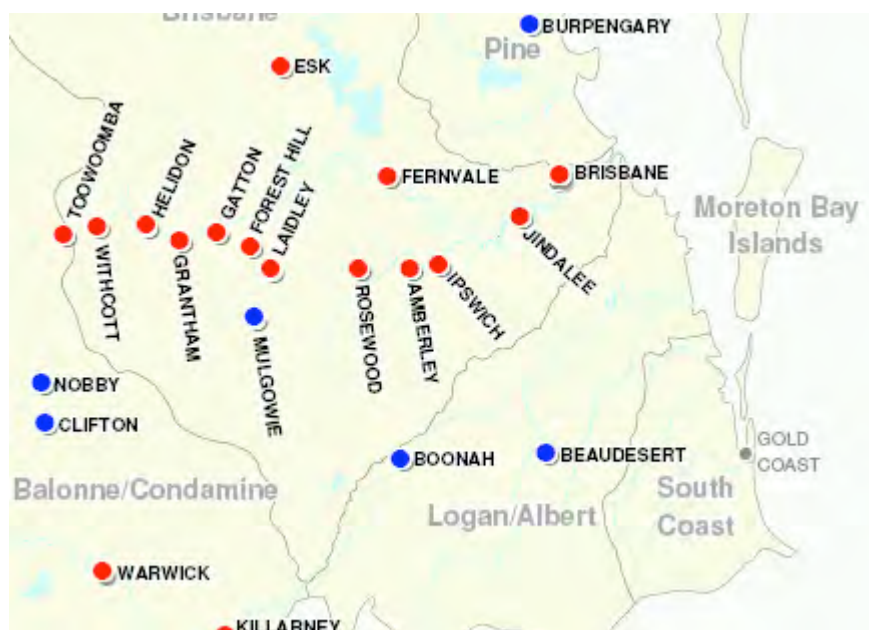
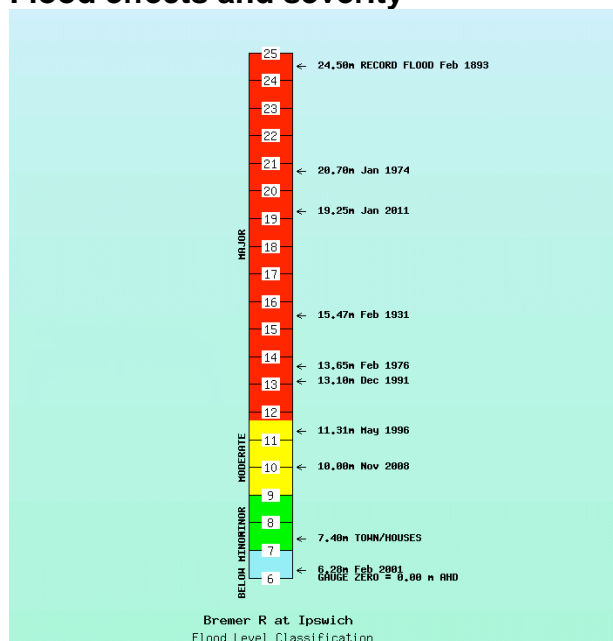


Figure 1. Map showing location of Ipswich.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



- The river peaked at 19.25 metres on 12/01/2011.
- Minor: 7 metres
Moderate: 9 metres
Major: 11.7 metres
- Gauge zero is 0.0 metres AHD.
- 3000 properties were inundated in the Ipswich area. (ABC 612 Radio)
- Ipswich was above major flood level (11.7 metres) from 11/01/2011 to the 14/01/2011.
- It remained above minor flood level (7 metres) from 10/01/2011 to 18/1/2011.

Figure 2. Flood level classifications and flood effects for Ipswich.

Rainfall summary

- Rainfalls in excess of 1000mm were recorded in parts of the Brisbane River catchment during December 2010 and January 2011.
- The vast majority of this rainfall fell between 09/01/2011 and 13/01/2011.

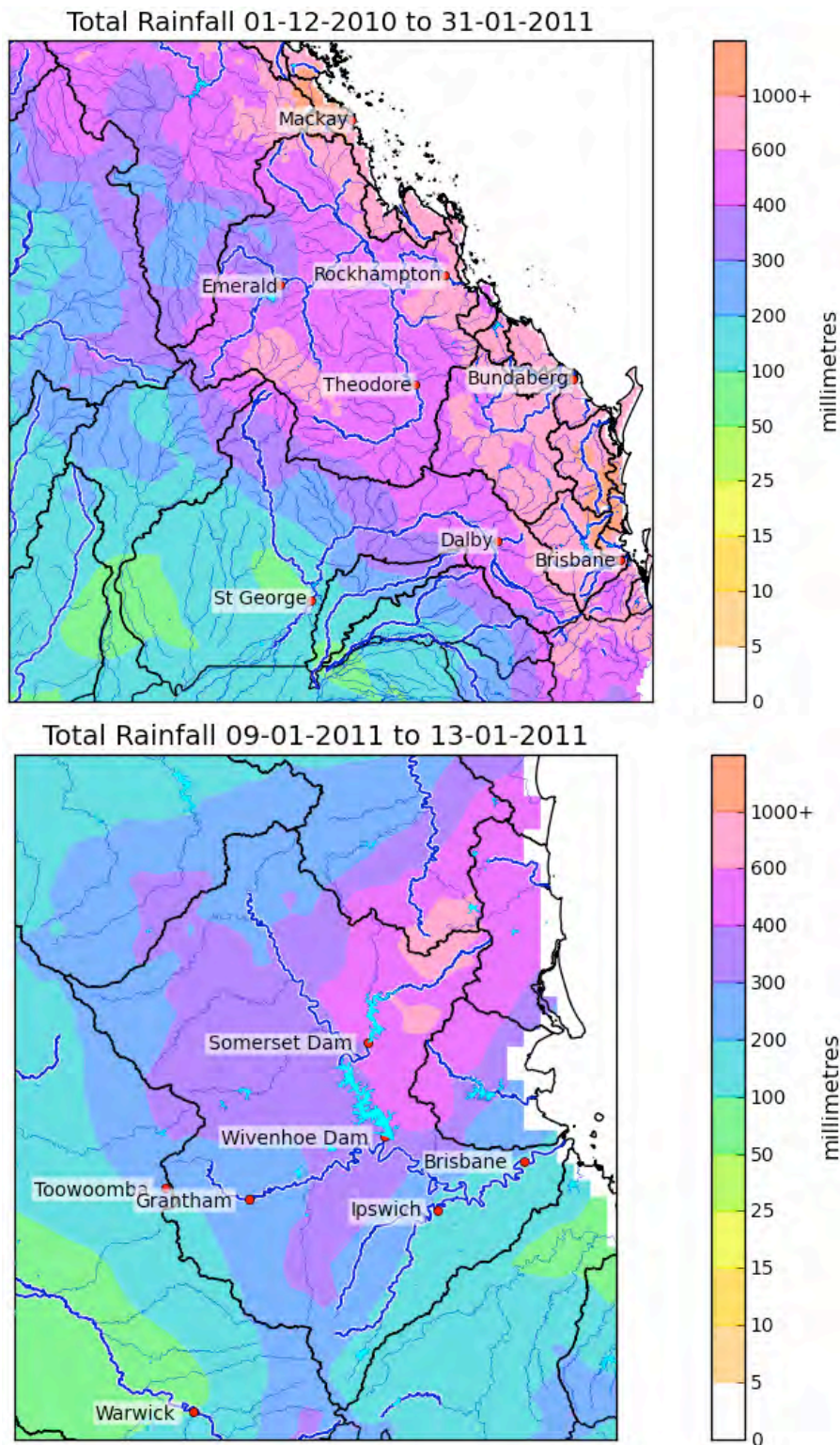


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the 96 hours to 9am on 13/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for two selected stations at Tallegalla AL and Spresters Bridge AL on the Bremer River upstream of Ipswich are shown in Table 1.
- The most significant rainfall intensities for Tallegalla AL in January 2011 exceeded the 1% Annual Exceedence Probability (100 year Average Recurrence Interval) intensities for multiple durations.
- The most significant rainfall intensities for Spresters Bridge AL in January 2011 exceeded the 1% Annual Exceedence Probability (100 year Average Recurrence Interval) intensities for multiple durations.

Table 1. Recorded maximum rainfall intensities for Tallegalla AL and Spresters Bridge AL on the Bremer River for January 2011.

Rainfall Duration	Tallegalla AL			Spresters Bridge AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
5 min	9	07:45 11/01/2011	1	9	09:10 11/01/2011	1
6 min	11	07:46 11/01/2011	1-2	11	09:11 11/01/2011	1-2
10 min	16	07:50 11/01/2011	1-2	18	09:10 11/01/2011	2
20 min	33	08:05 11/01/2011	2-5	28	09:15 11/01/2011	2-5
30 min	45	08:30 11/01/2011	5-10	41	09:30 11/01/2011	2-5
1hr	73	09:25 11/01/2011	10-20	58	09:35 11/01/2011	5-10
2hr	122	09:45 11/01/2011	50-100	86	09:35 11/01/2011	10-20
3hr	159	12:45 11/01/2011	>100	104	09:50 11/01/2011	20-50
6hr	241	17:45 11/01/2011	>100	172	14:05 11/01/2011	>100
12hr	336	19:10 11/01/2011	>100	233	17:55 11/01/2011	>100
24hr	360	14:05 11/01/2011	>100	241	19:25 11/01/2011	>100
48hr	424	15:10 11/01/2011	>100	290	17:55 11/01/2011	50-100
72hr	450	19:15 11/01/2011	>100	324	21:40 11/01/2011	50-100

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood timeline for Ipswich.

Time/Date	Event Description	Gauge height (metres)	Comment
06/01/2011	First warning issued	1.00	
10/01/2011	First time exceeded minor flood level	7.00	Remained above minor flood levels for ~7.5 days.
11/01/2011	First time exceeded moderate flood level	9.00	Remained above moderate flood levels for ~4 days.
11/01/2011	First time exceeded major flood level	11.70	Remained above major flood levels for ~2.5 days.
1:45 PM 12/01/2011	Major flood peak	19.25	Highest since 1974.
14/01/2011	Final fall below major	11.70	
14/01/2011	Final fall below moderate	9.00	
18/01/2011	Final fall below minor	7.00	
6:50 AM 21/01/2011	Final warning issued		

Flood heights at Ipswich

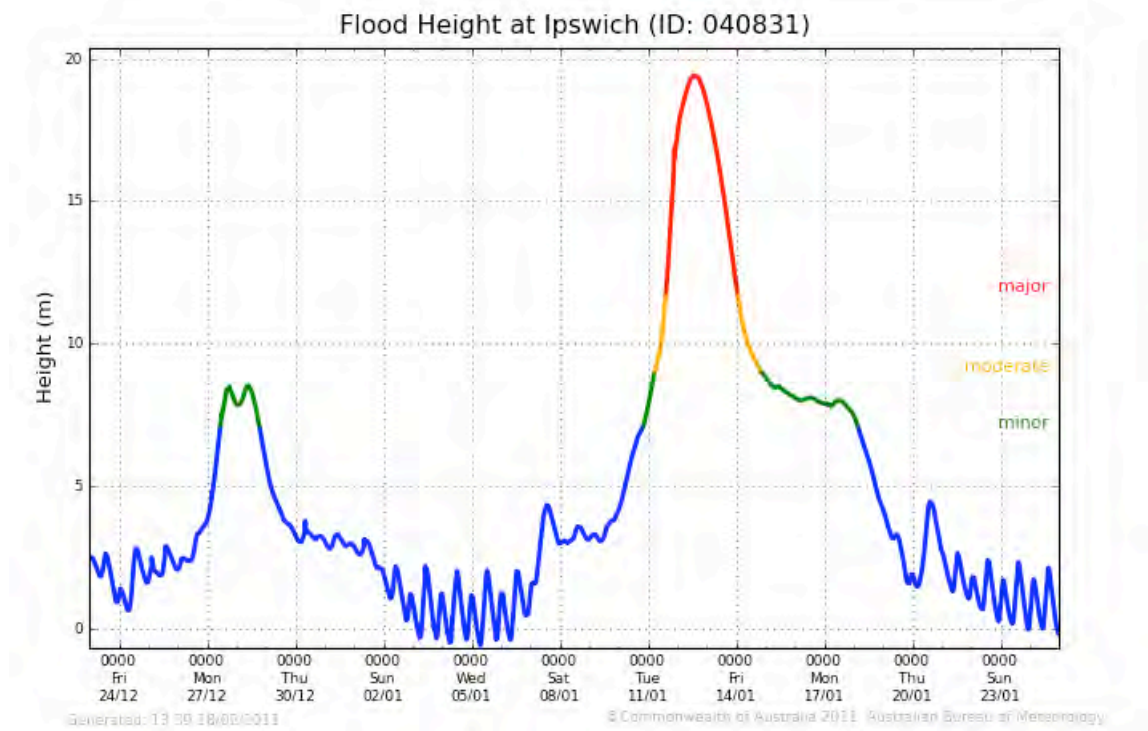


Figure 4. Flood heights at the Ipswich AL gauge.

Comparison with previous floods

- Start of record 1840 with 18 major flood peaks in the record.
- The last major flood recorded at Ipswich was 13.10 metres in December 1991 with major floods also occurring in 1976 (13.65 metres) and 1974 (20.70 metres).
- The highest floods in 1893, 1974 and 2011 were all as a result of backwater from the Brisbane River. (Note: the 1893 record flood reached 24.5 metres.)

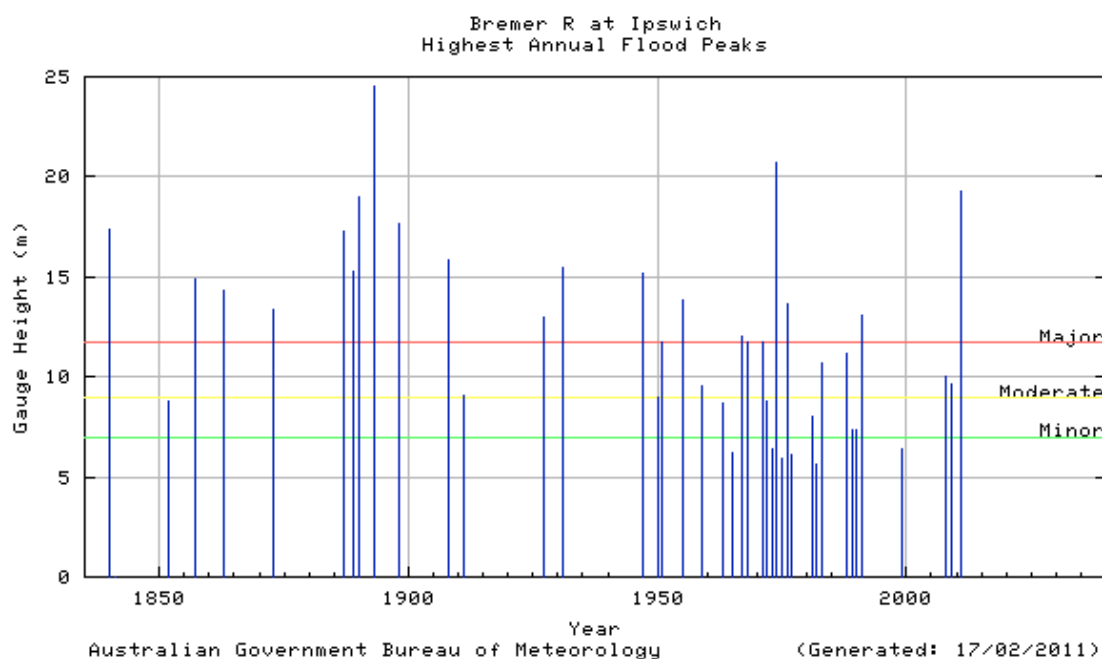


Figure 5. Highest annual flood peaks for the Bremer River at Ipswich.

Warning and Forecast Service

- The catchment started to become saturated during October with flood warnings for the Stanley, upper Brisbane and Bremer Rivers and Lockyer Creek issued between 10/10/2010 and 19/10/2010. This included the first large scale release from Wivenhoe Dam since 2001.
- A total of 96 warnings were issued for the Brisbane River during December 2010 and January 2011.

Table 3. Table of peak height predictions for Ipswich.

Time of Height Forecast	Forecast/Time	Peak
06/01/2011 First warning issued. Height at the time was 1.0m (below minor)		
10:55 PM on Sunday 9th of January 2011	At least minor flood levels expected in the Bremer River at Ipswich during Monday night.	Rising limb forecasts – reach a level and expected to continue rising
12:36 AM on Monday 10th of January 2011	At least minor flood levels expected in the Bremer River at Ipswich during Monday night and continuing into Tuesday.	
10:28 AM on Monday 10th of January 2011	Reach at least 9.5 metres (moderate) during the early hours of Tuesday.	
4:16 PM on Monday 10th of January 2011	Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.	
12:06 AM on Tuesday 11th of January 2011	Reach about 12.7 metres (major) during Tuesday afternoon.	
9:28 AM on Tuesday 11th of January 2011	Reach at least 16 metres (major) during Wednesday; further rises.	
3:24 PM on Tuesday 11th of January 2011	Reach at least 22 metres (major) during Wednesday; further rises.	
8:05 PM on Tuesday 11th of January 2011	Reach about 21.5 metres (major) during Wednesday; further rises possible.	
7:33 AM on Wednesday 12th of January 2011	Peak about 20.5 metres (major) during Wednesday afternoon.	19.25 metres at 1:45 PM Wed 12/01/2011.
4:29 PM on Wednesday 12th of January 2011	Peak around 19.5 metres (major) during Wednesday evening.	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Jordan River at Jericho and Alpha Creek at Alpha

- Jericho is on the Jordan River a tributary of the Alice River in the Cooper Creek catchment. Alpha is on Alpha Creek, a tributary of the Belyando River in the Burdekin River Catchment.
- The flood heights at Jericho are measured on a manual gauge co-owned by the Bureau of Meteorology and Barcaldine Regional Council (Bureau station number: 035285). The flood heights at Alpha are recorded on a manual gauge owned by the Bureau of Meteorology (Bureau station number: 035229).
- On the 28/12/2010 Jericho experienced flood levels equal to the record flood levels of April 1990. Peak heights recorded at Alpha on 28/12/2010 were the 3rd highest on record and more than 1 metre lower than the record flood peak of April 1990.
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

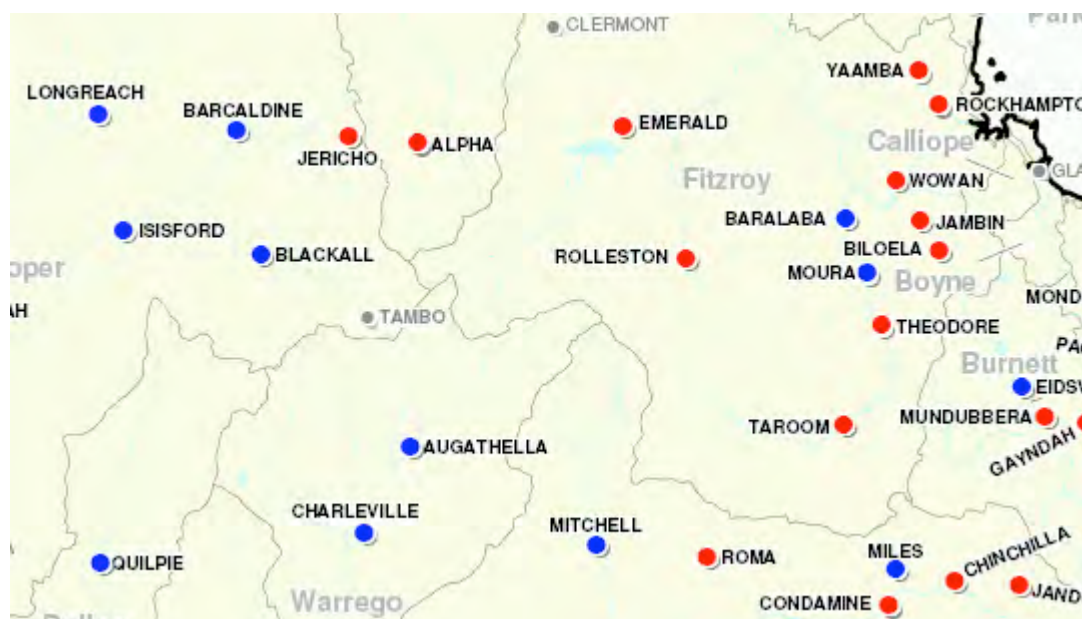
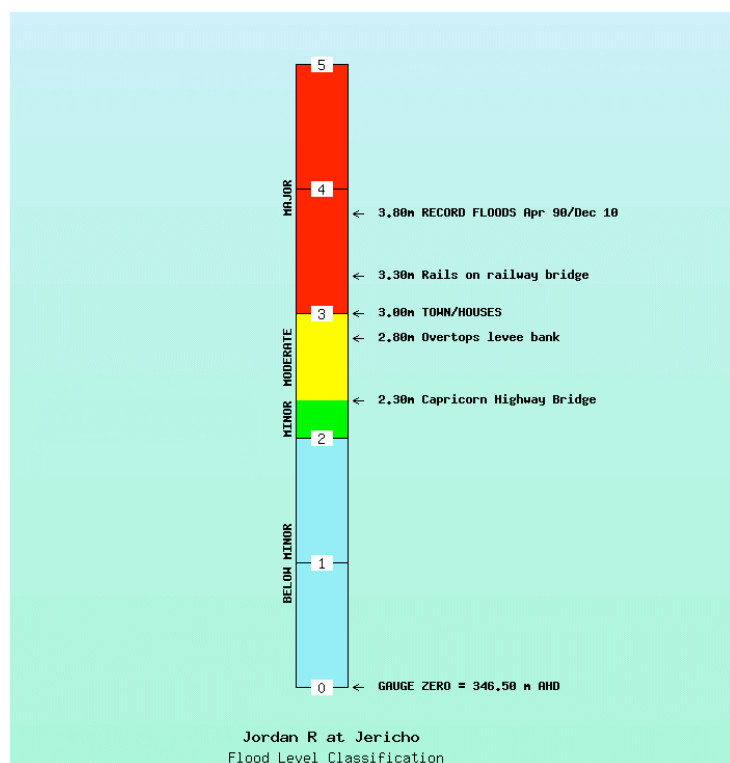


Figure 1. Map showing the location of Jericho and Alpha.

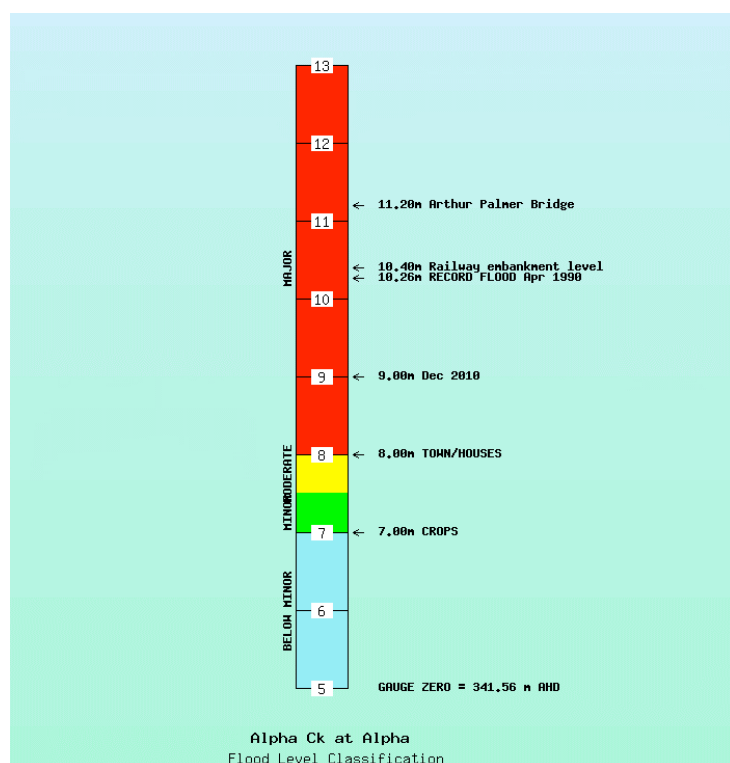
Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



Jordan River at Jericho

- **The river peaked at:**
3.08 metres at 6:00 AM on 20/12/2010
3.8 metres at 11:00 PM on 28/12/2010
- Minor: 2.0 metres
Moderate: 2.3 metres
Major: 3.0 metres
- Gauge Zero is 346.5 metres AHD.
- Several properties were inundated and damage was caused to roads, railway lines, businesses and schools. (Source: ABC).
- About 16 residents were evacuated from homes in Alpha and Jericho with water at least waist to chest high. (Source: ABC).



Alpha Creek at Alpha

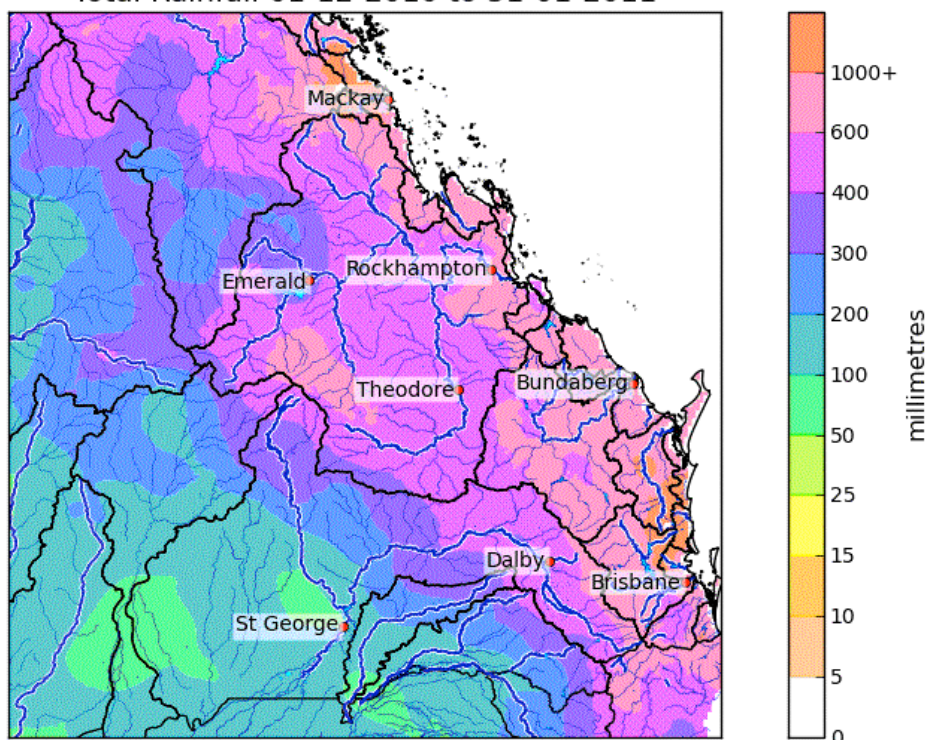
- **The creek peaked at:**
6.8 metres at 7:40 PM on 20/12/2010
9.0 metres at 8:00 AM on 28/12/2010
- Minor: 7.0 metres
Moderate: 7.5 metres
Major: 8.0 metres.
- Gauge Zero is 341.562 metres AHD.
- Several properties were inundated and damage was caused to roads, railway lines, businesses and schools. (Source: ABC).
- About 16 residents were evacuated from homes in Alpha and Jericho with water at least waist to chest high. (Source: ABC).

Figure 2. Flood level classifications and flood effects for Jericho and Alpha.

Rainfall summary

- Between 300 and 400 mm of rainfall was recorded over the Alpha-Jericho area between the 01/12/2010 and 31/01/2011 with falls between 400 and 600 mm of rainfall over the upper reaches of Alpha Creek upstream from Alpha. See Figure 3 (top).
- The heaviest rainfall period occurred between the 24/12/2010 and 28/12/2010 with the area receiving up to 200 mm of rainfall, as shown in Figure 3 (bottom).

Total Rainfall 01-12-2010 to 31-01-2011



Total Rainfall 24-12-2010 to 28-12-2010

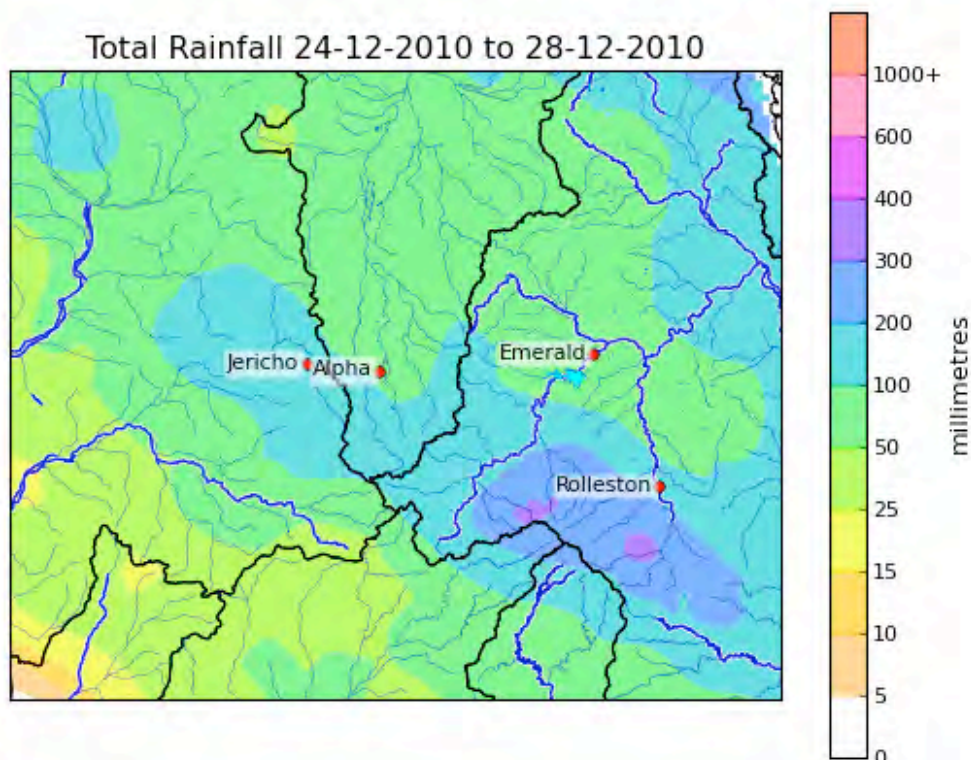


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and from 9am on 24/12/2010 to 9am on 28/12/2010.

Rainfall Intensity

- The December 2010 floods at Jericho and Alpha were the result of heavy rainfall in the area over a period of 4 days. All rainfall stations in the near vicinity are daily reporting rainfall stations (reporting a 24-hour rainfall at 9am each day) and therefore provide no sub-daily data to perform an informative rainfall intensity analysis.

Flood event timelines

Table 2. Flood timeline for Jericho

Time/Date	Event Description	Gauge Height (metres)	Comment
6:36 PM 24/12/2010	First warning issued		
9:00 AM 27/12/2010	24-hour rainfall of 80 mm recorded upstream at Glencoe.		
11:00 PM 28/12/2010	Major flood peak	3.80	Equal record flood peak.
10:18 AM 30/12/2010	Final warning issued		

Table 3. Flood timeline for Alpha

Time/Date	Event Description	Gauge Height (metres)	Comment
9:41 AM 27/12/2010	First warning issued		
9:00 AM 27/12/2010	Heavy rainfall recorded over the catchment upstream from Alpha.		
8:00 AM 28/12/2010	Major flood peak	9.0	3 rd highest on record.
9:05 AM 30/12/2010	Final warning issued		

Comparison with previous floods

- River height records for Jericho and Alpha commenced in 1950.
- River height peak of 3.80 metres at Jericho on 28/12/2010 equals the record river height set in April 1990.
- The record flood height for Alpha is 10.26 metres which occurred in April 1990. The peak that occurred on 28/12/2010 ranks as the 3rd highest on record and was more than 1 metre below the record flood height for the town.

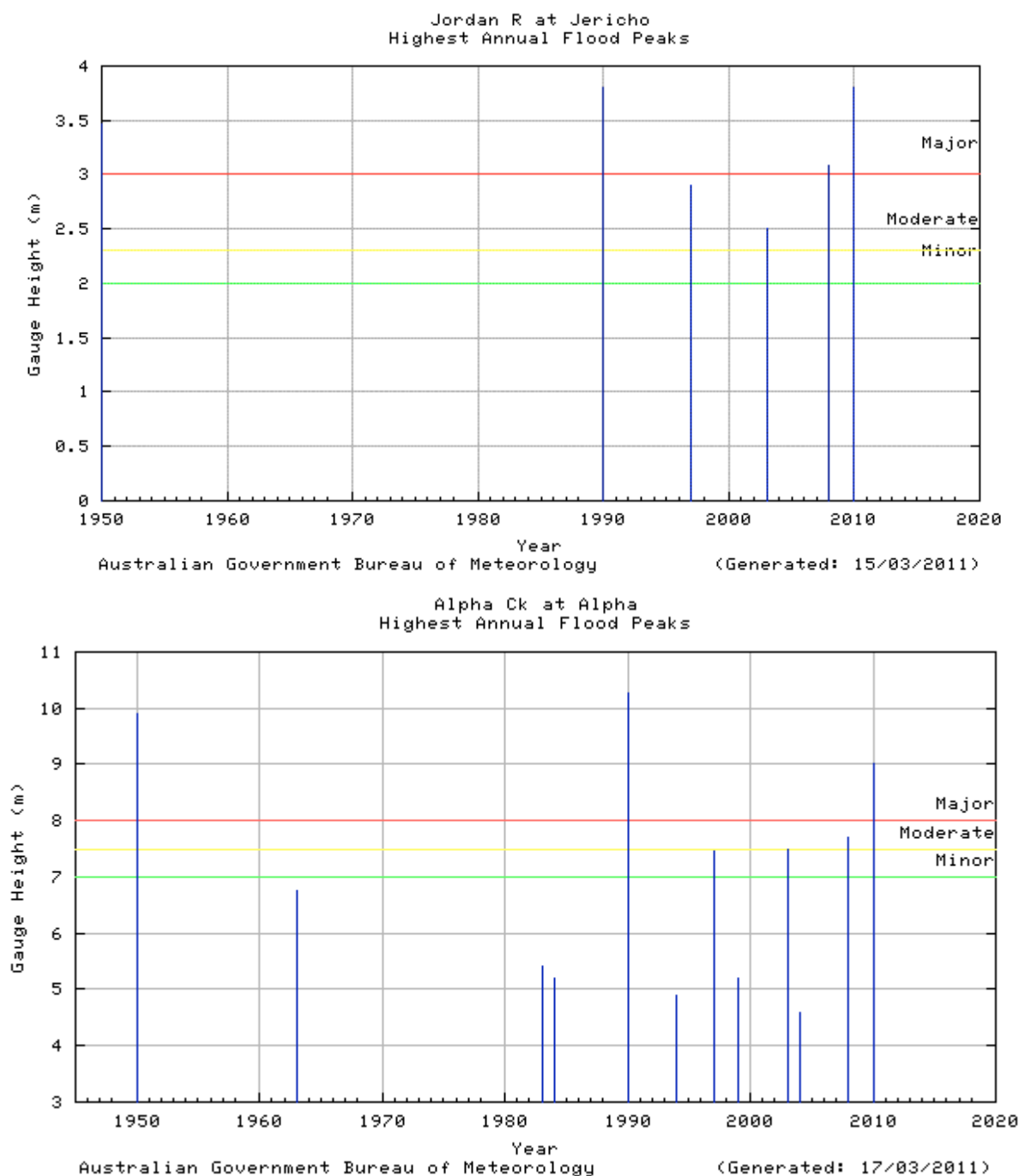


Figure 4. Highest annual flood peaks for Jericho on the Jordan River (top) and Alpha on Alpha Creek (bottom).

Warning and Forecast Service

- Warnings for the Jordan River are incorporated in the Cooper Creek flood warning. The first flood warning for the Jordan River was issued on 24/12/2010.
- Major flooding was first predicted for Jericho in the Flood Warning issued at 6:36 PM on 24/12/2010. Renewed rises were caused by further rainfall over the catchment area.
- A total of 8 warnings were issued for the Jordan River during December 2010.

Table 4. Table of peak height predictions for Jericho on the Jordan River

Time of Height Forecast	Forecast	Peak
24/12/2010 First warning issued for the Jordan River.		
6:36 PM on Friday the 24th of December 2010	Reach at least 3 metres by midday Saturday with possible further.	Rising limb forecasts – reach a level and expected to continue rising.
10:19 AM on Saturday the 25th of December 2010	Peak around 3 metres by midday Saturday.	
10:45 AM on Sunday the 26th of December 2010	Minor flooding is easing in the Jordan River at Glencoe, with rises expected downstream at Jericho and the Capricorn Highway during this week.	
10:45 AM on Monday the 27th of December 2010	Minor flooding is rising slowly in the Jordan River at Glencoe, with rises expected downstream at Jericho and the Capricorn Highway during this week.	
12:02 AM on Tuesday the 28th of December 2010	The Jordan River at Jericho is expected to rise above the major flood level of 3 metres tonight. Glencoe reported a peak of 3.5 metres at 8pm Monday night.	
10:17 AM on Tuesday the 28th of December 2010	Major flooding is occurring in the Jordan River at Glencoe and Jericho.	3.8 metres at 11:00 PM on 28/12/2010
30/12/2010 Final warning issued for the Jordan River.		

- Warnings for Alpha Creek at Alpha are incorporated in the Burdekin River Catchment flood warning. The first flood warning for the Alpha Creek was issued on 27/12/2010.
- Major flooding was first predicted for Alpha in the Flood Warning issued at 11:49 PM on 27/12/2010.
- A total of 6 warnings were issued for the Alpha Creek during December 2010.

Table 5. Table of peak height predictions for Alpha on Alpha Creek.

Time of Height Forecast	Forecast	Peak
27/12/2010 First warning issued for Alpha Creek.		
9:41 AM on Monday the 27th of December 2010	Further heavy rainfall overnight Sunday is causing renewed rises and major flooding in the Belyando River at Albro and in Alpha Creek at Rivington. River level rises to at least the minor flood level of 7 metres are expected at Alpha during this week.	Rising limb forecasts – reach a level and expected to continue rising.
11:49 PM on Monday the 27th of December 2010	At 8pm Monday, Alpha Creek at Alpha was 7.9 metres rising. A major flood peak is expected at Alpha during Tuesday, possibly near or exceeding 9 metres. In April 1990, Alpha peaked at 10.26 metres.	
12:06 AM on Tuesday the 28th of December 2010	At 8pm Monday, Alpha Creek at Alpha was 7.9 metres rising. A major flood peak is expected at Alpha during Tuesday, possibly near or exceeding 9 metres. In April 1990, Alpha peaked at 10.26 metres.	
8:55 AM on Tuesday the 28th of December 2010	Creek levels in Alpha Creek at Alpha have recorded a 9.0 metre major flood peak at 8am Tuesday with creek currently easing at 8.95 metres.	9.0 metres at 8:00 AM on 28/12/2010
30/12/2010 Final warning issued for Alpha Creek.		

Note: Table 4 and Table 5 do not include all forecasts issued during these flood events.

Flood summary for Helidon, Grantham, Gatton, Laidley and Forest Hills

- The towns affected by flooding in the Lockyer Valley included Withcott, Helidon, Grantham, Gatton, Laidley and Forest Hill.
- Withcott is on Gatton Creek and no water level observations are available.
- Helidon is on Lockyer Creek and water level observations are available from two automatic gauges:
 - Helidon TM (Bureau station number: 040829, Owner: DERM)
 - Helidon Alert (Bureau station number: 540143, Owner: Seqwater).
- Grantham is affected by both Lockyer and Sandy Creeks. An automatic gauge exists on Sandy Creek:
 - Sandy Creek Road (Bureau station number: 540386, Owner: Lockyer Valley Regional Council).
- Gatton is on Lockyer Creek and has two automatic gauges and one manual gauge:
 - Gatton TM (Bureau station number: 540363, Owner: Seqwater)
 - Gatton AL (Bureau station number: 540156, Owner: Seqwater)
 - Gatton manual (Bureau station number: 040444, Owner: Bureau of Meteorology)
 - All three gauges are at slightly different locations and the measured heights for the same flood will be different.
- Laidley is on Laidley Creek and has two automatic water level gauges and one manual gauge:
 - Showground Weir AL (Bureau station number: 540158, Owner: Seqwater)
 - Showground Weir HW TM (Bureau station number: 540047, Owner: Seqwater)
 - Laidley manual (Bureau station number: 040716, Owner: Bureau of Meteorology)
- Forest Hill is near the junction of Laidley Creek and Sandy Creek. The closest gauging station is owned by DERM (Site ID 143232A Sandy Creek @ Forest Hill). The Bureau does not currently collect data for this location.
- There are two Sandy Creeks described in this document. The first Sandy Creek flows into Lockyer Creek at Grantham and the second flows into Laidley Creek near Forest Hill.
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

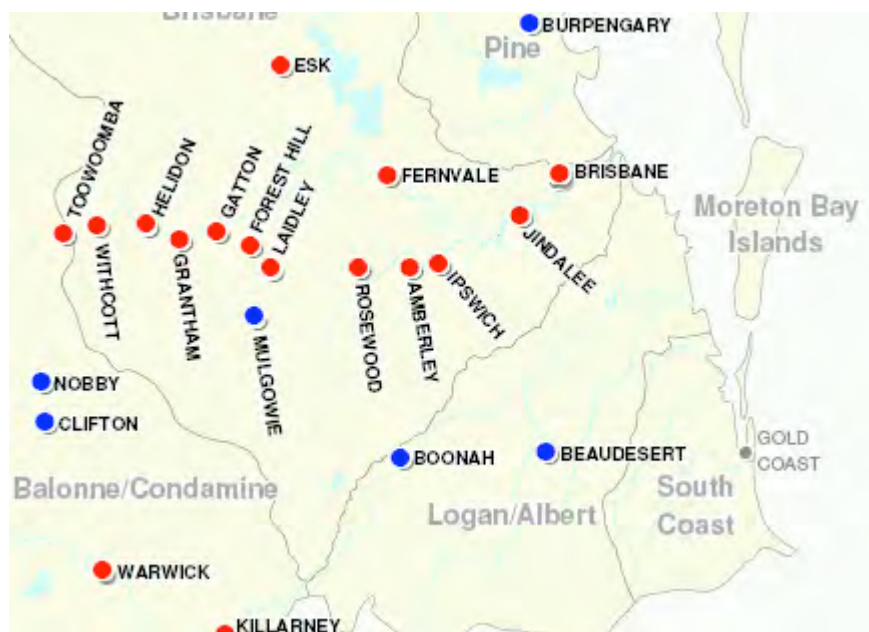
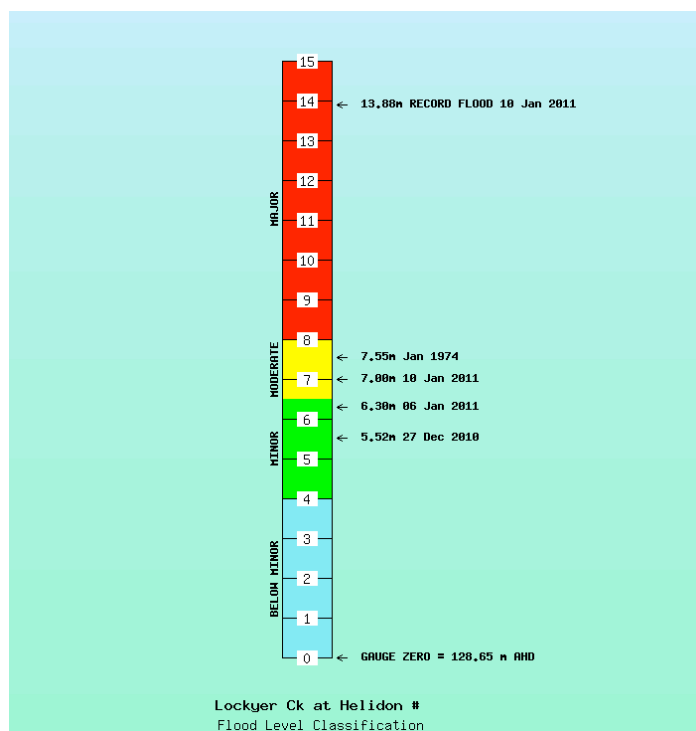


Figure 1. Map showing location of Withcott, Helidon, Grantham, Gatton, Laidley and Forest Hill in the Lockyer Valley.

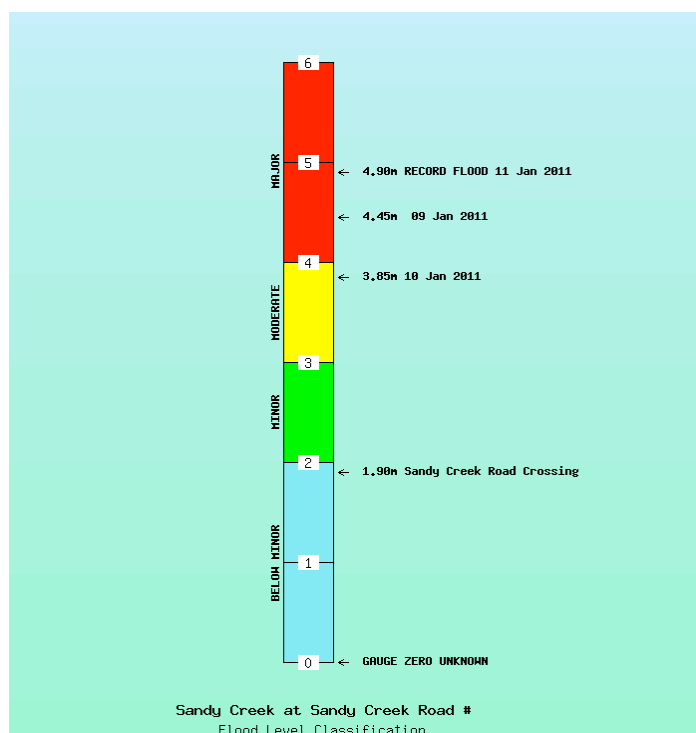
Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



Lockyer Creek at Helidon AL

- The creek peaked at:
 - 4.76 metres on 26/12/2010
 - 5.52 metres on 27/12/2010
 - 6.30 metres on 06/01/2011
 - 4.20 metres on 07/01/2011
 - 6.98 metres on 09/01/2011
 - 7.00 metres on 10/01/2011
 - 13.88 metres on 10/01/2011**
- (9th to 10th several closely spaced peaks observed)
- Minor: 4.0 metres
- Moderate: 6.5 metres
- Major: 8.0 metres
- Gauge Zero is 128.65 metres AHD.
- A post flood survey of debris found the flood peak to be 13.88 metres at the Helidon gauge. This is over 6 metres higher than the previous record flood in 1974.
- Above the major flood level on 10/01/2011
- Above the minor flood level from the 26/12/2010 to 27/12/2010, on the 06/01/2011 and 07/01/2011 and from 09/01/2011 to 10/01/2011

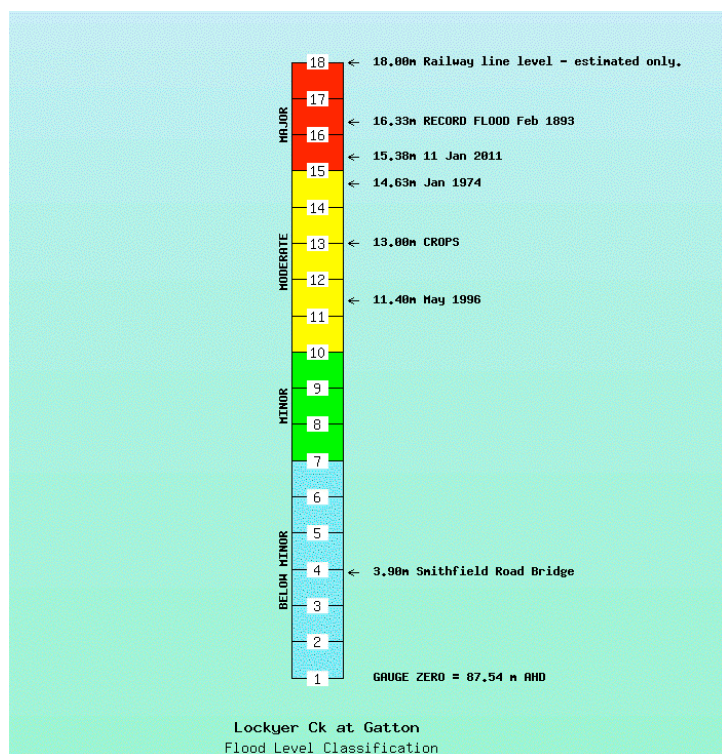


Sandy Creek Rd AL (Grantham)

- The creek peaked at:
 - 2.40 metres on 06/01/2011
 - 2.40 metres on 07/01/2011
 - 4.45 metres on 09/01/2011
 - 4.45 metres on 10/01/2011
 - 4.90 metres on 11/01/2011**
- Minor: 2.0 metres
- Moderate: 3.0 metres
- Major: 4.0 metres.
- Above the major flood level on the 9/10/2011, 10/01/2011 and 11/01/2011.
- Above the minor flood level from the 26/12/2010 to 27/12/2010, on the 06/01/2011 and 07/01/2011 and from 09/01/2011 to 12/01/2011.

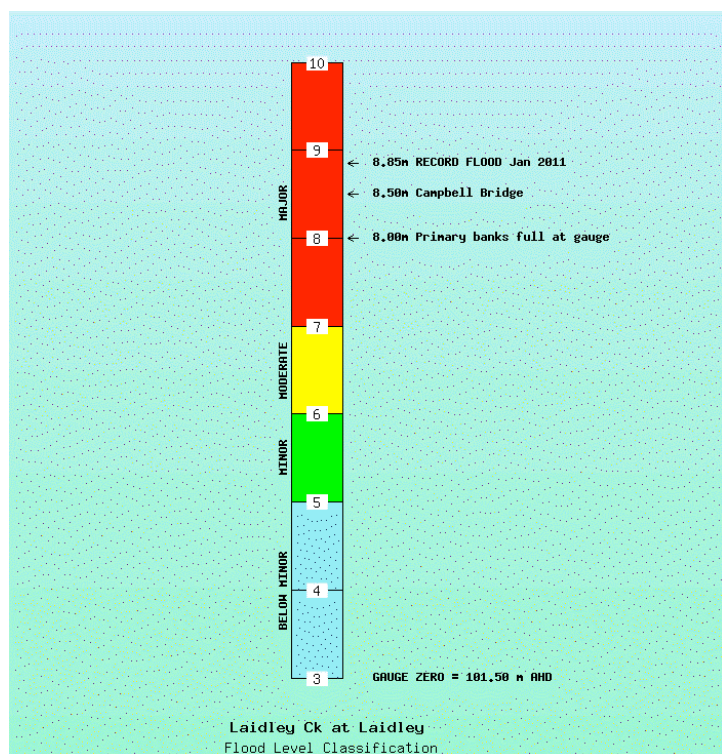
Figure 2. Flood level classifications and flood effects for Helidon and Sandy Creek Rd AL.

Flood effects and severity (cont)



Lockyer Ck at Gatton

- Post flood survey determined that Lockyer Creek at the Gatton manual gauge peaked at **15.38 metres on 11/01/2011**
- The peak on the 10/01/2011 is estimated to be about 1 metre lower than recorded on the 11th.
- Minor: 7.0 metres
Moderate: 10.0 metres
Major: 15.0 metres
- Gauge zero is 87.54 metres AHD.
- Above major flood level on the 11/01/2011.
- Above minor flood level on the 20/12/2010, 27/12/2010 to 28/12/2010, 06/01/2011 and 10/01/2011 to 12/01/2011.



Laidley Ck at Laidley

- The creek peaked at:
7.60 metres on 26/12/2010
8.80 metres on 27/12/2010
8.10 metres on 06/01/2011
8.70 metres on 10/01/2011
8.85 metres on 11/01/2011
7.60 metres on 19/01/2011
- Minor: 5.0 metres
Moderate: 6.0 metres
Major: 7.0 metres
- Gauge zero is 101.5 metres AHD.
- Above major flood level 5 times between 26/12/2010 and 19/1/2011.
- Above minor flood level from 26/12/2010 to 27/12/2010, on the 06/01/2011, from 10/01/2011 to 12/01/2011 and on 19/1/2011.

Figure 3. Flood level classifications and flood effects for Gatton and Laidley.

Rainfall summary

- Rainfalls between 600 and 1000mm were recorded in the Lockyer Valley area during December 2010 and January 2011.
- The vast majority of this rainfall fell between 09/01/2011 and 13/01/2011 as shown in the rainfall maps in Figure 3 below.

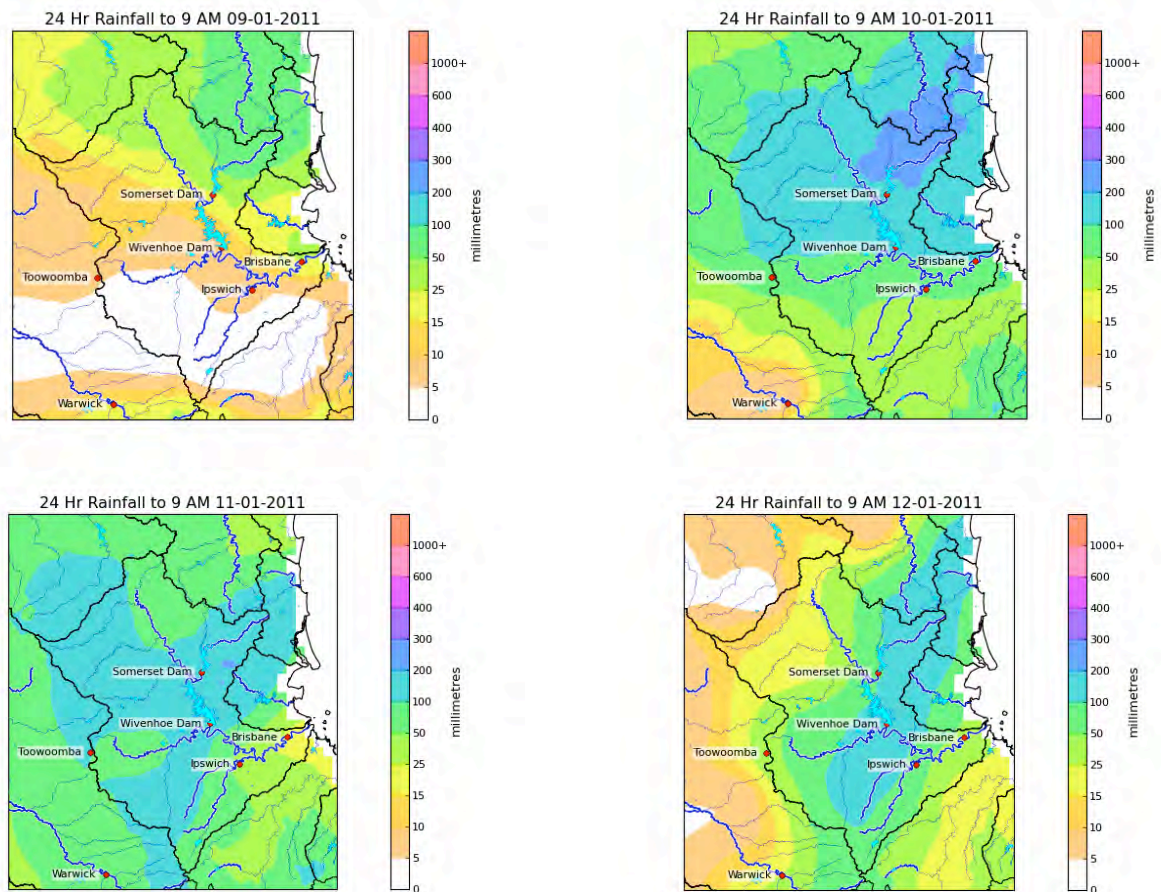


Figure 4. 24-Hour rainfall maps from 9am on 08/01/2011 to 9am on 12/01/2011.

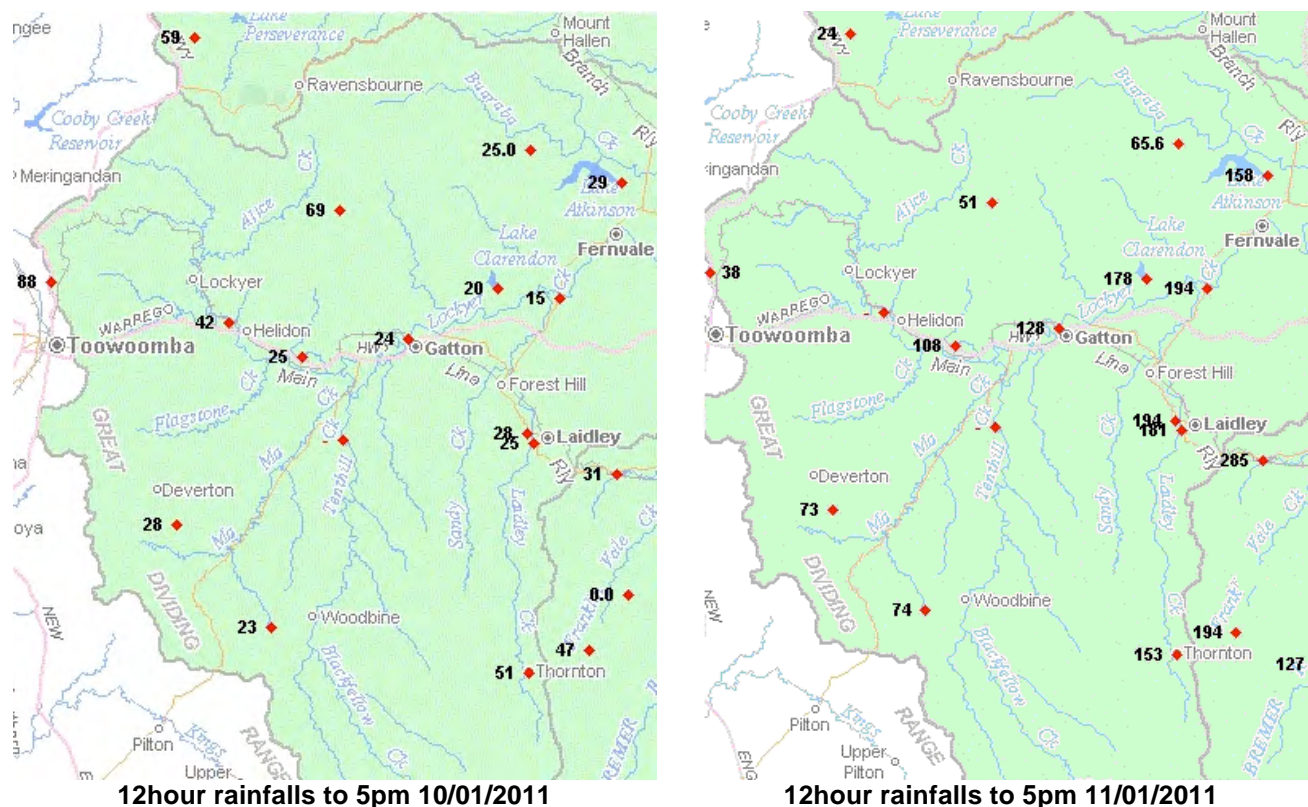


Figure 5 Rainfall for the 12 hours to 5pm 10/01/2011 and 5pm 11/01/2011.

Rainfall Intensity

- The heaviest recorded rainfall associated with the flash floods in the Lockyer Creek system on 10/01/2011 was the Toowoomba AL station on the top of the range, with much lighter rain recorded to the east in the Helidon and Grantham areas. There are no flood warning rainfall stations in the upper Lockyer Creek catchment (i.e. in tributary creek areas including Murphys Ck, Six Mile Ck, Rocky Ck, Gatton Ck).
- Review of the radar information suggests that the higher rainfalls and higher rainfall intensities occurred between the top of the range and the Helidon area and fell between the rain gauge network. This is further substantiated by a later report from Withcott which indicated a rainfall reading at 180.8mm for the 24 hour period ending 9am Tuesday 11 January 2011.
- The intensities for Toowoomba AL are provided in Table 1. The most significant rainfall intensities for Toowoomba AL in January 2011 occurred on the 10/01/2011 in the 1 hour duration periods with rainfall amounts equalling the 2-5% Annual Exceedence Probability (20-50 year Average Recurrence Interval).

Table 1. Recorded maximum rainfall Intensities for Toowoomba AL for January 2011.

Rainfall Duration	Toowoomba AL		
	Rainfall (mm)	Period ending	ARI (years)
5 min	9	13:45:00 10/01/2011	2
6 min	10	13:46:00 10/01/2011	1-2
10 min	14	13:45:00 10/01/2011	1-2
20 min	27	13:45:00 10/01/2011	5
30 min	36	13:50:00 10/01/2011	10
1hr	58	13:50:00 10/01/2011	20-50
2hr	65	14:15:00 10/01/2011	10-20
3hr	67	15:40:00 10/01/2011	5-10
6hr	75	16:55:00 10/01/2011	2-5
12hr	88	16:55:00 10/01/2011	2-5
24hr	134	6:00:00 10/01/2011	5-10
48hr	197	11:20:00 11/01/2011	10-20
72hr	218	19:15:00 11/01/2011	10-20

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

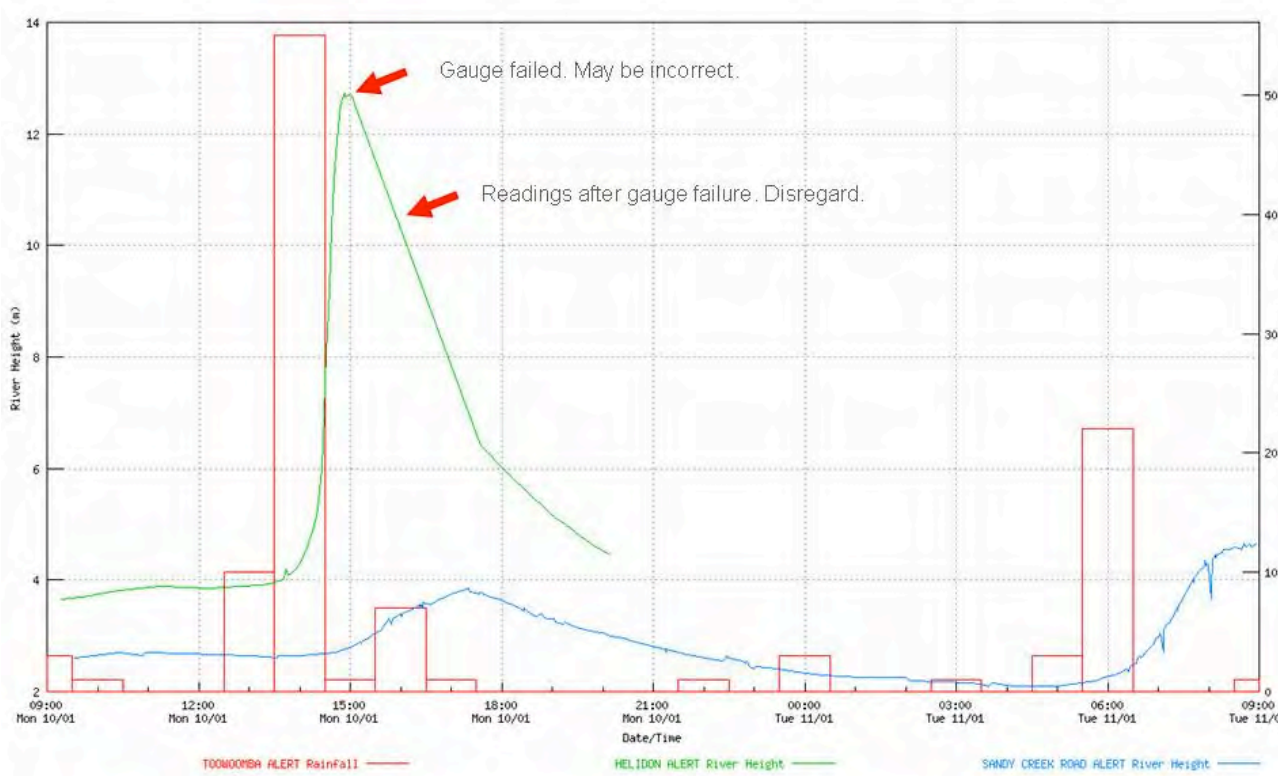
- The heaviest recorded rainfall associated with the flash floods in the Lockyer Creek system that affected Gatton, Laidley and Forest Hill on 11/01/2011 were in the Grandchester and Laidley areas.
- The most statistically significant rainfall intensities for Grandchester AL were for the 6 hour to 72 hour durations. The recorded rainfall amounts for these durations were all greater than 1% Annual Exceedence Probability (100 year Average Recurrence Interval).
- The most statistically significant rainfall intensities for Showground Weir near Laidley were for the 12 hour to 72 hour durations. The recorded rainfall amounts for these durations were all greater than 1% Annual Exceedence Probability (100 year Average Recurrence Interval)

Table 2. Recorded maximum rainfall intensities for Grandchester AL and Showground Weir AL for January 2011.

Rainfall Duration	Grandchester AL			Showground Weir Alert		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
5 min	8	07:00:00 11/01/2011	1	9	06:40:00 11/01/2011	1-2
6 min	9	06:56:00 11/01/2011	1	10	06:41:00 11/01/2011	1-2
10 min	16	07:00:00 11/01/2011	1-2	13	06:40:00 11/01/2011	1
20 min	26	07:00:00 11/01/2011	2-5	25	06:55:00 11/01/2011	2
30 min	36	07:15:00 11/01/2011	2-5	33	06:55:00 11/01/2011	2-5
1hr	58	07:45:00 11/01/2011	5-10	45	07:20:00 11/01/2011	2-5
2hr	88	08:40:00 11/01/2011	20-50	66	07:45:00 11/01/2011	5-10
3hr	115	08:40:00 11/01/2011	50-100	69	08:25:00 11/01/2011	2-5
6hr	167	12:40:00 11/01/2011	> 100	104	16:20:00 11/01/2011	10-20
12hr	289	17:40:00 11/01/2011	> 100	181	17:45:00 11/01/2011	> 100
24hr	321	17:55:00 11/01/2011	> 100	203	20:50:00 11/01/2011	50-100
48hr	380	15:25:00 11/01/2011	> 100	258	15:25:00 11/01/2011	50-100
72hr	418	00:00:00 12/01/2011	> 100	292	02:55:00 12/01/2011	50-100

Flood event timeline

Table 3. Flood event timeline for Lockyer Creek for the 10/01/2011.

RAINFALLS	
11am to 1pm	Heavy rainfall 50 to above 100mm recorded in the Cressbrook Dam area (e.g. highest total of 111mm at Redbank Creek rainfall station; located approx 15km south west of Esk and 40km to the north west of Toowoomba).
1pm to 2pm	Heavy rainfall in excess of 50mm recorded in the Toowoomba area (55mm at Toowoomba ALERT rainfall station approx 6km nor city; 60mm at Toowoomba Airport).
1pm to 2pm	Lighter rainfalls of generally less than 10mm at Gatton (1mm), Sandy Creek Road near Grantham (5mm) and Helidon (11mm).
WATER LEVELS	
	
2pm to 3pm	Very rapid rise in Lockyer Creek at Helidon . Automatic gauge indicated a water level rise, commencing at about 2pm, of more than 8 metres in one hour, from about 4 metres to possibly about 12.7 metres at about 3pm, before failing. Subsequently, DERM have advised that the Helidon flood peak has been surveyed as 13.88 metres and estimated to have occurred at 3:10pm on 10 January. The previous record was 7.55 metres in 1974.
3pm to 5pm	Rise of approx one metre recorded at automatic water level station in Sandy Creek at Sandy Creek Road AL, near Grantham , possibly indicating passage of floodwaters in the Grantham area of Lockyer Creek.
5pm to 7pm	Very rapid rise in Lockyer Creek at Gatton . Automatic gauge (TM) indicated a water level rise, commencing at about 5pm, of about 7 metres in two hours before failing. The Lockyer flash flood did not cause the highest flooding at Gatton and downstream. Higher flood levels were experienced at Gatton on the following day, Tuesday 11 January, due to further heavy rainfall in the Lockyer-Laidley valley. A post flood survey indicates a 2011 flood peak of 15.38 metres (occurring on Tuesday 11) at the long-term flood warning gauge. This compares with a 1974 flood peak of 14.63 metres. The highest recorded flood at Gatton is 16.33 metres in 1893.
6pm to 9pm	Rapid rise in Lockyer Creek at Glenore Grove . Automatic gauge indicated a water level rise, commencing at about 6pm, of about 3.8 metres in two hours from about 10.7 metres to about 14.5 metres at about 9pm. (Automatic gauge indicated a peak water level of about 14.6 metres at about 11pm.)
Midnight to	Rise in Lockyer Creek at Lyons Bridge . Automatic gauge indicated a water level rise,

midday Tuesday 11 Jan	commencing at about midnight Monday, of about 2 metres in twelve hours from about 15.2 metres to about 17.1 metres at about midday Tuesday.
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Table 4. Flood event timeline for Laidley and Lockyer Creek for the 11/01/2011.

RAINFALLS	
5am to 6am	Heavy rainfall of up to 50 mm in the Grantham, Gatton, and Glenore Grove Areas. Less in the Laidley and Grandchester areas.
6am to 7am	Heavy rainfall of up to 46 mm in the Laidley and Grandchester area.
7am to 8am	Rainfall generally eases to less than 20 mm but continues at 41 mm in the hour at Grandchester and 35 mm at Thornton which is higher in the Laidley Creek catchment.
8am to 5pm	Rainfall continues with maximum hourly intensities of around 25 mm. The 12 hour total to 5pm at Grandchester was 285 mm and at Showground Weir in Laidley was 194 mm. See Figure 4.
WATER LEVELS	
<p>Figure 4 is a dual-axis chart showing rainfall and river height over time. The x-axis represents time from 06:00 Mon 10/01 to 12:00 Wed 12/01. The left y-axis is River Height (m) from 4 to 16. The right y-axis is Hourly Rainfall (mm) from 0 to 40. A red bar chart shows hourly rainfall, with a major peak of 40 mm around 06:00 Tue 11/01. A green line shows the Showground Weir Alert River Height, peaking at approximately 9.5 m around 10:00 Tue 11/01. A blue line shows the Glenore Grove Alert River Height, peaking at approximately 15.5 m around 18:00 Tue 11/01.</p>	
1am to 6am	Rises started on Laidley Creek at Mulgowie TM (owned by DERM) at around midnight with what looks like a fast rise starting at about 6am but the station fails at around this time.
6am to 1pm	<p>Renewed rises also commenced at Showground Weir in Laidley at around 3am and reached a relatively steady level of over 9 metres about 10am. The manually recorded peak at the Bureau Laidley site was 8.85 metres at 1.20pm.</p> <p>Forest Hill was reported to have been flooded at around 9-10 am on 11/01/2011. This is believed to be a result of very heavy rainfall in the immediate area and flows in Laidley and Sandy Creeks.</p> <p>Rises were also occurring in Lockyer Creek at Gatton. A post flood survey indicates a flood peak of 15.38 metres occurred at around midday on Tuesday 11/01/2011 at the long-term flood warning gauge. This compares with a 1974 flood peak of 14.63 metres The highest recorded flood at Gatton is 16.33 metres in 1893.</p>
1pm to 5pm	Rapid rises started in Lockyer Creek at Glenore Grove at about 8am with the peak occurring around 5pm. The peak at the automatic gauge was about 15.34 metres.
Midnight to midday Tuesday 11 Jan	Rise in Lockyer Creek at Lyons Bridge . Automatic gauge indicated a water level rise, commencing at about midnight Monday, of about 2 metres in twelve hours from about 15.2 metres to about 17.1 metres at about midday Tuesday. The final peak was 17.50 metres at about 5.30pm on Tuesday 11/01/2011.

Flood Heights at Sandy Creek Road and Helidon

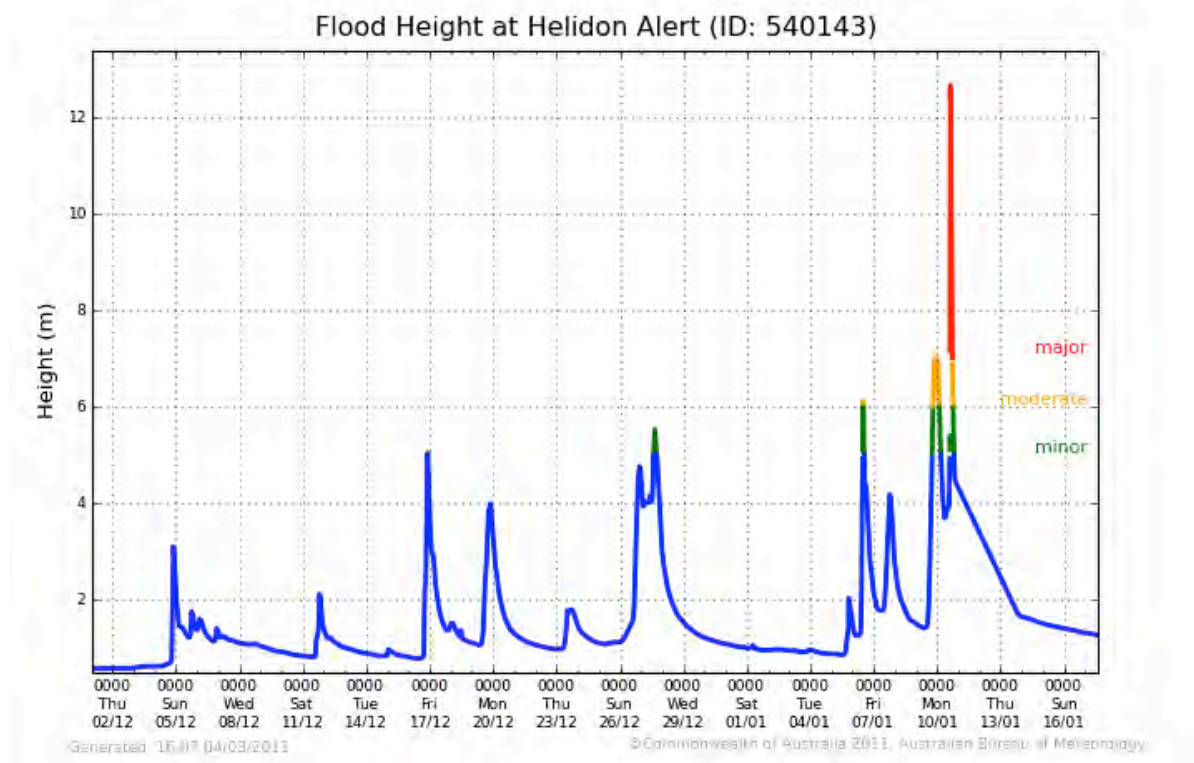


Figure 6. Flood Heights at Helidon for 02/12/2010 to 17/01/2011.

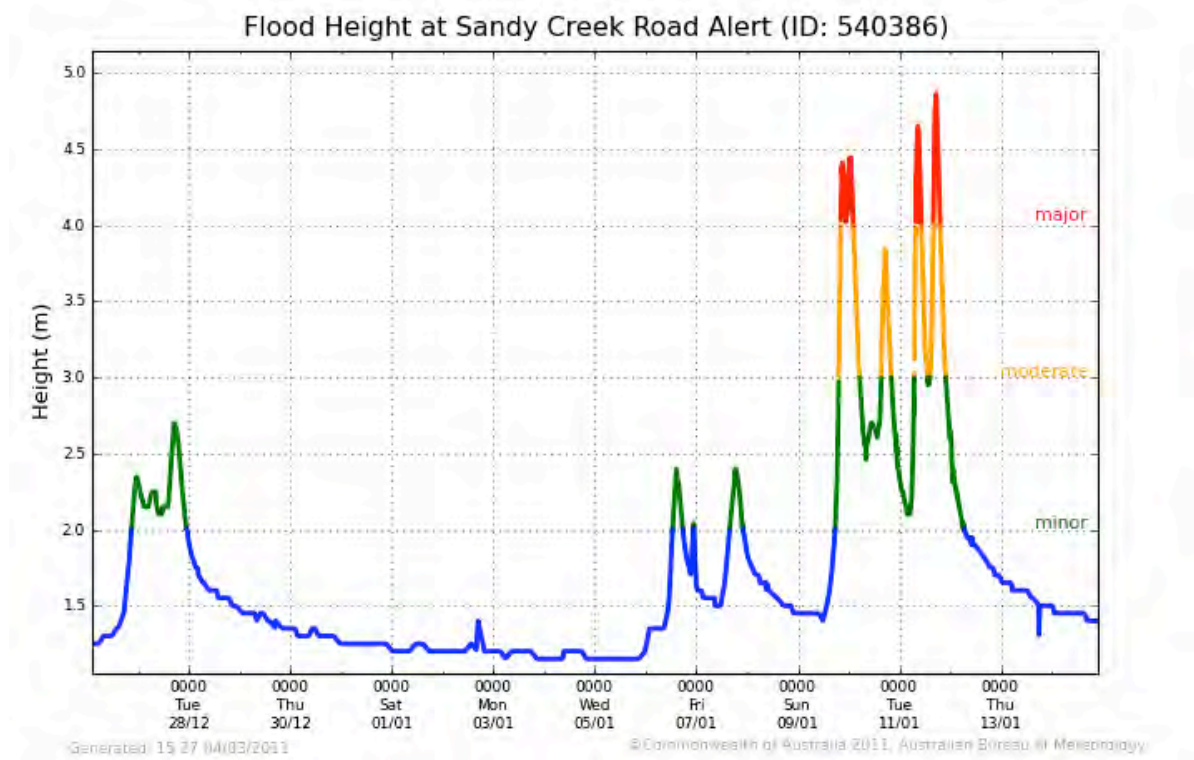


Figure 7. Flood Heights at Sandy Creek Road for 16/12/2010 to 15/01/2011.

Flood Heights at Gatton and Laidley

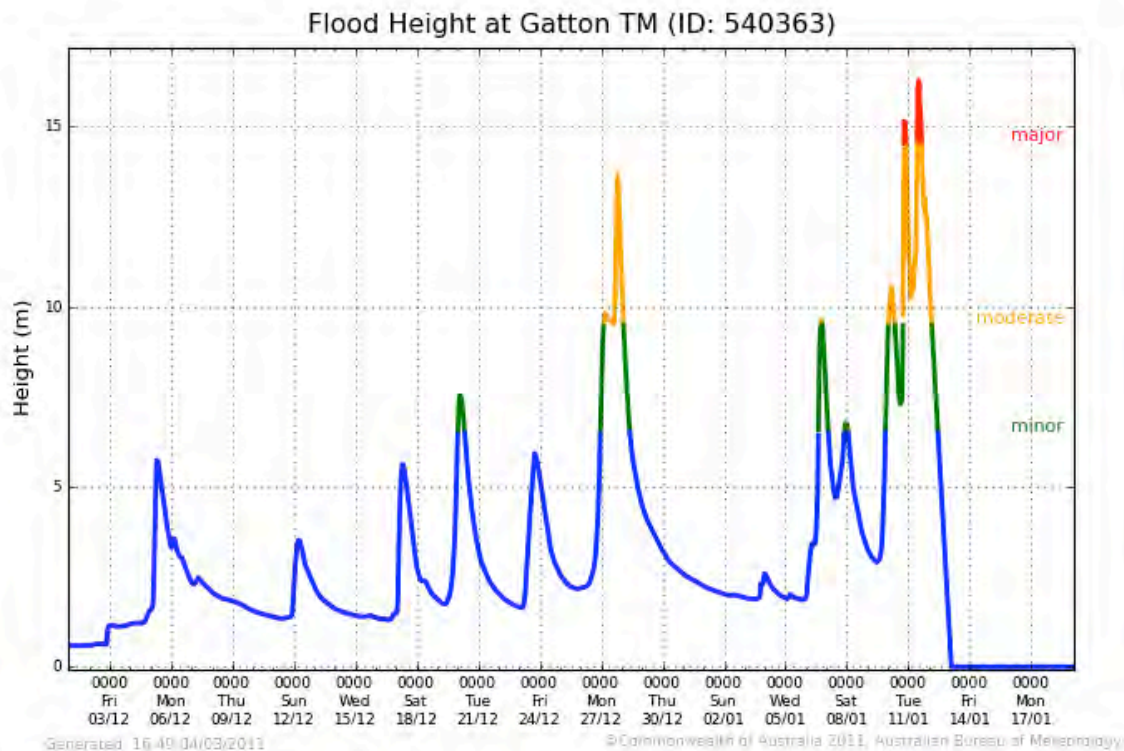


Figure 8. Flood Heights at Gatton TM for 01/12/2010 to 18/01/2011. Reconstructed using post flood surveys. Gatton TM has been used because it provides the best time series data for the December 2010 and January 2011 period.

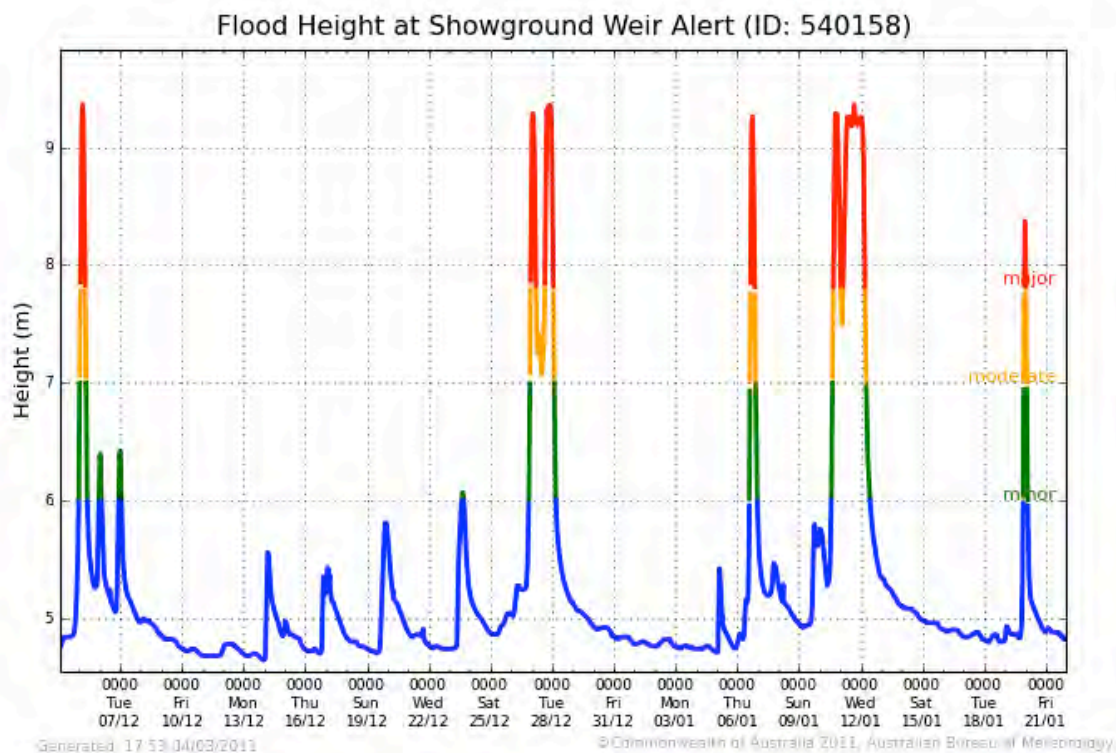


Figure 9. Flood Heights at Showground Weir Alert (Laidley) for 04/12/2010 to 21/01/2011.

Comparison with previous floods

- Record flood peaks were recorded at Helidon, Sandy Creek and Laidley.
- The highest peak of 15.38 metres at Gatton on 11-01-2011 was higher than 1974 peak of 14.63 metres but less than the 16.33 metre peak in 1893.
- The Helidon peak of 13.88 metres is over 6 metres higher than the previous record of 7.55 metres in 1974.
- The site at Sandy Creek Road AL has no historical flood records. The station was opened in 2006.

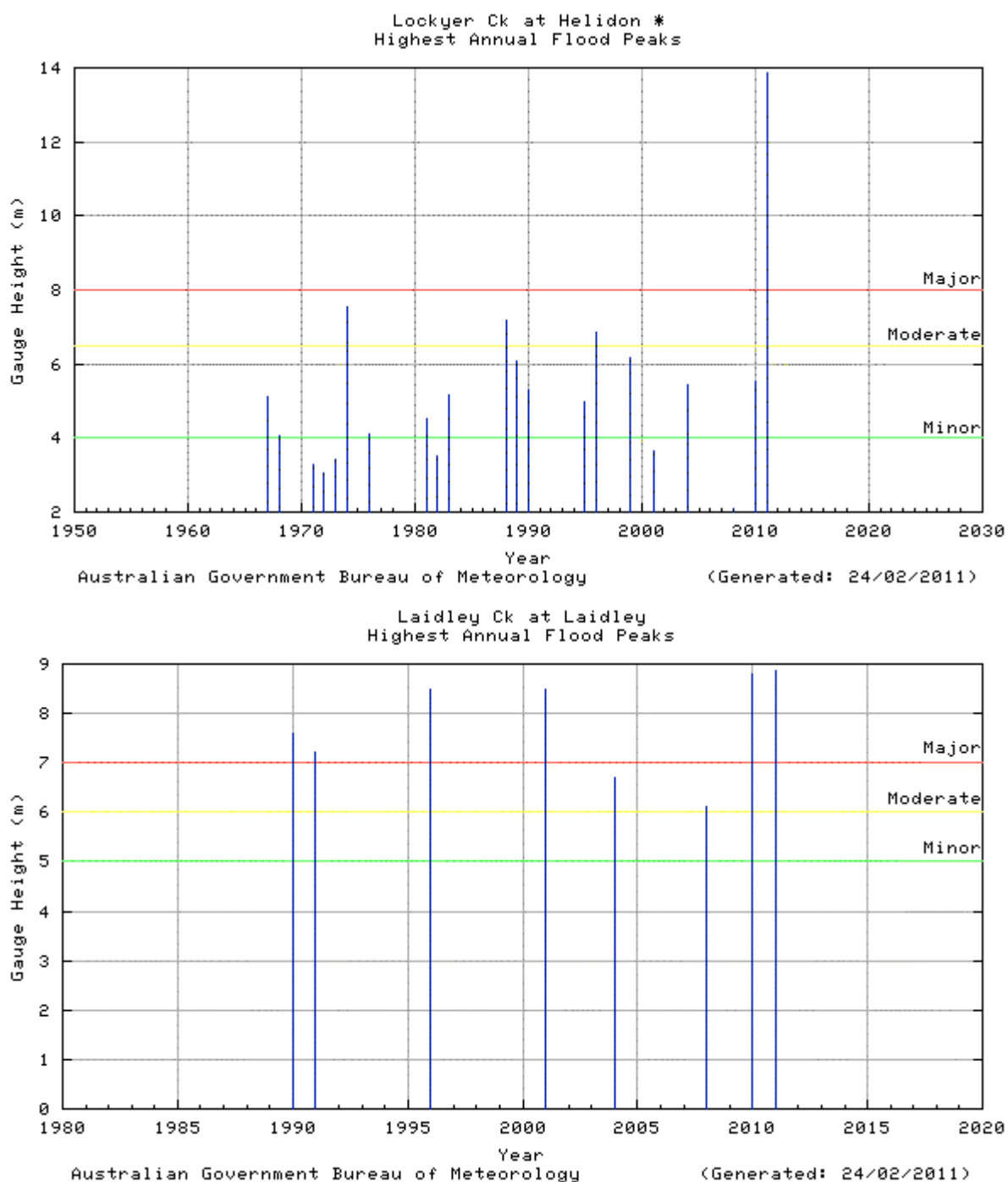


Figure 10. Highest annual flood peaks for Helidon and Laidley.

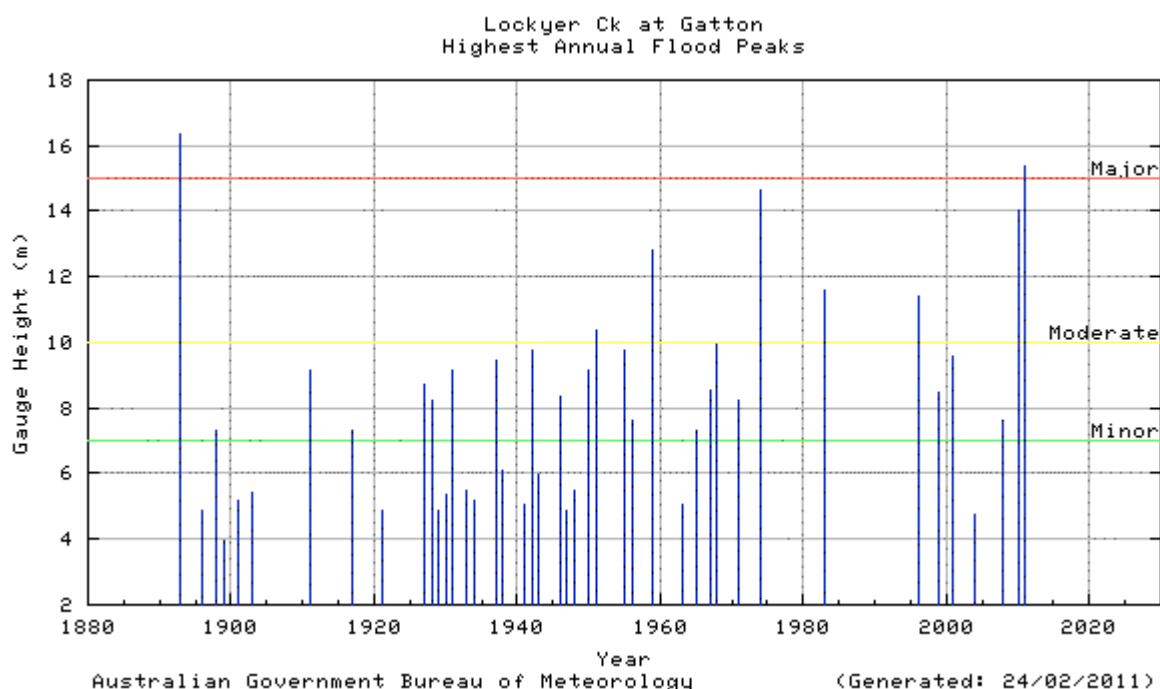


Figure 11. Highest annual flood peaks for Gatton manual gauge. Gatton has been used because it has the longest record.

Warning and Forecast Service

- Significant runoff commenced during early December with the first flood warnings for the Lockyer Creek for the 2010-2011 wet season, issued on 05/12/2010. Further heavy rainfall throughout December saw flood warnings issued between the 20/12/2010 and 22/12/2010 and again from 27/12/2010 to 30/12/2010. Further heavy rainfall in early January again caused creek rises and flood warnings were issued on 06/01/2011. The major flood event of the 10/01/2011 and 11/01/2011 then followed. A summary of the flood warnings for this major flood event is presented in Table 5 below.
- A total of 58 warnings were issued for Lockyer Creek during December 2010 and January 2011 as part of the Lower Brisbane Flood Warning.
- Severe weather warnings for heavy rainfall and flash flooding were issued between 9/01/2011 and 11/01/2011. These are summarised in Table 7.
- On the afternoon of 10/01/2011 an extraordinary "Flash Flood Warning" was created using the Warning for Coastal Streams from Maryborough to the NSW Border. It was retitled and the content changed to become a top priority flash flood warning for Lockyer Creek and broadcasters were requested to use the Standard Emergency Warning Signal (SEWS). A summary of the extraordinary "Flash Flood Warnings" is presented in Table 6.

Table 5. Summary of flood warnings issued that refer to Lockyer Creek. Warnings for Lockyer Creek are included in the Lower Brisbane Warning.

Time of Forecast	Forecast
10:55 PM on Sunday the 9th of January 2011	Lockyer Creek levels in the Helidon area have peaked at about 7 metres with further rises and moderate to major flooding expected downstream to the O'Reilly's area during Monday. Further rainfall is forecast for the region during Monday which may produce higher levels.
12:36 AM on Monday the 10th of January 2011	Moderate to major flood levels have developed in Lockyer Creek upstream of Gatton. Levels in the Helidon area have peaked at about 7 metres and rises continue at Gatton. Rises to major flood levels are expected during

	Monday at Glenore Grove and Lyons Bridge. Further heavy rainfall is forecast for the catchments of the Bremer River and Warrill and Lockyer Creeks during Monday.
10:28 AM on Monday the 10th of January 2011	A major flood peak is currently around Glenore Grove of around 13 metres. Rises to around 14.5 metres are expected at Lyons Bridge later today and around 15 metres at Rifle Range Road. Higher levels are possible as rainfall continues.
4:16 PM on Monday the 10th of January 2011	Further rainfall during Monday has led to renewed rises in the Lockyer Creek catchment. Rainfall is forecast to continue this evening and a return to moderate to major flood levels is expected overnight and during Tuesday.
6:12 PM on Monday the 10th of January 2011	Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Laidley Creek at Mulgowie. These will extend to Gatton and areas downstream during the evening and overnight. High level record major flooding is expected in areas downstream of Gatton overnight and during Tuesday.
9:44 PM on Monday the 10th of January 2011	Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Gatton and Laidley Creek at Mulgowie. These will extend to Lyons Bridge in the next few hours and areas downstream later Monday and early Tuesday. High level major flooding is expected in areas downstream of Gatton overnight and during Tuesday.
12:06 AM on Tuesday the 11th of January 2011	Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton this evening before the station failed. This level is well above the previous record peak of 16.33 metres from the February 1893 flood. The main flood waters are currently around Glenore Grove, with strong stream rises at Lyons Bridge expected in the next few hours. The Lockyer Creek at Glenore Grove has reached 14.60 metres at 11:30pm. A peak in the next few hours is expected, with flood levels in excess of 15 metres possible.
3:24 PM on Tuesday the 11th of January 2011	Very heavy rainfall is continuing in the Lockyer Creek catchment and further very fast rises are being observed. Major flooding will continue this evening throughout the catchment. Flood levels at Glenore Grove were at 15.2 metres at 3pm, which is 0.3 metres above the 1974 flood level. The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge and are continuing to increase near record levels.
12:19 AM on Wednesday the 12th of January 2011	Major flooding will continue tonight in the Lockyer Creek catchment. Flood levels at Glenore Grove peaked at 15.2 metres at 3pm, which is 0.3 metres above the 1974 flood level. The Lockyer Creek at Lyons Bridge peaked at 17.25 metres around 6pm Tuesday.

Note: This table does not include all forecasts issued during these flood events.

Table 6. Table of flood warnings showing the use of the Coastal Streams from Maryborough to the NSW Border warning to create a Flash Flood Warning for Lockyer Creek.

Date	Time	Header
Sunday 9 January 2011	2:48 PM	FLOOD WARNING FOR COASTAL STREAMS FROM MARYBOROUGH TO THE NSW BORDER Issued at 2:48 PM on Sunday the 9th of January 2011
Sunday 9 January 2011	7:05 PM	FLOOD WARNING FOR COASTAL STREAMS FROM MARYBOROUGH TO THE NSW BORDER Issued at 7:05 PM on Sunday the 9th of January 2011
Sunday 9 January 2011	11:02 PM	FLOOD WARNING FOR COASTAL STREAMS FROM MARYBOROUGH TO THE NSW BORDER Issued at 11:02 PM on Sunday the 9th of January 2011
Monday 10 January 2011	9:19 AM	FLOOD WARNING FOR COASTAL STREAMS FROM MARYBOROUGH TO THE NSW BORDER Issued at 9:19 AM on Monday the 10th of January 2011
Monday 10 January 2011	5:00 PM	FLASH FLOOD WARNING FOR LOCKYER CREEK Issued at 5:00 PM on Monday the 10th of January 2011 Very heavy rainfalls have been recorded in the Toowoomba area and caused extreme flash flooding. This rainfall is also causing extreme rises in the upper Lockyer Creek at Helidon with very fast and dangerous rises possible downstream at Gatton in the next few hours. Rises will extend downstream of Gatton during tonight.
Monday 10 January 2011	8:37 PM	FLASH FLOOD WARNING FOR LOCKYER CREEK Issued at 8:37 PM on Monday the 10th of January 2011 Very heavy rainfalls have been recorded in the Toowoomba, Crows Nest and Gatton area and have caused extreme rises in the upper Lockyer Creek between Helidon and Gatton with the peak currently arriving in the Glenore Grove area. Record flood levels of 18.92 metres were recorded at Gatton this evening before the station failed. This level is well above the previous record peak of 16.33 metres from the February 1893 flood. Very fast and dangerous rises are occurring downstream of Gatton to Glenore Grove and will extend downstream to Lyons Bridge and O'Reilly Weir during Monday night and Tuesday morning.
Tuesday 11 January 2011	12:19 AM	FLASH FLOOD WARNING FOR LOCKYER CREEK Issued at 12:19 AM on Tuesday the 11th of January 2011
Tuesday 11 January 2011	4:10 AM	FLASH FLOOD WARNING FOR LOCKYER CREEK Issued at 4:10 AM on Tuesday the 11th of January 2011
Tuesday 11 January 2011	7:27 AM	FINAL FLASH FLOOD WARNING FOR LOCKYER CREEK Issued at 7:27 AM on Tuesday the 11th of January 2011

Table 7. Table of Severe Weather warnings that covered the area of Lockyer Creek during the period 9/11/2011 to 11/01/2011.

Date	Time	Header
Sunday 9 January 2011	4:40 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district and southern parts of the Wide Bay and Burnett. Issued at 4:40 am on Sunday 9 January 2011
Sunday 9 January 2011	10:55 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett, and eastern Darling Downs and Granite Belt District. Issued at 10:55 am on Sunday 9 January 2011
Sunday 9 January 2011	4:55 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett, and eastern Darling Downs and Granite Belt District. Issued at 4:55 pm on Sunday 9 January 2011
Sunday 9 January 2011	11:00 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 11:00 pm on Sunday 9 January 2011
Monday 10 January 2011	5:00 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 5:00 am on Monday 10 January 2011
Monday 10 January 2011	11:00 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 11:00 am on Monday 10 January 2011
Monday 10 January 2011	11:05 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 11:05 am on Monday 10 January 2011
Monday 10 January 2011	5:05 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, far southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 5:05 pm on Monday 10 January 2011
Monday 10 January 2011	6:30 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast, Darling Downs and Granite Belt and eastern parts of the Maranoa and Warrego districts. Issued at 6:30 pm on Monday 10 January 2011
Monday 10 January 2011	7:50 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts. Issued at 7:50 pm on Monday 10 January 2011
Monday 10 January 2011	11:00 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts. Issued at 11:00 pm on Monday 10 January 2011
Tuesday	5:05	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash

11 January 2011	am	flooding and potentially worsening the existing river flood situation For people in the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts. Issued at 5:05 am on Tuesday 11 January 2011
Tuesday 11 January 2011	8:00 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 8:00 am on Tuesday 11 January 2011
Tuesday 11 January 2011	11:00 am	SEVERE WEATHER WARNING for heavy rainfall leading to flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 11:00 am on Tuesday 11 January 2011
Tuesday 11 January 2011	2:00 pm	SEVERE WEATHER WARNING for heavy rainfall leading to flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 2:00 pm on Tuesday 11 January 2011
Tuesday 11 January 2011	5:00 pm	SEVERE WEATHER WARNING for heavy rainfall leading to flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 5:00 pm on Tuesday 11 January 2011
Tuesday 11 January 2011	10:00 pm	SEVERE WEATHER WARNING for heavy rainfall leading to flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 5:00 pm on Tuesday 11 January 2011

Flood summary for the Mary River at Maryborough

- The town of Maryborough is on the Mary River in the Mary catchment
- The flood heights at Maryborough are measured using a manual gauge owned by the Bureau of Meteorology (Bureau station number: 040443).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

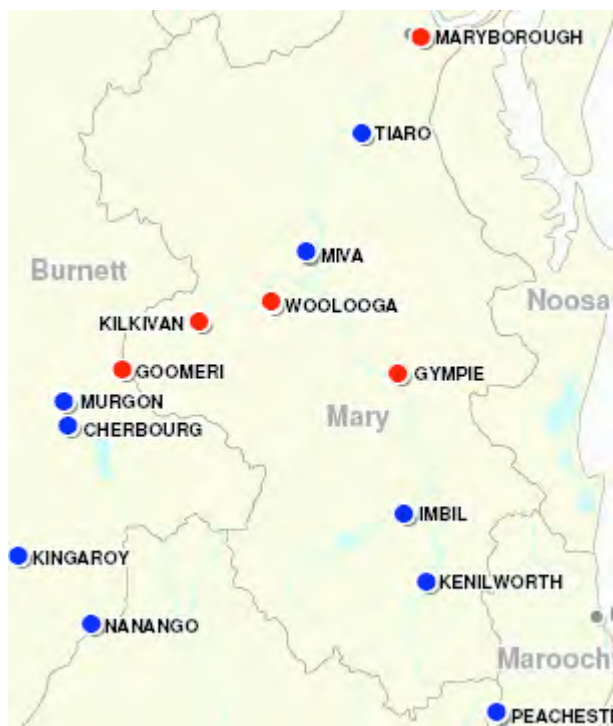


Figure 1. Map showing location of Maryborough.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

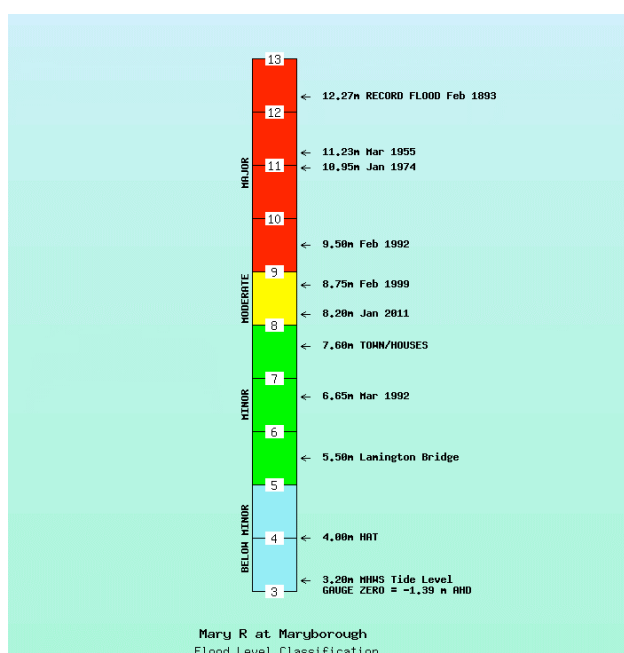


Figure 2. Flood level classifications and flood effects for Maryborough.

- **Peaked at 8.2 metres on 09/01/2011.**
- Minor: 5 metres
Moderate: 8 metres
Major: 9 metres.
- Gauge zero is -1.390 metres AHD.
- There was second peak of at 7.95 metres (minor) on 12/01/2011.
- Above moderate flood level (8 metres) from 09/01/2011 to 10/01/2011.
- Remained above minor flood level (5 metres) from 08/01/2011 to 14/01/2011.

Rainfall summary

- Over 600mm was recorded in most of the Mary River catchment during December 2010 and January 2011 with parts of the catchment receiving in excess of 1000mm.
- Very heavy rainfall of over 600mm in the Upper Mary between 9am on 06/01/2011 and 9am on 13/01/2011. Most of the Mary catchment received over 400mm between 9am on 06/01/2011 and 9am on 13/01/2011.

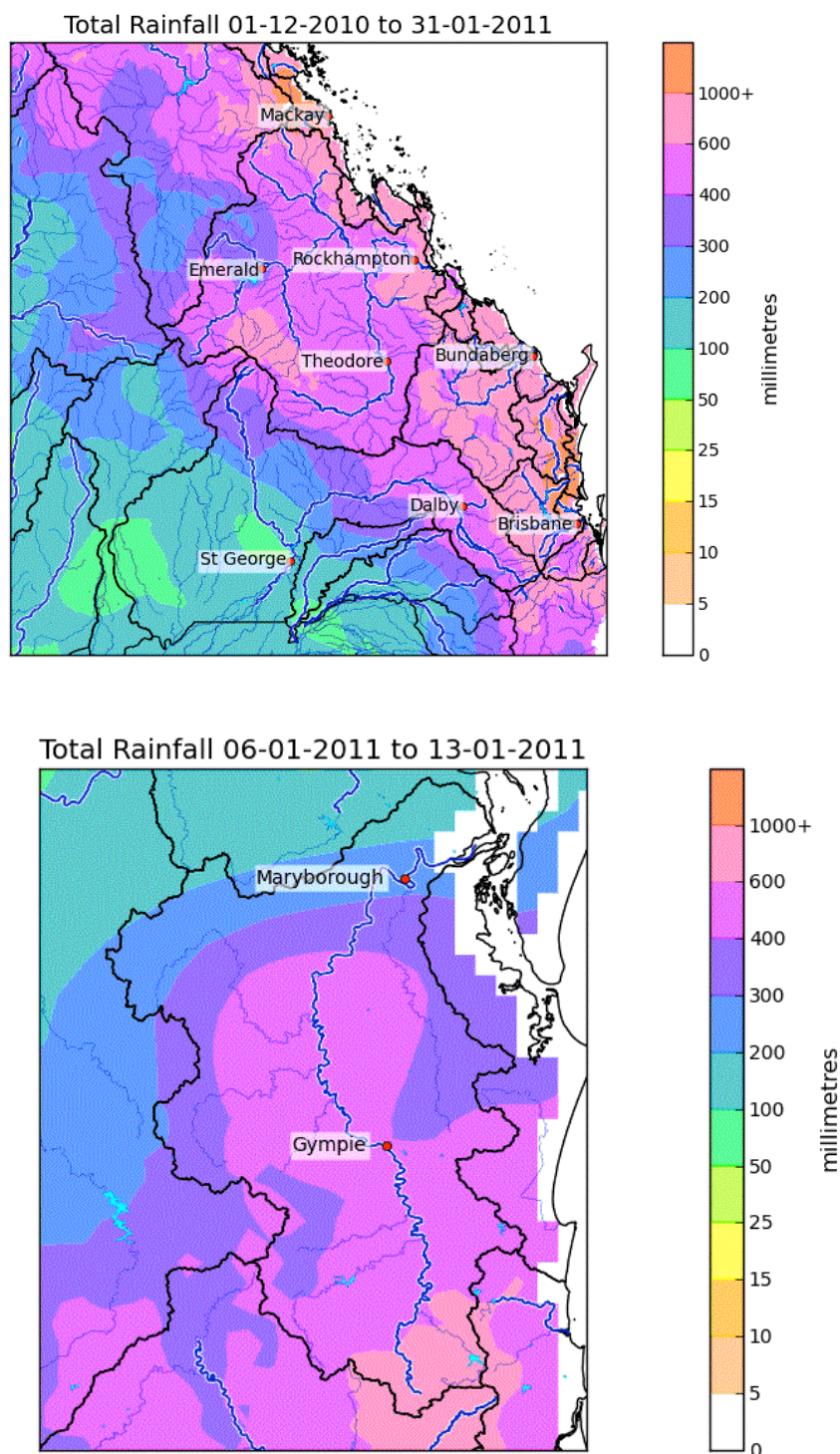


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for 9am on 06/01/2011 to 9am on 13/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for two selected stations at West Bellthorpe AL and Miva in the Mary River catchment are shown in Table 1.
- The most significant rainfall intensities for January 2011 at West Bellthorpe AL occurred in the 24, 48 and 72 hour durations ending at 4:20am on the 10/01/2011, 04:35am on the 11/01/2011 and 01:20am on the 12/01/2011 respectively. Smaller than a 1% Annual Exceedence Probability (greater than 100 year Average Recurrence Interval) was recorded.

Table 1. Recorded maximum rainfall intensities for West Bellthorpe AL and Miva in the Mary River catchment for December 2010 and January 2011.

Rainfall Duration	West Bellthorpe AL			Miva		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
12hr	245	9:05 PM 09/01/2011	50-100			
24hr	349	4:20 AM 10/01/2011	> 100	304	9:00 AM 08/01/2011	50-100
48hr	481	4:35 AM 11/01/2011	> 100	381	9:00 AM 09/01/2011	50-100
72hr	605	1:20 AM 12/01/2011	> 100	444	9:00 AM 09/01/2011	50-100

Flood event timeline

Table 2. Flood timeline for Theodore

Time/Date	Event Description	Gauge Height (metres)	Comment
8:43 AM 7/01/2011	First warning issued		
8/01/2011	First time it exceeded minor flood level	5.0	Remained above minor flood level for ~7 days
9/01/2011	First time it exceeded moderate flood level	8.0	Total time above moderate flood was ~1 day
12:30 PM 9/01/2011	Moderate flood peak	8.2	
10/01/2011	Final fall below moderate	8.0	
9:00 PM 12/01/2011	Minor flood peak	7.95	
14/01/2011	Final fall below minor	5.0	
8:54 AM 15/01/2011	Final warning issued		

Flood Heights at Maryborough

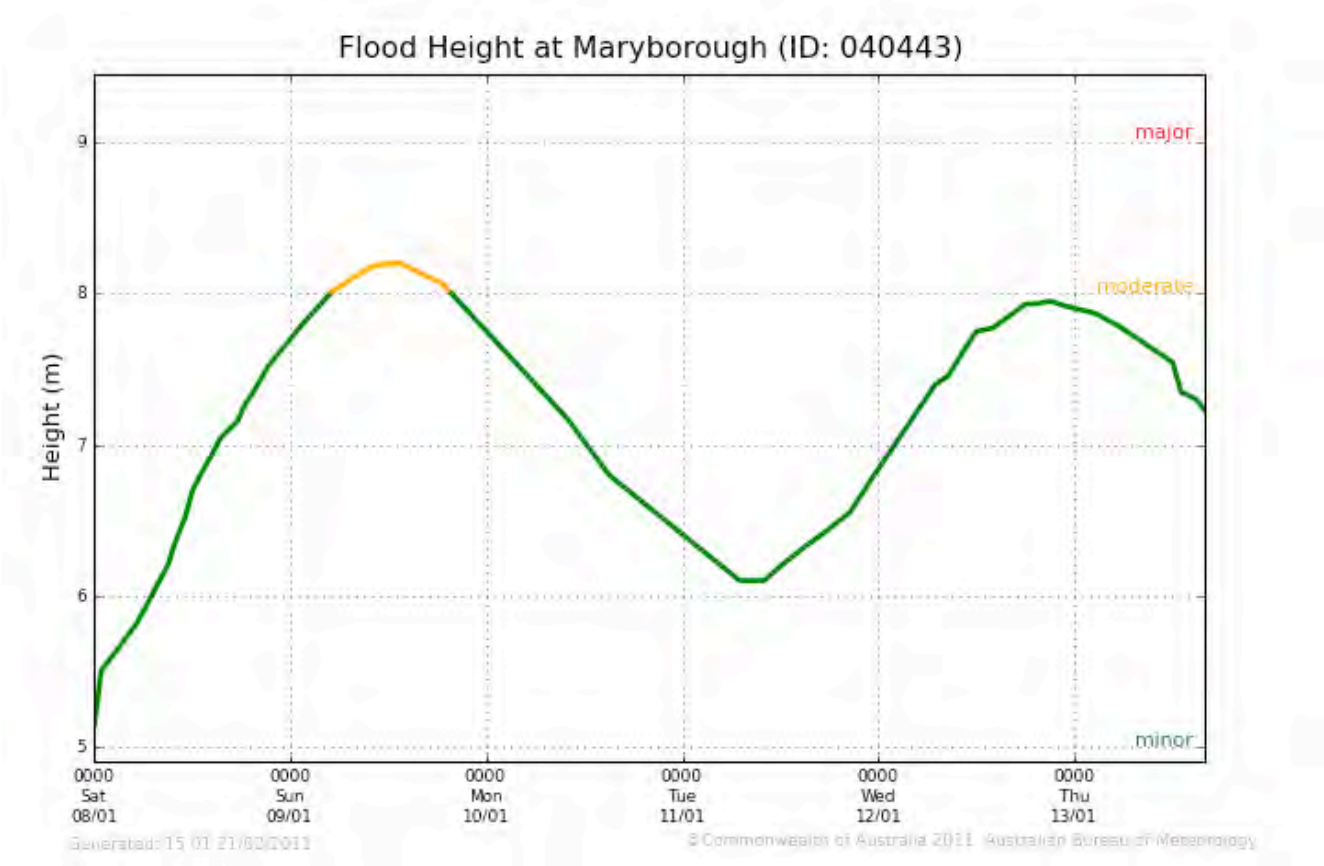


Figure 4. Flood heights at the Maryborough manual gauge.

Comparison with previous floods

- Start of record 1864 with 7 major and 4 moderate flood peaks in the record
- Last moderate flood was 8.75 metres February 1999.

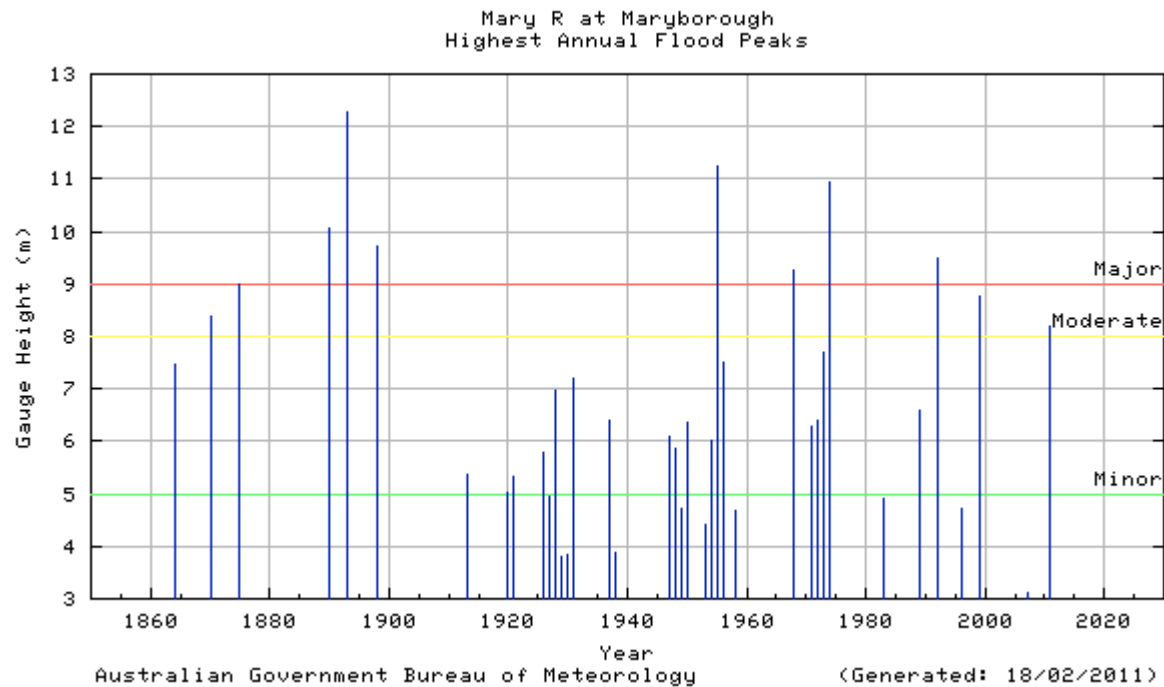


Figure 5. Highest annual flood peaks for the Mary River at Maryborough.

Warning and Forecast Service

- Significant runoff commenced during early December with flood warnings for the Mary River issued between 12/12/2010 and 14/12/2010 and again between 19/12/2010 and 22/12/2010.
- Further heavy rainfall occurred in early January with warnings commencing 06/01/2011 and continuing through to 15/01/2011.
- A total of 43 warnings were issued for the Mary River system including Maryborough during December 2010 and January 2011.

Table 3. Table of peak height predictions for Maryborough

Time of Height Forecast	Forecast	Peak
07/01/2011 First warning issued. Height at the time was below minor		
11:15 PM on Friday the 7th of January 2011	Exceed 5 metres (minor flood) overnight. Reach at least 6 metres during Saturday.	Rising limb forecasts – reach a level and expected to continue rising 6.05 metres at 7:30 AM Sat 8/01/2011 7.05 metres at 3:30 PM Sat 8/01/2011
2:09 AM on Saturday the 8th of January 2011	Reach at least 6 metres during Saturday morning with further rises above 7 metres possible.	
5:57 AM on Saturday the 8th of January 2011	Reach at least 7.5 metres during Saturday morning with further rises possible.	7.5 metres at 9:00 PM Sat 8/01/2011
10:05 AM on Saturday the 8th of January 2011	Continue rising during Saturday with a peak expected during Sunday of about 9 metres, possibly higher.	8.2 metres at 12:30 PM Sun 9/01/2011
12:21 PM on Saturday the 8th of January 2011	Continue rising during Saturday with a peak expected during Sunday of about 9 metres, possibly higher.	
6:36 PM on Saturday the 8th of January 2011	Continue rising overnight Saturday with a peak expected during Sunday of about 9 metres. Further heavy rainfall may result in higher levels.	
6:08 AM on Sunday the 9th of January 2011	A peak is expected during Sunday of around 8.4 metres. Further heavy rainfall may result in higher levels.	
11:01 AM on Sunday the 9th of January 2011	A peak is expected during Sunday of around 8.4 metres. Further heavy rainfall may result in higher levels.	
1:55 PM on Sunday the 9th of January 2011	A peak is expected during Sunday of around 8.4 metres. Further heavy rainfall may result in higher levels.	7.95 metres at 9:00 PM Wed 12/01/2011
5:50 PM on Sunday the 9th of January 2011	Fall slowly during Sunday night and Monday.	
6:33 AM on Tuesday the 11th of January 2011	River rises during Tuesday and a continuation of minor flooding.	
4:41 PM on Tuesday the 11th of January 2011	Peak near the moderate flood level (8 metres) around midday Wednesday.	
10:09 PM on Tuesday the 11th of January 2011	Peak near the moderate flood level (8 metres) around midday Wednesday.	
7:16 AM on Wednesday the 12th of January 2011	Peak near the moderate flood level (8 metres) around midday Wednesday.	
10:52 AM on Wednesday the 12th of January 2011	Peak near the moderate flood level (8 metres) early Wednesday afternoon.	
4:53 PM on Wednesday the 12th of January 2011	Peak near the moderate flood level (8 metres) early Wednesday afternoon.	

10:33 PM on Wednesday the 12th of January 2011	Peak near the moderate flood level (8 metres) Wednesday evening.	
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Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Fitzroy River at Rockhampton

- The town of Rockhampton is on the Fitzroy River in the Capricornia district.
- The river heights at Rockhampton are measured on a manual gauge owned by the Bureau of Meteorology (Bureau station number: 039264).
- Rockhampton experienced major flooding in January 2011 that continued for more than 13 days and cut the Bruce Highway which connects North Queensland with Brisbane.
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

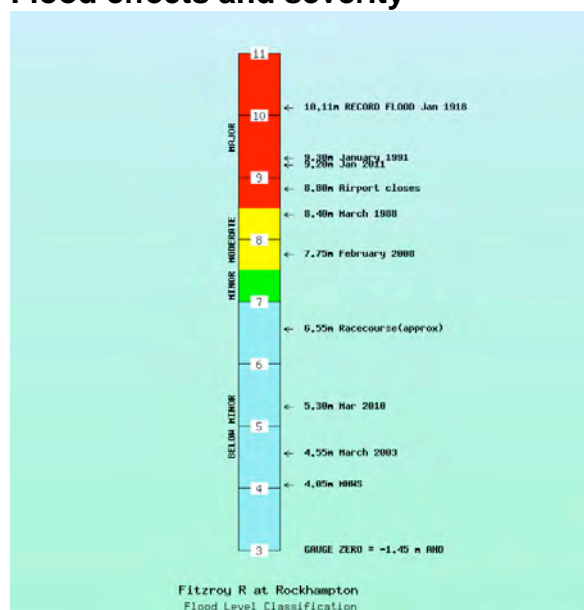
Location map



Figure 1. Map showing location of Rockhampton.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



- **Peaked at 9.2 metres on 04/01/2011.**
- Minor: 7.0 metres
Moderate: 7.5 metres
Major: 8.5 metres
- Gauge Zero is -1.488 metres AHD.
- Rockhampton was isolated for several weeks with the main highways to the south and west and the airport flooded (Source: Ninemsn).
- Many properties were flood affected and many residents were evacuated from parts of the town (Source: ABC).
- Above major flood level (8.5 metres) from 01/01/2011 to 14/01/2011.
- Above minor flood level (7.0 metres) from 13/12/2010 to 20/12/2010 and again from 27/12/2010 to 17/01/2011.

Figure 2. Flood level classifications and flood effects for Rockhampton

Rainfall summary

- Between 200 and 1000 millimetres of rainfall was recorded over the Fitzroy River catchment from the start of December 2010 to the end of January 2011.
- The heaviest rainfall periods during December and January occurred from the 26/12/2010 to 28/12/2010, with falls between 100 and 300 millimetres over a large part of the catchment with some areas receiving over 400mm during this period.

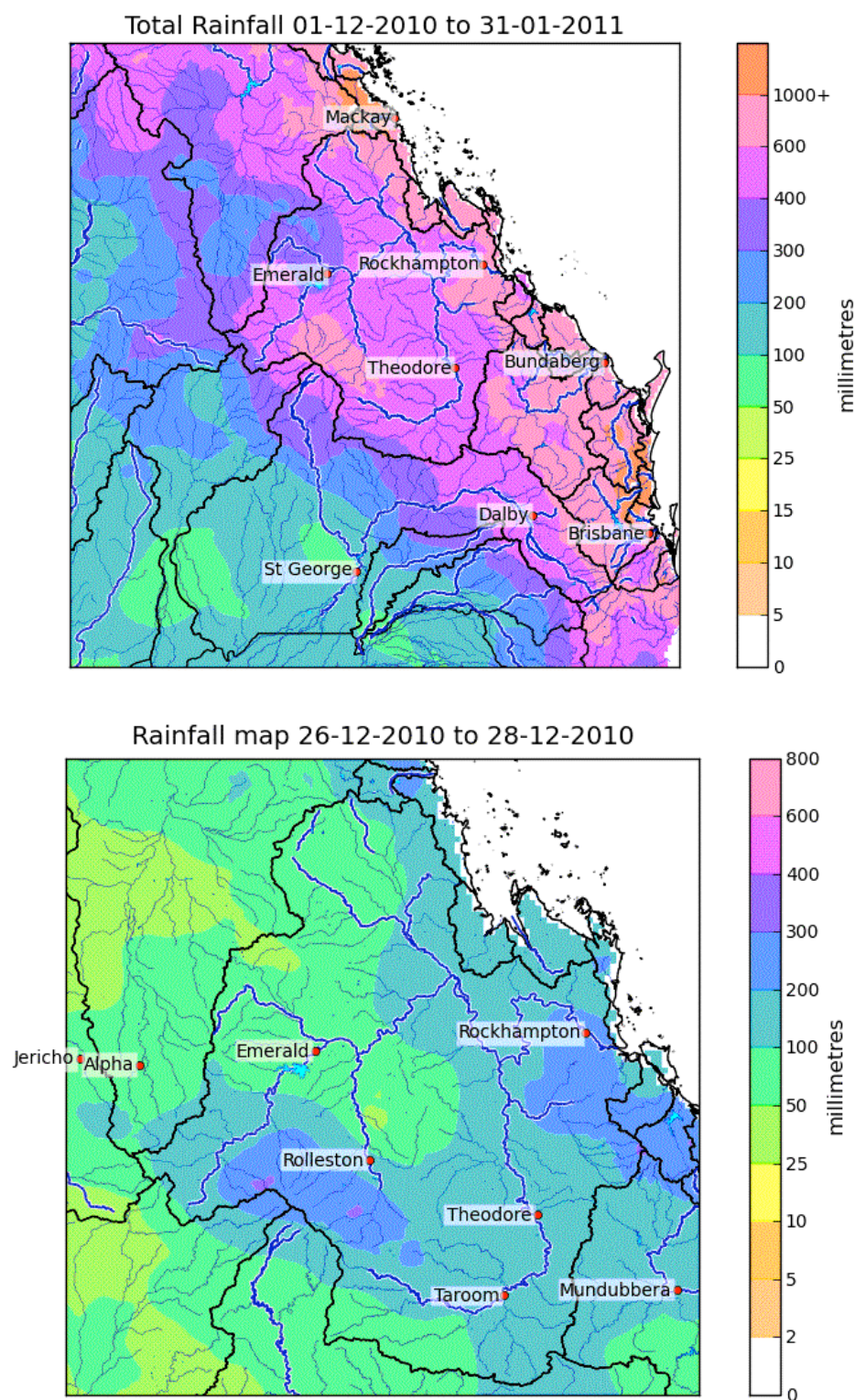


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the 48 hours to 9 AM on 28/12/2010 (bottom).

Rainfall Intensity

- Coolmaringa TM on the Mackenzie River and Kingsborough TM on the Don River, both upstream from Rockhampton, have been selected as examples of recorded rainfall intensities across the eastern parts of the Fitzroy River catchment during December 2010 and January 2011. The rainfall intensity data is shown in Table 1.
- The most significant rainfall intensities for December 2010 and January 2011 at these two sites occurred on 3/12/2010, 27/12/2010 and on 28/12/2010 however they were all well above the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded maximum rainfall intensities for Coolmaringa TM on the Mackenzie River and Kingsborough TM on the Don River for December 2010 and January 2011.

Rainfall Duration	Coolmaringa TM			Kingsborough TM		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
30 mins	22	10:25 AM 22/12/2010	< 1	45	12:05 PM 27/12/2010	10-20
60 min	33	10:45 AM 22/12/2010	1-2	53	12:15 PM 27/12/2010	5
2 hr	49	5:10 PM 27/12/2010	1-2	63	7:50 PM 27/12/2010	2-5
3 hr	61	5:40 PM 27/12/2010	2-5	78	8:15 PM 27/12/2010	5-10
6 hr	103	9:00 PM 27/12/2010	10-20	93	10:00 PM 27/12/2010	5-10
12hr	117	2:40 AM 28/12/2010	5-10	147	11:10 PM 27/12/2010	20
24hr	167	1:15 PM 03/12/2010	10-20	155	10:55 AM 28/12/2010	5-10
48hr	174	1:15 PM 03/12/2010	5-10	232	10:00 PM 27/12/2010	10-20
72hr	259	12:15 PM 03/12/2010	10-20	265	10:55 AM 28/12/2010	10-20

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood timeline for Rockhampton

Time/Date	Event Description	Gauge Height (metres)	Comment
11:06 AM 04/12/2010	First warning issued		First warning issued with reference to Rockhampton flooding.
2:00 AM 13/12/2010	River level first exceeds the minor flood level.	7.00	Remained above the minor flood level for ~7 days
2:00 PM 14/12/2010	River level first exceeds the moderate flood level	7.50	Remained above the moderate flood level for ~3 days.
5:30 AM 16/12/2010	Moderate flood peak	7.65	
5:30 AM 27/12/2010	River level exceeds the minor flood level again.	7.00	Remained above the minor flood level for ~21 days.
5:00 AM 28/12/2010	River level exceeds the moderate flood level again.	7.50	Remained above the moderate flood level for ~19.5 days.
8:45 AM 01/01/2011	River level first exceeds the major flood level	8.50	Remained above the major flood level for ~13.5 days.
3:15 PM 04/01/2011	Major flood peak	9.20	5 th highest flood peak on record for Rockhampton.
5:45 AM 14/01/2011	Final fall below major	8.50	
1:45 AM 16/01/2011	Final fall below moderate	7.00	
10:45 AM 17/01/2011	Final fall below minor	5.00	
7:54 AM 17/01/2011	Final warning issued		

Flood Heights at Rockhampton

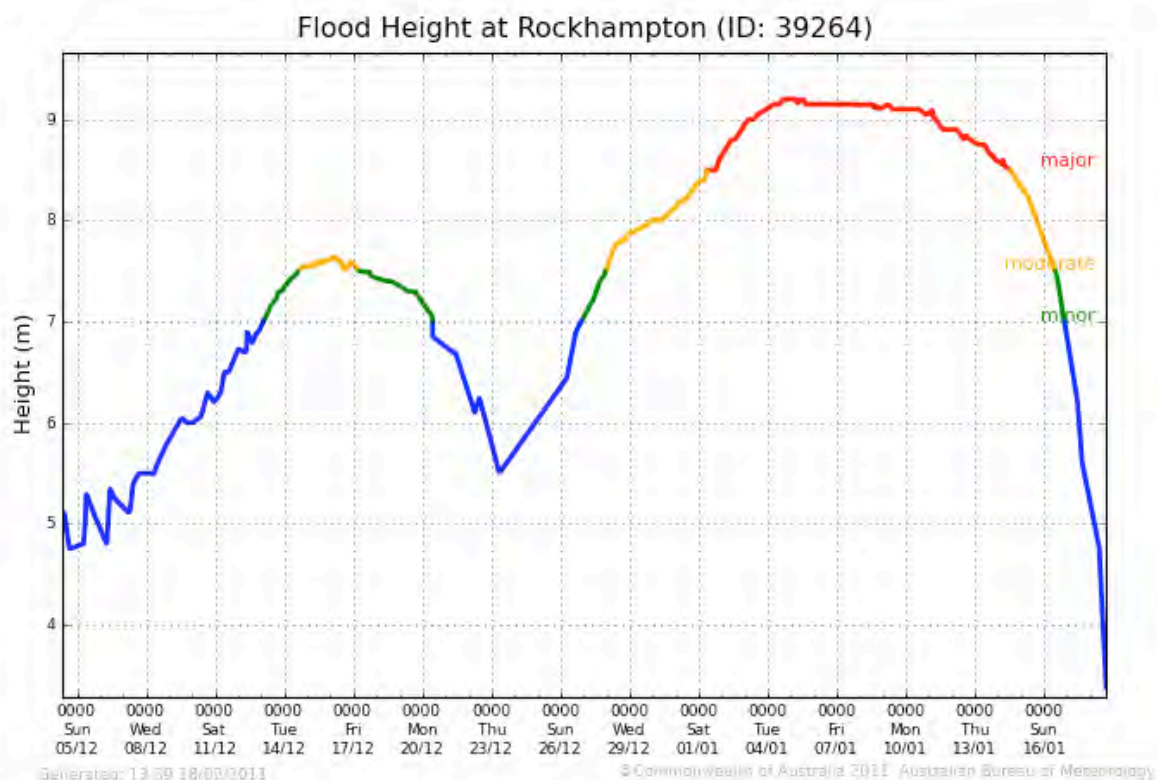


Figure 4. Flood Heights at Rockhampton manual gauge for December 2010 and January 2011

Comparison with previous floods

- River height records for Rockhampton date back to 1859.
- The 2011 major flood level of 9.2 metres is the fifth highest peak on record (two peaks recorded in 1918).
- The previous time the river level exceeded 9 metres was in January 1991 when the Fitzroy River rose to 9.30 metres.

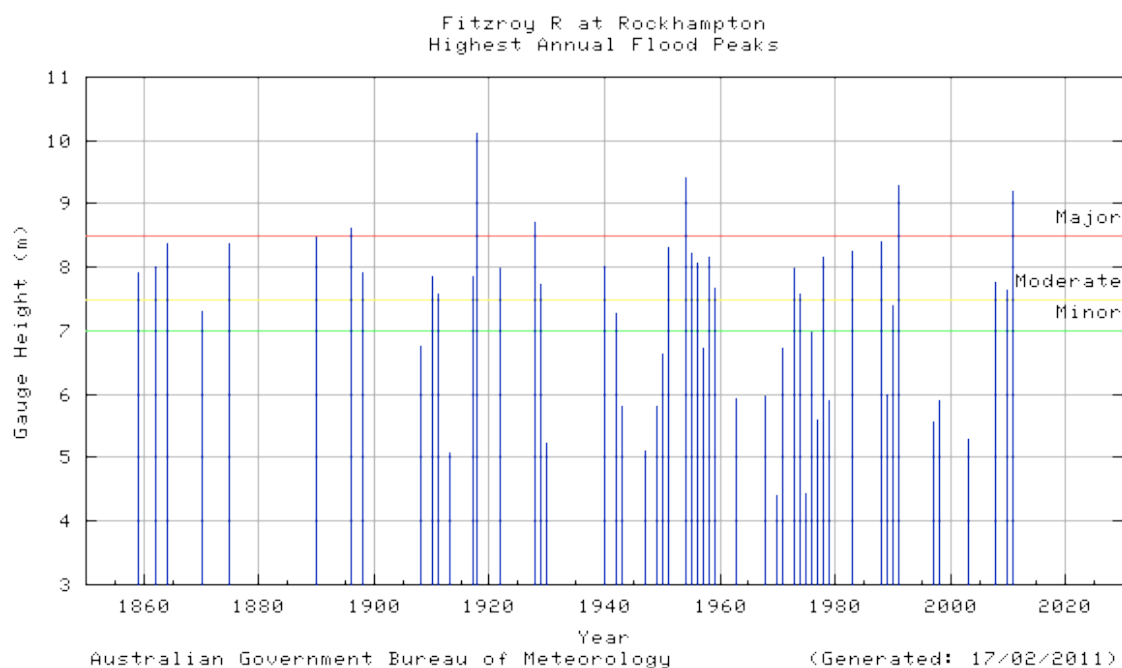


Figure 5. Highest annual flood peaks for the Fitzroy River at Rockhampton

Warning and Forecast Service

- The first warning issued for the Fitzroy River that included references to expected river height rises at Rockhampton was issued on 04/12/2010. Warnings then continued for the catchment throughout the month, finalising on 17/01/2011 following the major flood peak at Rockhampton.
- This period of warnings included the moderate flood peak at Rockhampton in December and the major flood peak at Rockhampton in January 2011.
- A total of 86 warnings were issued for the Fitzroy River system during December 2010 and January 2011 that referred to river rises and flooding at Rockhampton.

Table 3. Table of peak height predictions for Rockhampton

Time of Height Forecast	Forecast	Peak
04/12/2010 First warning issued referencing flooding at Rockhampton.		
11:06 AM on Saturday the 4th of December 2010	Slow river rises will also continue at Rockhampton during next week and possibly reach near the minor flood level of 7 metres by the end of next week.	Rising limb forecasts – reach a level and expected to continue rising
11:11 AM on Sunday the 5th of December 2010	Possibly reach near the minor flood level of 7 metres by next weekend 11-12 December.	
10:25 AM on Monday the 6th of December 2010	Reach the minor flood level of 7 metres by this weekend	
10:13 AM on Tuesday the 7th of December 2010	Exceed the minor flood level of 7 metres during this weekend.	
10:27 AM on Wednesday the 8th of December 2010	Exceed the minor flood level of 7 metres during this weekend and reach 7.8 metres early next week with further rises possible.	
11:19 AM on Monday the 13th of December 2010*	Peak up to 7.8 metres late this week. Levels remaining above 7 metres into next week.	
9:28 AM on Tuesday the 14th of December 2010	Reach up to 7.8 metres late this week. Levels remaining above 7 metres into next week.	7.65 metres at 05:30 AM Thur 16/12/2010
10:53 AM on Wednesday the 15th of December 2010	The Fitzroy River at Rockhampton is expected to peak up to 7.8 metres during the next 24 hours. Once a peak has been observed, river levels will fall very slowly and will remain above the minor flood level of 7 metres until at least 21/12/10.	

10:49 AM on Thursday the 23rd of December 2010	River levels will rise again over the weekend and through next week	Rising limb forecasts – reach a level and expected to continue rising
12:21 PM on Saturday the 25th of December 2010	River levels at Rockhampton will rise again to around the 7 metres mark by late next week.	
5:19 PM on Sunday the 26th of December 2010	Remain around at least the 7 metre minor flood level during this week, with possible higher levels later in the week and during the New Year weekend	
1:25 PM on Monday the 27th of December 2010	Reach at 7.5 metres (moderate) later this week.	
7:06 AM on Tuesday the 28th of December 2010	Reach 8 metres later this week and continue rising. Major flood levels (8.5 metres) possible early next week.	
4:21 PM on Wednesday the 29th of December 2010	Reach 8 metres (moderate) later this week and continue rising. Reach 8.5 metres (major) late in the weekend.	
9:50 AM on Thursday the 30th of December 2010	Reach 9 metres on Sunday morning with further rises. Reach about 9.4 metres by Tuesday with possible further rises.	
8:11 PM on Friday the 31st of December 2010	Reach 9 metres by Monday with further rises. Reach up to 9.4 metres by Wednesday with possible further rises.	9.2 metres at 3:15 PM Tue 04/01/2011
6:41 AM on Monday the 3rd of January 2011	Peak up to 9.4 metres on Wednesday, remaining above 8.5 metres for 1 week after the peak.	
6:25 AM on Wednesday the 5th of January 2011	Further small rises above 9.2 metres are expected during today. Remain above 8.5 metres for 1 week after the peak which is expected to last for at least 36 hours.	
6:47 PM on Wednesday the 5th of January 2011	Remain around the current peak level overnight. Remain above 8.5 metres (major) for 1 week after the peak.	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Comet River at Rolleston

- The town of Rolleston is on the Comet River in the Fitzroy River catchment
- The flood heights at Rolleston are measured on a manual gauge owned by the Bureau of Meteorology (Bureau station number: 035145).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

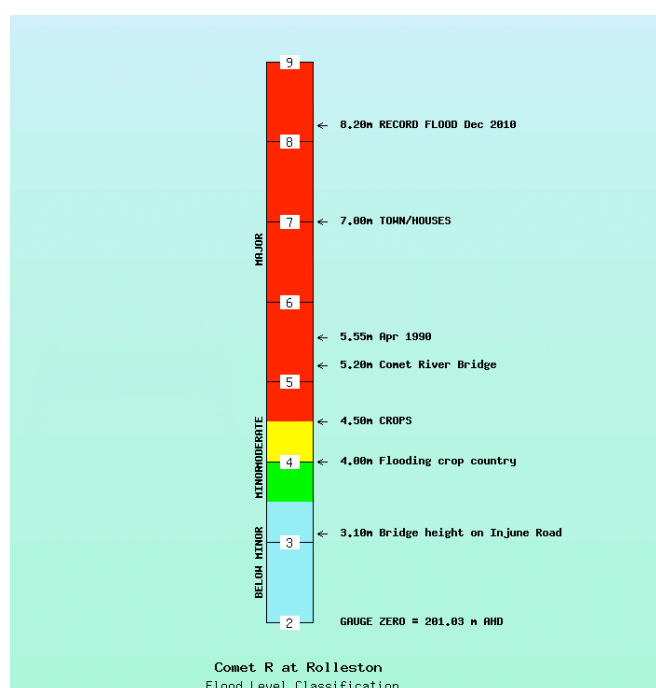
Location map



Figure 1. Map showing location of Rolleston.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



- **Peaked at:**
8.54 metres at 1:00 PM on 27/12/2010
Additional flood peaks have occurred in December 2010 and January 2011 but were not recorded.
- Minor: 3.5 metres
Moderate: 4.0 metres
Major: 4.5 metres
- Gauge zero is 201.030 AHD.
- The peak height recorded on 27/12/2010 exceeds the previous record flood height by 2.67 metres.
- Above major flood level (4.5 metres) from 03/12/2010 to 09/12/2010 and again from 21/12/2010 to 09/01/2011.*
- Above minor flood level (3.5 metres) from 01/12/2010 to 17/12/2010 and again from 19/12/2010 to 12/01/2011.*

Figure 2. Flood level classifications and flood effects for Rolleston.

* Data from the Rolleston Manual Gauge was incomplete for the period from 01/12/2010 to 12/01/2011 so these dates have been estimated from peak stage relationships using river heights recorded downstream at The Lake Alert.

Rainfall summary

- Between 600 and 1000 mm of rainfall was recorded over the upper Comet River and its tributaries from 01/12/2010 to 31/01/2011.
- Very heavy rainfall of between 300 and 400 mm and isolated falls above 400 mm were recorded over the upper tributaries of the Comet River in the 48 hours to 9am on 28/12/2010 which led to record flood levels at Rolleston on the 27/12/2010.

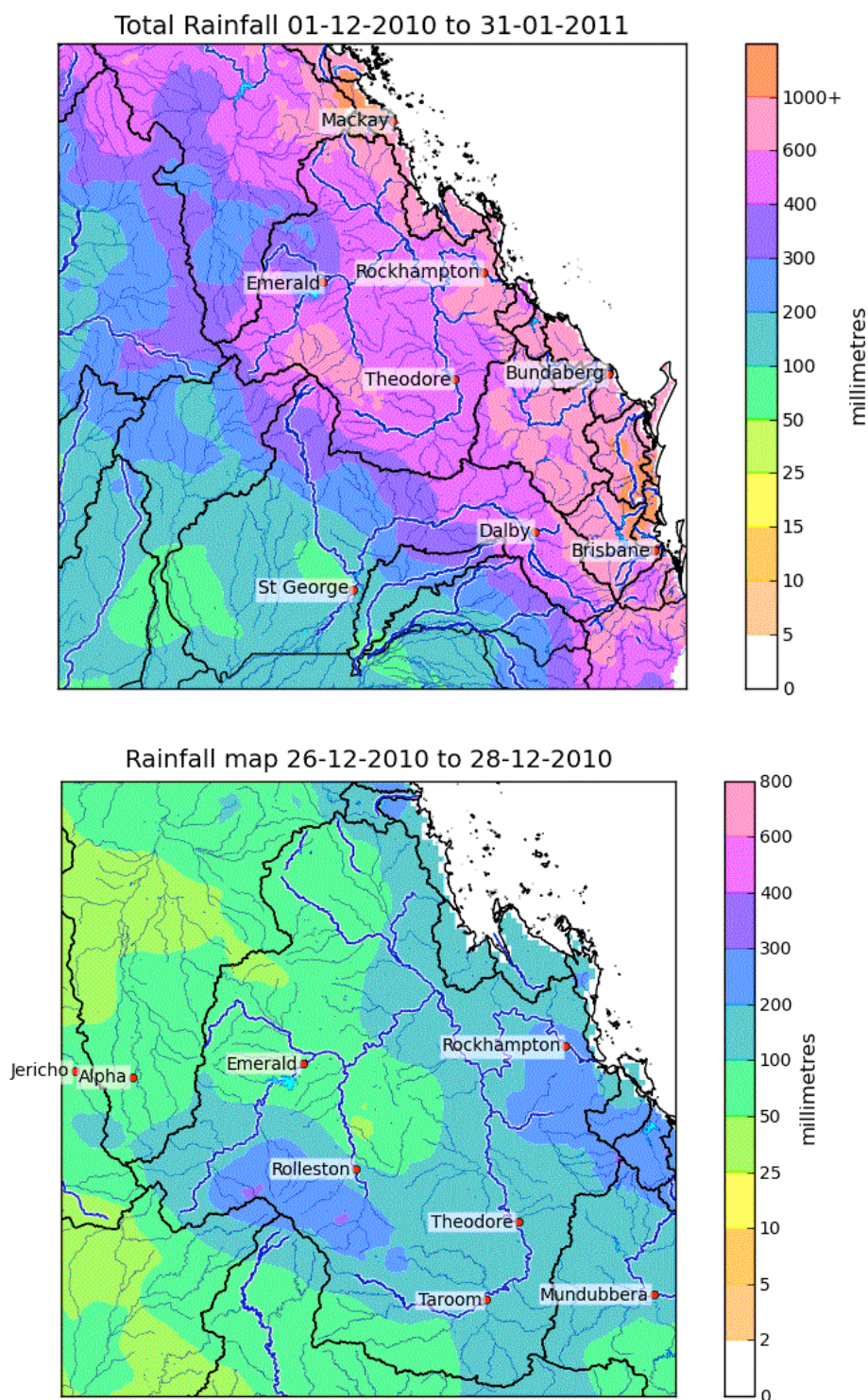


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the 48 hours to 9 AM on the 28/12/2010 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for Lake Brown TM on the Brown River and Rewan TM on Canarvon Creek, both upstream from Rolleston, have been selected as examples of recorded rainfall intensities across the Comet River catchment during December 2010. The rainfall intensity data is shown in Table 1.
- The most significant rainfall intensities at Lake Brown TM for December 2010 occurred in the 12 to 24 hour duration periods ending on 27/12/2010 and equalled the 2–5% Annual Exceedence Probability (20-50 year Average Recurrence Interval).
- The most significant rainfall intensities at Rewan TM for December 2010 also occurred in the 12 to 24 hour durations ending on 27/12/2010, exceeding the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded Maximum Rainfall Intensities for Lake Brown TM on Brown River and Rewan TM on Canarvon Creek for December 2010.

Rainfall Duration	Lake Brown TM			Rewan TM		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
6hr	86	8:40 AM 27/12/2010	5-10	118	5:50 AM 27/12/2010	20-50
12hr	144	9:45 AM 27/12/2010	20-50	183	7:35 AM 27/12/2010	> 100
24hr	186	4:15 PM 27/12/2010	20-50	237	3:25 PM 27/12/2010	> 100
48hr	208	3:50 PM 27/12/2010	10-20	268	3:45 PM 27/12/2010	20-50
72hr	213	4:15 PM 27/12/2010	10-20	276	3:45 PM 27/12/2010	20-50

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood timeline for Rolleston

Time/Date	Event Description	Gauge Height (metres)	Comment
5:30 PM 01/12/2010	First warning issued for the Comet River.		
01/12/2010*	First time it exceeded minor flood level	3.50	Remained above minor flood level for ~16 days
03/12/2010*	First time it exceeded major flood level	4.50	Remained above the major flood level for ~6 days.
05/12/2010*	Major flood peak	Flood peak not measured	
09/12/2010*	Below major flood level	4.50	
17/12/2010*	Below minor flood level	3.50	
19/12/2010*	Exceeded the minor flood level	3.50	Remained above minor flood level for ~24 days.
21/12/2010*	Exceeded the major flood level	4.50	Remained above the major flood level for ~19 days..
1:00 PM 27/12/2010*	Major flood peak	8.54	New Record
09/01/2011*	Below the major flood level	4.50	
12/01/2011*	Final fall below minor	3.50	
10:07 AM 13/01/2011	Final warning issued for the Comet River		

* Times are estimated by applying the peak stage relationship to river height observations recorded downstream at The Lakes Alert.

Comparison with previous floods

- Flood peak records for Rolleston date back to 1958 with 25 major flood peaks in the record.
- The flood peak of 8.54* metres on the 27/12/2010 sets a new record for Rolleston and exceeds the previous record peak of 5.87 metres that occurred on 19/02/2010 by 2.67 metres.

* Flood peak estimated from post flood survey.

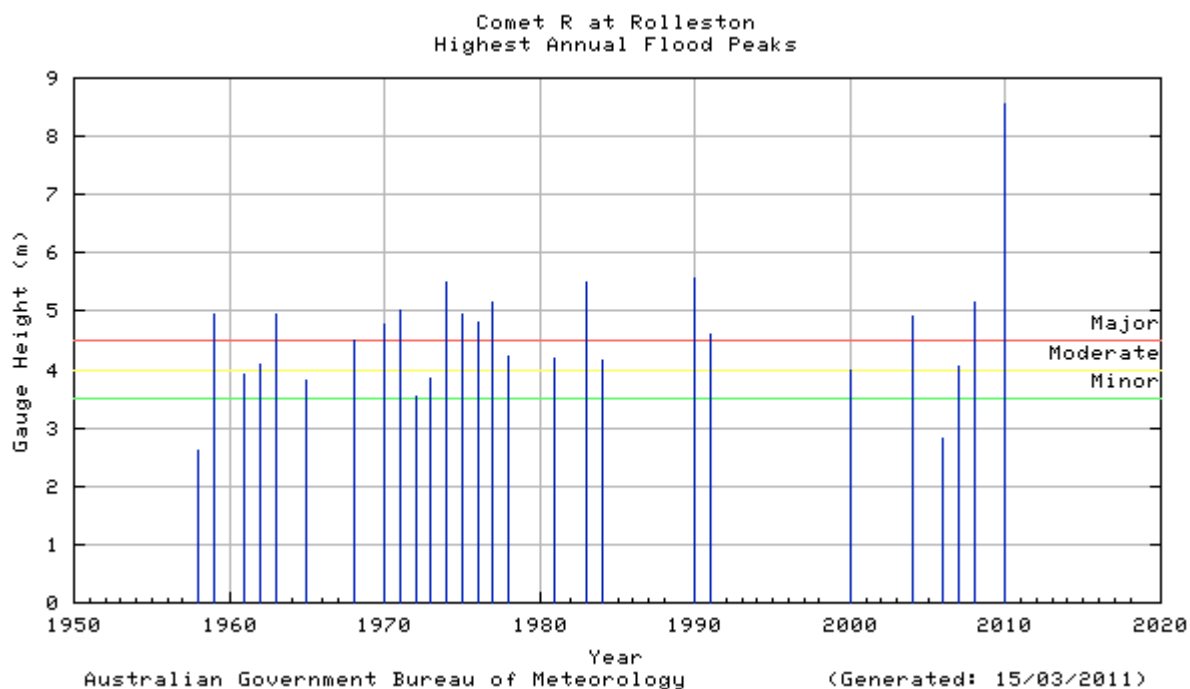


Figure 5. Highest annual flood peaks for the Comet River at Rolleston.

Warning and Forecast Service

- Significant runoff commenced during September with flood warnings for the Comet River issued between 05/09/2010 and 09/09/2010 and again between 27/09/2010 and 01/10/2010.
- Further rainfall occurred over the Fitzroy River catchment in late November but no warnings were required for towns along the Comet River.
- Rainfall in early December saw warnings recommence for the Comet River on 01/12/2010 and continuing through to 14/12/2010. Further warnings were then required between the 19/12/2010 to 15/01/2011 with record flooding occurring at Rolleston.
- A total of 73 warnings were issued for the Comet River in the Fitzroy River catchment during December 2010 and January 2011.
- Flood height predictions are not made for the town of Rolleston.

Flood summary for the Balonne River at St George

- The town of St George is on the Balonne River in the Condamine-Balonne River catchment.
- St George has a manual river height gauge jointly owned by the Bureau of Meteorology and Sunwater (Bureau station number: 043053) and an automatic river height gauge owned by the Queensland Department of Environment and Resource Management (Bureau station number: 043104). River level heights and peaks in this report are in reference to the manual gauge data.
- St George experienced two major flood peaks in January 2011 which rank as the 2nd and 3rd highest peaks on record
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

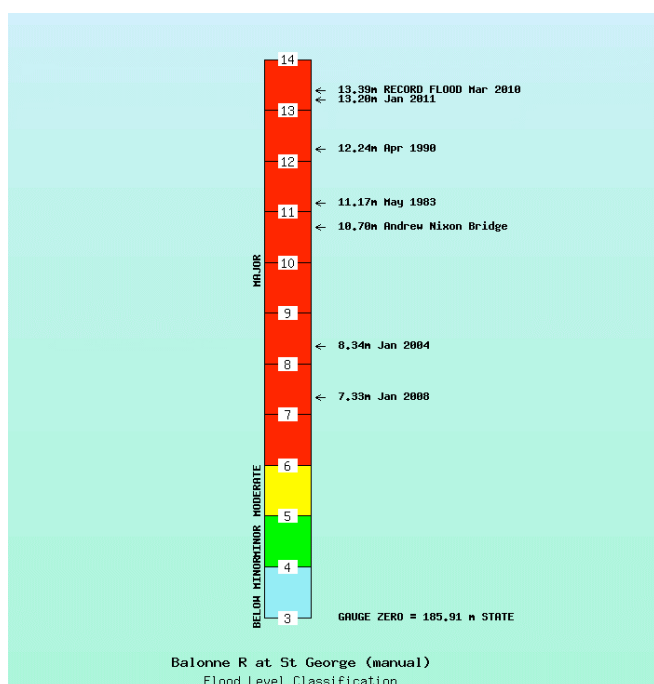
Location map



Figure 1. Map showing location of St George.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



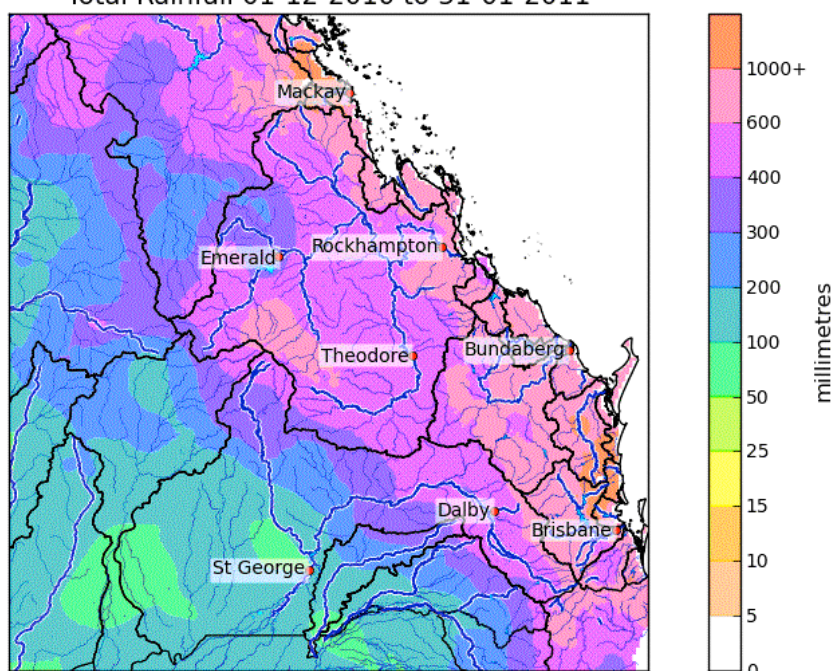
- **Peaked at:**
13.2 metres on 08/01/2011
12.49 metres on 23/01/2011
- Minor: 4 metres
Moderate: 5 metres
Major: 6 metres
- Gauge zero is 185.907 metres State Datum.
- Residents of the nursing home were evacuated to Brisbane (Source: ABC).
- 30 homes were expected to be inundated (Source: ABC).
- Above major flood level (6 metres) from 07/12/2010 to 13/12/2010, 16/12/2010 to 20/12/2010 and 21/12/2010 to 02/02/2011.
- Above minor flood level (4 metres) from 05/12/2010 to 04/02/2011.

Figure 2. Flood level classifications and flood effects for St George.

Rainfall summary

- Rainfall recorded in December 2010 and January 2011, which led to major flooding at St George, was heaviest over the eastern half of the catchment.
- Between 300 to 600 millimetres of rainfall was recorded over most of the Condamine River catchment from the start of December 2010 to the end of January 2011 with falls up to 1000mm over the far east of the catchment. Falls between 50 and 300 millimetres were recorded over the Balonne River catchment.
- The heaviest rainfall periods during December 2010 and January 2011 occurred from 27/12/2010 to 28/12/2010, with falls between 100 and 200 millimetres and from 06/01/2011 to 12/01/2011 with falls between 200 and 400 millimetres.

Total Rainfall 01-12-2010 to 31-01-2011



Total Rainfall 25-12-2010 to 12-01-2011

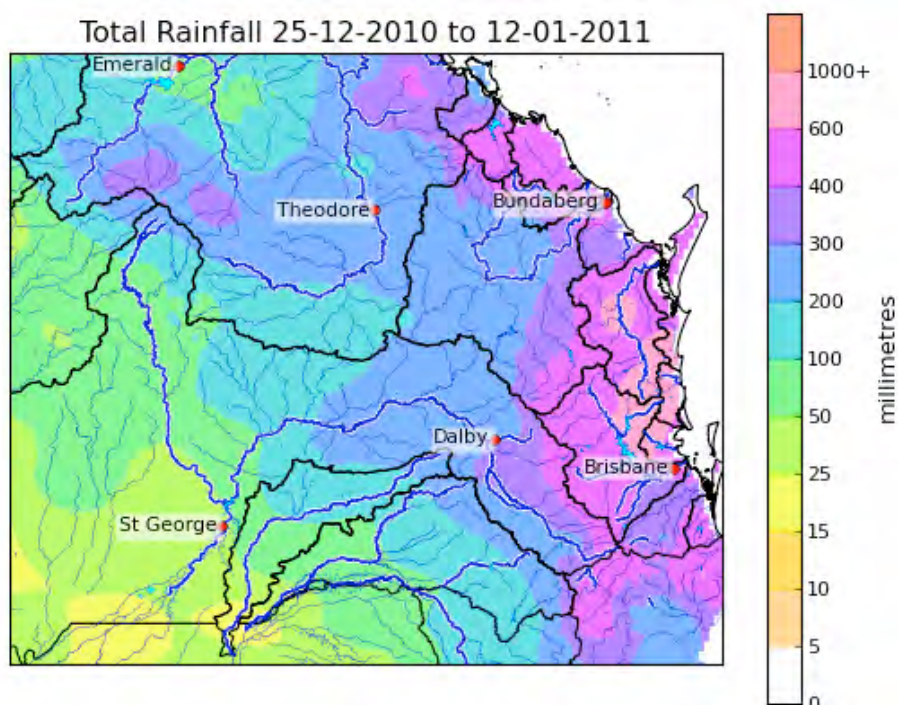


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the period from 9 AM on 25/12/2010 to 9 AM on 12/01/2011 (bottom).

Rainfall Intensity

- The December and January floods at St George were not caused by local area intense rainfall and rainfall intensity analysis of single sites in the large catchment above St George is not informative.
- The flood levels at St George were the result of the combination of large flows in Charleys Creek, Myall Creek, Upper Condamine and Maranoa Rivers.

Flood event timeline

Table 2. Flood timeline for St George

Time/Date	Event Description	Gauge Height (metres)	Comment
05/12/2010	First warning issued		
05/12/2010	River level first exceeds the minor flood level.	4.00	Remained above the minor flood level for ~61 days.
06/12/2010	River level first exceeds the moderate flood level.	5.00	Remained above the moderate flood level for ~59 days.
07/12/2010	River level exceeds the major flood level.	6.00	Remained above the major flood level for ~6 days.
9:00 AM 11/12/2010	Major flood peak.	8.05	
13/12/2010	River level falls below major	6.00	
16/12/2010	River level exceeds the major flood level.	6.00	Remained above the major flood level for ~4 days.
9:00 AM 17/12/2010	Major flood peak.	7.49	
20/12/2010	River level falls below major		
21/12/2010	River level exceeds the major flood level.	6.00	Remained above the major flood level for ~43 days.
9:00 PM 25/12/2010	Major flood peak.	8.75	
12:00 PM 08/01/2011	Major flood peak	13.2	2 nd highest flood peak on record.
9:00 PM 23/01/2011	Major flood peak	12.49	3 rd highest flood peak on record.
02/02/2011	River level falls below major	6.00	
03/02/2011	Final fall below moderate	5.00	
04/02/2011	Final fall below minor	4.00	
10/02/2011	Final warning issued		

Flood Heights at St George

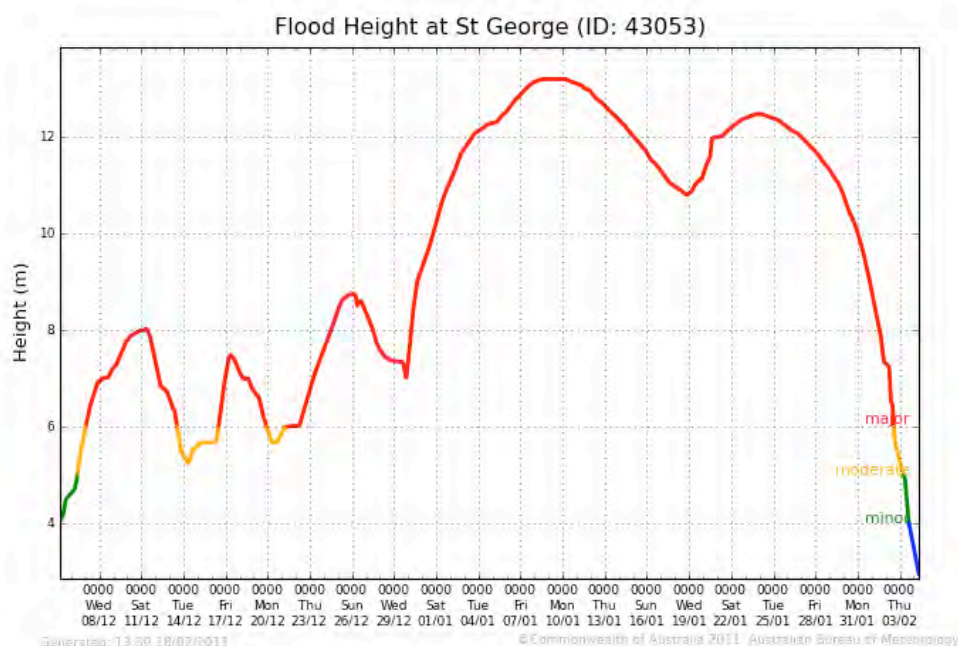


Figure 4. Flood Heights at St George manual gauge for December 2010 and January 2011

Comparison with previous floods

- River height records for the manual river height recording gauge at St George at its current site commenced in 1968.
- River height peaks on 08/01/2011 and 23/01/2011 ranked as the 2nd and 3rd highest on record.
- The previous time the river level at St George exceeded 13 metres was in March 2010.

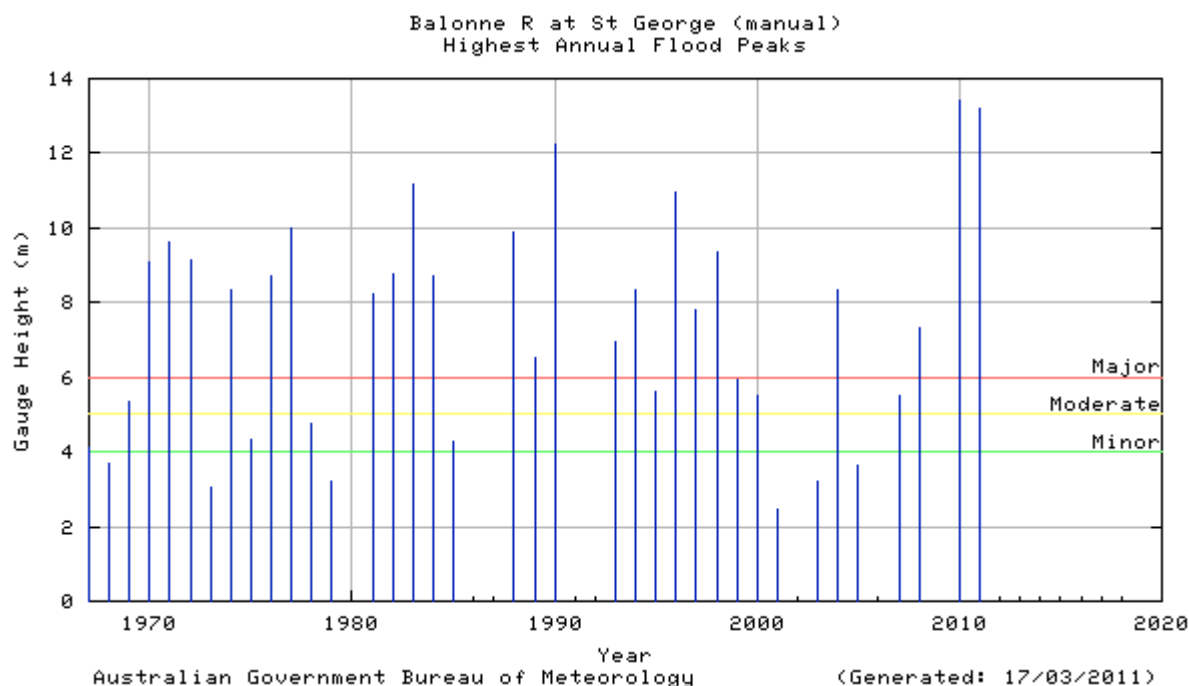


Figure 5. Highest annual flood peaks for the Balonne River at St George

Note: Records for St George date back to 1890 however only peak heights from 1968 to now can be compared. Heights before 1968 were recorded from a different site.

Warning and Forecast Service

- The first warning for the Condamine-Balonne River was issued on 05/12/2010 for minor flooding in the Condamine River and more significant flooding in the Maranoa and Balonne Rivers. However, further rainfall in December saw the continuation of the Condamine-Balonne River Flood Warning through to 10/02/2011.
- Major flooding was first predicted for St George in the Flood Warning issued at 9:43 AM on 07/12/2010.
- Thunderstorm activity caused river rises and 3 major flood peaks in December 2010. Heavy rainfall over the Upper Condamine River catchment area including Myall and Charleys Creek during late December 2010 and again in early January 2011 resulted in the two major flood peaks of 13.2 metres and 12.49 metres at St George during January 2011.
- A total of 103 warnings were issued for the Condamine-Balonne River system during December 2010 and January 2011.

Table 3. Table of peak height predictions for St George.

Time of Height Forecast	Forecast	Peak
05/12/2010 First warning issued. St George had just exceeded the minor flood level.		
9:43 AM on Tuesday the 7th of December 2010	Further rises are expected during the next few days as upstream floodwaters arrive. A forecast for St George will be given once upstream peaks have been observed.	Rising limb forecasts – reach a level and expected to continue rising.
10:22 AM on Thursday the 9th of December 2010	Levels are expected to reach at least 8 metres during the weekend.	
9:30 AM on Friday the 10th of December 2010	Peak around 8.3 metres during the weekend.	8.05 metres at 9:00 AM Sat 11/12/2010
11:35 AM on Sunday the 12th of December 2010	Major flood levels in the Balonne River at St George have recorded a peak at 8.05 metres during Saturday.	
9:49 AM on Monday the 13th of December 2010	Renewed rises expected later this week which will maintain high river levels going into next week.	Rising limb forecasts – reach a level and expected to continue rising.
9:50 AM on Friday the 17th of December 2010	Major flooding is rising at St George, with further rises expected during the weekend which will maintain high river levels during next week.	
10:30 AM on Saturday the 18th of December 2010	Major flood levels remain steady at St George, with further small rises expected during the weekend which will maintain high river levels during next week.	7.49 metres at 9:00 AM Fri 17/12/2010
11:17 AM on Sunday the 19th of December 2010	Major flood levels are easing at St George, with further rises expected which will maintain high river levels during this week.	Rising limb forecasts – reach a level and expected to continue rising.
6:43 PM on Sunday the 19th of December 2010	Major flood levels are easing at St George, with further rises expected to at least 10 metres during this week.	
12:03 PM on Tuesday the 21st of December 2010	Rises are expected over the new year period at St George. Further predictions will be made as peaks are observed upstream.	
4:29 PM on Thursday the 23rd of December 2010	High river levels and major flooding expected to continue at St George late next week.	
10:07 AM on Sunday the 26th of December 2010	High river levels are nearing an initial major flood peak at St George, however high river levels will continue into next week. Further predictions will be made for St George as upstream peaks are observed.	8.75 metres at 9:00 PM Sat 25/12/2010
6:47 AM on Monday the 27th of December 2010	Major flooding is easing at St George. Renewed rises and higher river levels to at least 9 metres expected during this week and higher levels during next week.	Rising limb forecasts – reach a level and expected to continue

3:40 PM on Sunday the 2nd of January 2011	renewed river rises are expected and will continue for at least the next 2 weeks as upstream floodwaters arrive which will prolong major flooding in the area.	rising.
7:08 AM on Tuesday the 28th of December 2010	Major flood levels (at least 10 metres) later this week with continued river rises.	
2:43 PM on Thursday the 30th of December 2010	Reach 10 metres (major) later this week and continue rising.	
9:00 PM on Thursday the 30th of December 2010	Reach 10 metres (major) during the weekend. Further rises to 12 metres expected during the next two weeks.	
7:27 AM on Saturday the 1st of January 2011	An initial assessment indicates levels higher than 12 metres. The main peak will not reach the St George area until about mid January.	
9:11 PM on Saturday the 1st of January 2011	Reach 12 metres during Monday 3rd January. Reach 13 metres during Thursday 6th with further rises. Peak higher than 13 metres during the weekend 8th/9th January.	13.2 metres at 12:00 PM Sat 08/01/2011
8:27 AM on Monday the 3rd of January 2011	Reach 12 metres during Monday 3/1/2011. Reach 13 metres by Thursday 6/1/201. Peak similar to or higher than the March 2010 flood during the weekend starting 8/1/2011	
8:27 AM on Tuesday the 4th of January 2011	Reach 13 metres on Thursday 6 Jan; Reach 13.4 metres (Mar 2010 level) overnight Friday 7 Jan; Reach 14 metres on Sunday 9 Jan; Peak possibly higher than 14 metres on Monday 10 Jan or Tuesday 11 Jan.	
9:26 AM on Thursday the 6th of January 2011	Reach 13 metres overnight; Reach 13.4 metres (Mar 2010 level) overnight Friday 7 Jan; Peak below 14 metres during weekend.	
Friday the 7th of January 2011	Reach 13.4 metres (Mar 2010 level) during Saturday; Peak below 14 metres late in the weekend.	
7:56 AM on Saturday the 8th of January 2011	Peak near the March 2010 flood level (13.4 metres)during today and Sunday; Remain above 13 metres until mid next week.	
7:27 AM on Sunday the 9th of January 2011	Remain above 13 metres during the next few days.	Rising limb forecasts – reach a level and expected to continue rising.
6:44 PM on Tuesday the 11th of January 2011	Remain around 13 metres until Thursday.	
10:55 AM on Saturday the 15th of January 2011	Return to above 12 metres this week with further rises. A peak is expected mid/late in the week beginning 22nd January.	
9:04 AM on Wednesday the 19th of January 2011	Exceed 12 metres later this week with further rises. Peak near 12.5 metres(major) late in the weekend or early next week.	12.49 metres at 9:00 PM Sun 23/01/2011
8:40 AM on Saturday the 22nd of January 2011	Reach the peak of about 12.5 metres on Sunday or Monday. Remain at peak level for around 3 days.	
9:33 AM on Monday the 24th of January 2011	Currently at a peak just under 12.5 metres and expected to remain steady around that level until about Thursday.	
10/02/2011 Final warning issued for the Condamine-Balonne River System.		

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Quart Pot Creek at Stanthorpe

- The town of Stanthorpe is located on Quart Pot Creek which is a tributary of the Severn River which is in the Macintyre River catchment.
- The flood heights at Stanthorpe are measured using two automatic gauges one owned by the Department of Environment and Resource Management and the second is owned by the Southern Downs Regional Council. (Bureau station number: DERM – 541073 and SDRC - 541087).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

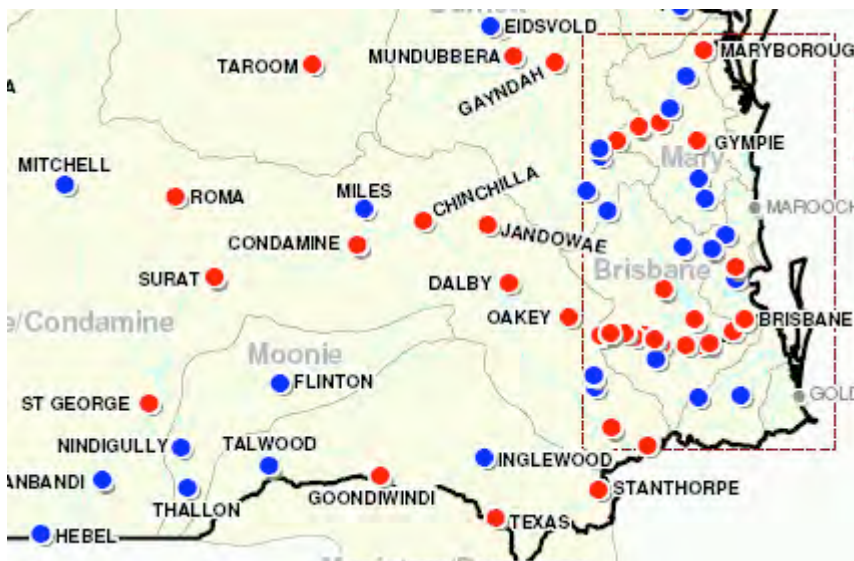


Figure 1. Map showing location of Stanthorpe.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

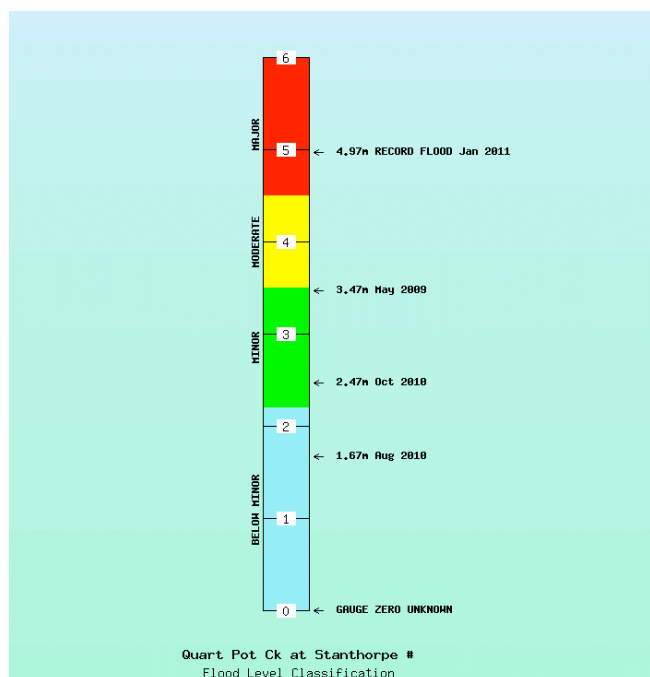


Figure 2. Flood level classifications and flood effects for Stanthorpe.

- First peak at 4.87 metres on 10/01/2011.
- Second peak at 4.97 metres on 11/01/2011.
- Minor: 2.2 metres.
Moderate: 3.5 metres.
Major: 4.5 metres.
- Gauge zero is 779.317m AHD.
- 12 houses inundated with the first peak and 50 people evacuated. (NineMSN)
- Stanthorpe was above major flood level (4.5 metres) twice both for a matter of hours on the 10/01/2011 and 11/01/2011.
- It remained above minor flood level (2.2 metres) from 09/01/2011 to 12/01/2011.

Rainfall summary

- In excess of 400mm of rainfall was recorded in the upper reaches of the Macintyre River catchment during December 2010 and January 2011.
- The vast majority of this rainfall fell between 09/01/2011 and 13/01/2011.

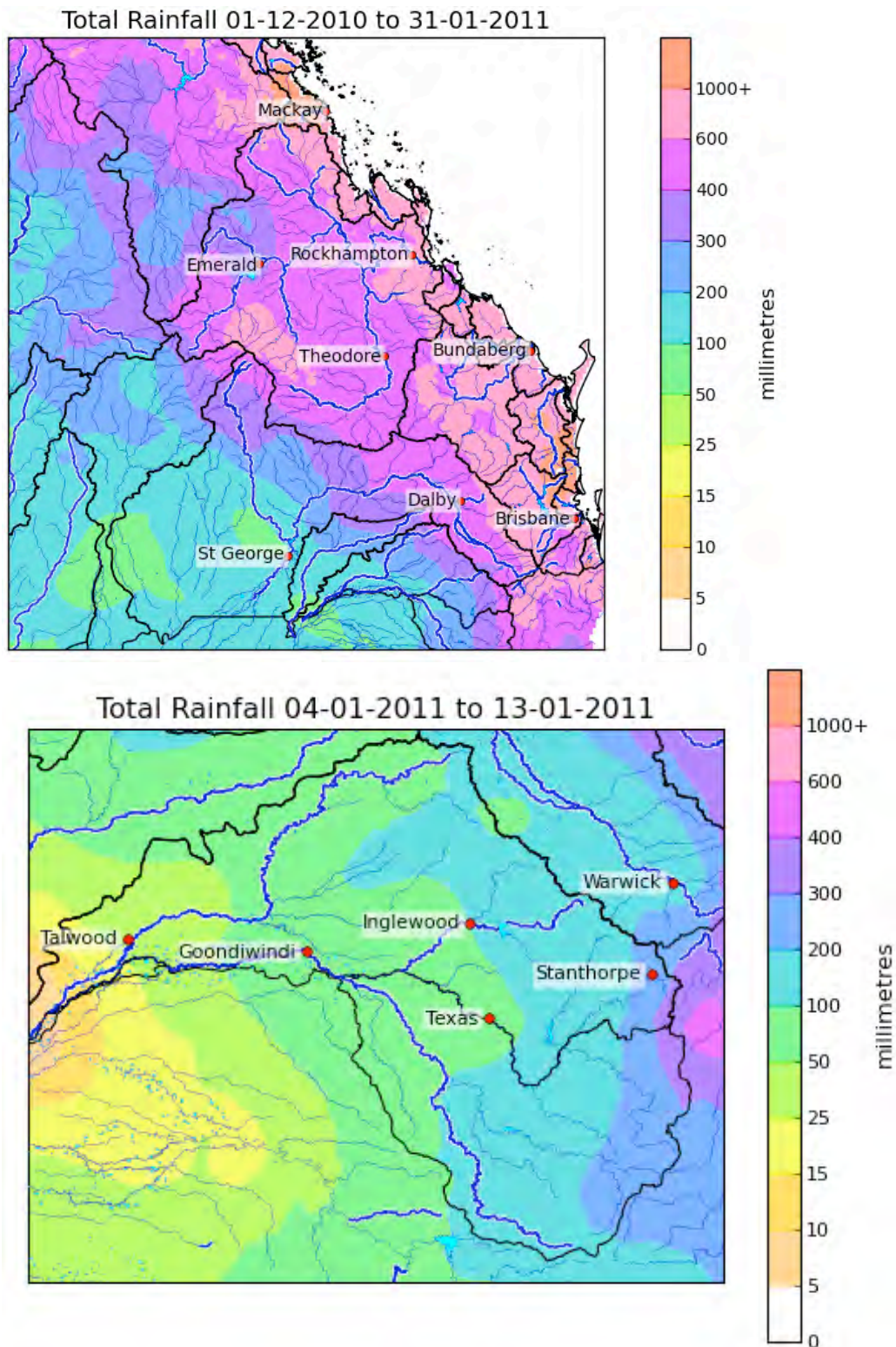


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the period 04/01/2010 to the 13/01/2010 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for Mountain Station Creek AL and Storm King Dam Headwater AL on the upper Severn River are shown in Table 1.
- The most significant rainfall intensities for Mountain Station Creek AL in January 2011 occurred in the 48 and 72 hours prior to 4:45pm and 8:30pm respectively on the 11/01/2011. Both durations produced a 50-100 year ARI, which is just less than the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).
- The most significant rainfall intensities for Storm King Dam Headwater AL in January 2011 occurred in the 24, 48 and 72 hours prior 9:25am, 11:50pm and 4:50pm respectively on the 11/01/2011. The 24, 48 and 72 hour durations produced 50-100 year ARI's, which is just less than the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded maximum rainfall intensities for Mountain Station Creek AL and Storm King Dam Headwater AL in the upper Dumaresq River catchment for January 2011.

Rainfall Duration	Mountain Station Creek AL			Storm King Dam Headwater AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
1hr	33	11:20 AM 10/01/2011	2-5	42	11:20 AM 10/01/2011	5-10
2hr	46	11:25 AM 10/01/2011	2-5	53	11:25 AM 10/01/2011	5-10
3hr	50	11:25 AM 10/01/2011	2-5	59	11:30 AM 10/01/2011	5-10
6hr	74	10:35 AM 11/01/2011	10-20	76	10:25 AM 11/01/2011	10-20
12hr	88	4:15 PM 11/01/2011	5-10	91	4:20 PM 11/01/2011	10
24hr	151	9:25 AM 11/01/2011	50	164	9:25 AM 11/01/2011	50-100
48hr	196	4:45 PM 11/01/2011	50-100	211	11:50 PM 11/01/2011	50-100
72hr	217	8:30 PM 11/01/2011	50-100	233	4:50 PM 11/01/2011	50-100

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood event timeline for Stanthorpe.

Time/Date	Event Description	Gauge height (metres)	Comment
11/01/2011	First warning issued	1.86	
09/01/2011	First time it exceeded minor flood level	2.20	Remained above minor flood levels for ~1.5 days.
10/01/2011	First time it exceeded moderate flood level	3.50	Remained above moderate flood levels for ~6 hours.
10/01/2011	First time it exceeded major flood level	4.50	Remained above major flood levels for ~2 hours.
2:40 PM 10/01/2011	Major flood peak	4.87	2nd highest flood on record.
10/01/2011	Fall below major	4.50	
10/01/2011	Fall below moderate	3.50	
11/01/2011	Exceed moderate flood level	3.50	Remained above moderate flood levels for ~10 hours.
11/01/2011	Exceed major flood level	4.50	Remained above major flood levels for ~4.5 hours.
11:00 AM 11/01/2011	Major flood peak	4.97	Largest flood on record.
11/01/2011	Final fall below major	4.50	
11/01/2011	Final fall below moderate	3.50	
12/01/2011	Final fall below minor	2.20	
7:43 AM 21/01/2011	Final warning issued		

Flood Heights at Stanthorpe

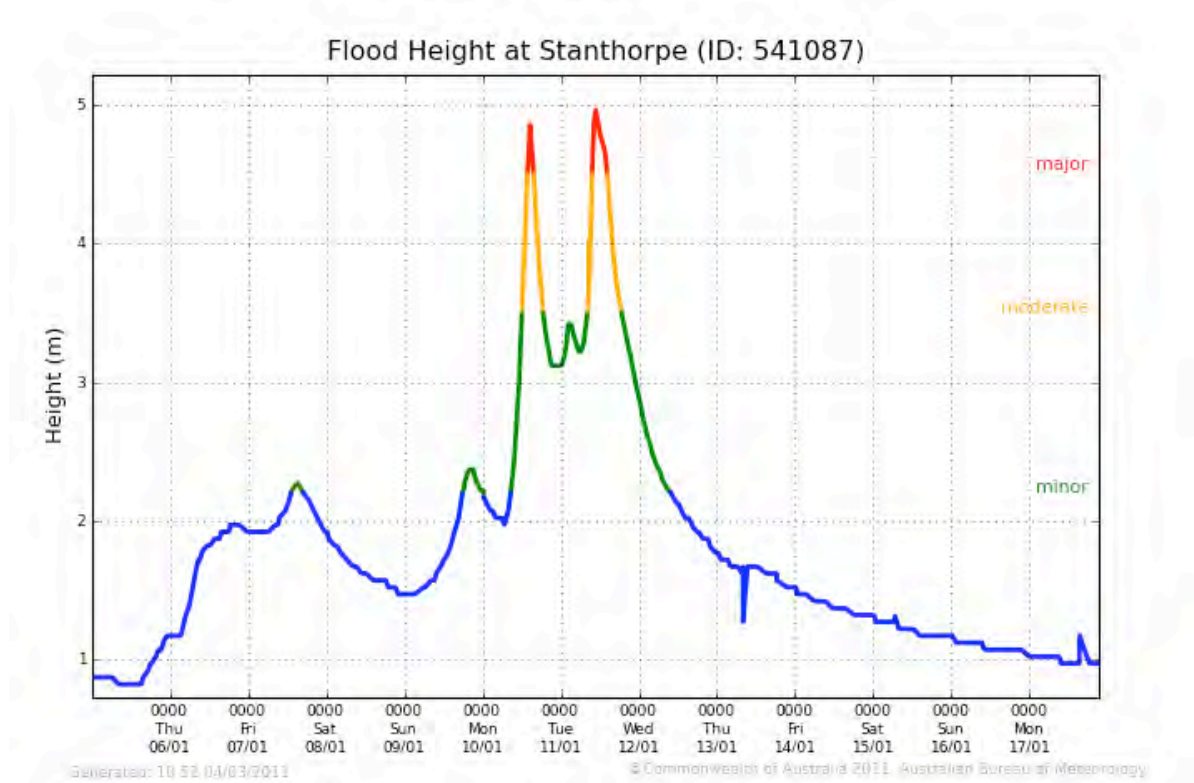


Figure 4. Flood Heights at the Stanthorpe gauge for January 2011.

Comparison with previous floods

- River height records for Stanthorpe commenced in 2005 with 2 major flood peaks occurring in that time both in January of 2011.

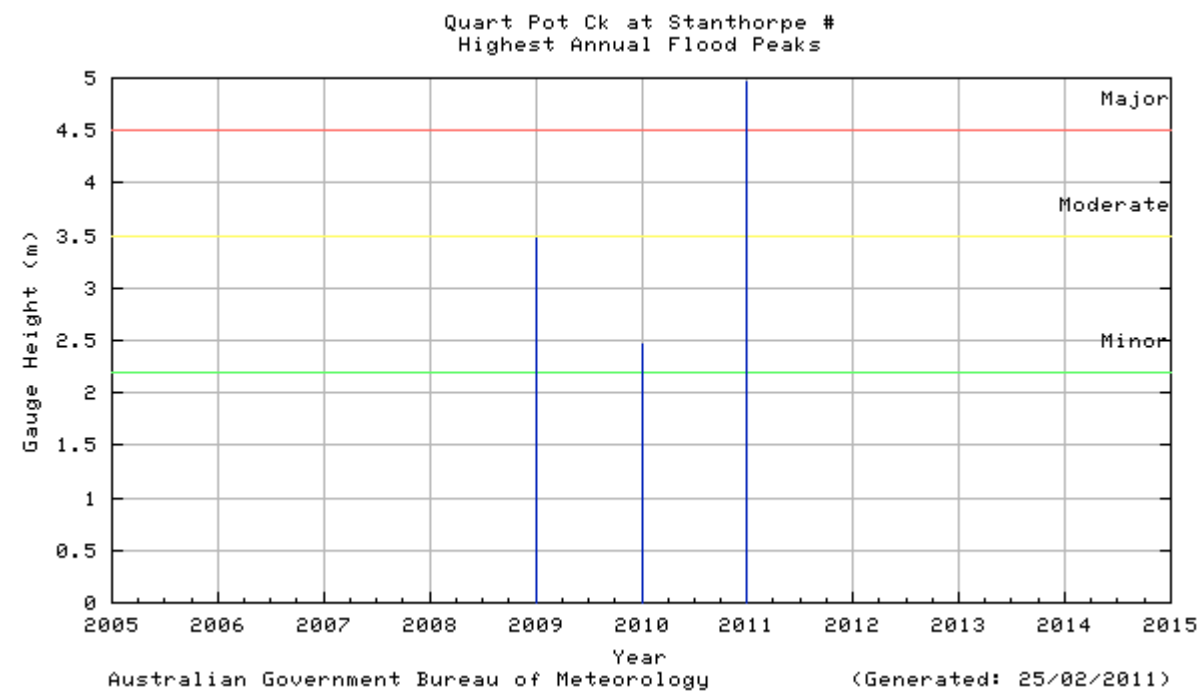


Figure 5. Highest annual flood peaks for Quart Pot Creek at Stanthorpe.

Warning and Forecast Service

- The Bureau does not provide a forecasting service for Quart Pot Creek at Stanthorpe
- Stanthorpe was mentioned in the Flood Warnings for the Macintyre and Weir Rivers but no forecasts were provided.

Flood summary for the Balonne River at Surat

- The town of Surat is on the Balonne River in the Condamine-Balonne River catchment.
- The flood heights at Surat are measured on a manual gauge owned by the Bureau of Meteorology (Bureau station number: 043063).
- Surat recorded two major flood peaks in January 2011 and a new record peak height of 12.75 metres.
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

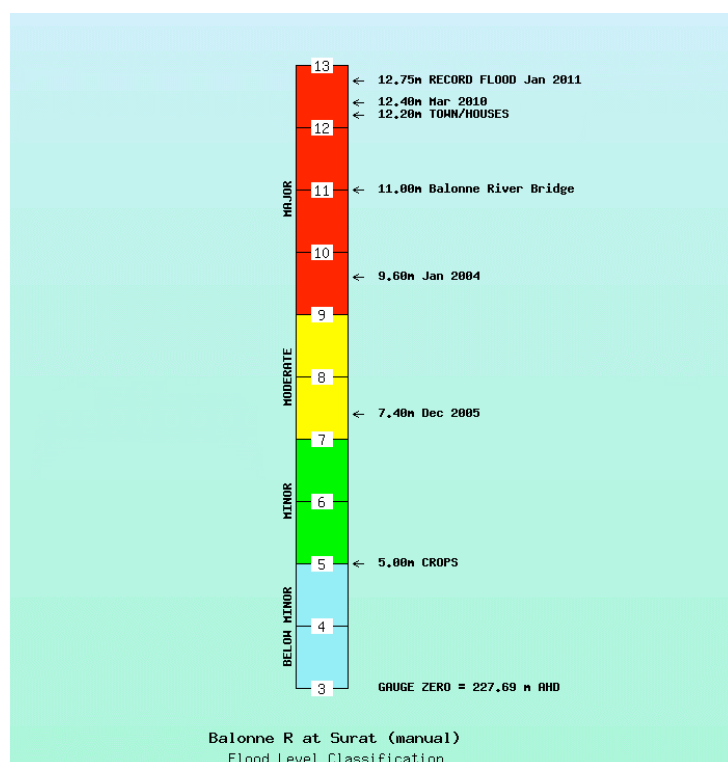
Location map



Figure 1. Map showing location of Surat.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



- **Peaked at:**
12.75 metres on 04/01/2011 (New record).
12.4 metres on 18/01/2011.
- Minor: 5 metres
Moderate: 7 metres
Major: 9 metres
- Gauge Zero is 227.695 AHD
- Above major flood level (9 metres) from 23/12/2010 to 29/01/2011.
- Above minor flood level (5 metres) from 04/12/2010 to 01/02/2011.

Figure 2. Flood level classifications and flood effects for Surat.

Rainfall summary

- Rainfall recorded in December 2010 and January 2011, which led to major flooding at Surat, was heaviest over the eastern half of the catchment.
- Between 300 to 600 millimetres of rainfall was recorded over the Condamine River catchment from the start of December 2010 to the end of January 2011 with falls up to 1400mm over the far east of the catchment. Falls between 100 and 300 millimetres were recorded over the Balonne River catchment.
- The heaviest rainfall periods during December 2010 and January 2011 occurred from 26/12/2010 to 28/12/2010, with falls between 100 and 200 millimetres and from 06/01/2011 to 12/01/2011 with falls between 200 and 400 millimetres.

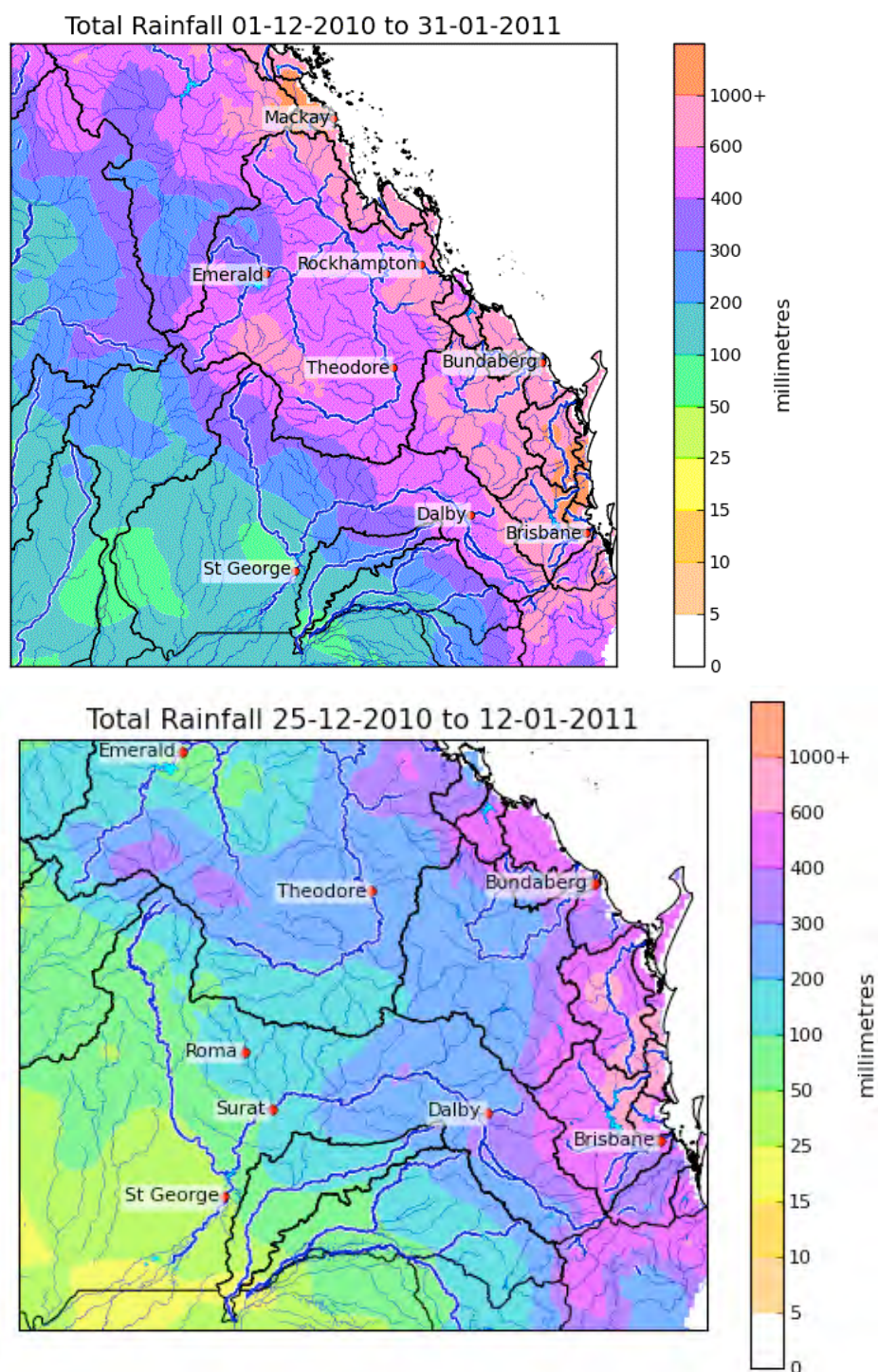


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the period from 9 AM on 25/12/2010 to 9 AM on 12/01/2011 (bottom).

Rainfall Intensity

- The December and January floods at Surat were not caused by local area intense rainfall and rainfall intensity analysis of single sites in the large catchment above Surat is not informative.
- The flood levels at Surat were the result of the combination of large flows in Dogwood Creek, Bungil Creek, Charleys Creek, Myall Creek and the Upper Condamine River.

Flood event timeline

Table 2. Flood timeline for Surat

Time/Date	Event Description	Gauge Height (metres)	Comment
05/12/2010	First warning issued		
04/12/2010	River level first exceeds the minor flood level.	5.00	Remained above the minor flood level for ~59 days.
07/12/2010	River level first exceeds the moderate flood level.	7.00	Remained above the moderate flood level for ~5 days.
6:00 AM 09/12/2010	Moderate flood peak	8.05	
12/12/2010	River level falls below moderate	7.00	
14/12/2010	River level exceeds the moderate flood level	7.00	Remained above the moderate flood level for ~48 days.
9:00 AM 19/12/2010	Moderate flood peak	8.80	
23/12/2010	River level exceeds the major flood level.	9.00	Remained above the major flood level for ~37 days.
5:45 AM 04/01/2011	Major flood peak.	12.75	New Peak Height Record.
10:00 PM 18/01/2011	Major flood peak	12.40	Equal 2 nd highest peak on record.
29/01/2011	River level falls below major	9.00	
31/01/2011	Final fall below moderate	7.00	
01/02/2011	Final fall below minor	5.00	
10/02/2011	Final warning issued		

Flood Heights at Surat

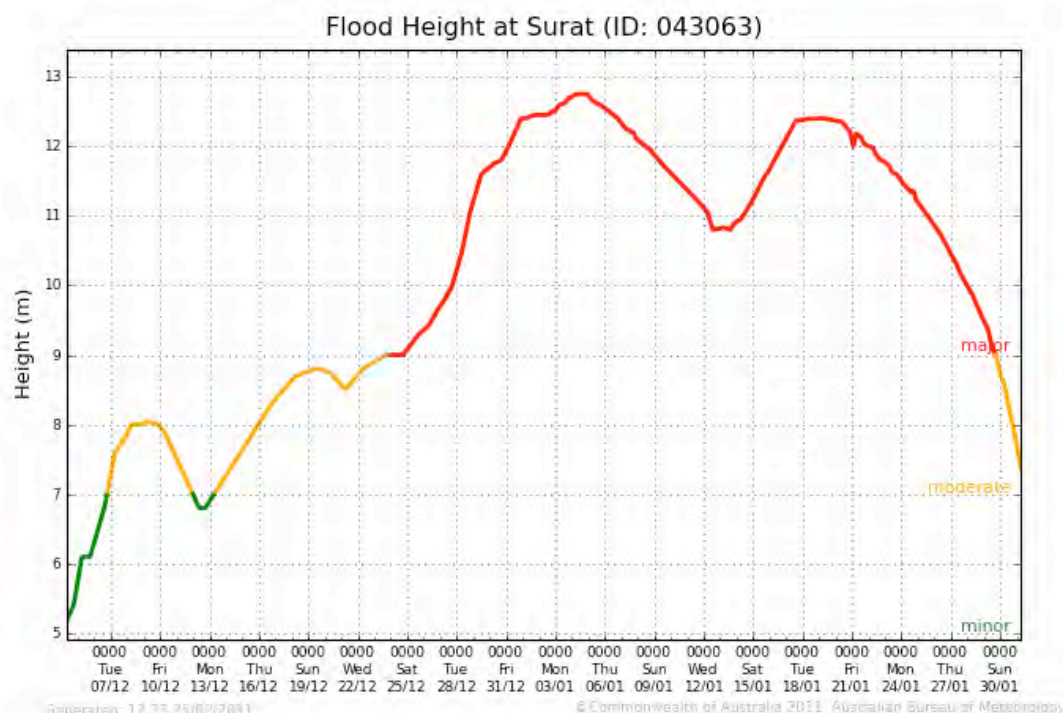


Figure 4. Flood Heights at Surat manual gauge for December 2010 and January 2011

Comparison with previous floods

- River height records for the manual river height recording gauge at Surat at its current site commenced in 1943.
- River height peak of 12.75 metres on 04/01/2011 is a new record. River height peak of 12.4 metres on 18/01/2011 equals the height recorded in March 2010 and is the second highest on record.

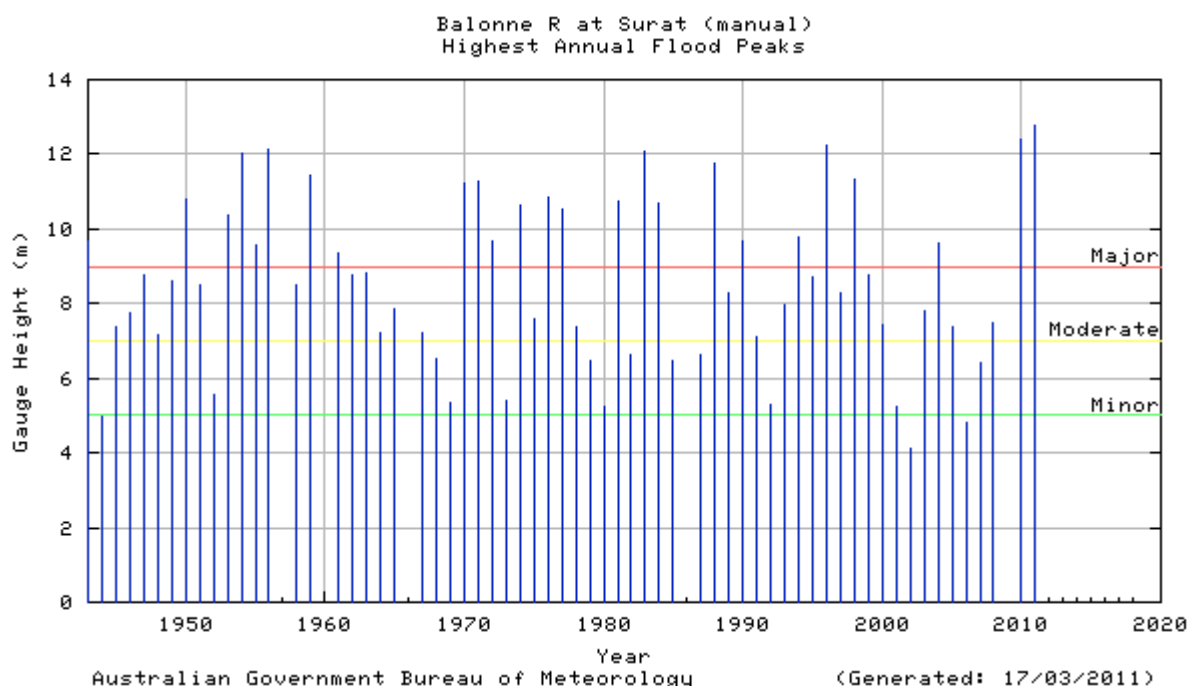


Figure 5. Highest annual flood peaks for the Balonne River at Surat

Note: Records for Surat date back to 1910 however only peak heights from 1943 to now can be compared. Heights before 1943 were recorded from a different site.

Warning and Forecast Service

- The first warning for the Condamine-Balonne River was issued on 05/12/2010 for minor flooding in the Condamine River and more significant flooding in the Maranoa and Balonne Rivers. However, further rainfall in December saw the continuation of the Condamine-Balonne River Flood Warning through to 10/02/2011.
- Thunderstorm activity caused river rises and 2 moderate flood peaks at Surat in December 2010. Heavy rainfall over the Upper Condamine River catchment area including Myall and Charleys Creek during late December and again in early January resulted in the two major flood peaks of 12.75 metres and 12.40 metres at Surat during January 2011
- A total of 103 warnings were issued for the Condamine-Balonne River system during December 2010 and January 2011.

Table 3. Table of peak height predictions for Surat.

Time of Height Forecast	Forecast	Peak
05/12/2010 First warning issued. Minor flooding at Surat at this time.		
7:48 AM on Sunday the 5th of December 2010	Recent rains have also caused rises and minor flooding in the Balonne River from the Surat area to Beardmore Dam. Rises will continue in these areas today causing some minor to moderate flooding.	Rising limb forecasts – reach a level and expected to continue rising.
11:00 AM on Monday the 6th of December 2010	In the Balonne River from the Surat area to Beardmore Dam, moderate flood levels are expected this week.	
9:43 AM on Tuesday the 7th of December 2010	Further rises are expected between Surat and Beardmore Dam during the next few days.	
10:22 AM on Thursday the 9th of December 2010	Moderate flood levels continue in the Balonne River between Surat and Weribone. The flood peak is currently in the Surat area. River level rises will continue between Surat and Beardmore Dam into the weekend.	8.05 metres at 6:00 AM Thu 09/12/2010
9:30 AM on Friday the 10th of December 2010	Renewed rises with a smaller peak should be expected during next week as waters from the Condamine River arrive.	Rising limb forecasts – reach a level and expected to continue rising.
9:49 AM on Monday the 13th of December 2010	Renewed rises are expected along the Balonne River during this week as waters from the Condamine River and local tributaries arrive.	
9:14 AM on Tuesday the 14th of December 2010	Further rises are expected along the Balonne River during this week as waters from the Condamine River and local tributaries arrive. Major flood levels are possible at Surat during this week.	
10:30 AM on Saturday the 18th of December 2010	River rises and moderate flood levels extending along the Balonne River between Surat and Beardmore Dam. Major flood levels are possible during the weekend at Surat.	
11:17 AM on Sunday the 19th of December 2010	Moderate flood levels extend along the Balonne River between Warkon and Weribone. Major flood levels are possible at Surat during the next 24 hours.	
12:03 PM on Monday the 20th of December 2010	Major flood levels are possible at Surat this week	
12:03 PM on Tuesday the 21st of December 2010	Major flood levels are forecast at Warkon and Surat through the weekend and continuing next week. River levels of at least 10 metres are expected at Surat.	
11:02 AM on Thursday the 23rd of December 2010	Moderate flood levels at Surat are expected to continue to rise through the weekend with major flood levels of at least 10 metres expected next week.	
10:07 AM on Sunday the 26th of December 2010	Major flooding is rising at Surat, with a flood peak of at least 10 metres expected later this week.	
5:26 PM on Monday the 27th of December 2010	Major flood peak (at least 11 metres) later this week.	
10:19 AM on Wednesday the 29th of December 2010	Initial major flood peak (up to 12 metres) later this week.	12.75 metres at 5:45 AM Tue 04/01/2011
12:48 PM on Wednesday the 29th of December 2010	Peak up to 12 metres next week.	

9:00 PM on Thursday the 30th of December 2010	Reach 12 metres during next week.	
7:55 AM on Friday the 31st of December 2010	Exceed 12 metres during the weekend. Possibly reach near the March 2010 flood level of 12.4 metres by Thursday 6th.	
7:11 PM on Friday the 31st of December 2010	Exceed the March 2010 flood level of 12.4 metres by Thursday 6th January.	
1:10 PM on Saturday the 1st of January 2011	Record levels higher than 12.4 metres during this week. Peak expected by Thursday 6th January.	
6:19 PM on Saturday the 1st of January 2011	Levels over 13 metres are possible with the peak expected by Wednesday 5th January.	
9:11 PM on Saturday the 1st of January 2011	Levels over 13 metres are possible with the peak expected by Tuesday 4th January.	
8:27 AM on Tuesday the 4th of January 2011	Peak around the current level of 12.8 metres today.	
7:04 PM on Tuesday the 4th of January 2011	Remain around the major flood peak overnight.	
2:11 PM on Wednesday the 5th of January 2011	Major flood levels will continue to fall slowly during the remainder of this week and into next week.	Rising limb forecasts – reach a level and expected to continue rising.
10:53 AM on Monday the 10th of January 2011	Major flooding continues to fall slowly around Surat and Weribone, with some renewed rises expected over the next several days.	
6:09 PM on Thursday the 13th of January 2011	Renewed rises are occurring at Warkon as upstream floodwaters arrive.	
10:55 AM on Saturday the 15th of January 2011	Reach 12 metres on Tuesday/Wednesday with further rises.	12.40 metres at 10:00 PM Tue 18/01/2011
8:28 AM on Sunday the 16th of January 2011	Exceed 12 metres on Tuesday/Wednesday with further rises. Peak expected later this week.	
9:00 AM on Monday the 17th of January 2011	Peak near 12.6 metres (major) on Tuesday/Wednesday.	
3:46 PM on Tuesday the 18th of January 2011	Peak near 12.6 metres (major) overnight tonight.	
9:04 AM on Wednesday the 19th of January 2011	Remain steady at 12.4 metres (major) during Wednesday.	
10/02/2011 Final warning issued for the Condamine-Balonne River System.		

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Dawson River at Taroom

- The town of Taroom is on the Dawson River in the Fitzroy catchment
- The flood heights at Taroom are measured on an automatic gauge owned by the Queensland Department of Environment and Resource Management (DERM) (Bureau station number: 035282) and a manual gauge owned by the Bureau of Meteorology (Bureau station number: 035115).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map



Figure 1. Map showing location of Taroom.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

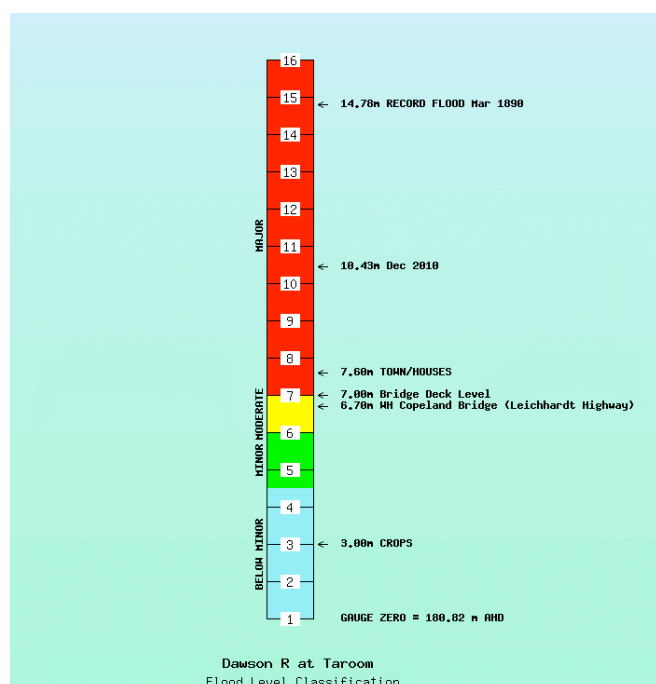


Figure 2. Flood level classifications and flood affects for Taroom.

- **Peaked at 10.43 metres on 29/12/2010.**
- Minor: 4.5 metres
Moderate: 6 metres
Major: 7 metres.
- Gauge zero is 180.82 metres AHD.
- Many houses were inundated (Source ABC)
- The highest river peak for December 2010 was 10.43 metres, recorded on 29/12/2010. This peak was the highest recorded since February 1956.
- Three other major flood peaks were recorded on 05/12/2010, 13/12/2010 and 20/12/2010.
- Above major flood level (7 metres) from 04/12/2010 to 07/12/2010, 13/12/2010 to 14/12/2010, 20/12/2010 to 21/12/2010 and again from 27/12/2010 to 01/01/2011.

Rainfall summary

- Over 600 mm of rainfall was recorded in the upper Dawson and over 400 mm in the middle Dawson during December 2010.
- Very heavy rainfall of over 200 mm was recorded in the upper Dawson River between 9 AM on the 26/12/2010 and 9am on the 28/12/2010. The area around Taroom recorded between 100 and 200 mm in the same time period. This rainfall was the most significant during December.

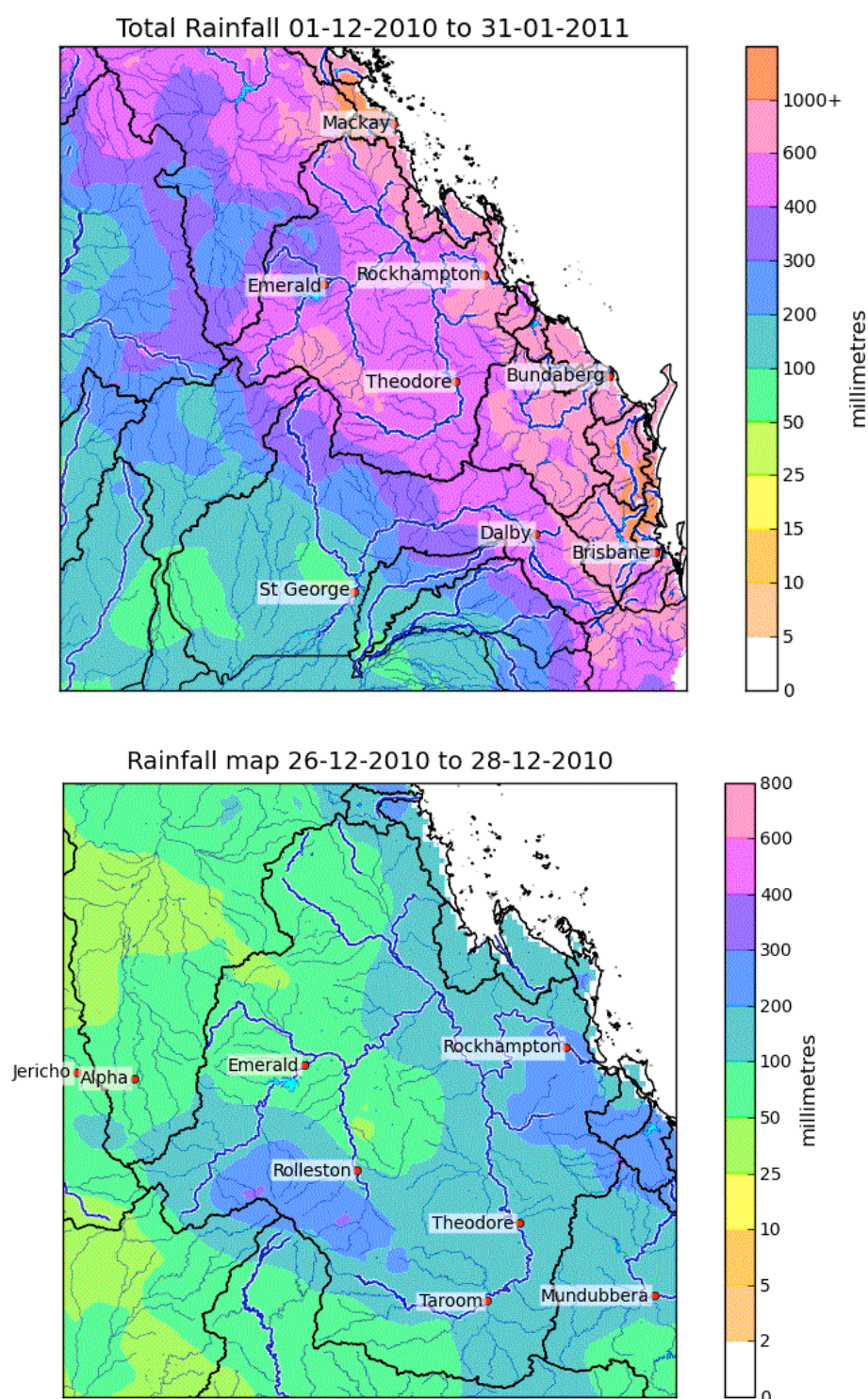


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the 48 hours to 9 AM on the 28/12/2010 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for two selected stations at Boxvale TM on the Upper Dawson River and Windamere TM on Jundah Creek are shown in Table 1, however they were all well above the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded maximum rainfall intensities for Windamere and Boxvale on the Upper Dawson River for December 2010 and January 2011.

Rainfall Duration	Windamere TM			Boxvale TM		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
12hr	72	10:40 AM 27/12/2010	2-5	107	02:35 AM 27/12/2010	5-10
24hr	107	10:40 AM 27/12/2010	2-5	134	2:35 PM 27/12/2010	5-10
48hr	134	3:15 PM 27/12/2010	5-10	149	2:40 PM 27/12/2010	2-5
72hr	140	6:25 PM 27/12/2010	2-5	158	2:45 PM 27/12/2010	2-5

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood timeline for Taroom

Time/Date	Event Description	Gauge Height (metres)	Comment
5:29 PM 01/12/2010	First warning issued		First warning issued referencing flooding at Taroom
01/12/2010	First time it exceeded minor flood level	4.5	Remained above the minor flood level for ~11 days.
03/12/2010	First time it exceeded moderate flood level	6.0	Remained above the moderate flood level for ~7 days.
04/12/2010	First time it exceeded major flood level	7.0	Remained above the major flood level for ~3 days.
9:00 AM 05/12/2010	Major flood peak	7.28	
07/12/2010	Fall below major	7.0	
10/12/2010	Fall below moderate	6.0	
11/12/2010	Fall below minor	4.5	
12/12/2010	Exceeded minor flood level	4.5	Remained above the minor flood level for ~ 5days.
12/12/2010	Exceeded moderate flood level	6.0	Remained above the moderate flood level for ~ 4days.
13/12/2010	Exceeded major flood level	7.0	Remained above the major flood level for ~ 1 day.
12:30 PM 13/12/2010	Major flood peak	7.20	
14/12/2010	Fall below major	7.0	
16/12/2010	Fall below moderate	6.0	
17/12/2010	Fall below minor	4.5	
19/12/2010	Exceeded minor flood level	4.5	Remained above the minor flood level for ~ 16 days.
19/12/2010	Exceeded moderate flood level	6.0	Remained above the moderate flood level for ~ 5 days.
20/12/2010	Exceeded major flood level	7.0	Remained above the major flood level for ~ 1 day.
7:00 PM 20/12/2010	Major flood peak	7.09	
21/12/2010	Fall below major	7.0	
24/12/2010	Fall below moderate	6.0	
27/12/2010	Exceeded moderate flood level	6.0	Remained above the moderate flood level for ~ 7 days.
27/12/2010	Exceeded major flood level	7.0	Remained above the major flood level for ~ 6 days.

7:00 PM 29/12/2010	Major flood peak	10.43	3 rd highest flood peak on record for Taroom. Greater than February 1956.
01/01/2011	Final fall below major	7.0	
02/01/2011	Final fall below moderate	6.0	
03/01/2011	Final fall below minor	4.5	
3:55 PM 10/01/2011	Final warning issued referencing flooding at Taroom		

Flood Heights at Taroom

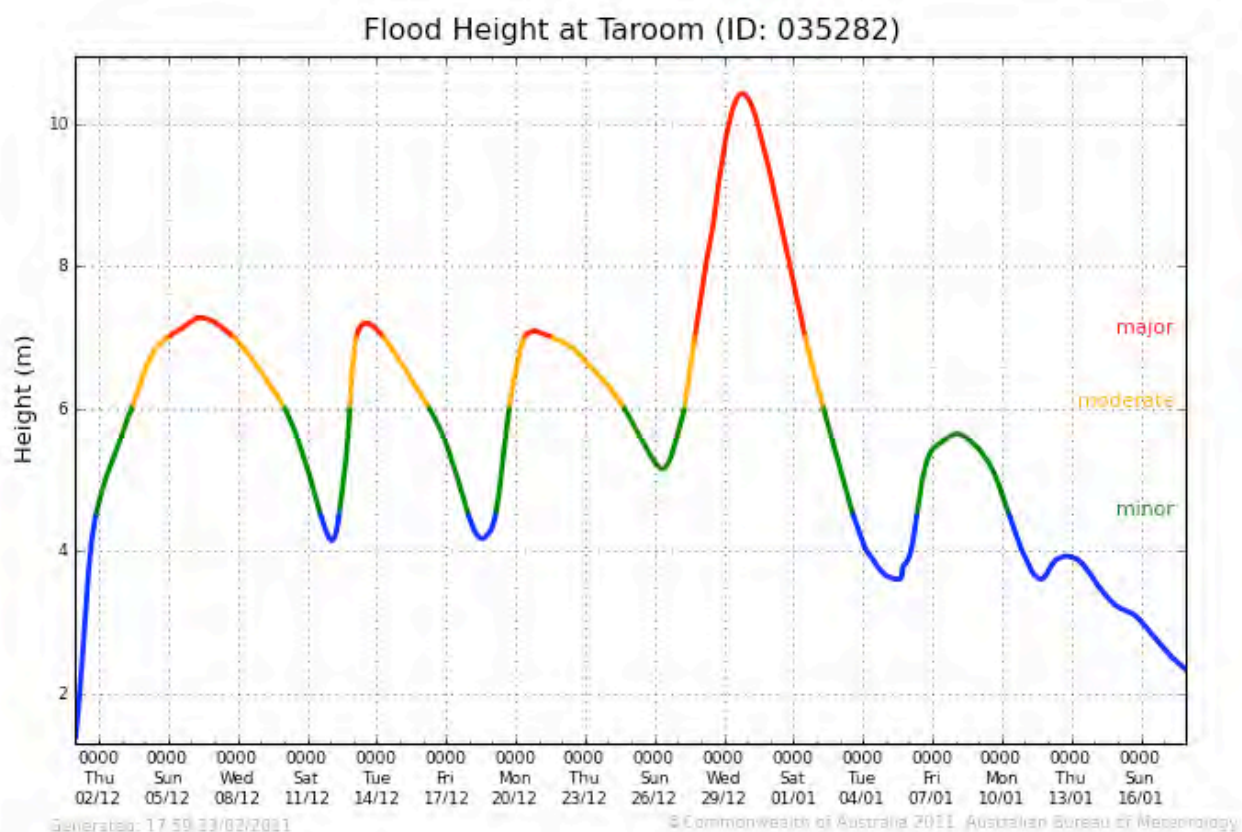


Figure 4. Flood Heights at Taroom automatic gauge for December 2010 and January 2011.

Comparison with previous floods

- Start of record 1864.
- Third highest flood peak on record for Taroom.
- Last major flood was 7.26 metres in March 2010 but previous to that was 7.46 metres in 1998.
- Record flood: 14.78 metres in 1890.

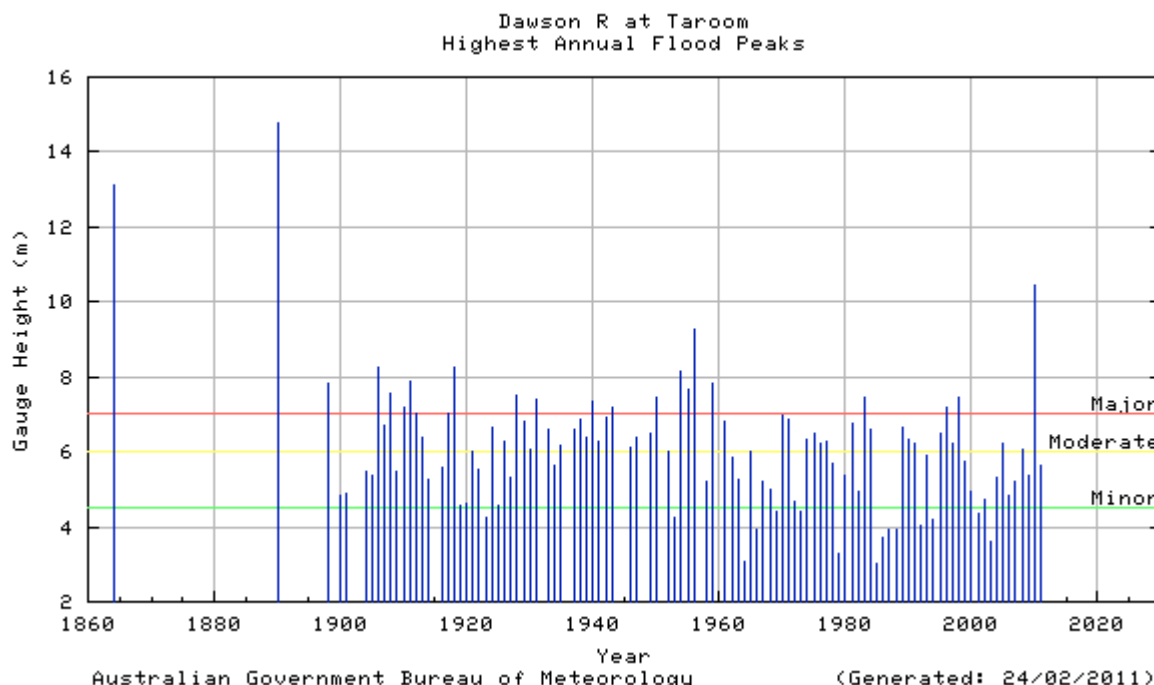


Figure 5. Highest annual flood peaks for the Dawson River at Taroom

Warning and Forecast Service

- Significant runoff commenced during September with flood warnings for the Dawson River issued between 5/9/2010 and 13/9/2010 and again between 22/9/2010 and 4/10/2010.
- Further rainfall occurred in late November with warnings commencing 22/11/2010 and continuing through to 17/1/2011.
- A total of 94 warnings were issued for the Fitzroy River system including the Dawson River during December 2010 and January 2011.
-

Table 3. Table of peak height predictions for Taroom.

Time of Height Forecast	Forecast	Peak
5:29 PM 01/12/2010 First warning issued. River height at the time was 3.95m (below minor)		
5:29 PM on Wednesday the 1st of December 2010	Moderate flood levels are expected at Taroom this week. Further forecasts will be made once upstream peaks have been observed.	Rising limb forecasts – reach a level and expected to continue rising
10:13 AM on Thursday the 2nd of December 2010	Further rises and moderate flooding is expected at Taroom within the next 24 to 36 hours, however river levels are not expected to reach the major flood level of 7 metres.	
9:59 AM on Friday the 3rd of December 2010	Moderate flood levels at Utopia Downs and Tarana Crossing are continuing and will extend to Taroom this morning. Further rises to the major flood level of 7 metres are possible over the weekend.	
4:31 PM on Friday the 3rd of December 2010	Moderate flood levels are continuing at Utopia Downs, Tarana Crossing and Taroom. Further rises to the major flood level of 7 metres at Taroom are possible over the weekend.	

11:06 AM on Saturday the 4th of December 2010	Peak about 7 metres during Sunday	7.28 metres at 9:00 AM Sun 05/12/2010
10:25 AM on Monday the 6th of December 2010	The Dawson River at Taroom continues to rise very slowly with major flooding in the area. Levels are expected to peak around the current levels of 7.25 metres but will remain above 7 metres into Tuesday.	
10:27 AM on Wednesday the 8th of December 2010	Moderate flood levels continue to fall at Taroom.	
10:50 AM on Saturday the 11th of December 2010	Renewed rises are expected above Taroom during the weekend.	Rising limb forecasts – reach a level and expected to continue rising
6:28 PM on Saturday the 11th of December 2010	A return to at least moderate flood levels should be expected at Taroom next week.	
6:28 PM on Saturday the 11th of December 2010	Reach at least 6.5 metres early next week.	
11:20 AM on Sunday the 12th of December 2010	A return to flood levels of around 7 metres should be expected at Taroom this week.	
6:08 PM on Sunday the 12th of December 2010	A return to flood levels of around 7 metres should be expected at Taroom this week.	
11:19 AM on Monday the 13th of December 2010	Peak around 7 metres on Monday.	7.20 metres at 12:30 PM Mon 13/12/2010
9:28 AM on Tuesday the 14th of December 2010	Flood levels at Taroom are falling and will continue to do so.	
10:57 AM on Saturday the 18th of December 2010	Further rises and minor to moderate flooding is expected downstream to Taroom during the weekend and early next week.	Rising limb forecasts – reach a level and expected to continue rising
11:06 AM on Sunday the 19th of December 2010	A return to moderate flood level is likely at Taroom today.	
5:54 PM on Sunday the 19th of December 2010	Minor flood levels are rising at Taroom. River levels are forecast to reach around 7 metres again early this week.	
11:30 AM on Monday the 20th of December 2010	Major flood levels continue to rise at Taroom with river levels forecast to peak just over 7 metres during Tuesday.	7.09 metres at 7:00 PM Mon 20/12/2010
10:56 AM on Tuesday the 21st of December 2010	Major flood levels have peaked around 7 metres at Taroom and will continue easing during Tuesday.	
10:16 AM on Wednesday the 22nd of December 2010	Moderate flood levels will continue to fall slowly at Taroom.	
10:49 AM on Thursday the 23rd of December 2010	At this stage, moderate flood levels will continue to fall at Taroom although further rainfall is forecast for the area.	
6:51 AM on Monday the 27th of December 2010	Overnight heavy rainfall in the Upper Dawson River is expected to produce fast river level rises and a return to moderate to major flood levels at Taroom.	Rising limb forecasts – reach a level and expected to continue rising
1:25 PM on Monday the 27th of December 2010	Overnight heavy rainfall in the Upper Dawson River is expected to produce fast river level rises and a return major flood levels at Taroom.	
5:57 PM on Monday the 27th of December 2010	Possibly exceed 8 metres by Wednesday with further rises.	
7:06 AM on Tuesday the 28th of December 2010	Peak around 8.3 metres by Wednesday	10.43 metres at 7:00 PM Wed 29/12/2010
1:09 PM on Tuesday the 28th of December 2010	Peak near 9 metres (major) during Wednesday	
6:51 PM on Tuesday the 28th of December 2010	Peak near 9.5 metres (major) overnight Wednesday	
12:24 AM on Wednesday the 29th of December 2010	Expected to peak below or at 10 metres (major) overnight.	

8:59 AM on Wednesday the 29th of December 2010	Peak above 10 metres Wednesday or overnight	
4:21 PM on Wednesday the 29th of December 2010	Peak around 10.6 metres overnight	
7:12 AM on Thursday the 30th of December 2010	Levels will remain high through Thursday.	
3:55 PM on Monday the 10th of January 2011	Final warning issued referencing flooding at Taroom	
7:54 AM on Monday the 17th of January 2011	Final Fitzroy River warning	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Dumaresq River at Texas

- The town of Texas is located on the Dumaresq River in the Macintyre River catchment.
- The flood heights at Texas are measured using a combination of an automatic gauge co-owned by the Bureau of Meteorology and Goondiwindi Regional Council and a manual station owned by the Bureau of Meteorology. (Bureau station number: Manual – 041403 and Automatic – 041548).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

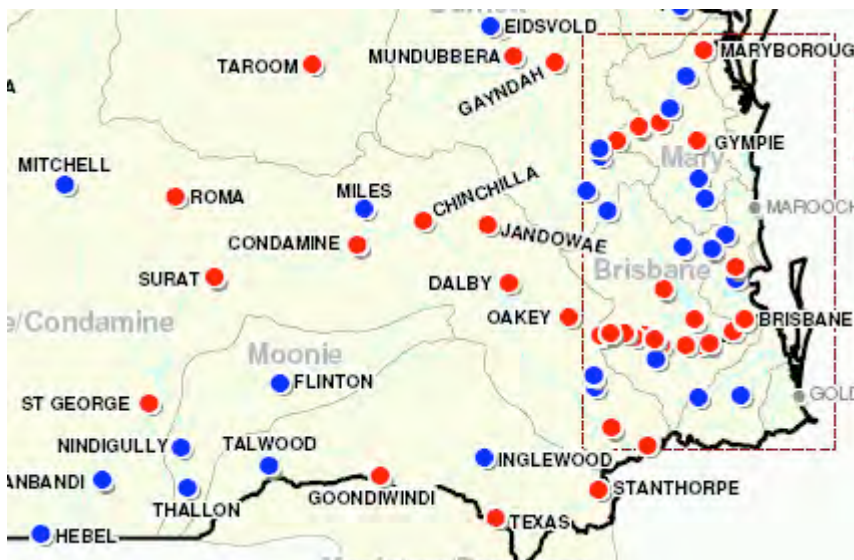
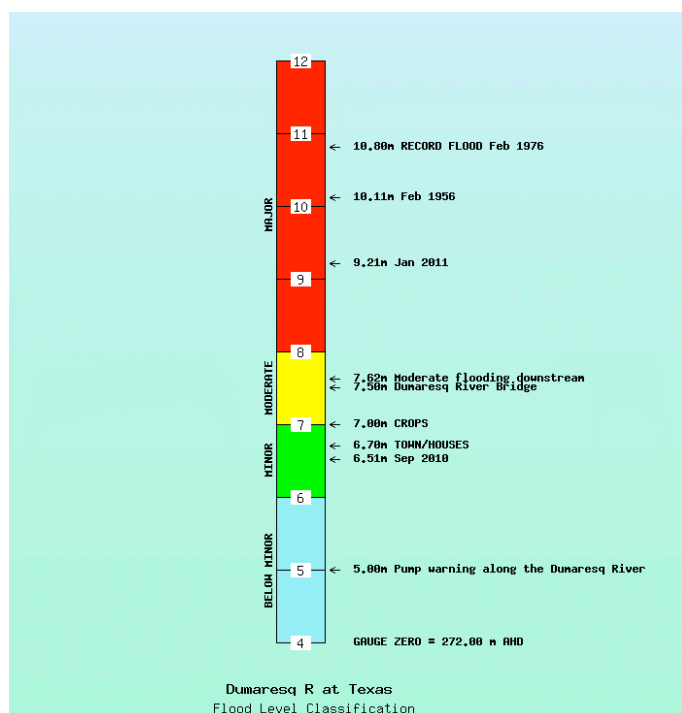


Figure 1. Map showing location of Texas.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity



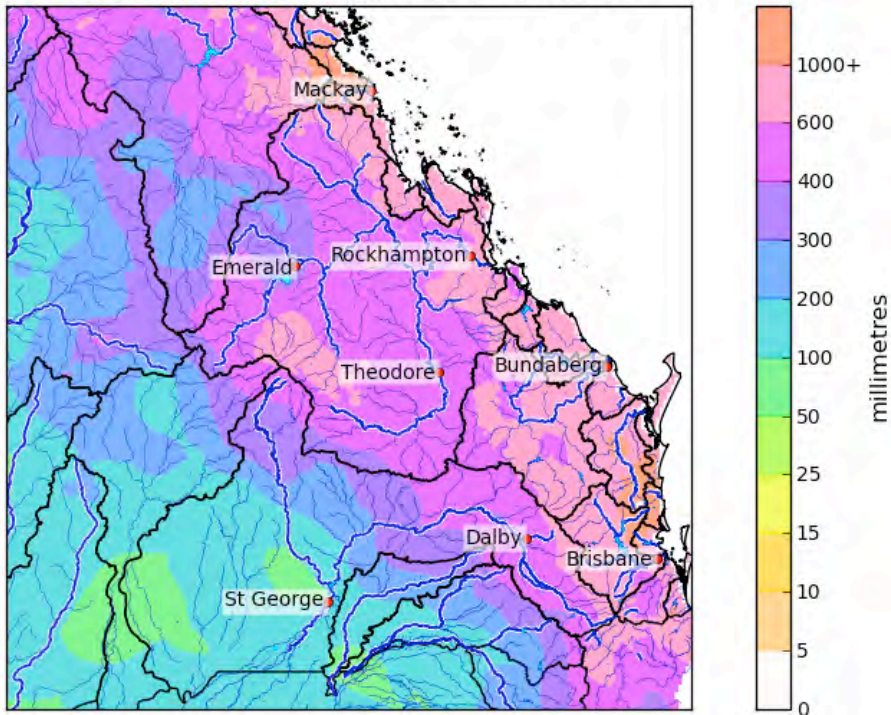
- **Peaked at 9.21 metres on 12/01/2011.**
- Minor: 6.0 metres, Moderate: 7.0 metres, Major: 8.0 metres.
- Gauge zero is 271.997 metres AHD.
- Town and houses begin to be affected at 6.7 metres.
- Large crop losses and stock losses.
- Texas was above major flood level (8.0 metres) from 12/01/2011 to 13/01/2011.
- It remained above minor flood level (6.0 metres) from 11/01/2011 to 14/01/2011.

Figure 2. Flood level classifications and flood effects for Texas.

Rainfall summary

- In excess of 400mm of rainfall was recorded in the upper reaches of the Macintyre River catchment during December 2010 and January 2011.
- The vast majority of this rainfall fell between 09/01/2011 and 13/01/2011.

Total Rainfall 01-12-2010 to 31-01-2011



Total Rainfall 09-01-2011 to 13-01-2011

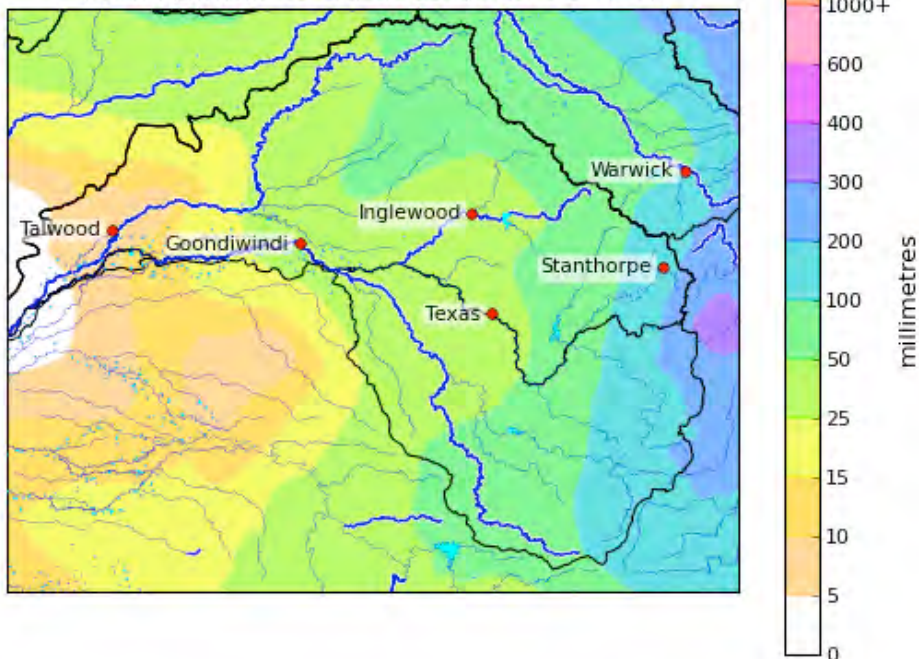


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the period 09/01/2011 to the 13/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for Broadwater Creek AL and Amiens Knob AL on the upper Dumaresq River are shown in Table 1.
- The most significant rainfall intensity for Broadwater Creek AL in January 2011 occurred in the 20 minutes ending 3:10pm on 03/01/2011 producing a 10-20 ARI, however all periods were well below the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).
- The most significant rainfall intensity for Amiens Knob AL in January 2011 occurred in the 30 minutes to 2:45pm on 03/01/2011 producing a 50-100 ARI, which represents close to a 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded maximum rainfall intensities for Broadwater Creek AL and Amiens Knob AL on the Macintyre River for January 2011.

Rainfall Duration	Broadwater Creek AL			Amiens Knob AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
5 min	11	3:05 PM 03/01/2011	5	11	2:25 PM 03/01/2011	5
6 min	12	3:06 PM 03/01/2011	5	13	2:26 PM 03/01/2011	5-10
10 min	18	3:05 PM 03/01/2011	5-10	19	2:45 PM 03/01/2011	10
20 min	29	3:10 PM 03/01/2011	10-20	36	2:40 PM 03/01/2011	20-50
30 min	31	3:20 PM 03/01/2011	5-10	49	2:45 PM 03/01/2011	50-100
1hr	33	3:45 PM 03/01/2011	2-5	57	3:15 PM 03/01/2011	20-50
2hr	35	4:30 PM 03/01/2011	1-2	58	4:15 PM 03/01/2011	10-20
3hr	36	5:05 PM 03/01/2011	1-2	59	4:20 PM 03/01/2011	5-10
6hr	36	5:05 PM 03/01/2011	<1	60	4:20 PM 03/01/2011	2-5
12hr	50	12:50 PM 27/12/2010	<1	61	10:35 PM 03/01/2011	1-2
24hr	63	12:50 PM 27/12/2010	1	61	10:35 PM 03/01/2011	1
48hr	92	11:30 PM 11/01/2011	1-2	72	10:45 PM 11/01/2011	<1
72hr	104	4:40 PM 11/01/2011	1-2	98	1:10 PM 06/01/2011	1-2

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood event timeline for Texas.

Time/Date	Event Description	Gauge height (metres)	Comment
11/01/2011	First warning issued	1.86	
07/01/2011	First time it exceeded minor flood level	6.00	Remained above minor flood levels for ~16.5 hours.
11:45 AM 07/01/2011	Minor flood peak	6.86	
08/01/2011	Fall below minor	6.00	
11/01/2011	First time it exceeded minor flood level	6.00	Remained above minor flood levels for ~3 days.
11/01/2011	First time it exceeded moderate flood level	7.00	Remained above moderate flood levels for ~2 days.
12/01/2011	First time it exceeded major flood level	8.00	Remained above major flood levels for ~1.5 days.
8:35 AM 12/01/2011	Major flood peak	9.21	Highest since 1956.
13/01/2011	Final fall below major	8.00	
13/01/2011	Final fall below moderate	7.00	
14/01/2011	Final fall below minor	6.00	
7:43 AM 21/01/2011	Final warning issued		

Flood Heights at Texas

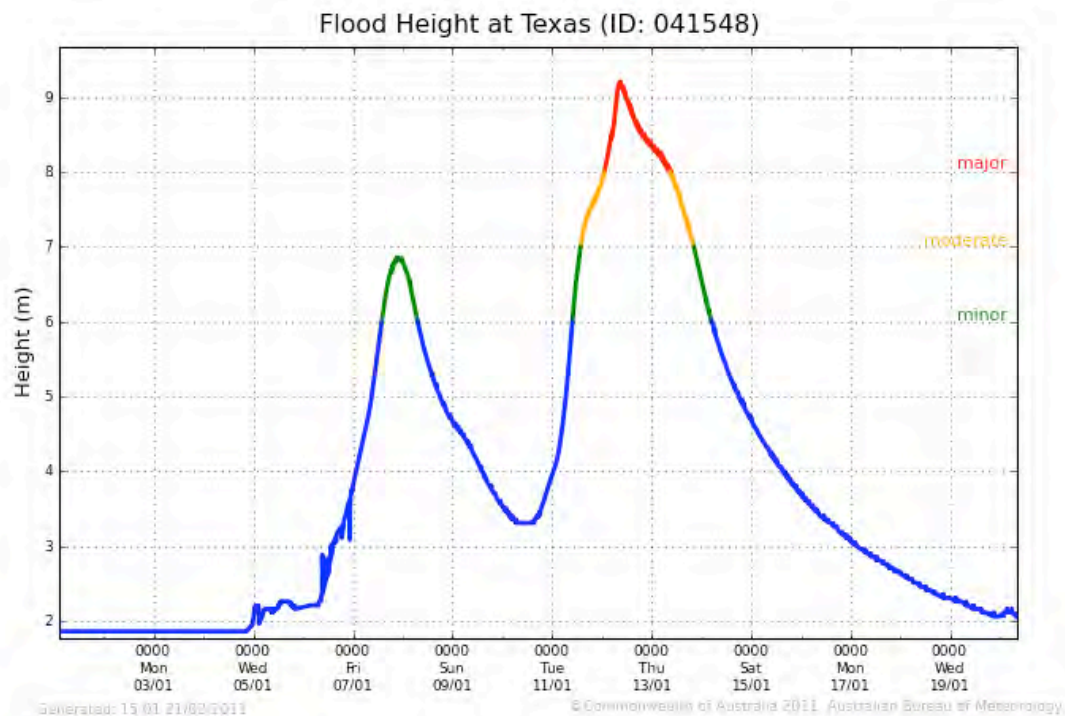


Figure 4. Flood Heights at the Texas automatic gauge for January 2011.

Comparison with previous floods

- River height records for Texas commenced in 1890 with 14 major flood peaks since that time, with 1893 and 1921 both recording two major flood peaks.
- The last major flood recorded at Texas was the record flood in February 1976 of 10.80 metres.

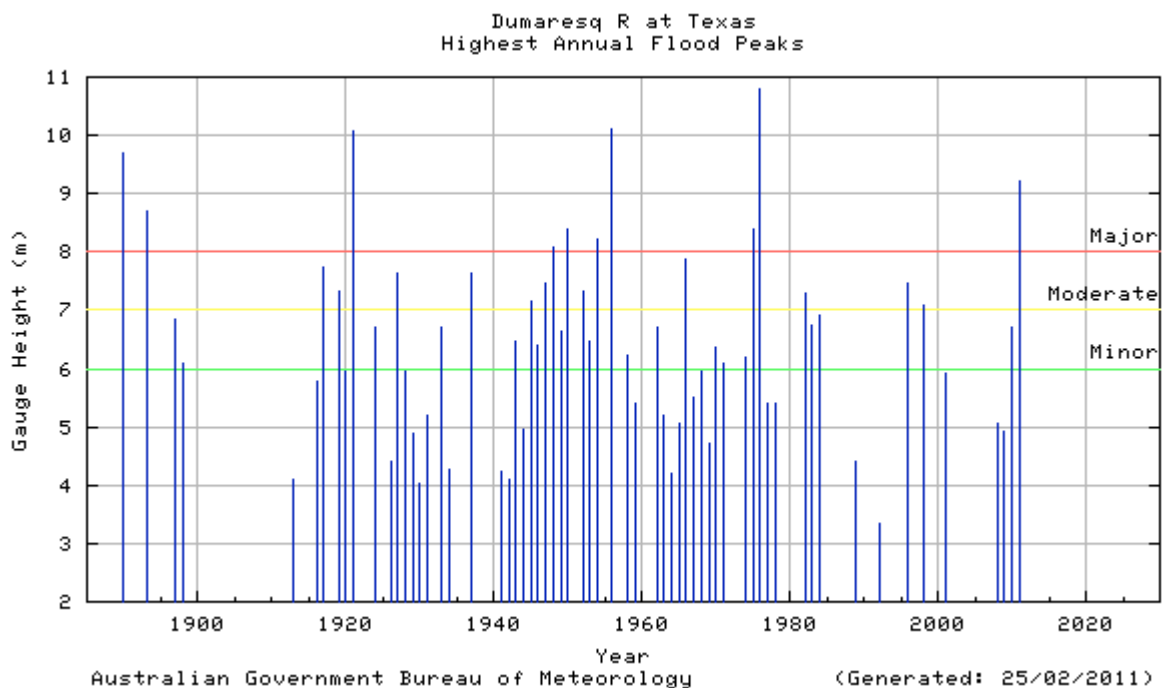


Figure 5. Highest annual flood peaks for the Dumaesq River at Texas.

Warning and Forecast Service

- The catchment received well above average rainfall and subsequently recorded multiple flood peaks throughout August, September and October with 6 periods of flood warnings issued for the Border Rivers during this period.
- Flood warnings for the Border Rivers were next issued between the 11/12/2010 and 15/12/2010 and begun again on the 27/12/2010 and continued until the 30/01/2011.
- A total of 59 warnings were issued for the Border Rivers during December 2010 and January 2011.

Table 3. Table of peak height predictions for Texas.

Time of Height Forecast	Forecast/Time	Peak
10/01/2011 First warning issued. Height at the time was 3.36m (below minor)		
5:14 AM on Tuesday the 11th of January 2011	Major flood levels are expected at Texas overnight	Rising limb forecast.
11:13 AM on Tuesday the 11th of January 2011	Flood levels at Texas to around 9 metres are expected tonight.	9.21 metres at 8:35 AM Tues 12/01/2011
5:48 PM on Tuesday the 11th of January 2011	Flood levels at Texas are expected to reach at least 10 metres during Wednesday.	
11:31 PM on Tuesday the 11th of January 2011	Peak around the major flood level of 8 metres expected at Texas during Wednesday.	
8:38 AM on Wednesday the 12th of January 2011	Rises are continuing downstream at Texas where river levels to around the 1976 flood level of 10.8 metres are expected during Wednesday.	
1:15 PM on Wednesday the 12th of January 2011	Rises are continuing downstream at Texas where river levels to around the 1976 flood level of 10.8 metres are expected during Wednesday.	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Dawson River at Theodore

- The town of Theodore is on the Dawson River in the Fitzroy catchment
- The flood heights at Theodore are measured on a manual gauge owned by the Bureau of Meteorology (Bureau station number: 039315).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map



Figure 1. Map showing location of Theodore.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

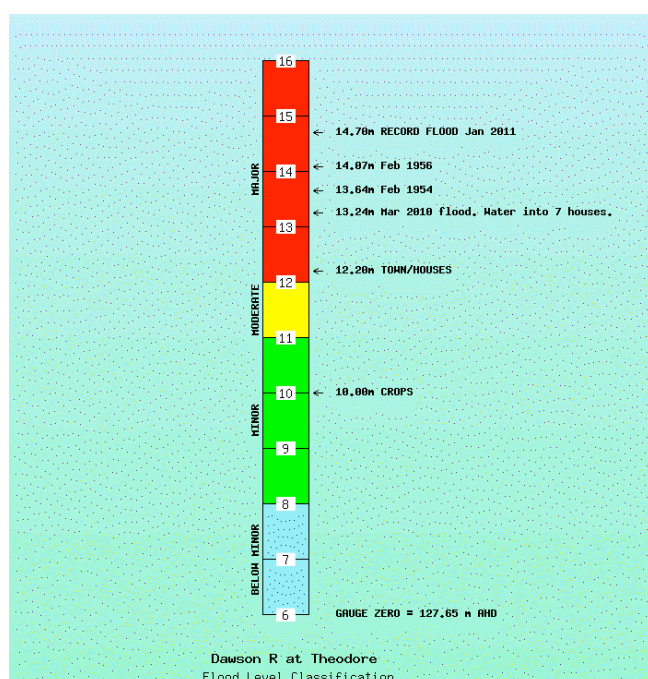


Figure 2. Flood level classifications and flood affects for Theodore.

- **Peaked at:**
 - 13.00 metres on 10/12/2010
 - 12.09 metres on 17/12/2010
 - 13.56 metres on 25/12/2010
 - 14.60 metres on 28/12/2010
 - 14.70 metres on 01/01/2011
- Minor: 8 metres
- Moderate: 11 metres
- Major: 12 metres
- Gauge zero is 127.654 AHD.
- All 350 residents were evacuated on 28/12/2010 (Source: ABC).
- Above major flood level (12 metres) from 07/12/2010 to 13/12/2010, 17/12/2010 to 18/12/2010 and again from 23/12/2010 to 6/01/2011.
- Above minor flood level (8 metres) from 04/12/2010 to 17/1/2011.

Rainfall summary

- Over 600 mm of rainfall was recorded in the upper Dawson and over 400 mm in the middle Dawson during December 2010.
- Very heavy rainfall of over 200 mm was recorded in the upper Dawson River between 9 AM on the 26/12/2010 and 9am on the 28/12/2010. The area around Theodore recorded between 100 and 200 mm in the same time period. This rainfall was the most significant during December and led to the new river height record on the 01/01/2011.

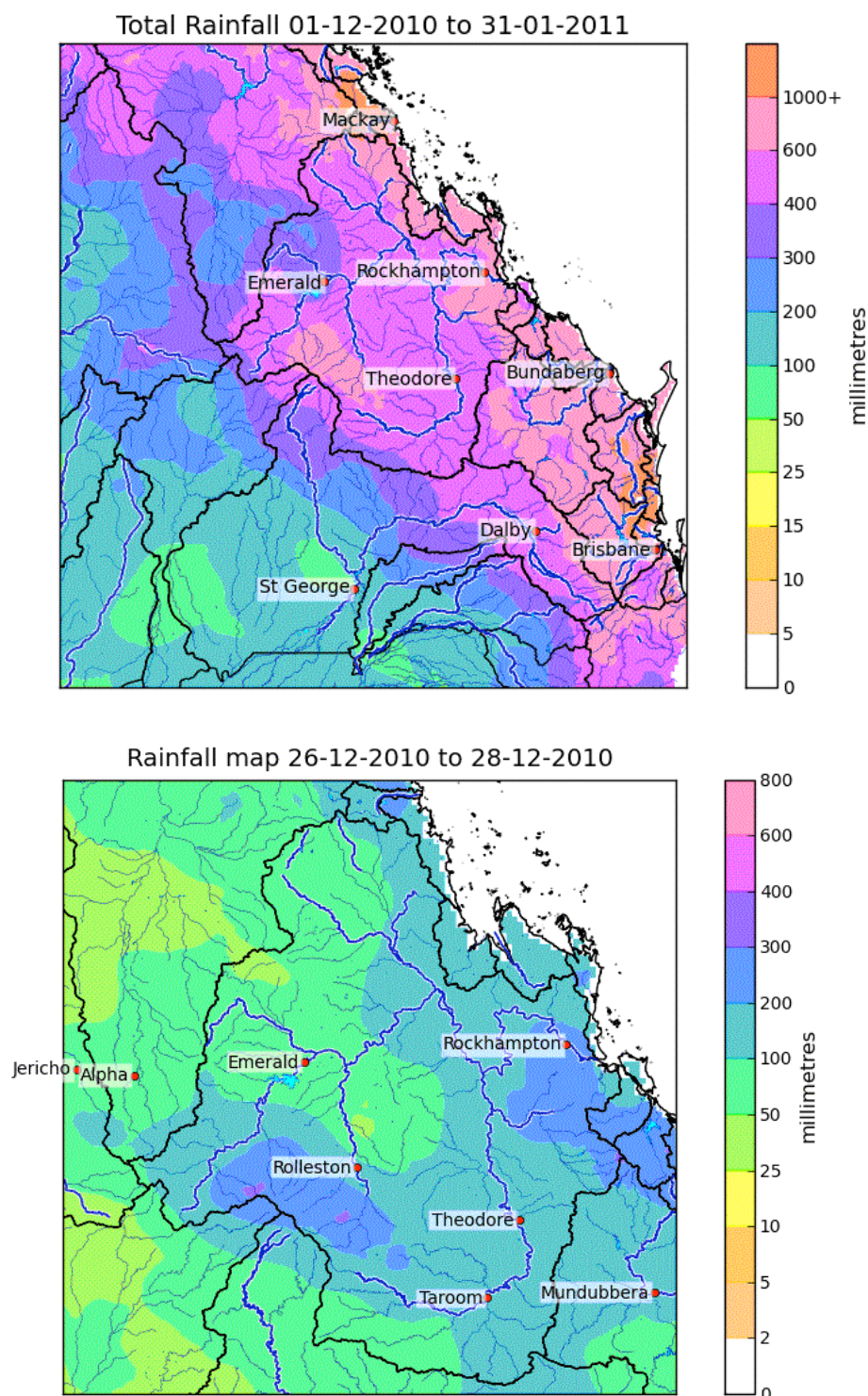


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the 48 hours to 9 AM on the 28/12/2010 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for Boxvale TM on the Upper Dawson River and Windamere TM on Jundah Creek, both upstream from Theodore, have been selected as examples of recorded rainfall intensities across the Dawson River catchment during December 2010 and January 2011. The rainfall intensity data is shown in Table 1, however intensities are all well above the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded Maximum Rainfall Intensities for Windamere and Boxvale on the Upper Dawson River for December 2010 and January 2011.

Rainfall Duration	Windamere TM			Boxvale TM		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
12hr	72	10:40 AM 27/12/2010	2-5	107	2:35 PM 27/12/2010	5-10
24hr	107	10:40 AM 27/12/2010	2-5	134	2:35 PM 27/12/2010	5-10
48hr	134	3:15 PM 27/12/2010	5-10	149	2:40 PM 27/12/2010	2-5
72hr	140	6:25 PM 27/12/2010	2-5	158	2:45 PM 27/12/2010	2-5

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood timeline for Theodore

Time/Date	Event Description	Gauge Height (metres)	Comment
4:34 AM 22/11/2010	First warning issued	7.40	
4/12/2010	First time it exceeded minor flood level	8.00	Remained above minor flood level for about 44 days
7/12/2010	First time it exceeded moderate flood level	11.00	Remained above moderate flood level for ~7 days
8/12/2010	First time it exceeded major flood level	12.00	Remained above the major flood level for ~5 days.
2:00 PM 10/12/2010	Major flood peak	13.00	
13/12/2010	Below major flood level	12.00	
14/12/2010	Below moderate flood level	11.00	
16/12/2010	Exceeded the moderate flood level	11.00	Remained above moderate flood level for ~3 days.
17/12/2010	Exceeded the major flood level	12.00	Remained above the major flood level for ~27 hours.
7:30 PM 17/12/2010	Major flood peak	12.09	
18/12/2010	Below the major flood level	12.00	
19/12/2010	Below the moderate flood level	11.00	
22/12/2010	Exceeded the moderate flood level	11.00	Remained above the moderate flood level for ~16 days.
23/12/2010	Exceeded the major flood level	12.00	Remained above the major flood level for ~14 days.
3:00 PM 25/12/2010	Major flood peak	13.56	Greater than March 2010
7:00 PM 28/12/2010	Major flood peak	14.60	New record
10:00 AM 01/01/2011	Major flood peak	14.70	New record
06/01/2011	Final fall below major	12.00	
07/01/2011	Final fall below moderate	11.00	
17/01/2011	Final fall below minor	8.00	
7:54 AM 17/01/2011	Final warning issued		

Flood Heights at Theodore

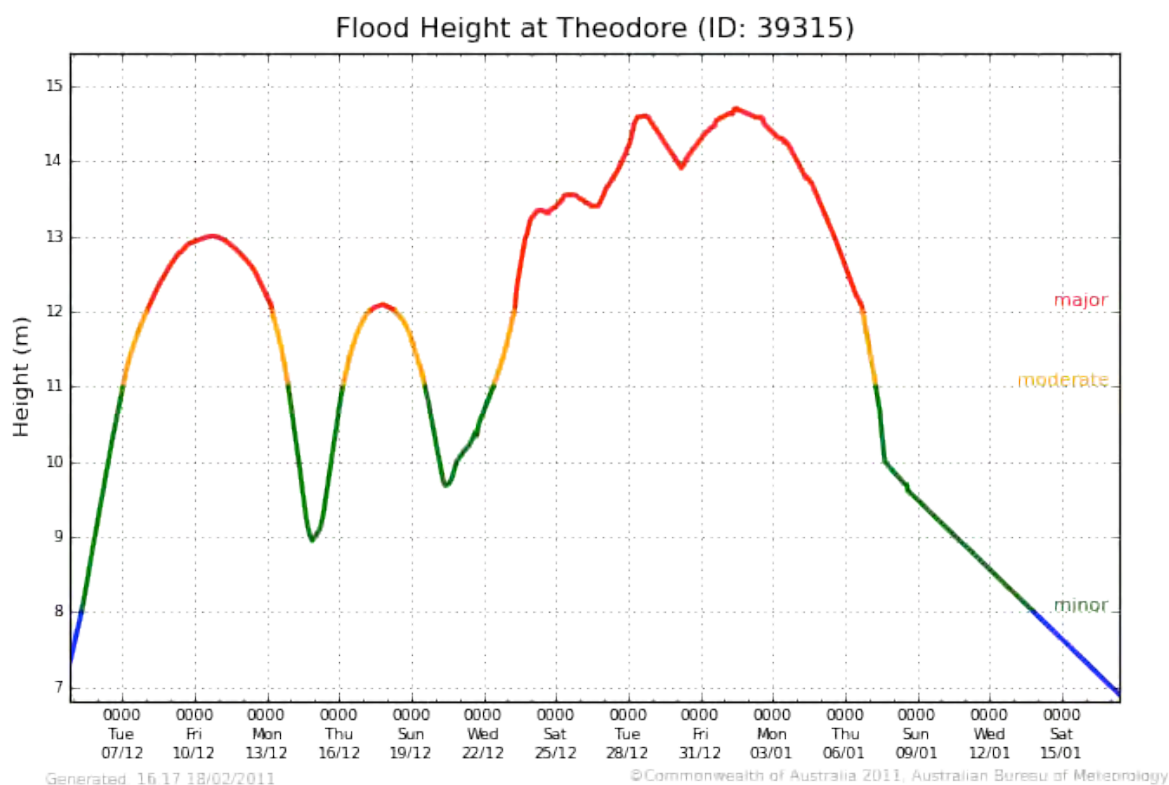


Figure 4. Flood Heights at Theodore manual gauge for December 2010 and January 2011

Comparison with previous floods

- Start of record 1924 with 20 major flood peaks in the record including 4 in 2010.
- Last major flood was 13.45 metres in March 2010 but previous to that was 12.22 metres in 1996.

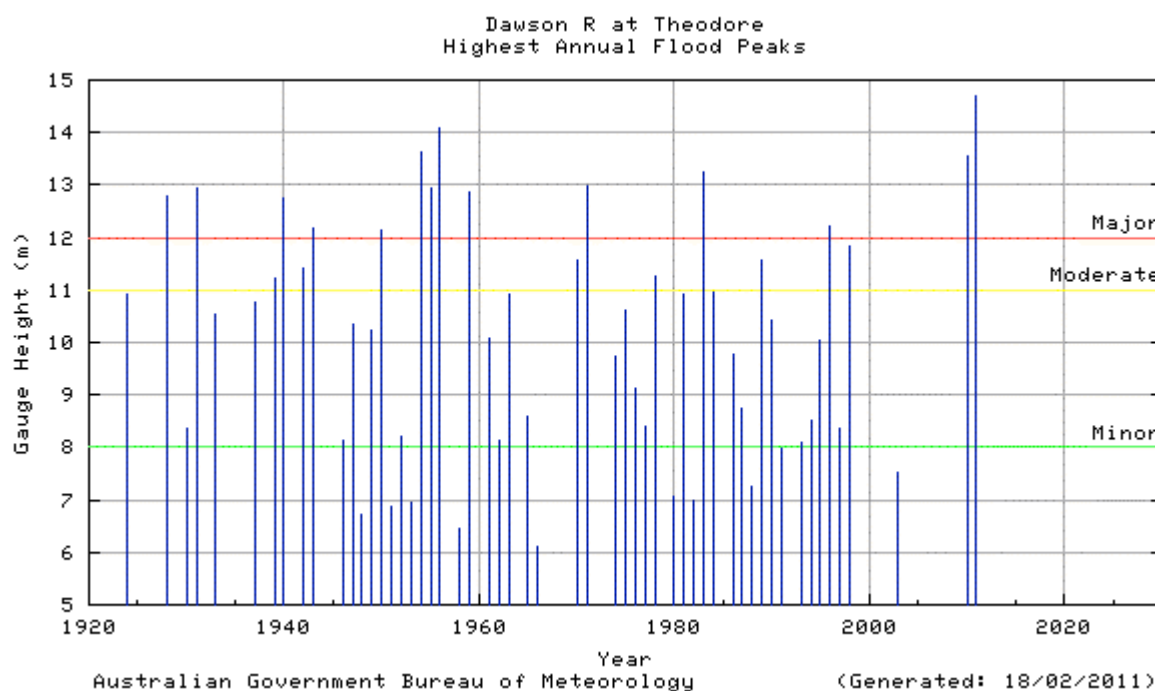


Figure 5. Highest annual flood peaks for the Dawson River at Theodore

Warning and Forecast Service

- Significant runoff commenced during September with flood warnings for the Dawson River issued between 05/09/2010 and 13/09/2010 and again between 22/09/2010 and 04/10/2010.
- Further rainfall occurred in late November with warnings commencing 22/11/2010 and continuing through to 17/01/2011.
- A total of 94 warnings were issued for the Fitzroy River system including the Dawson River during December 2010 and January 2011.

Table 3. Table of peak height predictions for Theodore.

Time of Height Forecast	Forecast	Peak
22/11/2010 First warning issued. River height at the time was 7.40m (below minor)		
10:27 AM on Wednesday the 8th of December 2010	peak to 13 metres is possible during Friday	13.00 metres at 2:00 PM Fri 10/12/2010
9:41 AM on Thursday the 9th of December 2010	peak around 13.2 metres overnight Friday	
10:06 AM on Friday the 10th of December 2010	peak around 13.2 metres overnight Friday	
9:14 AM on Thursday the 16th of December 2010	Peak just over 12 metres overnight Friday.	12.09 metres at 7:30 PM Fri 17/12/2010
9:01 AM on Friday the 17th of December 2010	Peak around 12.3 metres overnight Friday.	
2:37 PM on Thursday the 23rd of December 2010	Reach at least 13.2 metres during Friday	13.56m at 3:00 PM Sat 25/12/2010
5:48 PM on Thursday the 23rd of December 2010	Reach at least 13.5 metres during Friday	
9:59 AM on Friday the 24th of December 2010	Reach at least 13.5 metres during Friday.	
12:21 PM on Saturday the 25th of December 2010	Stay around the 13.4 metre mark for the rest of the weekend	
1:25 PM on Monday the 27th of December 2010	Possibly exceed 14 metres (major) during Monday/Tuesday	14.6m at 7:00 PM Tue 28/12/2010
5:57 PM on Monday the 27th of December 2010	Exceed 14 metres during Monday/Tuesday	
7:06 AM on Tuesday the 28th of December 2010	Rises to 15 metres possible during Tuesday/Wednesday	
6:51 PM on Tuesday the 28th of December 2010	Rises to 15 metres (major) still possible during Wednesday	
7:20 PM on Thursday the 30th of December 2010	Continue rising and exceed 14.5 metres early next week	14.7m at 10:00 AM Sat 1/1/2011
7:34 AM on Friday the 31st of December 2010	Continue rising slowly and exceed 14.5 metres during the weekend	
6:48 AM on Saturday the 1st of January 2011	Continue to rise slowly and exceed 14.5 metres during the weekend	
12:17 PM on Saturday the 1st of January 2011	Continue to rise slowly with levels up to 15 metres possible.	
12:21 PM on Sunday the 2nd of January 2011	Remain near the flood peak during Sunday	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for Toowoomba

- Rainfall over Toowoomba drains into Gowrie Creek and its tributaries East and West Creek and Black Gully. The headwaters of East and West Creek are to the south of the town centre and meet to become Gowrie Creek just to the north of the Toowoomba Central Business District.
- There are no river height recording stations on East and West Creek. Heights at Gowrie Creek are measured at Cranley TM owned by the Department of Environment and Resource Management (DERM) (Bureau station number: 541093). The Cranley TM gauge is located about 6 kilometres north of Toowoomba CBD.
- Very intense localised rainfall in the Toowoomba area caused severe flash flooding through the Toowoomba CBD during the early afternoon of the 10/01/2011.

Location map



Note: Toowoomba Alert and Toowoomba (AWS)

Data sources: Watercourses from the Bureau of Meteorology's Geofabric 1.0. Roads from Geoscience Australia Topo 250K (Series 3). Imagery from Bing Maps under the ESRI ArcGIS licence. Catchment boundaries and stations from the Bureau of Meteorology. Location points are from the Geoscience Australia Gazetteer 2008.

Figure 1. Map showing Toowoomba and locations of Toowoomba AL and Toowoomba AWS.

Rainfall summary

- Rainfall of between 600 and 1000mm was recorded in the Toowoomba area from 01/12/2010 to 31/01/2011 as shown in Figure 3.
- The vast majority of this rain fell between 09/01/2011 and 13/01/2011 as shown in the rainfall maps in Figure 3 below.
- Rainfall in the Toowoomba area is recorded at the Toowoomba AWS owned by Bureau of Meteorology (Bureau station number: 540162) and Toowoomba Alert owned by Seqwater (Bureau station number: 041529). The Toowoomba Regional Council also has a meso-network of rainfall recording stations.
- A table listing the 24 hour rainfall figures recording at rainfall stations in the Toowoomba area to 9am on 11/01/2010 is shown in Table 1.

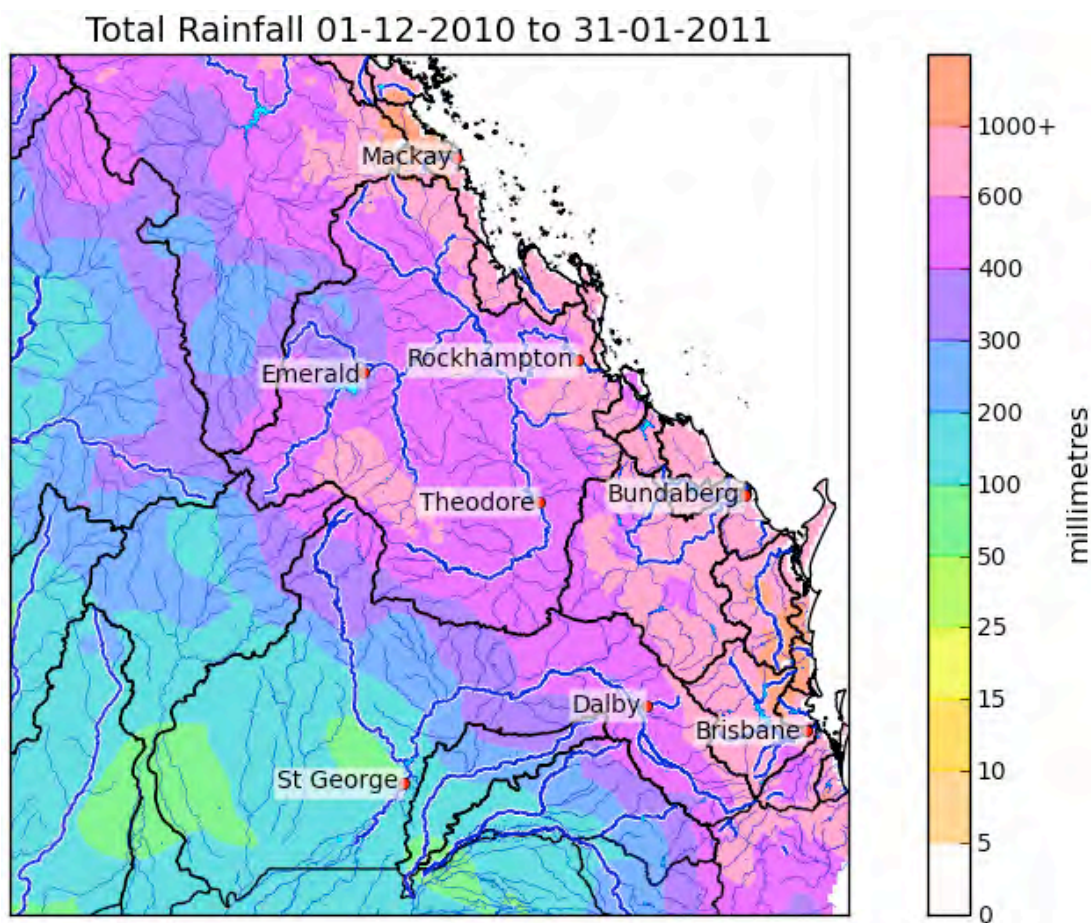


Figure 2. 24 Rainfall over the southeast quarter of Queensland from 01/12/2010 to 31/01/2011.

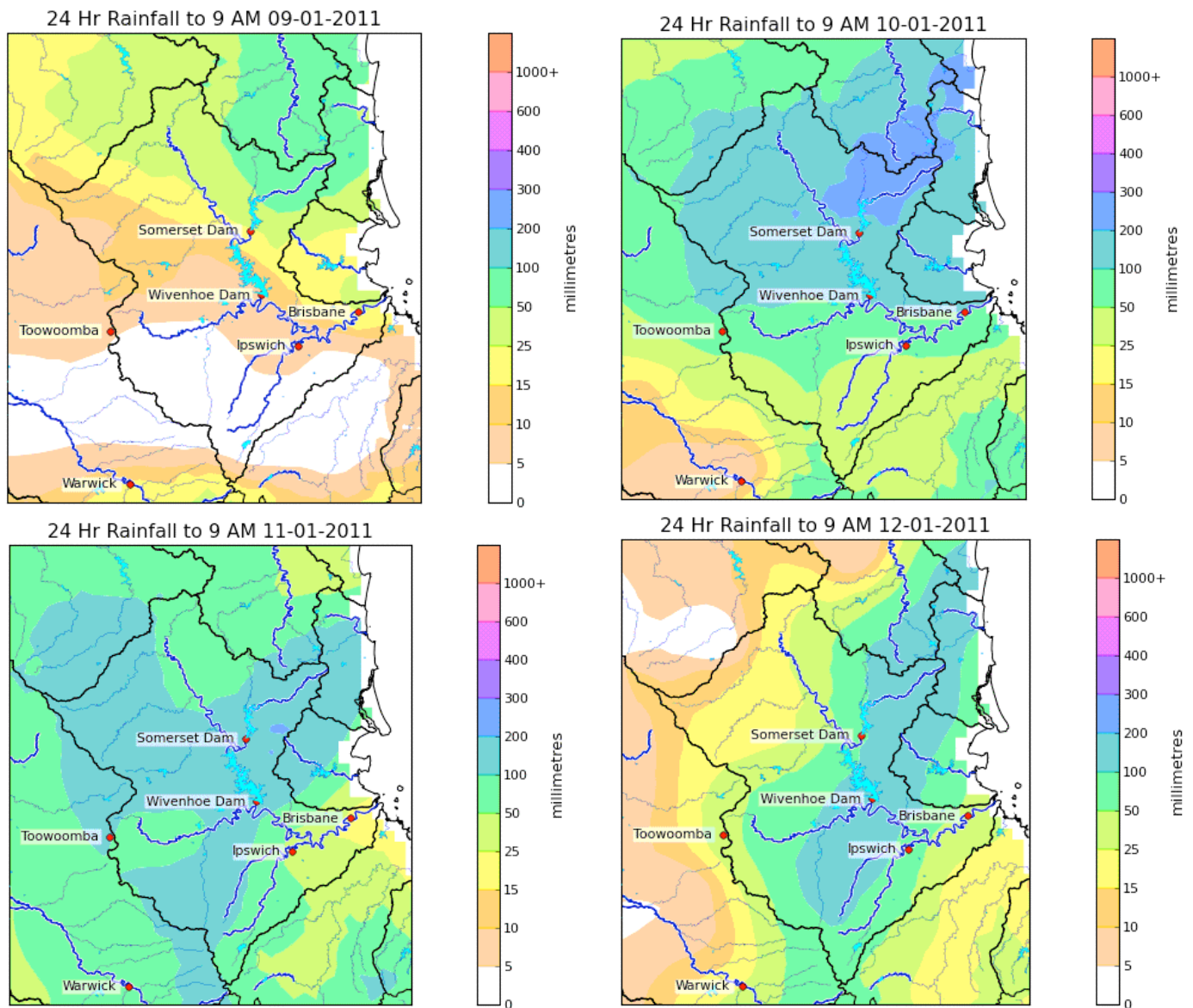


Figure 3. 24-Hour rainfall maps from 9am on 08/01/2011 to 9am on 12/01/2011.

Table 1. Rainfall recorded in the Toowoomba area in the 24-hours to 9am on 11/01/2011.

Station	24-hour rainfall to 9am on 11/01/2011
Toowoomba AWS	123.4
Toowoomba Alert	117
Middle Ridge	149.6
Withcott	180.8

Rainfall Intensity

- Maximum rainfall intensities for Toowoomba AL, which is located northeast of Toowoomba and Toowoomba Airport, are shown in Table 2.
- The most significant rainfall intensity for Toowoomba AL in January 2011 occurred in the 1 hour to 1:50pm on 10/01/2011, with rainfall amounts equalling the 2-5% Annual Exceedence Probability (20-50 year Average Recurrence Interval).
- The most significant rainfall intensities for Toowoomba Airport in January 2011 occurred in the 1 hour to 2:00pm on 10/01/2011 and 48 hours to 11:50am on 11/01/2011 with both equalling the 2-5% Annual Exceedence Probability (20-50 year Average Recurrence Interval).

Table 2. Recorded maximum rainfall intensities for Toowoomba AL and Toowoomba Airport for January 2011.

Rainfall Duration	Toowoomba AL			Toowoomba Airport		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
5 min	9	13:45:00 10/01/2011	2			
6 min	10	13:46:00 10/01/2011	1-2			
10 min	14	13:45:00 10/01/2011	1-2			
20 min	27	13:45:00 10/01/2011	5			
30 min	36	13:50:00 10/01/2011	10			
1hr	58	13:50:00 10/01/2011	20-50	60	2:00 PM 10/01/2011	20-50
2hr	65	14:15:00 10/01/2011	10-20	68	2:00 PM 10/01/2011	20
3hr	67	15:40:00 10/01/2011	5-10	73	4:00 PM 10/01/2011	10-20
6hr	75	16:55:00 10/01/2011	2-5	87	5:00 PM 10/01/2011	10-20
12hr	88	16:55:00 10/01/2011	2-5	99	5:00 PM 10/01/2011	5-10
24hr	134	6:00:00 10/01/2011	5-10	154	4:00 PM 10/01/2011	10-20
48hr	197	11:20:00 11/01/2011	10-20	208	11:00 AM 11/01/2011	20-50
72hr	218	19:15:00 11/01/2011	10-20	233	9:00 AM 12/01/2011	10-20

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location.

The frequency analysis in this report is for rainfall only.

Flash Flood event timeline

Table 3. Flash flood event timeline for Toowoomba on the 10/01/2011.

Time/Date	Event Description
10:55 AM 09/01/2011	First Severe Weather Warning for Flash Flooding over the Darling Downs and Southeast Coast region.
12:45 PM 10/01/2011	Redbank Creek AL recorded intense hourly rainfall of 87 mm.
12:45 PM 10/01/2011	Heavy rainfall commenced in eastern parts of Toowoomba CBD. The peak rainfall occurred sometime between 12.45pm and 2.15pm. Totals of 138mm were recorded at Toowoomba Regional Council rain gauges. Higher rainfalls are considered likely.
2:00 PM 10/01/2011	Estimated time water level peaked in the Toowoomba CBD (Source: Insurance Council Australia – “The nature and causes of flooding in Toowoomba 10 January 2011.”)
2:20 PM 10/01/2011*	The flood peak at Cranley TM reached an estimated peak of 4.6 metres. This figure followed a post flood survey conducted by DERM.
5:06 PM 11/01/2011	Final Severe Weather warning for flash flooding over the Darling Downs.

* Time was estimated from observations.

Flood Heights at Cranley TM on Gowrie Creek

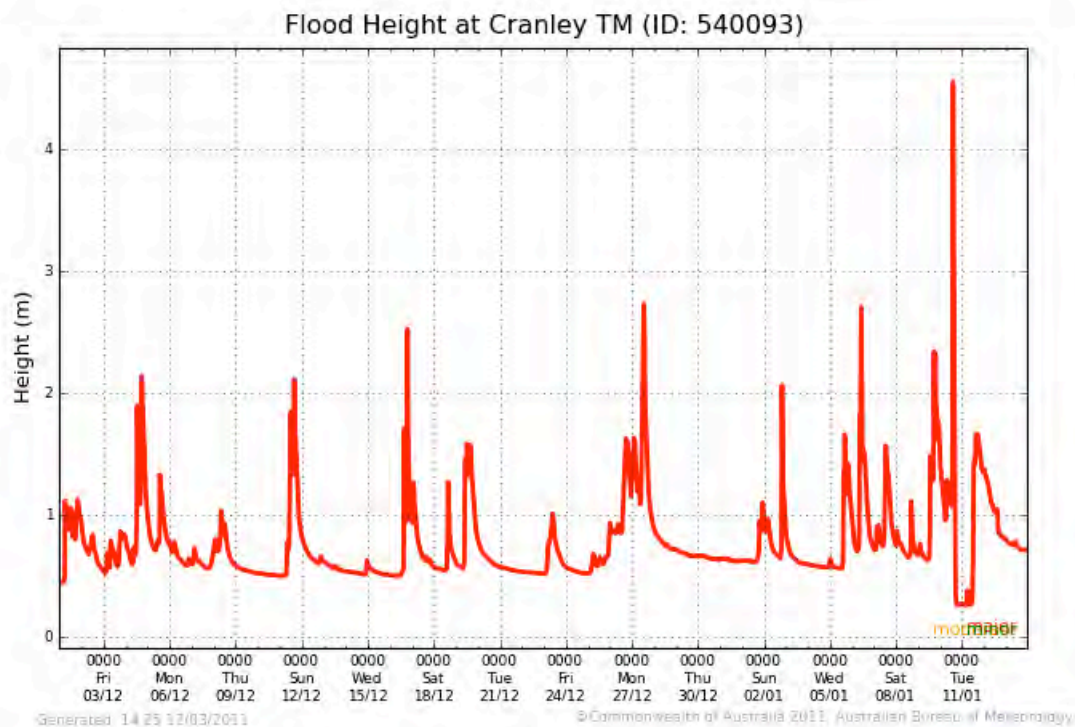


Figure 4. Flood Heights at Cranley TM for the 01/12/2010 to 14/01/2011. Reconstructed by adding in surveyed peak height. No flood classifications exist for Cranley TM.

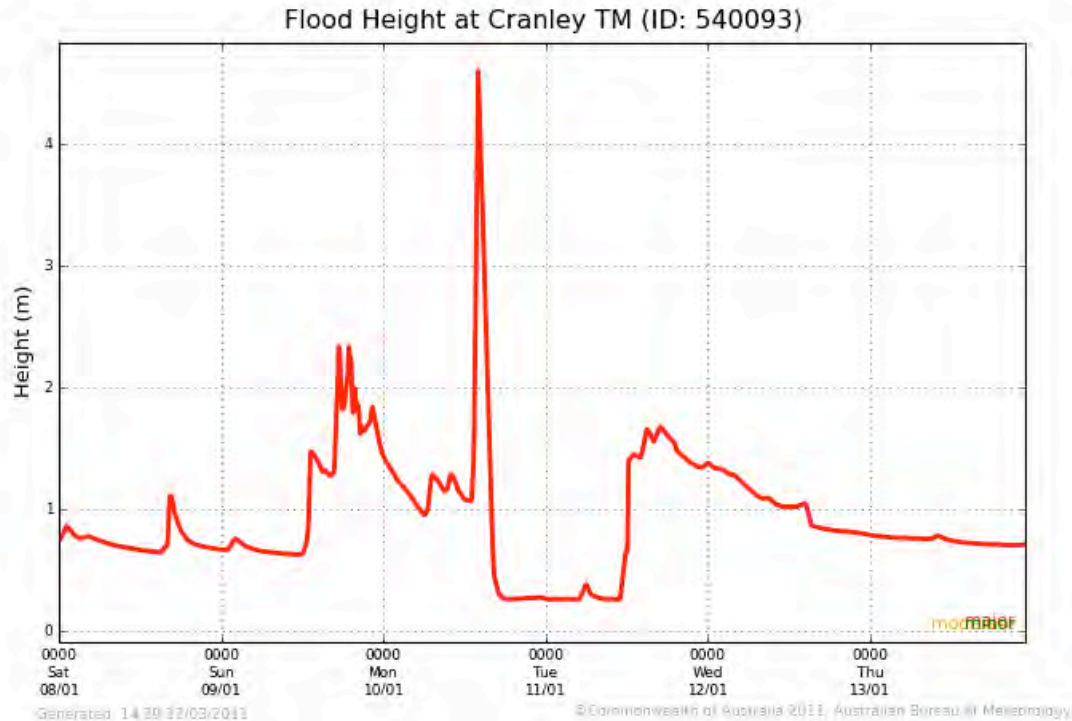


Figure 5. Flood Heights at Cranley TM for the 08/01/2010 to 14/01/2011. Reconstructed by adding in surveyed peak height. No flood classifications exist for Cranley TM.

Note: The recession at Cranley TM (above) was not recorded as gas line was washed away during flood. Therefore the above diagram does not represent a normal recession of heights at Cranley TM.

Warning and Forecast Service

- The Bureau does not provide a flood warning service for Toowoomba
- Severe Weather warnings for heavy rainfall and flash flooding were issued covering the Toowoomba area from 4.40am Sunday 9/1/2010 until 10pm Tuesday 11/01/2011.

Date	Time	Header
Sunday 9 January 2011	4:40 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district and southern parts of the Wide Bay and Burnett. Issued at 4:40 am on Sunday 9 January 2011
Sunday 9 January 2011	10:55 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett, and eastern Darling Downs and Granite Belt District. Issued at 10:55 am on Sunday 9 January 2011
Sunday 9 January 2011	4:55 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett, and eastern Darling Downs and Granite Belt District. Issued at 4:55 pm on Sunday 9 January 2011
Sunday 9 January 2011	11:00 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 11:00 pm on Sunday 9 January 2011
Monday 10 January 2011	5:00 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 5:00 am on Monday 10 January 2011
Monday 10 January 2011	11:00 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 11:00 am on Monday 10 January 2011
Monday 10 January 2011	11:05 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 11:05 am on Monday 10 January 2011
Monday 10 January 2011	5:05 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast district, far southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district. Issued at 5:05 pm on Monday 10 January 2011
Monday 10 January 2011	6:30 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast, Darling Downs and Granite Belt and eastern parts of the Maranoa and Warrego districts. Issued at 6:30 pm on Monday 10 January 2011
Monday 10 January 2011	7:50 pm	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts. Issued at 7:50 pm on Monday 10 January 2011
Monday 10	11:00	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash

January 2011	pm	flooding and potentially worsening the existing river flood situation For people in the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts. Issued at 11:00 pm on Monday 10 January 2011
Tuesday 11 January 2011	5:05 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation For people in the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts. Issued at 5:05 am on Tuesday 11 January 2011
Tuesday 11 January 2011	8:00 am	SEVERE WEATHER WARNING for heavy rainfall leading to localised flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 8:00 am on Tuesday 11 January 2011
Tuesday 11 January 2011	11:00 am	SEVERE WEATHER WARNING for heavy rainfall leading to flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 11:00 am on Tuesday 11 January 2011
Tuesday 11 January 2011	2:00 pm	SEVERE WEATHER WARNING for heavy rainfall leading to flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 2:00 pm on Tuesday 11 January 2011
Tuesday 11 January 2011	5:00 pm	SEVERE WEATHER WARNING for heavy rainfall leading to flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 5:00 pm on Tuesday 11 January 2011
Tuesday 11 January 2011	10:00 pm	SEVERE WEATHER WARNING for heavy rainfall leading to flash flooding and worsening the existing river flood situation For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Issued at 5:00 pm on Tuesday 11 January 2011

Flood summary for the Condamine River at Warwick

- The town of Warwick is on the Condamine River in the Condamine-Balonne catchment.
- The flood heights at Warwick are measured on a combination of two automatic gauges and a manual gauge. The manual gauge is owned by the Bureau of Meteorology (Bureau station number: 041357), one of the automatic gauges is owned by the Queensland Department of Environment and Resource Management (DERM) (Bureau station number: 41503) and the other automatic gauge is owned by the Southern Downs Regional Council and the Bureau of Meteorology (Bureau station number: 041534).
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map

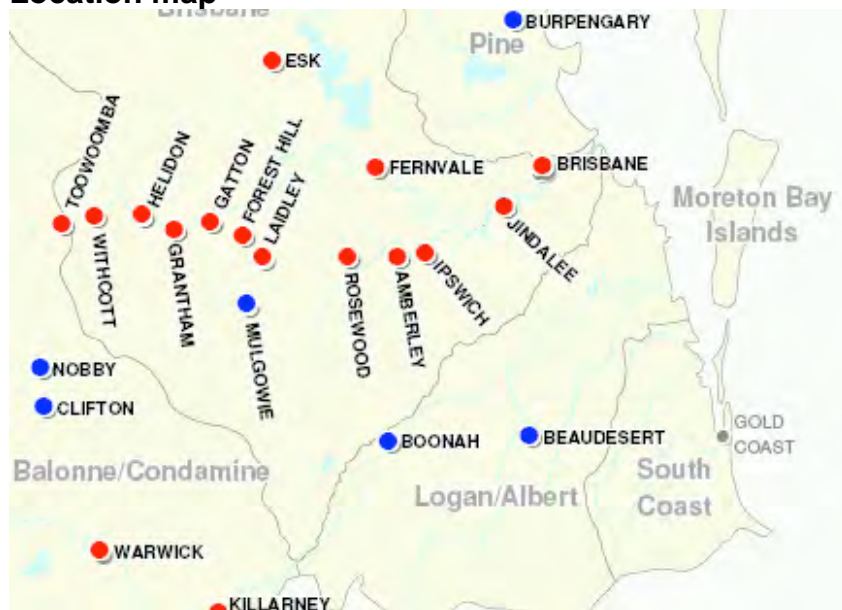


Figure 1. Map showing location of Warwick.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

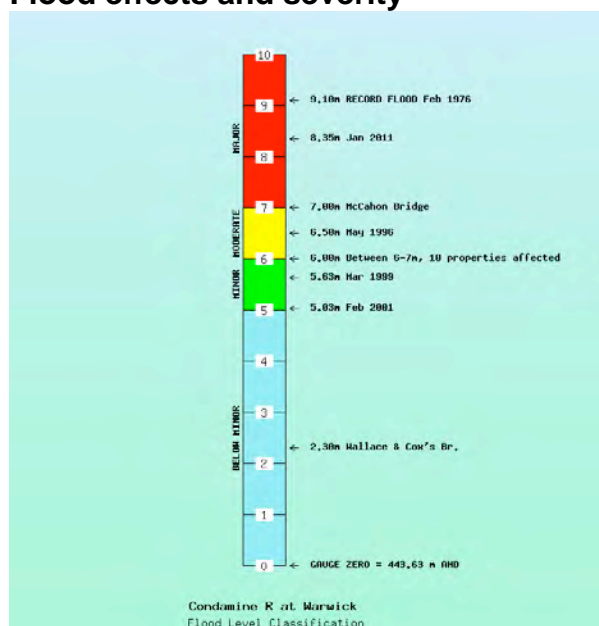


Figure 2. Flood level classifications and flood effects for Warwick.

* Indicates dates and times were estimated due to station failure.

- **Peaked at 7.9 metres on 27/12/2010, Peaked at 8.35 metres on 11/01/2011.**
- Minor: 5.0 metres
Moderate: 6.0 metres
Major: 7.0 metres.
- Gauge zero is 443.627 metres AHD.
- 150 homes and 25-30 businesses were inundated during the second flood peak at Warwick. (ABC News online)
- Warwick was above major flood level (7 metres) during the 27/12/2010 and again on 11/01/2011.*

Rainfall summary

- Between 300 to 400 millimetres of rainfall was recorded over the Condamine River and nearby creeks during the month of December 2010. Further heavy rainfall of between 200 and 400 millimetres were recorded during early January 2011.
- The heaviest rainfall was recorded between 06/01/2011 and 12/01/2011 with falls between 200 and 400 millimetres.

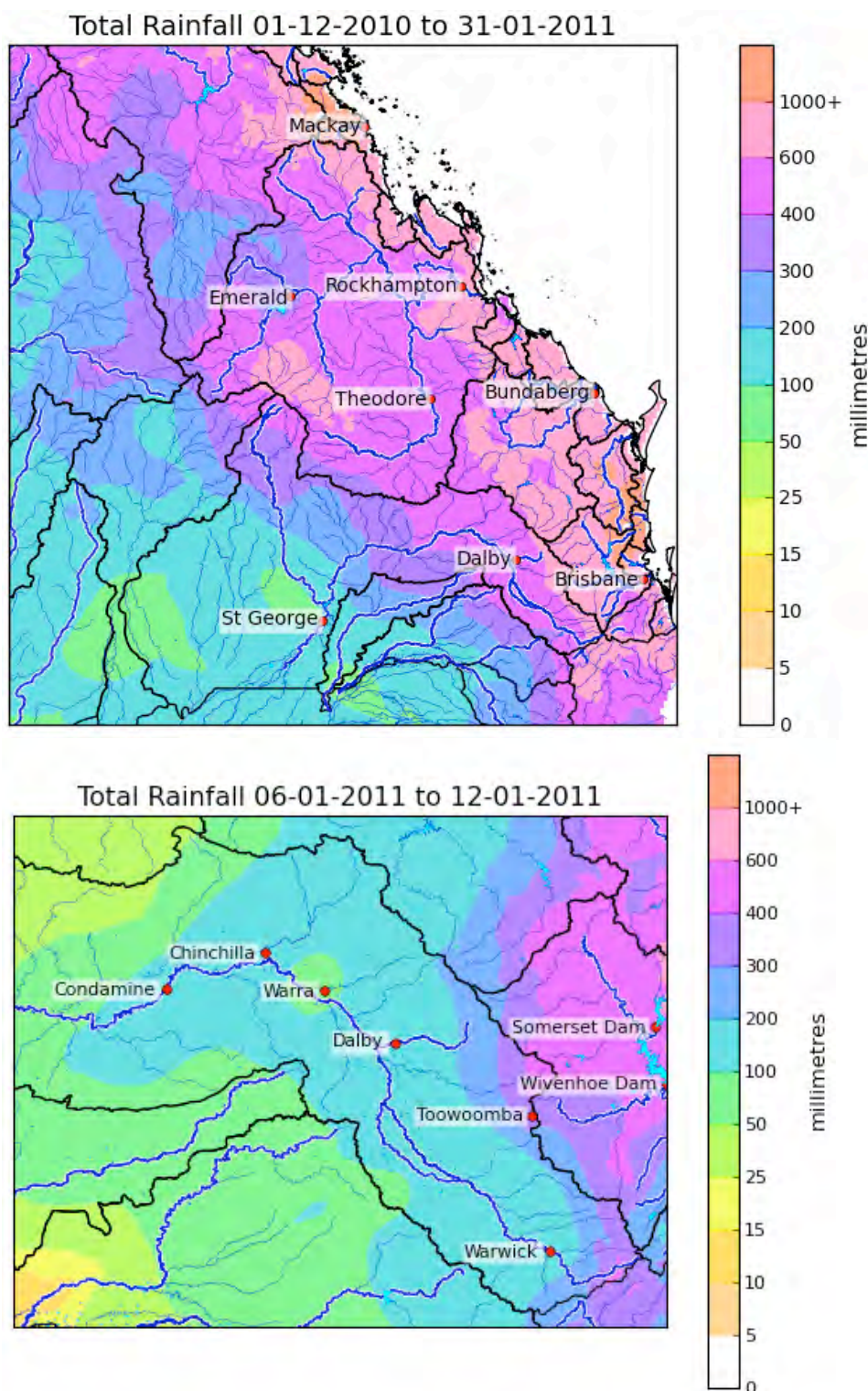


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the period between 06/01/2011 and 12/01/2011 (bottom).

Rainfall Intensity

- Maximum rainfall intensities for two selected stations at Mosely's AL and Yangan AL in the upper Condamine River catchment are shown in Table 1.
- The most significant rainfall intensities for Mosely's AL in December 2010 and January 2011 occurred on the 27/12/2010 and 11/01/2011 and 12/01/2011. Intensities for all durations were below the 1% Annual Exceedence Probability (100 year Average Recurrence Interval) intensities.
- The most significant rainfall intensities for Yangan AL in December 2010 occurred on the 27/12/2010. Intensities for all durations were below the 1% Annual Exceedence Probability (100 year Average Recurrence Interval) intensities.

Table 1. Recorded maximum rainfall intensities for Mosely's AL and Yangan AL on the upper Condamine River for December 2010 and January 2011.

Rainfall Duration	Mosely's AL			Yangan AL		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
3hr	55	10:45 AM 11/01/2011	2-5	45	12:35 PM 27/12/2010	1-2
6hr	92	1:15 PM 27/12/2010	20-50	70	1:30 PM 27/12/2010	5-10
12hr	120	2:20 PM 27/12/2010	20-50	80	1:45 PM 27/12/2010	5-10
24hr	159	1:30 PM 27/12/2010	50	106	1:45 PM 27/12/2010	5-10
48hr	193	1:30 AM 12/01/2011	20-50	114	1:50 PM 27/12/2010	2-5
72hr	198	9:40 PM 11/01/2011	20-50	122	1:50 PM 27/12/2010	2-5

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood timeline for Warwick.

Time/Date	Event Description	Gauge height (metres)	Comment
05/12/2010	First warning issued	2.44	
27/12/2010	First time exceeded minor	5.00	Remained above minor flood levels for ~1 day.
27/12/2010	First time exceeded moderate	6.00	Remained above minor flood levels for ~1 day
27/12/2010	First time exceeded major	7.00	Remained above minor flood levels for ~12 hours.
9:45 PM 27/12/2010	Major flood peak	7.90	8th highest on record
28/12/2010 – Est.*	Fall below major	7.00	
28/12/2010 – Est.*	Fall below moderate	6.00	
28/12/2010 – Est.*	Fall below minor	5.00	
10/01/2011	First time exceeded minor	5.00	Remained above minor flood levels for ~2.5 days.
10/01/2011	First time exceeded moderate	6.00	Remained above moderate flood levels for ~2.5 days.
11/01/2011	First time exceeded major	7.00	Remained above major flood levels for ~16 hours.
8:00 PM 11/01/2011	Major flood peak	8.35	Largest since 1976 and 4 th highest on record.
12/01/2011	Fall below major	7.00	
12/01/2011	Fall below moderate	6.00	
12/01/2011	Fall below minor	5.00	
10:55 AM 15/01/2011	Final warning issued		

* Indicates dates and times were estimated due to station failure.

Flood height at Warwick

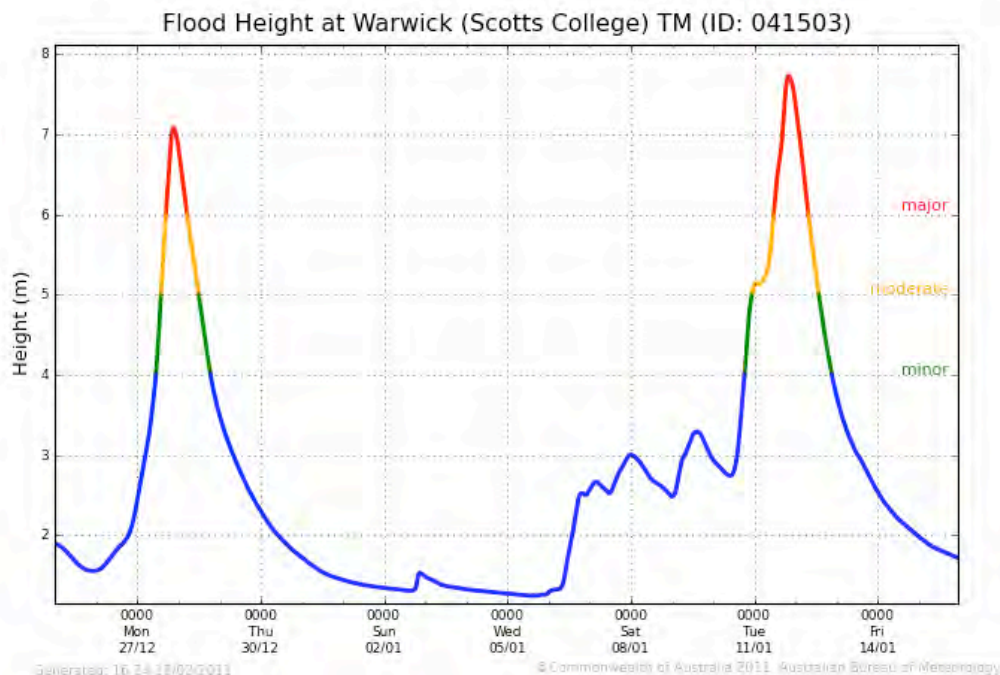


Figure 4. Flood height at the Scotts College gauge in Warwick.

Please note that the above hydrograph was recorded from Warwick (Scott's College) TM as the Alert gauge was un-serviceable during both events. The sites are different. All other reference to peaks heights are at the Warwick gauge where some manual reports were recorded at the peaks. (The heights at the Scott's College gauge are about 0.8m less than Warwick.)

Comparison with previous floods

- Start of record 1887 with 12 major flood peaks in the record including 2 in 1887 and in 1890.
- Last major flood was 9.10 metres February 1976 but previous to that was 7.01 metres in 1974.

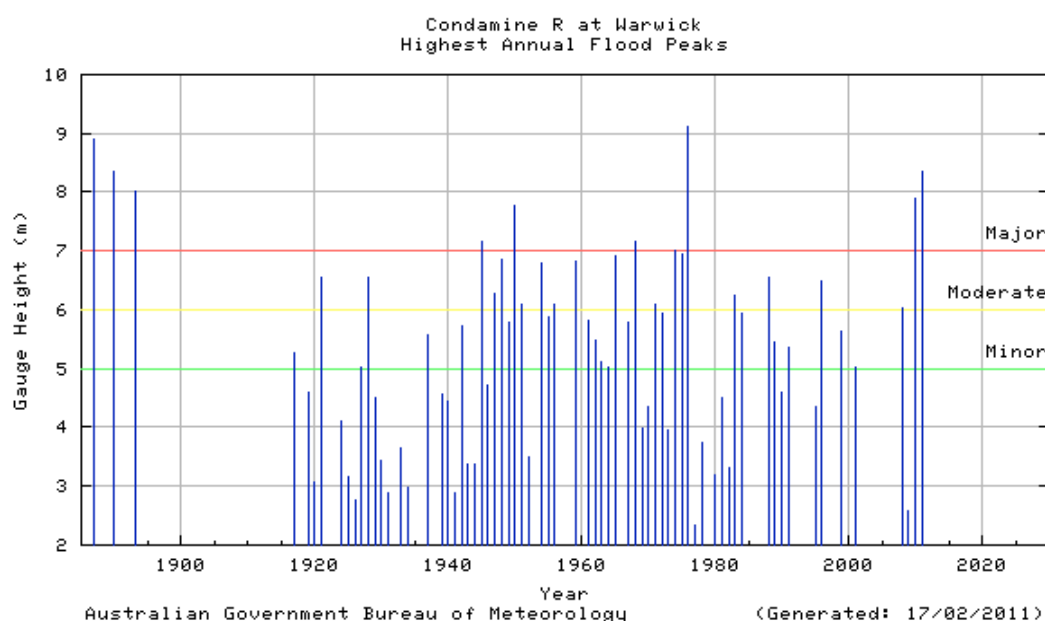


Figure 5. Highest annual flood peaks for the Condamine River at Warwick.

Warning and Forecast Service

- The catchments started to become saturated during October with flood warnings for the Condamine and Balonne Rivers issued between 10/10/2010 and 25/10/2010.
- A total of 103 warnings were issued for the Condamine and Balonne River during December 2010 and January 2011.

Table 3. Table of peak height predictions for Warwick.

Time of Height Forecast	Forecast	Peak
05/12/2010 First warning issued. Height at the time was 2.44m (below minor)		
6:47 AM on Monday the 27th of December 2010	A minor flood peak up to 5.5 metres can be expected at Warwick during Monday.	7.90 metres at 9:45 PM Mon 27/12/2010.
12:36 PM on Monday the 27th of December 2010	Moderate flood levels will occur downstream at Warwick during Monday, with further rises and major flooding possible overnight.	
5:26 PM on Monday the 27th of December 2010	Warwick is predicted to peak at about 8 metres by midnight tonight causing major flooding in the area.	
11:46 PM on Sunday the 9th of January 2011	Renewed rises are possible during the next couple of days with the forecast heavy rainfall.	Forecast of heavy rainfall and renewed rises.
1:44 AM on Monday the 10th of January 2011	Renewed rises are possible during the next couple of days with the forecast heavy rainfall.	
6:13 AM on Monday the 10th of January 2011	Renewed rises and flooding is likely in tributary creeks and at Killarney to Warwick during the next 2 days with the forecast heavy rainfall.	
10:53 AM on Monday the 10th of January 2011	Renewed rises and flooding is likely in tributary creeks and at Killarney to Warwick during the next 2 days with the forecast heavy rainfall.	
5:25 PM on Monday the 10th of January 2011	Rises to 6 metres (moderate flood level) are expected downstream at Warwick during Monday night.	8.35 metres at 8:00 PM Tue 11/01/2011.
10:32 PM on Monday the 10th of January 2011	Peak up 6.5 metres (moderate) by midnight Monday.	
6:55 AM on Tuesday the 11th of January 2011	Peak up 6.5 metres (moderate) during Tuesday. Further rises are possible as rainfall continues.	
12:30 PM on Tuesday the 11th of January 2011	Major flood levels of 7.3 metres later today and overnight. Further rises are possible as rainfall continues.	
2:15 PM on Tuesday the 11th of January 2011	Major flood levels of 7.3 metres during this afternoon. Further rises are possible as rainfall continues.	
6:44 PM on Tuesday the 11th of January 2011	Reach 8.5 metres during this evening. Further rises are possible as rainfall continues.	

Note: This table does not include all forecasts issued during these flood events.

Flood summary for the Fitzroy River at Yaamba

- The town of Yaamba is on the Fitzroy River in the Fitzroy catchment.
- The river heights at Yaamba are measured on a manual gauge owned by the Bureau of Meteorology (Bureau station number: 033076).
- Yaamba experienced major flooding in January 2011 that isolated the town and affected around 3000 properties in the area.
- A detailed map of the flood warning network is available on the Bureau website at http://www.bom.gov.au/hydro/flood/qld/brochures/river_maps.shtml

Location map



Figure 1. Map showing location of Yaamba.

Note: Red dots are reported flood inundated towns or cities and blue dots are flood affected towns or cities.

Flood effects and severity

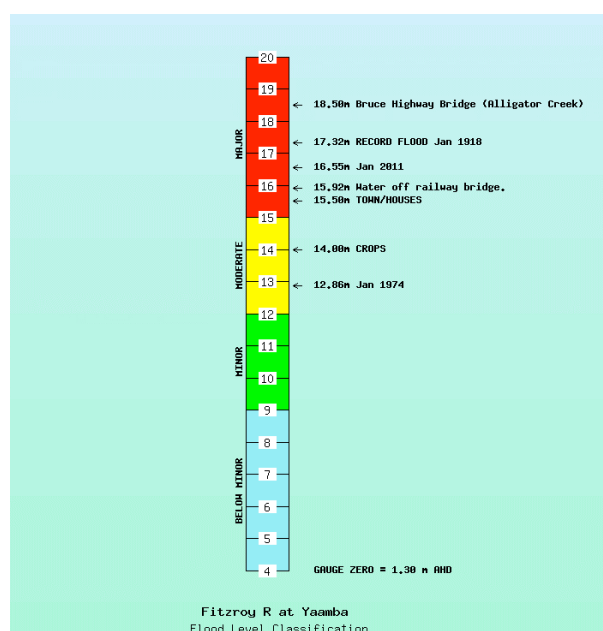


Figure 2. Flood level classifications and flood effects for Yaamba.

- **Peaked at 16.55 metres on 04/01/2011.**
- Minor: 9 metres
Moderate: 12 metres
Major: 15 metres.
- Gauge zero is 1.30 metres AHD.
- The township of Yaamba was isolated and many properties in the area were affected (Courier Mail).
- The major flood peak for Yaamba in January 2011 is the fourth highest on record.
- Above major flood level (15 metres) from 30/12/2010 to 14/01/2011.
- Remained above minor flood level (9 metres) from 03/12/2010 to 17/01/2011.

Rainfall summary

- Between 400 to 1000 millimetres of rainfall was recorded over the Fitzroy River catchment from the start of December 2010 to the end of January 2011.
- The heaviest rainfall periods during December and January occurred from the 26/12/2010 to 28/12/2010, with falls between 200 and 300 millimetres over most of the catchment with some areas receiving over 400 millimetres.

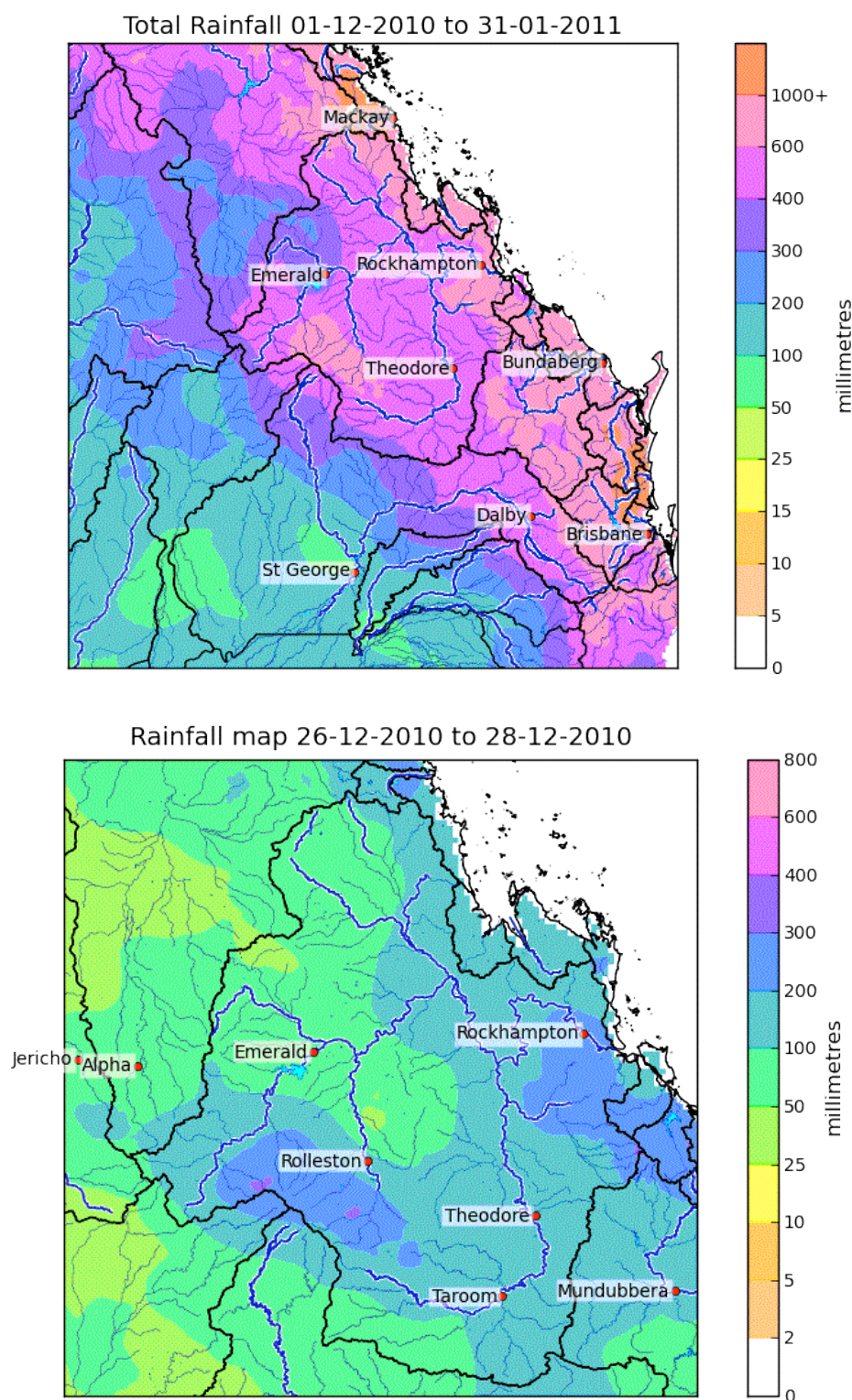


Figure 3. Rainfall map from 01/12/2010 to 31/01/2011 (top) and for the 48 hours to 9 AM on 28/12/2010 (bottom).

Rainfall Intensity

- Coolmaringa TM on the Mackenzie River and Kingsborough TM on the Don River, both upstream from Rockhampton, have been selected as examples of recorded rainfall intensities across the eastern parts of the Fitzroy River catchment during December 2010 and January 2011. The rainfall intensity data is shown in Table 1.
- The most significant rainfall intensities for December 2010 and January 2011 at these two sites can be seen below. All durations were well below the 1% Annual Exceedence Probability (100 year Average Recurrence Interval).

Table 1. Recorded maximum rainfall intensities for Coolmaringa TM on the Mackenzie River and Kingsborough TM on the Don River for December 2010 and January 2011.

Rainfall Duration	Coolmaringa TM			Kingsborough TM		
	Rainfall (mm)	Period ending	ARI (years)	Rainfall (mm)	Period ending	ARI (years)
30 mins	22	10:25 AM 22/12/2010	< 1	45	12:05 PM 27/12/2010	10-20
60 min	33	10:45 AM 22/12/2010	1-2	53	12:15 PM 27/12/2010	5
2 hr	49	5:10 PM 27/12/2010	1-2	63	7:50 PM 27/12/2010	2-5
3 hr	61	5:40 PM 27/12/2010	2-5	78	8:15 PM 27/12/2010	5-10
6 hr	103	9:00 PM 27/12/2010	10-20	93	10:00 PM 27/12/2010	5-10
12hr	117	2:40 AM 28/12/2010	5-10	147	11:10 PM 27/12/2010	20
24hr	167	1:15 PM 03/12/2010	10-20	155	10:55 AM 28/12/2010	5-10
48hr	174	1:15 PM 03/12/2010	5-10	232	10:00 PM 27/12/2010	10-20
72hr	259	12:15 PM 03/12/2010	10-20	265	10:55 AM 28/12/2010	10-20

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Flood event timeline

Table 2. Flood timeline for Yaamba

Time/Date	Event Description	Gauge Height (metres)	Comment
11:06 AM 04/12/2010	First warning issued		First warning issued with reference to Yaamba flooding.
04/12/2010	River level first exceeds the minor flood level.	9.00	Remained above the minor flood level for ~46 days.
6:00 PM 04/12/2010	Minor flood peak	10.50	
09/12/2010	River level first exceeds the moderate flood level	12.00	Remained above the moderate flood level for ~13 days.
9:00 AM 14/12/2010	Moderate flood peak	14.10	
21/12/2010	Fall below moderate	12.00	
26/12/2010	River level exceeds the moderate flood level again.	12.00	Remained above the moderate flood level for ~22 days.
30/12/2010	River level first exceeds the major flood level	15.00	Remained above the major flood level for ~ 16 days.
9:00 AM 04/01/2011	Major flood peak	16.55	4 th highest flood peak on record for Yaamba.
14/01/2011	Final fall below major	15.00	
16/01/2011	Final fall below moderate	12.00	
18/01/2011	Final fall below minor	9.00	
7:54 AM 17/01/2011	Final warning issued		

Flood Heights at Yaamba

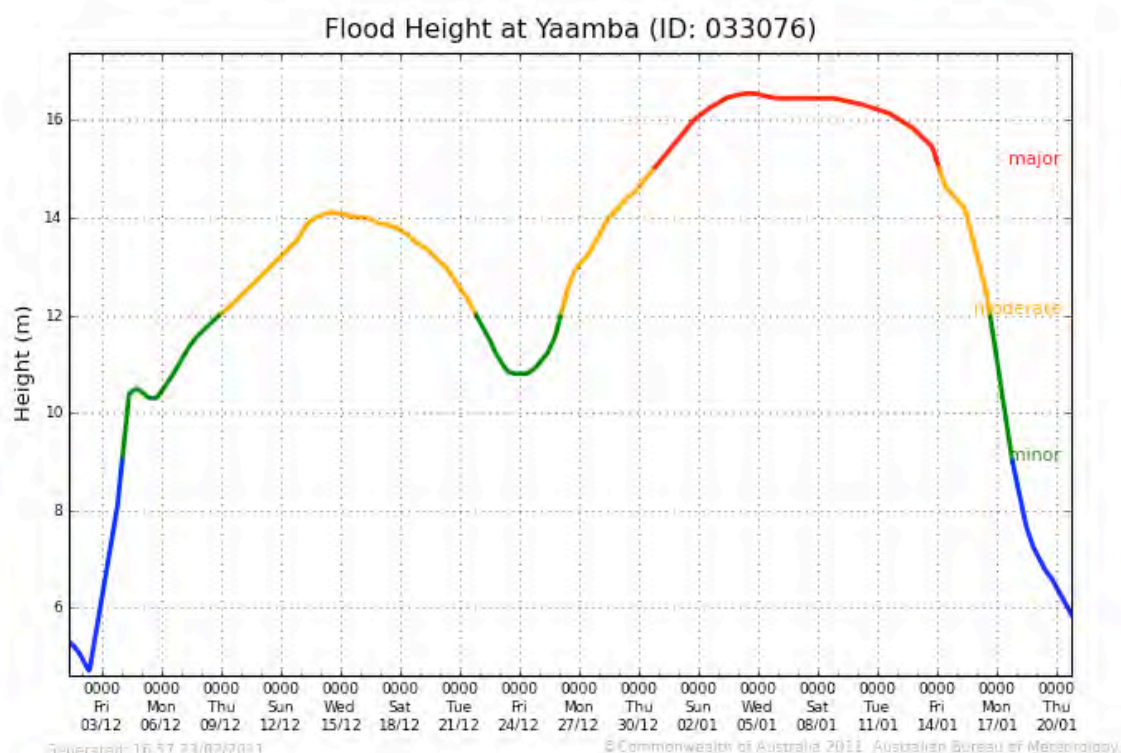


Figure 4. Flood Heights at Yaamba for December 2010 and January 2011

Comparison with previous floods

- River height records for Yaamba date back to 1889 with 11 major flood peaks in the record, including two major floods in 1918 and in 1991.
- The major flood level of 16.55 metres is the fourth highest peak on record. (The highest flood on record is 17.32m in 1918).
- The previous time the river level exceeded 15 metres was in January 1991.

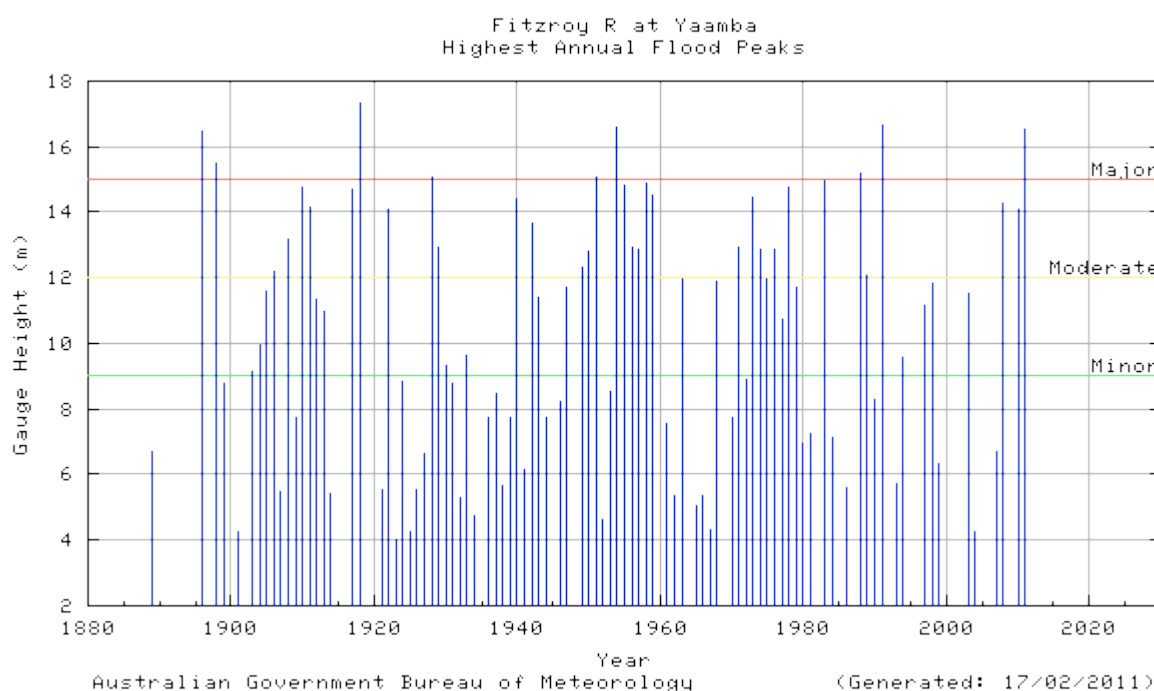


Figure 5. Highest annual flood peaks for the Fitzroy River at Yaamba

Warning and Forecast Service

- The first warning issued for the Fitzroy River that included reference to expected river height rises at Yaamba was issued on 04/12/2010. Warnings then continued for the catchment throughout the month, finalising on 17/01/2011 following the major flood peak at Yaamba.
- This period of warnings included the moderate flood peak at Yaamba in December and the major flood peak at Yaamba in January 2011.
- A total of 86 warnings were issued for the Fitzroy River system during December 2010 and January 2011 that referred to river rises and flooding at Yaamba.

Table 3. Table of peak height predictions for Yaamba

Time of Height Forecast	Forecast	Peak
11:06 AM 04/12/2010 First warning issued referencing flooding at Yaamba. Height at 9:00 AM on 04/12/2010 was 10.4m (minor).		
2:39 PM on Thursday the 30th of December 2010	Reach around 16.1 metres during Saturday with further rises.	Rising limb forecasts – reach a level and expected to continue rising
12:07 PM on Friday the 31st of December 2010	Expected to reach 16.1 metres on Saturday with further rises to around 16.6 metres on Monday.	
7:04 AM on Sunday the 2nd of January 2011	Reach about 16.5 metres on Monday with possible further rises.	
6:41 AM on Monday the 3rd of January 2011	Peak about 16.5 metres overnight Monday, remaining high for several days.	16.55 metres at 0900 Tues 04/01/2011
7:14 PM on Tuesday the 4th of January 2011	Remain around the major flood peak of 16.55 metres overnight. River levels to remain high for several days.	

Note: This table does not include all forecasts issued during these flood events.



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Appendix J

Specific briefings and activities conducted by the Bureau

June 2010 to February 2011

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Appendix J: Specific activities and briefings

- [1] During the floods, the RFC and FWC received numerous ad hoc telephone requests for elaboration on forecasts and warnings issued. The FWC also provided direct briefings and advice to at least the following agencies:
- a. Rockhampton Regional Council – Rockhampton 11th Dec to 20th Dec and 26th December to January 10th.
 - b. Balonne Shire Council – Dirranbandi/St George/Surat 1st January to the 10th January.
 - c. Brisbane City Council, through Flood Information Centre (FIC) – Brisbane – Saturday 8th January to Saturday 15th January.
 - d. Seqwater Flood Operations Centre (responsible for operating Wivenhoe Dam and other dams) – continuous through period and multiple times per day.
 - e. SunWater (responsible for operating Beardmore Dam and other dams).
 - f. Murweh Shire Council – Charleville -11th to 18th December – then ‘ad hoc’ advice.
 - g. Ipswich City Council - Ipswich- Saturday 8th January to Saturday 15th January.
 - h. Bundaberg Regional Council – Bundaberg 26th December to 30th December and again 12th January to 14th January.
 - i. Goondiwindi Regional Council – Goondiwindi/Inglewood 12th January to 14th January.
 - j. Gympie Regional Council - Gympie 9th January – 11th January.
 - k. Western Downs Regional Council – Dalby/Condamine/Chinchilla 18th December to 10th January (on and off).
 - l. Fraser Coast Regional Council – Maryborough – 8th and 9th January.
 - m. Central Highlands Regional Council - Emerald/Comet 27th December to 31st December.
 - n. Banana Shire Council –Theodore/Moura/Baralaba/Taroom – most of December.
 - o. Hinchinbrook Shire Council – Ingham 2nd/3rd February.
 - p. Southern Downs Regional Council – Warwick -12th 13th January.
 - q. Cairns Regional Council – Cairns – ad hoc advice before TC Yasi.
 - r. Burdekin Shire Council - Giru/Burdekin – ad hoc advice.
 - s. North Burnett Regional Council – Mundubbera/Gayndah – 26th December to 29th December.



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Appendix K

Rainfall statistics and ARI/AEP definitions

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Appendix K: Rainfall Statistics and ARI/AEP definitions

In order to explain the statistics of rainfall, it is useful to define some terms. The Bureau of Meteorology does not use depth of rainfall in this particular context but prefers to use rainfall rate (in mm per hour), known as intensity. It is calculated by dividing the depth of rainfall by the duration.

The period of time over which the rainfall is measured is called the duration. For example: one year - in the case of annual rainfall; one month (for many climate purposes); or so many days, hours or minutes.

Frequency is used to compare the severity of different rainfall events and is a time period of how often a particular rainfall intensity may be expected to occur. Curves representing these values are known as rainfall intensity-frequency-duration (IFD) curves. Analyses of data from rainfall gauges and the use of statistical theory enables the Bureau to estimate the probability that a particular rainfall depth will be equalled or exceeded at a particular place, within a particular time interval (duration), and over any given period of time. Rainfall IFD analyses are available for all locations in Australia.

The Average Recurrence Interval (ARI) and the Annual Exceedance Probability (AEP) are both a measure of the rarity of a rainfall event. The probability of a particular rainfall amount for a specified duration being equalled or exceeded in any 1 year period can be expressed as a percentage (the annual exceedance probability or AEP) or as "on the average once in every x years" (an average recurrence interval, or ARI, of x years). As an example, for a single location in Melbourne, a rainfall amount of 48.2 mm in 1 hour can be expected to be equalled or exceeded on average once every 100 years. In this case, the ARI is 100 years and the AEP is 1%.

It is important to note that an ARI of 100 years does not mean that the event will only occur once every 100 years. In fact, for each and every year, there is a 1% chance that the event (in this example, 48.2 mm in 1 hour) will be equalled or exceeded (once or more than once).

As the use of the term ARI can lead to confusion, it is preferable to use annual exceedance probability (AEP) to describe the chance of a particular rainfall as the AEP conveys the probability or chance that exists for each year. For example, a rainfall total of 159mm falling in 3 hours at Darwin Regional Office has a 1% probability of being equalled or exceeded in any one year can be easier to understand than the equivalent statement of a rainfall total of 159mm in 3 hours has an average recurrence interval (ARI) of 100 years.

Additional clarification may be required to explain the effects of duration. If a thunderstorm occurs, it would be most severe in terms of rainfall intensity and expected probability of occurrence for some particular duration, e.g. it may be a 0.5% AEP (200-year ARI) event at a duration of 1 hour but a 2% AEP (50 year ARI) event for a 30 minute duration, and a 1% AEP (100 year ARI) event for 2 hours duration.

The duration of thunderstorm necessary to produce the maximum peak flow for any location in a drainage system is a period known as the critical duration for that location. This is the time taken for water to flow from the outermost point in the system to the subject location. Thunderstorms of a shorter duration (and higher intensity) may cause the maximum flows in part of the catchment upstream of the subject location, but not at that location. Longer thunderstorms will not produce a flow in excess of the maximum peak flow of this critical duration thunderstorm; however, there could be embedded burst of rainfall over a period of time equal to the critical duration within the longer thunderstorm.

Importantly, a rainfall event of a particular AEP (say 1%) does not necessarily produce a flood magnitude of the same AEP. For example, a 1% AEP rainfall event may occur when the catchment is particularly dry and the resulting flood magnitude may be considerably less than the 1% AEP flood.

For more information on statistic analysis of rainfall please go to:

<http://reg.bom.gov.au/water/designRainfalls/afd/afdFAQ.shtml>



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Appendix L

Copies of warnings issued for Toowoomba and the Lockyer Valley Location

9 to 11 January 2011

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IDQ20032
Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast district and southern parts of the Wide Bay and Burnett.

Issued at 4:40 am on Sunday 9 January 2011

Synoptic Situation: At 4am EST, an upper level low was located offshore of the Capricorn coast. A surface trough was located offshore of the southern Queensland coast. Both of these systems are expected to move closer to the coast today.

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

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11am Sunday

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 7:27 AM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

The Balonne River at St George reached a peak of 13.2 metres during Saturday and remains at that level now (Sunday morning). Major flood levels will remain high (above 13 metres) during the next few days.

Moderate to major flooding extends along the Condamine and Balonne River system. Rises will extend downstream of the Loudoun Bridge area to the Chinchilla Weir area during the next few days causing renewed major flooding, but river levels will remain well below the peaks recorded during the Christmas-New Year period.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Minor to moderate flooding is generally easing again, although a renewed minor flood peak is expected at Warwick today. Further rain is forecast for the eastern Darling Downs area from today through to Tuesday which will cause renewed rises in creeks in the area, and may produce renewed Condamine River rises.

MYALL CREEK:

A second minor flood peak of 2.3 metres occurred at Dalby during Saturday afternoon and creek levels are now falling again below minor flood level. Renewed rises are possible with the forecast rain.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with some renewed rises expected during the next several days. The river levels will however remain metres below the record peaks recorded during the first week of January.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone. Record flood levels peaked in the Barrackdale area during Friday night about 1.5 metres higher than the March 2010 flood level, but have only fallen about 20 centimetres. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days.

The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 6am Sunday, the Balonne River at St George was 13.2 metres and holding at its peak which was reached during Saturday.

Major flood levels will remain high (above 13 metres) during the next few days.

High level major flooding is expected to continue in the Balonne River system



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downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek. The peak flow will be in the Dirranbandi to Hebel area around mid-January.

Predicted River Heights/Flows:
Balonne River at:

St George (manual) Remain above 13 metres during the next few days.

Next Issue:

The next warning will be issued at about 4pm Sunday.
(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Murrays Br #	6.4m rising	06:29 AM SUN 09/01/11
Condamine R at Warwick #	4.84m rising	06:15 AM SUN 09/01/11
Condamine R at Tummalville *	7.53m falling	05:00 AM SUN 09/01/11
Condamine R at Centenary Br	6.94m falling slowly	05:00 AM SUN 09/01/11
North Condamine R at Lone Pine *	3.26m falling	05:00 AM SUN 09/01/11
Oakey Ck at Fairview *	4.18m steady	05:00 AM SUN 09/01/11
Condamine R at Loudoun Br *	5.02m falling	05:00 AM SUN 09/01/11
Myall Ck at Dalby #	1.59m falling	06:09 AM SUN 09/01/11
Condamine R at Warra-Kogan Rd Br	10.98m rising	06:00 PM SAT 08/01/11
Condamine R at Chinchilla Weir TW *	10.55m rising	05:40 AM SUN 09/01/11
Condamine R at Cotswold *	13.45m falling	05:10 AM SUN 09/01/11
Balonne R at Warkon	11.09m falling slowly	06:00 AM SUN 09/01/11
Balonne R at Surat (manual)	11.8m falling slowly	06:00 AM SUN 09/01/11
Balonne R at Weribone *	12.81m falling	05:30 AM SUN 09/01/11
Balonne R at Warroo	14.98m falling slowly	05:30 AM SUN 09/01/11
Maranoa R at Old Cashmere *	3.36m rising	05:40 AM SUN 09/01/11
Balonne R at St George (manual)	13.2m steady	06:00 AM SUN 09/01/11
Balonne R at Whyenbah	8.1m rising slowly	09:00 AM SAT 08/01/11
Culgoa R at Woolerbilla *	6.3m rising	04:00 AM SUN 09/01/11
Balonne R Minor at Dirranbandi	5.3m rising slowly	06:00 AM SUN 09/01/11
Narran R at Dirranbandi-Hebel Rd *	5.21m rising slowly	03:00 PM SAT 08/01/11
Ballandool R at Hebel-Bollon Rd *	3.68m rising slowly	05:30 AM SUN 09/01/11
Bokhara R at Hebel *	1.84m rising slowly	05:20 AM SUN 09/01/11

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR WARRILL CREEK THE LOWER BRISBANE BELOW WIVENHOE

Issued at 9:13 AM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

Minor flood levels are falling at Amberley along Warrill Creek.

SEQ Water advises releases from Wivenhoe Dam will continue through Sunday. Minor flooding will continue downstream along the Brisbane River to Mt Crosby today and tomorrow.

Weather Forecast:

Rain periods with moderate falls possible.

Next Issue:

The next warning will be issued at about 9am Monday or earlier if needed.

Latest River Heights:

Brisbane R at Savages Crossing * 10.34m falling 08:10 AM SUN 09/01/11
Brisbane R at Savages Crossing # 10.31m falling 09:03 AM SUN 09/01/11
Brisbane R at Burtons Br # 7.76m falling 08:59 AM SUN 09/01/11
Cabbage Tree Ck at L Manchester # 51.19m steady 07:55 AM SUN 09/01/11
Brisbane R at Kholo Br # 2.61m falling 08:59 AM SUN 09/01/11
Brisbane R at Mt Crosby # 11.21m steady 08:55 AM SUN 09/01/11
Brisbane R at Mt Crosby # 11.14m falling 09:06 AM SUN 09/01/11
Brisbane R at Colleges Crossing # 8.91m steady 09:07 AM SUN 09/01/11
Warrill Ck at Amberley DNR * 5.07m falling 08:20 AM SUN 09/01/11

*automatic station

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20800

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE STANLEY RIVER BRISBANE RIVER ABOVE WIVENHOE DAM

Issued at 9:28 AM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

Heavy rainfall has returned to the Brisbane River catchment overnight and will continue through today.

Minor flood levels are occurring along the Stanley River at Peachester. Some moderate flood levels are expected today at Woodford with higher levels possible as rainfall continues.

A return to moderate and major flood levels is likely from Linville to Gregor Creek today.

Next Issue:

The next warning will be issued by 2pm Sunday.

Latest River Heights:

Stanley R at Peachester *	5.19m rising	08:00 AM SUN 09/01/11
Stanley R at Peachester #	5.88m rising	09:10 AM SUN 09/01/11
Stanley R at Woodford *	4.4m rising	08:20 AM SUN 09/01/11
Kilcoy Ck d/s Mt Kilcoy Weir *	4.88m rising	08:20 AM SUN 09/01/11
Stanley R at Somerset Dam HW #	100.12m rising	09:03 AM SUN 09/01/11
Cooyar Ck at Cooyar Ck *	2.71m steady	08:00 AM SUN 09/01/11
Brisbane R at Linville #	3.52m rising	09:12 AM SUN 09/01/11
Brisbane R at Devon Hills #	5.25m falling	09:12 AM SUN 09/01/11
Emu Ck at Boat Mountain *	2.13m falling	08:00 AM SUN 09/01/11
Maronghi Ck at Glendale *	2.01m rising	08:00 AM SUN 09/01/11
Brisbane R at Gregor Ck *	4.92m rising	08:30 AM SUN 09/01/11
Cressbrook Ck at Rosentreter Br *	2.29m steady	08:00 AM SUN 09/01/11
Cressbrook Ck at Rosentreter Br #	2.28m falling	07:36 AM SUN 09/01/11
Esk Ck at Falls Rd *	1.96m falling	08:20 AM SUN 09/01/11
Splityard Creek Dam #	163.2m steady	07:19 AM SUN 09/01/11
Brisbane R at Wivenhoe Dam HW #	68.55m rising	09:00 AM SUN 09/01/11

*automatic station

Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20032
Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett, and eastern Darling Downs and Granite Belt District.

Issued at 10:55 am on Sunday 9 January 2011

Synoptic Situation: At 10am EST, an upper level low was located offshore of the Capricorn coast. A surface trough was located offshore of the southern Queensland coast. Both of these systems are expected to move closer to the coast today.

Rain areas and thunderstorms are expected to increase further through the Southeast Coast district and southern parts of the Wide Bay and Burnett district today. The heavy rain areas are expected to move into the eastern parts of the Darling Downs and Granite Belt District overnight. Some heavy falls are likely which may lead to localised flash flooding and/or worsen existing river flooding.

Recent events: Rainfall over 100mm was recorded in the last 24 hours about parts of the Sunshine Coast and Hinterland.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 5pm Sunday

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20800

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE STANLEY RIVER AND BRISBANE RIVER ABOVE WIVENHOE DAM

Issued at 2:12 PM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfall of up to 85 millimetres has been recorded in the catchments of the Upper Brisbane and Stanley Rivers during the 5 hours since 9am Sunday. Heavy rainfall is expected to continue in the catchments during Sunday and Monday with major flood levels expected in the Upper Brisbane River during Sunday and into Monday.

UPPER BRISBANE RIVER:

The heavy rainfall is causing very fast rises in the Upper Brisbane River at Linville with major flood levels expected during Sunday afternoon. Fast rises to major flood levels are expected downstream to Gregor Creek during Sunday and into Monday.

STANLEY RIVER:

Minor flood levels are currently steady in the Stanley River at Peachester but renewed rises are possible during the next 24 hours. Moderate flood levels are expected later today at Woodford with higher levels possible as rainfall continues. Rises and flooding are also possible in Kilcoy Creek during the next 24 hours.

Next Issue:

The next warning will be issued by 10pm Sunday.

Latest River Heights:

Stanley R at Peachester #	7.68m steady	01:37 PM SUN 09/01/11
Stanley R at Woodford #	4.92m rising	01:31 PM SUN 09/01/11
Kilcoy Ck d/s Mt Kilcoy Weir #	6.48m steady	01:43 PM SUN 09/01/11
Cooyar Ck at Cooyar Ck #	5.1m rising	01:45 PM SUN 09/01/11
Brisbane R at Linville *	3.41m rising	08:10 AM SUN 09/01/11
Brisbane R at Devon Hills #	5.61m rising	01:46 PM SUN 09/01/11
Emu Ck at Boat Mountain #	2.82m rising	01:43 PM SUN 09/01/11
Maronghi Ck at Glendale *	2.08m rising	12:17 PM SUN 09/01/11
Brisbane R at Gregor Ck #	6.48m rising	01:44 PM SUN 09/01/11
Cressbrook Ck at Rosentreter Br #	3.12m rising	01:30 PM SUN 09/01/11

*,# automatic

Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20780

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR COASTAL STREAMS FROM MARYBOROUGH TO THE NSW BORDER

Issued at 2:48 PM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

Very heavy rainfall is being recorded in a rainband that stretches from Gympie to the northern suburbs of Brisbane and inland to Dalby. Totals of up to 25 to 50 millimetres have been recorded in the last hour within this rainband with the heaviest rainfall currently in the upper reaches of the Caboolture River and Kilcoy Creek.

This rainband is expected to move south during this afternoon and during Sunday night. Fast rises and flash flooding are possible during tonight in the Caboolture and Pine River catchments and in the Brisbane Metropolitan creeks.

A flood warning is current for the Mary River, Sunshine Coast Streams, Upper Brisbane and Lower Brisbane Rivers.

The heaviest rainfall during the 6 hours to 3pm Sunday includes Wamuran 94mm, Mt Mee 99mm and Maleny 92mm.

Next Issue:

The next warning will be issued at about 7pm.

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 3:28 PM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

The Balonne River at St George reached a peak of 13.2 metres during Saturday and has remained steady at that level during Sunday. Major flood levels will remain high (above 13 metres) during the next few days.

Moderate to major flooding extends along the Condamine and Balonne River system. Rises will extend downstream of the Loudoun Bridge area to the Chinchilla Weir area during the next few days causing renewed major flooding, but river levels will remain well below the peaks recorded during the Christmas-New Year period.

Further rain is forecast for the eastern Darling Downs area from today through to Tuesday which will cause renewed rises in creeks in the area, and may produce renewed Condamine River rises.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Minor to moderate flooding is generally easing in the Upper Condamine with levels at Warwick currently steady just above minor flood level. Further rises are possible during the next couple of days with the forecast heavy rainfall.

MYALL CREEK:

Flood levels have fallen below minor in Myall Creek at Dalby but rainfall has started to fall in the upper reaches and renewed rises are expected during Sunday night.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with some renewed rises expected during the next several days. The river levels will however remain metres below the record peaks recorded during the first week of January.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone. Record flood levels peaked in the Barrackdale area during Friday night about 1.5 metres higher than the March 2010 flood level, but have only fallen about 20 centimetres. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days.

The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 6am Sunday, the Balonne River at St George was 13.2 metres and holding at its peak which was reached during Saturday. Major flood levels will remain high (above 13 metres) during the next few days.



Australian Government
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High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek. The peak flow will be in the Dirranbandi area by mid-week and in the Hebel area later this week.

Predicted River Heights/Flows:
Balonne River at:

St George (manual) Remain above 13 metres during the next few days.

Next Issue:

The next warning will be issued at about 11pm Sunday.
(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	0.85m rising	02:24 PM SUN 09/01/11
Condamine R at Elbow Valley #	4.18m rising	02:52 PM SUN 09/01/11
Condamine R at Murrays Br #	6.3m falling	02:52 PM SUN 09/01/11
Condamine R @ Warwick(Scots Col.) *	3.29m steady	02:00 PM SUN 09/01/11
Condamine R at Warwick #	5.09m steady	02:34 PM SUN 09/01/11
Glengallan Ck near Backwater Ck #	1.35m steady	01:58 PM SUN 09/01/11
Condamine R at Tummalville *	7.16m falling	02:00 PM SUN 09/01/11
Condamine R at Centenary Br	6.9m falling slowly	09:00 AM SUN 09/01/11
North Condamine R at Lone Pine *	3.08m falling	01:00 PM SUN 09/01/11
Oakey Ck at Fairview *	4m falling	02:00 PM SUN 09/01/11
Condamine R at Loudoun Br *	5.09m rising	02:00 PM SUN 09/01/11
Myall Ck at Dalby #	1.09m falling	02:48 PM SUN 09/01/11
Condamine R at Warra-Kogan Rd Br	11.4m steady	06:00 AM SUN 09/01/11
Condamine R at Chinchilla Weir TW *	11.08m rising	02:30 PM SUN 09/01/11
Condamine R at Condamine	8.45m rising slowly	12:00 PM SUN 09/01/11
Condamine R at Cotswold *	13.22m steady	02:20 PM SUN 09/01/11
Balonne R at Warkon	11.09m steady	02:00 PM SUN 09/01/11
Yuleba Ck at Yuleba Forestry *	2.65m falling	02:20 PM SUN 09/01/11
Balonne R at Surat * (auto)	11.22m falling	02:40 PM SUN 09/01/11
Balonne R at Surat (manual)	11.8m falling slowly	06:00 AM SUN 09/01/11
Balonne R at Weribone *	12.72m falling	02:10 PM SUN 09/01/11
Balonne R at Warroo	14.98m falling slowly	05:30 AM SUN 09/01/11
Maranoa R at Old Cashmere *	3.53m steady	02:30 PM SUN 09/01/11
Balonne R at St George (manual)	13.2m steady	03:00 PM SUN 09/01/11
Balonne R at St George * (auto)	12.83m steady	02:30 PM SUN 09/01/11
Balonne R at Whyenbah	8.1m steady	09:00 AM SUN 09/01/11
Culgoa R at Woolerbillia *	6.31m rising	07:00 AM SUN 09/01/11
Balonne R Minor at Dirranbandi	5.3m rising slowly	06:00 AM SUN 09/01/11
Narran R at Dirranbandi-Hebel Rd *	5.25m steady	09:00 AM SUN 09/01/11
Ballandool R at Hebel-Bollon Rd *	3.69m steady	01:00 PM SUN 09/01/11
Bokhara R at Hebel *	1.85m steady	12:30 PM SUN 09/01/11

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



Australian Government
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IDQ20032
Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett, and eastern Darling Downs and Granite Belt District.

Issued at 4:55 pm on Sunday 9 January 2011

Synoptic Situation: At 4pm EST, an upper level low was located near the Wide Bay coast. A surface trough was located near the southern Queensland coast. Both of these systems are moving towards the west and southwest.

Rain areas and thunderstorms are expected to continue about the northern and central parts of the Southeast Coast District, southern parts of the Wide Bay and Burnett District, and northeastern parts of the Darling Downs and Granite Belt district. The heavy rain areas are expected to move into the southern parts towards the border with New South Wales and west to the Granite Belt overnight. Heavy falls are likely which may lead to localised flash flooding and/or worsen existing river flooding.

Recent events: In the past 24 hours, Maleny has recorded 239mm, West Bellthorpe 233mm and Lindfield 226mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11pm Sunday

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



Australian Government
Bureau of Meteorology

IDQ20780

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR COASTAL STREAMS FROM MARYBOROUGH TO THE NSW BORDER

Issued at 7:05 PM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

A rainband stretches from Gympie to the northern suburbs of Brisbane and inland to Dalby. Rainfall totals of up to 180 millimetres have been recorded in the Sunshine Coast region in the six hours to 7pm. The heaviest rainfall in the past two hours has been in the Killcoy, Stanley and Upper Mary catchments, with totals up to 60 millimetres recorded. The rainband is expected to move south during Sunday night.

Fast river rises have occurred in the Caboolture River resulting in minor flooding at Caboolture. Further rises in the Caboolture River and Pine River catchments are expected overnight Sunday.

Fast river rises have occurred in Woogaroo Creek resulting in moderate flooding at Opossum. Further flooding is possible in the Brisbane and Ipswich metropolitan creeks overnight Sunday.

Flood warnings are current for the Mary River, Sunshine Coast streams and the Upper Brisbane and Lower Brisbane rivers.

Next Issue:

The next warning will be issued at about 11pm.

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/>. Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20800

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE STANLEY RIVER AND BRISBANE RIVER ABOVE WIVENHOE DAM

Issued at 10:38 PM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfall of between 100 and 250 millimetres has been recorded in the catchments of the Upper Brisbane and Stanley Rivers during the 13 hours since 9am Sunday. The heavy rainfall is expected to continue in the catchments with major flood levels being maintained during Sunday and Monday.

UPPER BRISBANE RIVER:

Major flooding has developed in Cooyar and Cressbrook Creeks and in the Upper Brisbane River from Linville downstream to Gregor Creek. Further rises and high level major flooding are possible during Sunday and into Monday.

STANLEY RIVER:

Major flood levels are continuing to rise in the Stanley River at Peachester and Woodford. Further rises and high level major flooding are possible during Sunday and into Monday.

Further rises and flooding are also possible in Kilcoy Creek during the next 24 hours.

Next Issue:

The next warning will be issued by 9am Monday.

Latest River Heights:

Stanley R at Peachester #	8.92m steady	10:07 PM SUN 09/01/11
Stanley R at Woodford #	8.18m rising	10:11 PM SUN 09/01/11
Kilcoy Ck d/s Mt Kilcoy Weir #	7.12m steady	10:11 PM SUN 09/01/11
Cooyar Ck at Cooyar Ck #	8.1m rising	10:00 PM SUN 09/01/11
Brisbane R at Linville #	9.66m steady	10:06 PM SUN 09/01/11
Brisbane R at Devon Hills #	11.19m falling	10:00 PM SUN 09/01/11
Emu Ck at Boat Mountain #	9.72m steady	10:06 PM SUN 09/01/11
Brisbane R at Gregor Ck #	14.52m falling	10:11 PM SUN 09/01/11
Cressbrook Ck at Rosentreter Br #	5.16m falling	10:06 PM SUN 09/01/11

Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE LOWER BRISBANE BELOW WIVENHOE

Issued at 10:55 PM on Sunday the 9th of January 2011

by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek upstream of Gatton and in the Bremer River in the Rosewood area. Further rainfall is forecast for the region during Monday which may produce higher levels.

LOCKYER CREEK:

Lockyer Creek levels in the Helidon area have peaked at about 7 metres with further rises and moderate to major flooding expected downstream to the O'Reilly's area during Monday.

BREMER RIVER:

River level rises and moderate to major flooding continue in the Rosewood area. Further rises are expected downstream during the next 24 hours with at least minor flood levels expected in the Bremer River at Ipswich during Monday night.

MIDDLE AND LOWER BRISBANE:

SEQ Water advises releases from Wivenhoe Dam will continue. Minor flooding will continue along the middle Brisbane River at Savages and Mt Crosby with moderate flood levels expected at Mt Crosby overnight Monday.

Next Issue:

The next warning will be issued at about 9am Monday.

Latest River Heights:

Lockyer Ck at Helidon #	6.68m falling	10:08 PM SUN 09/01/11
Flagstone Ck at Brown-Zirbels Rd *	4.65m rising	08:40 PM SUN 09/01/11
Sandy Creek at Sandy Creek Road #	4.25m falling	10:03 PM SUN 09/01/11
Ma Ma Ck at Harm's *	1.92m steady	08:00 AM SUN 09/01/11
Tenthill Ck at Tenthill *	2.45m steady	08:33 PM SUN 09/01/11
Lockyer Ck at Gatton #	9.62m falling	09:58 PM SUN 09/01/11
Laidley Ck at Mulgowie *	3.33m rising	08:00 PM SUN 09/01/11
Laidley Ck at Laidley	3.95m falling slowly	08:00 PM SUN 09/01/11
Laidley Ck at Showground Weir #	5.6m falling	08:55 PM SUN 09/01/11
Bill Gunn Dam #	110.06m steady	09:44 PM SUN 09/01/11
Laidley Ck at Warrego Hwy *	4.36m rising	08:00 PM SUN 09/01/11
L Lockyer Ck at Glenore Grove #	8.8m rising	10:09 PM SUN 09/01/11
Lockyer Ck at Lyons Br #	10.03m rising	10:08 PM SUN 09/01/11
Lockyer Ck at Rifle Range Rd *	9.47m rising	08:40 PM SUN 09/01/11
Atkinson Dam #	65.76m steady	09:52 PM SUN 09/01/11
Lockyer Ck at O'Reilly's Weir #	12m rising	10:05 PM SUN 09/01/11



Australian Government
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Brisbane R at Lowood Pump Stn #	10.87m falling	10:07 PM SUN 09/01/11
Brisbane R at Savages Crossing #	11.47m rising	10:09 PM SUN 09/01/11
Brisbane R at Burtons Br #	8.78m rising	10:08 PM SUN 09/01/11
Cabbage Tree Ck at L Manchester #	51.97m rising	10:10 PM SUN 09/01/11
Brisbane R at Kholo Br #	3.61m rising	10:10 PM SUN 09/01/11
Brisbane R at Mt Crosby #	11.9m rising	10:09 PM SUN 09/01/11
Brisbane R at Colleges Crossing #	9.71m rising	10:11 PM SUN 09/01/11
Bremer R at Adams Br #	2.15m falling	10:03 PM SUN 09/01/11
Bremer R at Stokes Crossing #	2.65m rising	09:53 PM SUN 09/01/11
Bremer R at Spresters Br #	4.87m rising	09:56 PM SUN 09/01/11
Spring Ck at Greys Plains Rd #	1.14m steady	09:48 PM SUN 09/01/11
Western Ck at Grandchester #	3.38m rising	10:07 PM SUN 09/01/11
Western Ck at Rosewood WWTP #	6.43m rising	08:45 PM SUN 09/01/11
Bremer R at Rosewood #	5.02m rising	10:05 PM SUN 09/01/11
Bremer R at Five Mile Br Walloon #	4m rising	10:09 PM SUN 09/01/11
Bremer R at Walloon DERM *	4.54m rising	08:00 PM SUN 09/01/11
Reynolds Ck at Moogerah Dam #	155.5m steady	09:01 PM SUN 09/01/11
Warrill Ck at Kalbar Weir HW #	75.75m steady	09:59 PM SUN 09/01/11
Warrill Ck at Kalbar Weir TW *	5.25m falling	08:40 PM SUN 09/01/11
Warrill Ck at Harrisville#	2.45m rising	10:08 PM SUN 09/01/11
Warrill Ck at Churchbank Weir #	0.76m steady	07:29 PM SUN 09/01/11
Warrill Ck at Greens Rd Amberley #	4.52m rising	10:05 PM SUN 09/01/11
Warrill Ck at Amberley DNR *	5.43m rising	08:40 PM SUN 09/01/11
Purga Ck at Peak Crossing #	1.16m rising	08:08 PM SUN 09/01/11
Purga Ck at Loamside *	4.19m falling	08:40 PM SUN 09/01/11
Bremer R at Berry's Lagoon *	17.66m rising	08:30 PM SUN 09/01/11
Bremer R at One Mile Br #	8.9m rising	10:11 PM SUN 09/01/11
Bremer R at Hancocks Br Brassall #	5.98m steady	10:11 PM SUN 09/01/11
Bremer R at Ipswich #	3.95m rising	09:58 PM SUN 09/01/11
Brisbane R at Moggill #	3.57m rising	09:46 PM SUN 09/01/11
Brisbane R at City Gauge #	0.1m steady	08:12 PM SUN 09/01/11
Moreton Bay at Whyte Island #	0.45m rising	10:07 PM SUN 09/01/11

*,# from automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



Australian Government
Bureau of Meteorology

IDQ20032
Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district.

Issued at 11:00 pm on Sunday 9 January 2011

Synoptic Situation: At 10pm EST, an upper level low was located over the southern Capricornia. A surface trough was located near the Fraser coast. Both of these systems are moving slowly west.

Heavy rain areas and thunderstorms are expected to continue about northern and central parts of the Southeast Coast District, southern parts of the Wide Bay and Burnett District, and northeastern parts of the Darling Downs and Granite Belt district. The heavy rain areas are expected to extend further south to the New South Wales border and west to the Granite Belt overnight. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

Recent events: In the past 24 hours, Maleny has recorded 336mm, West Bellthorpe 331mm and Lindfield 301mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 5am Monday

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20780

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR COASTAL STREAMS FROM MARYBOROUGH TO THE NSW BORDER

Issued at 11:02 PM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

A rainband stretches from Gympie to the northern suburbs of Brisbane and inland to Dalby. Rainfall totals of up to 260 millimetres have been recorded in the Sunshine Coast region since 9am Sunday. Rainfall has generally eased in the past two hours, however, further heavy rainfall is expected overnight and during Monday.

Minor flood levels are easing in the Caboolture River at Caboolture. Renewed rises are still possible in the Caboolture and Pine River catchments during Monday.

Minor flooding is easing in Woogaroo Creek at Opossum. Heavy rainfall and flash flooding are possible in the Brisbane and Ipswich metropolitan creeks during Monday.

Flood warnings are current for the Mary River, Sunshine Coast streams and the Upper Brisbane and Lower Brisbane rivers. A severe weather warning is also current for this region.

Next Issue:

The next warning will be issued at about 9am Monday or earlier if needed.

Latest River Heights:

nil.

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/>. Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 11:46 PM on Sunday the 9th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfalls of between 50-80mm have been recorded in the Myall Creek catchment since 9am Sunday. River level rises and major flooding is being recorded at Clydesdale with at least moderate and possibly major floods levels likely at Dalby during Monday. Further rainfall is possible in the catchment overnight Sunday.

The Balonne River at St George reached a peak of 13.2 metres during Saturday and has remained steady at that level during Sunday. Major flood levels will remain high (above 13 metres) during the next few days.

Moderate to major flooding extends along the Condamine and Balonne River system. Rises will extend downstream of the Loudoun Bridge area to the Chinchilla Weir area during the next few days causing renewed major flooding, but river levels will remain well below the peaks recorded during the Christmas-New Year period.

Further rain is forecast for the eastern Darling Downs area during Monday into Tuesday which will cause renewed rises in creeks in the area, and may produce renewed Condamine River rises.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Minor to moderate flooding is generally easing in the Upper Condamine with levels at Warwick currently steady just above minor flood level. Further rises are possible during the next couple of days with the forecast heavy rainfall.

MYALL CREEK:

Major flood levels continue to rise in Myall Creek in the Clydesdale area and minor flood levels are possible in the north Myall Creek at Moffatt during Monday morning. Minor flood levels at Dalby are rising with moderate flood levels likely during Monday and major flood levels possible during Monday night. Higher levels are possible with the forecast of further heavy rainfall.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with some renewed rises expected during the next several days. The river levels will however remain metres below the record peaks recorded during the first week of January.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone. Record flood levels peaked in the Barrackdale area during Friday night about 1.5 metres higher than the March 2010 flood level, but have only fallen about 20 centimetres. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days.



The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 9pm Sunday, the Balonne River at St George was 13.2 metres and holding at its peak which was reached during Saturday. Major flood levels will remain high (above 13 metres) during the next few days.

High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek. The peak flow will be in the Dirranbandi area by mid-week and in the Hebel area later this week.

Predicted River Heights/Flows:

Myall Creek at Dalby: Reach 3 metres (moderate) by midday Monday
Possibly reach 3.5 metres (major) Monday night.

Balonne River at:

St George (manual) Remain above 13 metres during the next few days.

Next Issue:

The next warning will be issued at about 8am Sunday.
(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	0.95m rising	10:33 PM SUN 09/01/11
Condamine R at Elbow Valley #	3.83m falling	10:43 PM SUN 09/01/11
Condamine R at Murrays Br #	6.2m rising	10:47 PM SUN 09/01/11
Condamine R @ Warwick(Scots Col.) *	3.11m falling	08:00 PM SUN 09/01/11
Condamine R at Warwick #	4.89m falling	10:19 PM SUN 09/01/11
Glengallan Ck near Backwater Ck #	2.3m rising	10:53 PM SUN 09/01/11
Condamine R at Tummaville *	6.96m falling	09:00 PM SUN 09/01/11
Condamine R at Centenary Br	6.87m falling slowly	06:00 PM SUN 09/01/11
North Condamine R at Lone Pine *	3.04m rising	09:00 PM SUN 09/01/11
Oakey Ck at Fairview *	3.8m falling	09:00 PM SUN 09/01/11
Condamine R at Loudoun Br *	5.29m rising	09:00 PM SUN 09/01/11
Myall Ck at Dalby #	2.09m rising	10:46 PM SUN 09/01/11
Condamine R at Warra-Kogan Rd Br	11.18m falling slowly	06:00 PM SUN 09/01/11
Condamine R at Chinchilla Weir TW *	11.34m steady	08:40 PM SUN 09/01/11
Condamine R at Condamine	8.35m falling slowly	04:00 PM SUN 09/01/11
Condamine R at Cotswold *	13.05m falling	08:40 PM SUN 09/01/11
Balonne R at Warkon	11.07m falling slowly	09:00 PM SUN 09/01/11
Yuleba Ck at Yuleba Forestry *	2.42m falling	08:40 PM SUN 09/01/11
Balonne R at Surat * (auto)	11.18m falling	08:50 PM SUN 09/01/11
Balonne R at Surat (manual)	11.65m falling slowly	08:00 PM SUN 09/01/11
Bungil Ck at Roma	2.2m steady	07:00 PM SUN 09/01/11
Balonne R at Weribone *	12.66m steady	08:40 PM SUN 09/01/11
Balonne R at Warroo	14.5m falling slowly	05:00 PM SUN 09/01/11
Maranoa R at Old Cashmere *	3.61m steady	08:00 PM SUN 09/01/11
Balonne R at St George (manual)	13.2m steady	09:00 PM SUN 09/01/11



Australian Government
Bureau of Meteorology

Balonne R at St George *	(auto)	12.85m rising	08:30 PM SUN 09/01/11
Balonne R at Whyenbah		8.1m steady	09:00 AM SUN 09/01/11
Culgoa R at Woolerbilla *		6.39m rising	10:10 PM SUN 09/01/11
Balonne R Minor at Dirranbandi		5.3m rising slowly	06:00 AM SUN 09/01/11
Narran R at Dirranbandi-Hebel Rd *		5.26m steady	03:00 PM SUN 09/01/11
Ballandool R at Hebel-Bollon Rd *		3.71m steady	08:00 PM SUN 09/01/11
Bokhara R at Hebel *		1.87m rising	08:20 PM SUN 09/01/11

*,# from automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE LOWER BRISBANE BELOW WIVENHOE

Issued at 12:36 AM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek upstream of Gatton and in the Bremer River in the Rosewood area. Further heavy rainfall is forecast for the catchments of the Bremer River and Warrill and Lockyer Creeks during Monday.

LOCKYER CREEK:

Moderate to major flood levels have developed in Lockyer Creek upstream of Gatton. Levels in the Helidon area have peaked at about 7 metres and rises continue at Gatton. Rises to major flood levels are expected during Monday at Glenore Grove and Lyons Bridge.

BREMER RIVER:

River level rises and moderate to major flooding continue in the Rosewood area. Further rises are expected downstream during the next 24 hours with at least minor flood levels expected in the Bremer River at Ipswich during Monday night and continuing into Tuesday.

MIDDLE AND LOWER BRISBANE:

SEQ Water advises releases from Wivenhoe Dam will continue. Minor flooding will continue along the middle Brisbane River at Savages and Mt Crosby during Monday with moderate flood levels expected overnight Monday.

Higher than predicted tides are expected to continue in the Lower Brisbane area during Monday. Minor flood levels are possible on the high tide at the Brisbane City (Port Office) gauge during Tuesday and Wednesday.

Next Issue:

The next warning will be issued at about 9.30am Monday.

Latest River Heights:

Lockyer Ck at Helidon #	6.5m rising	11:47 PM SUN 09/01/11
Flagstone Ck at Brown-Zirbels Rd *	4.65m rising	08:40 PM SUN 09/01/11
Sandy Creek at Sandy Creek Road #	4.2m rising	11:39 PM SUN 09/01/11
Lockyer Ck at Gatton #	12.98m steady	11:46 PM SUN 09/01/11
Laidley Ck at Mulgowie *	3.45m rising	10:00 PM SUN 09/01/11
Laidley Ck at Laidley	3.95m falling slowly	08:00 PM SUN 09/01/11
Laidley Ck at Showground Weir *	5.62m falling	08:30 PM SUN 09/01/11
Laidley Ck at Showground Weir #	5.72m rising	11:37 PM SUN 09/01/11
Laidley Ck at Warrego Hwy *	4.75m rising	10:00 PM SUN 09/01/11
Lockyer Ck at Glenore Grove #	9.98m rising	11:48 PM SUN 09/01/11
Lockyer Ck at Lyons Br #	10.73m rising	11:47 PM SUN 09/01/11
Lockyer Ck at Rifle Range Rd *	9.47m rising	08:40 PM SUN 09/01/11



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Lockyer Ck at O'Reilly's Weir #	12.34m rising	11:45 PM SUN 09/01/11
Brisbane R at Lowood Pump Stn #	11.19m falling	11:46 PM SUN 09/01/11
Brisbane R at Savages Crossing #	11.73m rising	11:48 PM SUN 09/01/11
Brisbane R at Burtons Br #	9.06m rising	11:32 PM SUN 09/01/11
Brisbane R at Kholo Br #	3.91m rising	11:44 PM SUN 09/01/11
Brisbane R at Mt Crosby #	12.24m steady	11:49 PM SUN 09/01/11
Brisbane R at Colleges Crossing #	9.91m rising	11:46 PM SUN 09/01/11
Bremer R at Spresters Br #	4.97m rising	11:08 PM SUN 09/01/11
Western Ck at Grandchester #	4.23m rising	11:45 PM SUN 09/01/11
Western Ck at Rosewood WWTP #	6.63m rising	11:49 PM SUN 09/01/11
Bremer R at Rosewood #	5.14m rising	11:41 PM SUN 09/01/11
Bremer R at Five Mile Br Walloon #	4.66m rising	11:48 PM SUN 09/01/11
Bremer R at Walloon DERM *	5.04m rising	10:30 PM SUN 09/01/11
Reynolds Ck at Moogerah Dam #	155.48m falling	11:34 PM SUN 09/01/11
Warrill Ck at Harrisville #	2.74m rising	11:44 PM SUN 09/01/11
Warrill Ck at Harrisville#	2.65m rising	11:32 PM SUN 09/01/11
Warrill Ck at Greens Rd Amberley #	4.4m falling	11:47 PM SUN 09/01/11
Warrill Ck at Amberley DNR *	5.43m rising	08:40 PM SUN 09/01/11
Bremer R at Berry's Lagoon *	17.66m rising	08:30 PM SUN 09/01/11
Bremer R at One Mile Br #	9.25m rising	11:33 PM SUN 09/01/11
Bremer R at Hancocks Br Brassall #	6.23m rising	11:33 PM SUN 09/01/11
Bremer R at Ipswich #	4.1m rising	11:34 PM SUN 09/01/11
Brisbane R at Moggill #	3.72m rising	11:44 PM SUN 09/01/11
Brisbane R at City Gauge #	0.9m rising	11:12 PM SUN 09/01/11

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 1:44 AM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfalls have eased in the catchment of Myall Creek during the last 3 hours and further heavy rainfall is now more likely in south eastern Darling Downs. Major flooding has peaked at Clydesdale and levels have remained below minor at Moffatt. Rises continue at Dalby but flood levels are now expected to peak up to the moderate flood level of 3 metres by 8am Monday.

Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Warra-Kogan Road Bridge to Dirranbandi.

Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine and Oakey Creek during Monday into Tuesday.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Minor to moderate flooding is generally easing in the Upper Condamine with river levels at Warwick currently steady just above minor flood level. Further rises are possible during the next couple of days with the forecast heavy rainfall.

MYALL CREEK:

Rainfalls have eased in the catchment of Myall Creek during the last 3 hours and further heavy rainfall is now more likely in south eastern Darling Downs. Major flooding has peaked at Clydesdale and levels have remained below minor at Moffatt. Rises continue at Dalby but flood levels are now expected to peak up to the moderate flood level of 3 metres by 8am Monday.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with some renewed rises expected during the next several days. The river levels will however remain metres below the record peaks recorded during the first week of January.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 9pm Sunday, the Balonne River at St George was 13.2 metres and holding at its peak which was reached during Saturday. Major flood levels will remain high (above 13 metres) during the next few days.

High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes



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the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek. The peak flow will be in the Dirranbandi area by mid-week and in the Hebel area later this week.

Predicted River Heights/Flows:

Myall Creek at Dalby: Peak up to 3 metres (moderate flood level) by 8am Monday

Balonne River at:

St George (manual) Remain above 13 metres during the next few days.

Next Issue:

The next warning will be issued at about 10am Monday.

(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	1.2m rising	01:01 AM MON 10/01/11
Condamine R at Elbow Valley #	3.73m falling	12:24 AM MON 10/01/11
Condamine R at Murrays Br #	6.15m falling	12:38 AM MON 10/01/11
Condamine R @ Warwick(Scots Col.) *	2.97m falling	11:00 PM SUN 09/01/11
Condamine R at Warwick #	4.84m falling	11:53 PM SUN 09/01/11
Glengallan Ck near Backwater Ck #	2.65m rising	12:15 AM MON 10/01/11
Condamine R at Tummalville *	6.87m falling	11:00 PM SUN 09/01/11
Condamine R at Centenary Br	6.87m falling slowly	06:00 PM SUN 09/01/11
North Condamine R at Lone Pine *	3.13m rising	11:00 PM SUN 09/01/11
Oakey Ck at Fairview *	3.75m falling	11:00 PM SUN 09/01/11
Condamine R at Loudoun Br *	5.38m rising	11:00 PM SUN 09/01/11
Myall Ck at Dalby #	2.39m rising	12:52 AM MON 10/01/11
Condamine R at Warra-Kogan Rd Br	11.18m falling slowly	06:00 PM SUN 09/01/11
Condamine R at Chinchilla Weir TW *	11.44m rising	11:40 PM SUN 09/01/11
Condamine R at Condamine	8.35m falling slowly	04:00 PM SUN 09/01/11
Condamine R at Cotswold *	12.97m falling	11:40 PM SUN 09/01/11
Balonne R at Warkon	11.07m falling slowly	09:00 PM SUN 09/01/11
Yuleba Ck at Yuleba Forestry *	2.34m falling	11:40 PM SUN 09/01/11
Balonne R at Surat * (auto)	11.13m falling	11:50 PM SUN 09/01/11
Balonne R at Surat (manual)	11.65m falling slowly	08:00 PM SUN 09/01/11
Bungil Ck at Roma	2.2m steady	07:00 PM SUN 09/01/11
Balonne R at Weribone *	12.62m falling	11:40 PM SUN 09/01/11
Balonne R at Warroo	14.5m falling slowly	05:00 PM SUN 09/01/11
Maranoa R at Old Cashmere *	3.6m steady	11:00 PM SUN 09/01/11
Balonne R at St George (manual)	13.2m steady	09:00 PM SUN 09/01/11
Balonne R at St George * (auto)	12.81m falling	11:30 PM SUN 09/01/11
Balonne R at Whyenbah	8.1m steady	09:00 AM SUN 09/01/11
Culgoa R at Woolerbilla *	6.39m rising	10:10 PM SUN 09/01/11
Balonne R Minor at Dirranbandi	5.3m rising slowly	06:00 AM SUN 09/01/11
Narran R at Dirranbandi-Hebel Rd *	5.26m steady	03:00 PM SUN 09/01/11
Ballandool R at Hebel-Bollon Rd *	3.71m steady	08:00 PM SUN 09/01/11
Bokhara R at Hebel *	1.87m rising	08:20 PM SUN 09/01/11

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on



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telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



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IDQ20032

Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district.

Issued at 5:00 am on Monday 10 January 2011

Synoptic Situation: At 4am EST, an upper level low was located over the southern Capricornia. A surface trough was located near the Fraser coast. Both of these systems are moving slowly west.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast district, far southern parts of the Wide Bay and Burnett District and eastern parts of the Darling Downs and Granite Belt district. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

Recent events: In the past 24 hours, West Bellthorpe recorded 343mm, Maleny 337mm, and Lindfield 313mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11am Monday

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 6:13 AM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfalls have eased in the catchment of Myall Creek during the last 6 hours, although further rain periods will continue today. At 6am, Dalby was 3 metres and rising. Dalby is expected to reach about 3.5 metres by midday today, with possible further rises during the afternoon depending on upstream river levels and further rain.

Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine and Oakey Creek during Monday into Tuesday. Renewed rises and flooding is likely in tributary creeks and at Killarney to Warwick during the next 2 days with the forecast heavy rainfall.

Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Warra-Kogan Road Bridge to Dirranbandi.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Minor to moderate flooding is generally easing in the Upper Condamine with river levels at Warwick falling below minor flood level. Renewed rises and flooding is likely in tributary creeks and at Killarney to Warwick during the next 2 days with the forecast heavy rainfall.

MYALL CREEK:

Rainfalls have eased in the catchment of Myall Creek during the last 6 hours, although further rain periods will continue today. At 6am, Dalby was 3 metres and rising. Dalby is expected to reach about 3.5 metres by midday today, with possible further rises during the afternoon depending on upstream river levels and further rain.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with some renewed rises expected during the next several days. The river levels will however remain metres below the record peaks recorded during the first week of January.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone, with some renewed rises expected over the next several days. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 6am Monday, the Balonne River at St George was 13.2 metres and holding at its peak which was reached during Saturday. Major flood levels will remain high (above 13 metres) until mid-week.



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High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek. The peak flow will be in the Dirranbandi area by mid-week and in the Hebel area later this week.

Predicted River Heights/Flows:

Myall Creek at Dalby: Reach 3.5 metres (major flood level) by midday Monday

Balonne River at:

St George (manual) Remain above 13 metres during the next few days.

Next Issue:

The next warning will be issued at about 11am Monday.

(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	1.5m falling	05:23 AM MON 10/01/11
Condamine R at Elbow Valley #	3.68m steady	05:08 AM MON 10/01/11
Condamine R at Murrays Br #	5.95m falling	05:12 AM MON 10/01/11
Condamine R @ Warwick(Scots Col.) *	2.87m falling	03:00 AM MON 10/01/11
Condamine R at Warwick #	4.74m falling	04:35 AM MON 10/01/11
Condamine R at Tummalville *	6.72m falling	03:00 AM MON 10/01/11
Condamine R at Centenary Br	6.8m falling slowly	05:00 AM MON 10/01/11
North Condamine R at Lone Pine *	3.16m falling	03:00 AM MON 10/01/11
Oakey Ck at Fairview *	3.98m rising	03:00 AM MON 10/01/11
Condamine R at Loudoun Br *	5.55m rising	03:00 AM MON 10/01/11
Myall Ck at Dalby #	3.00m rising	06:00 AM MON 10/01/11
Condamine R at Warra-Kogan Rd Br	11.18m falling slowly	06:00 PM SUN 09/01/11
Condamine R at Chinchilla Weir TW *	11.53m rising	02:40 AM MON 10/01/11
Condamine R at Condamine	8.35m falling slowly	04:00 PM SUN 09/01/11
Condamine R at Cotswold *	12.88m falling	02:50 AM MON 10/01/11
Balonne R at Warkon	11.07m falling slowly	09:00 PM SUN 09/01/11
Yuleba Ck at Yuleba Forestry *	2.34m falling	11:40 PM SUN 09/01/11
Balonne R at Surat * (auto)	11.12m falling	02:50 AM MON 10/01/11
Balonne R at Surat (manual)	11.65m falling slowly	08:00 PM SUN 09/01/11
Bungil Ck at Roma	2.2m steady	07:00 PM SUN 09/01/11
Balonne R at Weribone *	12.6m falling	02:50 AM MON 10/01/11
Balonne R at Warroo	14.5m falling slowly	05:00 PM SUN 09/01/11
Maranoa R at Old Cashmere *	3.6m steady	02:00 AM MON 10/01/11
Balonne R at St George (manual)	13.2m steady	09:00 PM SUN 09/01/11
Balonne R at Whyenbah	8.1m steady	09:00 AM SUN 09/01/11
Culgoa R at Woolerbilla *	6.41m steady	04:00 AM MON 10/01/11
Balonne R Minor at Dirranbandi	5.3m rising slowly	06:00 AM SUN 09/01/11
Narran R at Dirranbandi-Hebel Rd *	5.26m rising slowly	03:00 PM SUN 09/01/11
Ballandool R at Hebel-Bollon Rd *	3.71m rising slowly	12:00 AM MON 10/01/11
Bokhara R at Hebel *	1.9m rising slowly	02:30 AM MON 10/01/11

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20800

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE STANLEY RIVER AND BRISBANE RIVER ABOVE WIVENHOE DAM

Issued at 9:16 AM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfall of up to 300mm has been recorded in the catchments of the Upper Brisbane and Stanley Rivers during the 24 hours to 9am Monday. Major flood levels continue although levels are currently easing. Further rises are possible and the heavy rainfall is expected to continue today.

UPPER BRISBANE RIVER:

Moderate to major flooding continues in much of the upper Brisbane catchment. Flood levels are now easing although further rainfall is expected today.

STANLEY RIVER:

Major flood levels are easing in the Stanley River at Peachester and Woodford. Further rises and high level major flooding are possible during Monday as rainfall continues.

Next Issue:

The next warning will be issued by 4pm Monday.

Latest River Heights:

Stanley R at Peachester #	7.36m falling	08:16 AM MON 10/01/11
Stanley R at Woodford #	8.28m falling	08:10 AM MON 10/01/11
Kilcoy Ck d/s Mt Kilcoy Weir *	6.36m falling	06:00 AM MON 10/01/11
Kilcoy Ck d/s Mt Kilcoy Weir #	5.92m steady	08:16 AM MON 10/01/11
Stanley R at Somerset Dam HW #	102.84m rising	08:18 AM MON 10/01/11
Cooyar Ck at Cooyar Ck #	6.36m falling	08:18 AM MON 10/01/11
Brisbane R at Linville *	7.54m falling	06:00 AM MON 10/01/11
Brisbane R at Linville #	6.94m falling	08:15 AM MON 10/01/11
Brisbane R at Devon Hills #	8.25m falling	08:19 AM MON 10/01/11
Emu Ck at Boat Mountain *	7.01m falling	07:28 AM MON 10/01/11
Emu Ck at Boat Mountain #	6.62m falling	08:13 AM MON 10/01/11
Maronghi Ck at Glendale *	3.23m falling	07:17 AM MON 10/01/11
Brisbane R at Gregor Ck *	9.6m falling	07:30 AM MON 10/01/11
Brisbane R at Gregor Ck #	11.44m falling	08:17 AM MON 10/01/11
Cressbrook Ck at Rosentreter's Br *	4.3m falling	07:20 AM MON 10/01/11
Cressbrook Ck at Rosentreter's Br #	4.2m falling	08:18 AM MON 10/01/11
Esk Ck at Falls Rd *	4.05m steady	06:00 AM MON 10/01/11
Splityard Creek Dam #	166.1m rising	07:57 AM MON 10/01/11
Brisbane R at Wivenhoe Dam	68.55m falling slowly	09:00 AM SUN 09/01/11



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Brisbane R at Wivenhoe Dam HW #	71.45m falling	08:18 AM MON 10/01/11
Brisbane R at Wivenhoe Dam HW #	71.47m rising	08:17 AM MON 10/01/11
Brisbane R at Wivenhoe Dam TW #	38.67m rising	08:17 AM MON 10/01/11
Brisbane R at Wivenhoe Dam TW #	38.6m falling	08:18 AM MON 10/01/11

*automatic station

Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20780

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR COASTAL STREAMS FROM MARYBOROUGH TO THE NSW BORDER

Issued at 9:19 AM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

A rainband stretches from Maroochydore to the Beenleigh area and inland to Stanthorpe. Rainfall totals of between 150-250mm and up to 320mm have been recorded in the Sunshine Coast region in the past 24 hours. Rainfall in the past six hours has been between 25-50mm across the Sunshine Coast Rivers and streams and in the lower Brisbane River and tributary creeks.

Further rainfall is expected to continue through the Southeast Coast district, far southern parts of the Wide Bay and Burnett District and eastern parts of the Darling Downs and Granite Belt district.

Minor flood levels are occurring in:

- North Pine River at Youngs Crossing
- Enoggera Creek between Enoggera Dam and Kelvin Grove
- Woogaroo Creek at Opossum
- Oxley Creek at Archerfield
- Upper Logan River at Diekman's Bridge and in the Rathdowney area.

Further rises and flash flooding are likely in the creeks and streams around Brisbane and Ipswich associated with the heaviest rainfall.

Flood warnings are current for the Mary River, Sunshine Coast streams and the Upper Brisbane and Lower Brisbane rivers. A severe weather warning is also current for this region.

Next Issue:

The next warning will be issued at about 4:30pm Monday.

Latest River Heights:

nil.

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

**FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER
BELOW WIVENHOE**

Issued at 10:28 AM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek and along the Bremer River. Moderate flood levels are likely at Ipswich. Further heavy rainfall is forecast for the catchments of the Brisbane and Bremer Rivers and Warrill and Lockyer Creeks during Monday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday. At the Brisbane City Gauge, river levels of about 2.3 metres are expected with the high tides on Tuesday and Wednesday causing minor flooding.

LOCKYER CREEK:

A major flood peak is currently around Glenore Grove of around 13 metres. Rises to around 14.5 metres are expected at Lyons Bridge later today and around 15 metres at Rifle Range Road. Higher levels are possible as rainfall continues.

BREMER RIVER:

River level rises and moderate flooding continue in the Rosewood area. Further rises are expected downstream during the next 24 hours with moderate flood levels of at least 10 metres expected in the Bremer River at Ipswich early on Tuesday.

MIDDLE AND LOWER BRISBANE:

SEQwater advises releases from Wivenhoe Dam will increase during Monday. Minor flooding is expected at Savages and moderate flooding at Mt Crosby overnight tonight.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.3 metres with the high tides on Tuesday and Wednesday. Further rises are possible as rainfall continues.

Predicted River Heights/Flows:

Ipswich: Reach at least 9.5 metres (moderate) during the early hours of Tuesday.

Moggill: Reach around 8 metres (below minor) on Tuesday morning.

Jindalee: Reach at least 5 metres (below minor) during Tuesday.

Brisbane: Reach about 2.3 metres (minor) with the high tides on Tuesday and



Australian Government
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Wednesday.

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 3:30pm Monday.

Latest River Heights:

Lockyer Ck at Gatton *	9.49m falling	08:20 AM MON 10/01/11
Laidley Ck at Laidley	3.85m steady	08:55 AM MON 10/01/11
Laidley Ck at Showground Weir *	5.3m falling	08:10 AM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.7m steady	08:00 AM MON 10/01/11
Lockyer Ck at Glenore Grove #	12.86m falling	09:18 AM MON 10/01/11
Lockyer Ck at Lyons Br #	14.07m rising	09:17 AM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	13.4m rising	08:20 AM MON 10/01/11
Brisbane R at Lowood Pump Stn #	13.21m rising	09:13 AM MON 10/01/11
Brisbane R at Savages Crossing #	12.95m rising	09:18 AM MON 10/01/11
Brisbane R at Burtons Br #	9.92m rising	09:11 AM MON 10/01/11
Brisbane R at Kholo Br #	5.19m rising	09:12 AM MON 10/01/11
Brisbane R at Mt Crosby #	13.43m rising	09:16 AM MON 10/01/11
Brisbane R at Colleges Crossing #	11.11m rising	09:20 AM MON 10/01/11
Bremer R at Adams Br *	1.93m rising	08:30 AM MON 10/01/11
Bremer R at Stokes Crossing #	2.3m rising	09:01 AM MON 10/01/11
Bremer R at Spicers Br #	5.02m falling	09:03 AM MON 10/01/11
Western Ck at Rosewood WWTP #	6.38m falling	07:09 AM MON 10/01/11
Bremer R at Rosewood #	5.06m falling	09:08 AM MON 10/01/11
Bremer R at Five Mile Br Walloon #	5.42m rising	08:24 AM MON 10/01/11
Bremer R at Walloon DERM *	6.49m rising	08:00 AM MON 10/01/11
Warrill Ck at Harrisville#	2.65m steady	08:17 AM MON 10/01/11
Warrill Ck at Amberley DNR *	5.34m rising	08:10 AM MON 10/01/11
Bremer R at Ipswich #	5.7m rising	09:08 AM MON 10/01/11
Brisbane R at Moggill #	4.72m rising	09:14 AM MON 10/01/11
Brisbane R at Jindalee Br #	2.8m rising	09:17 AM MON 10/01/11
Brisbane R at City Gauge #	0.65m rising	09:09 AM MON 10/01/11

*automatic station

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 10:53 AM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfalls have eased in the catchment of Myall Creek during the last 6 hours, although further rain periods will continue today. At 11am, Dalby was 3.4 metres and rising. Dalby is expected to reach about 3.5 metres by midday today, with possible further rises during the afternoon depending on upstream river levels and further rain.

Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine and Oakey Creek during Monday into Tuesday. Renewed rises and flooding is likely in tributary creeks and at Killarney to Warwick during the next 2 days with the forecast heavy rainfall.

Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Warra-Kogan Road Bridge to Dirranbandi.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Minor to moderate flooding is generally easing in the Upper Condamine with river levels at Warwick falling below minor flood level. Renewed rises and flooding is likely in tributary creeks and at Killarney to Warwick during the next 2 days with the forecast heavy rainfall.

MYALL CREEK:

Rainfalls have eased in the catchment of Myall Creek during the last 6 hours, although further rain periods will continue today. At 11am, Dalby was 3.4 metres and rising. Dalby is expected to reach about 3.5 metres by midday today, with possible further rises during the afternoon depending on upstream river levels and further rain.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with some renewed rises expected during the next several days. The river levels will however remain metres below the record peaks recorded during the first week of January.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone, with some renewed rises expected over the next several days. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 9am Monday, the Balonne River at St George was 13.18 metres and holding at its peak which was reached during Saturday. Major flood levels will remain high (above 13 metres) until mid-week.

High level major flooding is expected to continue in the Balonne River system



Australian Government
Bureau of Meteorology

downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek. The peak flow will be in the Dirranbandi area by mid-week and in the Hebel area later this week.

Predicted River Heights/Flows:

Myall Creek at Dalby: Reach 3.5 metres (major flood level) by midday Monday

Balonne River at: St George (manual) Remain above 13 metres during the next few days.

Next Issue:

The next warning will be issued at about 5pm Monday.

(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	4.1m falling	10:38 AM MON 10/01/11
Condamine R at Elbow Valley #	4.78m rising	10:34 AM MON 10/01/11
Condamine R at Murrays Br #	5.95m rising	10:26 AM MON 10/01/11
Condamine R @ Warwick(Scots Col.) *	2.75m steady	09:24 AM MON 10/01/11
Condamine R at Warwick #	4.69m steady	08:34 AM MON 10/01/11
Glengallan Ck near Backwater Ck #	2.15m falling	09:36 AM MON 10/01/11
Condamine R at Tummalville *	6.56m falling	09:00 AM MON 10/01/11
Condamine R at Centenary Br	6.77m falling slowly	09:00 AM MON 10/01/11
North Condamine R at Lone Pine *	3.11m rising	09:00 AM MON 10/01/11
Oakey Ck at Fairview *	5.83m rising	09:30 AM MON 10/01/11
Condamine R at Loudoun Br *	5.94m rising	09:00 AM MON 10/01/11
Myall Ck at Dalby #	3.39m rising	10:26 AM MON 10/01/11
Condamine R at Warra-Kogan Rd Br	10.86m falling	09:00 AM MON 10/01/11
Condamine R at Chinchilla Weir TW *	11.65m rising	08:10 AM MON 10/01/11
Condamine R at Condamine	8.35m steady	08:00 AM MON 10/01/11
Condamine R at Cotswold *	12.73m falling	08:30 AM MON 10/01/11
Balonne R at Warkon	10.99m falling slowly	09:00 AM MON 10/01/11
Yuleba Ck at Yuleba Forestry *	2.24m falling	08:00 AM MON 10/01/11
Balonne R at Surat * (auto)	11.07m falling	08:50 AM MON 10/01/11
Balonne R at Surat (manual)	11.55m falling slowly	06:00 AM MON 10/01/11
Bungil Ck at Roma	2.2m steady	07:00 PM SUN 09/01/11
Balonne R at Weribone *	12.54m falling	08:50 AM MON 10/01/11
Balonne R at Warroo	14.9m falling slowly	06:00 AM MON 10/01/11
Maranoa R at Old Cashmere *	3.57m steady	08:00 AM MON 10/01/11
Balonne R at St George (manual)	13.18m falling	09:00 AM MON 10/01/11
Balonne R at St George * (auto)	12.8m falling	08:50 AM MON 10/01/11
Balonne R at Whyenbah	8.11m steady	09:00 AM MON 10/01/11
Culgoa R at Woolerbilla *	6.42m steady	07:00 AM MON 10/01/11
Balonne R Minor at Dirranbandi	5.3m steady	06:00 AM MON 10/01/11
Narran R at Dirranbandi-Hebel Rd *	5.3m steady	08:00 AM MON 10/01/11
Ballandool R at Hebel-Bollon Rd *	3.74m rising	08:00 AM MON 10/01/11
Bokhara R at Hebel *	1.92m rising	08:00 AM MON 10/01/11

*automatic station

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



Australian Government
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IDQ20032

Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district.

Issued at 11:00 am on Monday 10 January 2011

Synoptic Situation: At 10am EST, an upper level low was located over the southwest of the Capricornia District. A surface trough was located off the southeast coast. Both of these systems are moving slowly west.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast district, far southern parts of the Wide Bay and Burnett District and eastern parts of the Darling Downs and Granite Belt district. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

The heavy rain areas and thunderstorms are expected to contract southwards into the Southeast Coast district and southeast parts of the Darling Downs and Granite Belt district during Tuesday.

Recent events: In the 24 hours to 9am EST Monday morning, Maleny received 321mm, West Bellthorpe 310 mm and Peachester 298 mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11am Monday

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20032
Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast district, southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district.

Issued at 11:05 am on Monday 10 January 2011

Synoptic Situation: At 10am EST, an upper level low was located over the southwest of the Capricornia District. A surface trough was located off the southeast coast. Both of these systems are moving slowly west.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast district, far southern parts of the Wide Bay and Burnett District and eastern parts of the Darling Downs and Granite Belt district. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

The heavy rain areas and thunderstorms are expected to contract southwards into the Southeast Coast district and southeast parts of the Darling Downs and Granite Belt district during Tuesday.

Recent events: In the 24 hours to 9am EST Monday morning, Maleny received 321mm, West Bellthorpe 310 mm and Peachester 298 mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 5 pm Monday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

**FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER
BELOW WIVENHOE INCLUDING BRISBANE CITY**

Issued at 4:16 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Further rainfall during Monday has led to renewed rises in the Lockyer Creek catchment. Rainfall is forecast to continue this evening and a return to moderate to major flood levels is expected overnight and during Tuesday. Major flood levels are expected to continue at Lyons Bridge with rises above 15 metres likely during Tuesday.

BREMER RIVER:

Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:

SEQwater advises releases from Wivenhoe Dam will increase during Monday. Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.



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(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.
Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 9pm Monday.

Latest River Heights:

Lockyer Ck at Gatton #	10.36m steady	03:04 PM MON 10/01/11
Laidley Ck at Laidley	6m rising	02:45 PM MON 10/01/11
Laidley Ck at Showground Weir #	6.98m rising	03:07 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.43m falling	01:00 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	11.36m falling	03:05 PM MON 10/01/11
Lockyer Ck at Lyons Br #	14.79m rising	03:02 PM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	13.4m rising	08:20 AM MON 10/01/11
Brisbane R at Lowood Pump Stn #	14.13m falling	03:07 PM MON 10/01/11
Brisbane R at Savages Crossing #	14.15m rising	03:09 PM MON 10/01/11
Brisbane R at Burtons Br #	10.88m rising	03:05 PM MON 10/01/11
Brisbane R at Kholo Br #	6.23m rising	03:06 PM MON 10/01/11
Brisbane R at Mt Crosby #	14.26m rising	03:07 PM MON 10/01/11
Brisbane R at Colleges Crossing #	11.96m rising	03:09 PM MON 10/01/11
Bremer R at Spresters Br #	5.07m rising	03:09 PM MON 10/01/11
Bremer R at Rosewood #	4.94m rising	03:02 PM MON 10/01/11
Bremer R at Five Mile Br Walloon #	5.12m falling	03:09 PM MON 10/01/11
Warrill Ck at Harrisville #	3.82m rising	03:05 PM MON 10/01/11
Warrill Ck at Amberley DNR *	5.34m rising	08:10 AM MON 10/01/11
Bremer R at Ipswich #	6.6m rising	02:40 PM MON 10/01/11
Brisbane R at Moggill #	5.52m rising	02:59 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.7m rising	02:50 PM MON 10/01/11
Brisbane R at City Gauge #	1.36m falling	03:09 PM MON 10/01/11

*automatic station

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



Australian Government
Bureau of Meteorology

IDQ20780

Australian Government Bureau of Meteorology
Queensland

Broadcasters are directed to use the SEWS for this warning.

TOP PRIORITY

FLASH FLOOD WARNING FOR LOCKYER CREEK

Issued at 5:00 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Very heavy rainfalls have been recorded in the Toowoomba area and caused extreme flash flooding. This rainfall is also causing extreme rises in the upper Lockyer Creek at Helidon with very fast and dangerous rises possible downstream at Gatton in the next few hours. Rises will extend downstream of Gatton during tonight.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast district, far southern parts of the Wide Bay and Burnett District and eastern parts of the Darling Downs and Granite Belt district. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

Further rises and flash flooding are likely in the creeks and streams around Brisbane and Ipswich associated with the heaviest rainfall.

Flood warnings are current for the Mary River, Sunshine Coast streams and the Upper Brisbane and Lower Brisbane rivers. A severe weather warning is also current for this region.

Next Issue:

The next warning will be issued at about 8:30pm Monday.

Latest River Heights:

nil.

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20032

Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast district, far southern parts of the Wide Bay and Burnett district and eastern parts of the Darling Downs and Granite Belt district.

Issued at 5:05 pm on Monday 10 January 2011

Synoptic Situation: At 4pm EST, an upper level low was located over the west of the Wide Bay and Burnett district. A surface trough was located off the east Queensland coast. The upper low is forecast to move southwest over the southern interior of Queensland while the surface trough remains slow moving.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast district and eastern parts of the Darling Downs and Granite Belt district. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

The heavy rain areas and thunderstorms are expected to contract southwards and gradually ease in the Southeast Coast district and eastern parts of the Darling Downs and Granite Belt district later on Tuesday.

Rainfall has eased in far southern parts of the Wide Bay and Burnett district and therefore the warning for this district is now CANCELLED.

Recent events: In the 24 hours to 9am EST Monday, Maleny received 321mm, West Bellthorpe 310 mm and Peachester 298 mm.
In the 7 hours since 9am EST Monday, Redbank Creek received 126mm, Toowoomba Airport 88mm and Mt Castle 80mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11pm Monday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20800

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE STANLEY RIVER AND BRISBANE RIVER ABOVE WIVENHOE DAM

Issued at 5:22 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfall of between 50-75mm has been recorded in the Cressbrook Creek catchment with localised totals in excess of 125mm. Major flood levels continue at Gregor Creek and at Rosentretter's Bridge although levels are currently easing. Further rises are possible as heavy rainfall is forecast into Tuesday.

UPPER BRISBANE RIVER:

Moderate to major flooding continues in much of the upper Brisbane catchment. Flood levels are now easing although further rainfall is forecast for the remainder of today and into Tuesday.

STANLEY RIVER:

Minor to moderate flood levels are easing in the Stanley River at Peachester and Woodford. Further rises are possible during the next 24 hours as rainfall continues.

Next Issue:

The next warning will be issued by 9am Tuesday.

Latest River Heights:

Stanley R at Peachester #	7.06m falling	05:07 PM MON 10/01/11
Stanley R at Woodford #	7.38m falling	05:07 PM MON 10/01/11
Kilcoy Ck d/s Mt Kilcoy Weir #	5.55m steady	05:09 PM MON 10/01/11
Stanley R at Somerset Dam HW #	103.34m rising	04:20 PM MON 10/01/11
Cooyar Ck at Cooyar Ck #	4.48m falling	05:09 PM MON 10/01/11
Brisbane R at Linville #	4.94m falling	05:09 PM MON 10/01/11
Brisbane R at Devon Hills #	6.11m falling	05:02 PM MON 10/01/11
Emu Ck at Boat Mountain #	5.84m rising	05:01 PM MON 10/01/11
Maronghi Ck at Glendale *	4.37m rising	04:30 PM MON 10/01/11
Brisbane R at Gregor Ck #	8.62m steady	04:53 PM MON 10/01/11
Cressbrook Ck at Rosentreters Br #	6.66m falling	05:06 PM MON 10/01/11
Esk Ck at Falls Rd *	3.95m falling	10:40 AM MON 10/01/11
Splityard Creek Dam #	162.7m rising	05:06 PM MON 10/01/11
Brisbane R at Wivenhoe Dam HW #	72.83m falling	05:07 PM MON 10/01/11
Brisbane R at Wivenhoe Dam TW #	39.92m rising	05:03 PM MON 10/01/11

*,# from automatic station

Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 5:25 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Rainfalls have eased in the catchment of Myall Creek during Monday although although further rain periods are likely during tonight and Tuesday morning. At 5pm, Myall Creek at Dalby was 3.74 metres and rising slowly at major flood level. A peak is expected at Dalby in the next 3 to 6 hours but renewed rises are still possible overnight Monday but dependent on further heavy rainfall.

Rises have been recorded during Monday in the Upper Condamine with moderate flood levels expected at Warwick overnight Monday.

Very heavy rainfall and flash flooding has been recorded in the Toowoomba area during Monday afternoon. Rises are expected in Gowrie Creek to Oakey during tonight and Tuesday.

Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine and Oakey Creek during Monday into Tuesday.

Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Warra-Kogan Road Bridge to Dirranbandi.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Rises and major flooding has developed in the upper Condamine river at Murrays Bridge. Rises to 6 metres (moderate flood level) are expected downstream at Warwick during Monday night.

MYALL CREEK:

Rainfalls have eased in the catchment of Myall Creek during Monday although further rain periods are likely during tonight and Tuesday morning. At 5pm, Myall Creek at Dalby was 3.74 metres and rising at major flood level. This level is about 0.2 metres higher than peak recorded on 27th December 2010.

A peak is expected at Dalby in the next 3 to 6 hours but renewed rises are still possible overnight Monday but dependent on further heavy rainfall.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with some renewed rises expected during the next several days. The river levels will however remain metres below the record peaks recorded during the first week of January.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone, with some renewed rises expected over the next several days. River levels in the area



between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 3pm Monday, the Balonne River at St George was 13.14 metres and holding at its peak which was reached during Saturday. Major flood levels will remain high (above 13 metres) until mid-week.

High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek. The peak flow will be in the Dirranbandi during Wednesday and in the Hebel area later this week.

Predicted River Heights/Flows:

Condamine R at Warwick Reach 6 metres (moderate) during Monday night.

Myall Creek at Dalby Major flood peak in the next 3 to 6 hours.
Remain high during Tuesday.

Balonne R at St George (manual) Remain above 13 metres for the next few days.

Next Issue:

The next warning will be issued at about 10pm Monday.
(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	3.65m falling	05:18 PM MON 10/01/11
Condamine R at Elbow Valley #	5.28m steady	05:08 PM MON 10/01/11
Condamine R at Murrays Br #	7.5m rising	04:32 PM MON 10/01/11
Condamine R @ Warwick(Scots Col.) *	3.43m rising	04:00 PM MON 10/01/11
Condamine R at Warwick	5.2m rising	04:41 PM MON 10/01/11
Glengallan Ck near Backwater Ck #	4.4m rising	05:21 PM MON 10/01/11
Condamine R at Tummalville *	6.53m rising	04:00 PM MON 10/01/11
Condamine R at Centenary Br	6.75m falling slowly	03:00 PM MON 10/01/11
North Condamine R at Lone Pine *	3.19m steady	04:00 PM MON 10/01/11
Oakey Ck at Fairview *	6.39m steady	04:00 PM MON 10/01/11
Condamine R at Loudoun Br *	6.35m rising	04:00 PM MON 10/01/11
Myall Ck at Dalby #	3.74m rising	04:44 PM MON 10/01/11
Condamine R at Warra-Kogan Rd Br	10.6m falling slowly	03:00 PM MON 10/01/11
Condamine R at Chinchilla Weir TW *	11.71m rising	02:20 PM MON 10/01/11
Condamine R at Condamine	8.35m steady	08:00 AM MON 10/01/11
Condamine R at Cotswold *	12.56m falling	02:50 PM MON 10/01/11
Balonne R at Warkon	10.99m falling slowly	09:00 AM MON 10/01/11
Yuleba Ck at Yuleba Forestry *	2.17m steady	02:10 PM MON 10/01/11
Balonne R at Surat * (auto)	11m rising	03:00 PM MON 10/01/11
Balonne R at Surat (manual)	11.55m falling slowly	06:00 AM MON 10/01/11
Bungil Ck at Roma	2.2m steady	07:00 PM SUN 09/01/11
Balonne R at Weribone *	12.47m falling	03:00 PM MON 10/01/11
Balonne R at Warroo	14.9m falling slowly	06:00 AM MON 10/01/11
Maranoa R at Old Cashmere *	3.56m steady	03:00 PM MON 10/01/11
Balonne R at St George (manual)	13.14m falling	03:00 PM MON 10/01/11



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Balonne R at St George * (auto)	12.77m rising	02:30 PM MON 10/01/11
Balonne R at Whyenbah	8.11m steady	09:00 AM MON 10/01/11
Culgoa R at Woolerbilla *	6.43m steady	01:00 PM MON 10/01/11
Balonne R Minor at Dirranbandi	5.3m steady	06:00 AM MON 10/01/11
Narran R at Dirranbandi-Hebel Rd *	5.31m steady	03:00 PM MON 10/01/11
Ballandool R at Hebel-Bollon Rd *	3.76m steady	01:10 PM MON 10/01/11
Bokhara R at Hebel *	1.97m rising	01:40 PM MON 10/01/11

*,# automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

**FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER
BELOW WIVENHOE INCLUDING BRISBANE CITY**

Issued at 6:12 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

LOCKYER CREEK: Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Laidley Creek at Mulgowie. These will extend to Gatton and areas downstream during the evening and overnight. Severe record major flooding is expected in areas downstream of Gatton overnight and during Tuesday.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Laidley Creek at Mulgowie. These will extend to Gatton and areas downstream during the evening and overnight. High level record major flooding is expected in areas downstream of Gatton overnight and during Tuesday.

BREMER RIVER:

Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley



overnight.

MIDDLE AND LOWER BRISBANE:

SEQwater advises releases from Wivenhoe Dam will increase during Monday. Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.

Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 9pm Monday.

Latest River Heights:

Lockyer Ck at Helidon *	12.66m rising	02:50 PM MON 10/01/11
Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	3.27m falling	08:20 AM MON 10/01/11
Sandy Creek at Sandy Creek Road #	3.8m falling	05:22 PM MON 10/01/11
Ma Ma Ck at Harm's *	2.28m falling	08:10 AM MON 10/01/11
Tenthill Ck at Tenthill *	4.53m rising	04:10 PM MON 10/01/11
Lockyer Ck at Gatton *	9.07m rising	05:30 PM MON 10/01/11
Lockyer Ck at Gatton #	13.22m rising	05:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	7.88m rising	04:00 PM MON 10/01/11
Laidley Ck at Laidley	6m rising	02:45 PM MON 10/01/11
Laidley Ck at Showground Weir *	8.95m rising	05:30 PM MON 10/01/11
Laidley Ck at Showground Weir #	9m rising	05:31 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.28m falling	03:00 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	10.78m falling	05:24 PM MON 10/01/11
Lockyer Ck at Lyons Br #	14.93m rising	05:05 PM MON 10/01/11



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Lockyer Ck at Rifle Range Rd * 14.85m rising 05:30 PM MON 10/01/11
Lockyer Ck at O'Reilly's Weir # 16.38m rising 05:29 PM MON 10/01/11
Brisbane R at Lowood Pump Stn # 14.53m falling 05:28 PM MON 10/01/11
Brisbane R at Savages Crossing # 14.37m rising 05:29 PM MON 10/01/11
Brisbane R at Burtons Br # 11.08m rising 05:23 PM MON 10/01/11
Brisbane R at Kholo Br # 6.63m rising 05:28 PM MON 10/01/11
Brisbane R at Mt Crosby # 14.64m rising 05:31 PM MON 10/01/11
Brisbane R at Mt Crosby # 14.08m falling 04:39 PM MON 10/01/11
Brisbane R at Colleges Crossing # 12.41m rising 05:33 PM MON 10/01/11
Bremer R at Stokes Crossing # 4.6m falling 05:20 PM MON 10/01/11
Warrill Ck at Churchbank Weir * 2.35m rising 05:30 PM MON 10/01/11
Warrill Ck at Greens Rd Amberley # 5.6m rising 05:26 PM MON 10/01/11
Bremer R at One Mile Br # 11.8m steady 05:03 PM MON 10/01/11
Bremer R at Hancocks Br Brassall # 9.28m rising 04:33 PM MON 10/01/11
Bremer R at Ipswich # 6.85m steady 05:27 PM MON 10/01/11
Brisbane R at Moggill # 5.87m rising 05:18 PM MON 10/01/11
Brisbane R at Jindalee Br # 3.75m steady 04:07 PM MON 10/01/11
Brisbane R at City Gauge # 0.81m falling 05:21 PM MON 10/01/11

*automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20032
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Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast, Darling Downs and Granite Belt and eastern parts of the Maranoa and Warrego districts.

Issued at 6:30 pm on Monday 10 January 2011

Synoptic Situation: At 6pm EST, an upper level low was located over the west of the Wide Bay and Burnett district. A surface trough was located off the east Queensland coast. The upper low is forecast to move southwest over the southern interior of Queensland while the surface trough remains slow moving.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast, Darling Downs and Granite Belt and eastern parts of the Maranoa and Warrego districts this evening. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

The heavy rain areas and thunderstorms are expected to contract into the Southeast Coast and eastern parts of the Darling Downs and Granite Belt districts during Tuesday. These conditions should gradually ease later in the day.

Recent events: In the 24 hours to 9am EST Monday, Maleny received 321mm, West Bellthorpe 310 mm and Peachester 298 mm.
In the 7 hours since 9am EST Monday, Redbank Creek received 126mm, Toowoomba Airport 88mm and Mt Castle 80mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11pm Monday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



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IDQ20780

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Queensland

Broadcasters in the Lockyer Valley area are directed to use the SEWS for this warning.

TOP PRIORITY

FLASH FLOOD WARNING FOR LOCKYER CREEK

Issued at 8:37 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Very heavy rainfalls have been recorded in the Toowoomba, Crows Nest and Gatton area and have caused extreme rises in the upper Lockyer Creek between Helidon and Gatton with the peak currently arriving in the Glenore Grove area.

Record flood levels of 18.92 metres were recorded at Gatton this evening before the station failed. This level is well above the previous record peak of 16.33 metres from the February 1893 flood.

Very fast and dangerous rises are occurring downstream of Gatton to Glenore Grove and will extend downstream to Lyons Bridge and O'Reilly Weir during Monday night and Tuesday morning.

Contact the SES on 132 500 for emergency assistance if required.

Next Issue:

The next warning will be issued at about midnight Monday.

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20032
Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts.

Issued at 7:50 pm on Monday 10 January 2011

Synoptic Situation: At 7pm EST, an upper level low was located over the west of the Wide Bay and Burnett district. A surface trough was located off the east Queensland coast. The upper low is forecast to move southwest over the southern interior of Queensland while the surface trough remains slow moving.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts this evening and overnight. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

The heavy rain areas and thunderstorms are expected to contract into the Southeast Coast and eastern parts of the Darling Downs and Granite Belt districts during Tuesday. These conditions should gradually ease later in the day.

Recent events: In the 24 hours to 9am EST Monday, Maleny received 321mm, West Bellthorpe 310 mm and Peachester 298 mm.
In the 7 hours since 9am EST Monday, Redbank Creek received 126mm, Toowoomba Airport 88mm and Mt Castle 80mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11pm Monday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

**FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER
BELOW WIVENHOE INCLUDING BRISBANE CITY**

Issued at 9:44 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

LOCKYER CREEK: Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Gatton and Laidley Creek at Mulgowie. Lockyer Creek at Gatton reached 19 metres, which is more than 2.5 metres above the previous record.

Rapid stream rises are occurring at Glenore Grove, and the river has reached 14.42 metres at 9pm. A peak in the next few hours is expected, with flood levels in excess of 15 metres possible.

Stream rises in the Lockyer Creek downstream are expected overnight, with the main flood waters reaching Lyons Bridge overnight.

Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek, Warrill Creek and along the Bremer River. Major flood levels are likely at Ipswich during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, a river levels of about 2.1 metres is expected with the afternoon high tide on Tuesday and about 3 metres is expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment at Helidon and Gatton and Laidley Creek at Mulgowie. These will extend to Lyons Bridge in the next few hours and areas downstream later Monday and early Tuesday. High level major flooding is expected in areas downstream of Gatton overnight and during Tuesday.

BREMER RIVER:

Rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels over 5 metres are expected at Rosewood overnight.



The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Further rainfall during Monday will lead to increasing river levels along Warrill Creek with levels expected to reach above 6 metres at Amberley overnight.

MIDDLE AND LOWER BRISBANE:

SEQwater advises releases from Wivenhoe Dam will increase during Monday. Moderate flooding is expected at Savages Crossing and at Mt Crosby Weir overnight tonight and during Tuesday.

The Brisbane River at the City Gauge (lower end of Edward Street and at Thornton Street) is expected to reach about 2.1 metres with the afternoon high tide on Tuesday and reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon. Quicker rises and higher levels are possible depending on further rainfall tonight.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres with the afternoon high tide on Tuesday.
Reach about 3 metres with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about midnight Monday.

Latest River Heights:

Lockyer Ck at Helidon *	12.66m rising	02:50 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	4.28m falling	08:40 PM MON 10/01/11
Sandy Creek at Sandy Creek Road #	2.85m falling	08:49 PM MON 10/01/11
Ma Ma Ck at Harm's *	2.28m falling	08:10 AM MON 10/01/11
Tenthill Ck at Tenthill *	4.52m falling	08:40 PM MON 10/01/11
Lockyer Ck at Gatton *	18.92m rising	18:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	6.68m falling	07:30 PM MON 10/01/11
Laidley Ck at Laidley	8.6m rising slowly	06:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	9.22m rising	08:58 PM MON 10/01/11



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Laidley Ck at Warrego Hwy *	5.38m rising	08:00 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	14.42m rising	08:58 PM MON 10/01/11
Lockyer Ck at Lyons Br #	15.07m rising	08:56 PM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	14.99m rising	08:40 PM MON 10/01/11
Lockyer Ck at O'Reilly's Weir #	17.14m rising	08:55 PM MON 10/01/11
Brisbane R at Lowood Pump Stn #	15.17m falling	08:58 PM MON 10/01/11
Brisbane R at Savages Crossing *	14.76m falling	08:40 PM MON 10/01/11
Brisbane R at Savages Crossing #	14.87m steady	08:53 PM MON 10/01/11
Brisbane R at Burtons Br #	11.44m rising	08:47 PM MON 10/01/11
Brisbane R at Kholo Br #	7.09m rising	08:47 PM MON 10/01/11
Brisbane R at Mt Crosby #	15.05m rising	08:57 PM MON 10/01/11
Brisbane R at Colleges Crossing #	12.91m rising	09:00 PM MON 10/01/11
Warrill Ck at Greens Rd Amberley #	5.92m falling	08:56 PM MON 10/01/11
Bremer R at One Mile Br #	12.2m rising	08:59 PM MON 10/01/11
Bremer R at Hancocks Br Brassall #	9.58m rising	08:27 PM MON 10/01/11
Bremer R at Ipswich #	7.2m rising	08:56 PM MON 10/01/11
Brisbane R at Moggill #	6.12m rising	08:53 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.75m steady	07:07 PM MON 10/01/11
Brisbane R at City Gauge *	0.41m steady	08:40 PM MON 10/01/11

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 10:32 PM on Monday the 10th of January 2011
by the Bureau of Meteorology, Brisbane.

Major flood levels have steadied in Myall Creek at Dalby and a moderate flood peak is expected in the upper Condamine River at Warwick by midnight Monday. Fast rises and major flooding is developing in Hodgson and Dalrymple Creeks and is expected in the Condamine River downstream of Warwick to Tummaville during Tuesday and Wednesday.

Heavy rainfall of up to 200 millimetres has been recorded in the catchment of Charleys Creek just upstream of the Chinchilla area and fast rises to major flood levels are expected at Chinchilla during Tuesday.

Very heavy rainfall and flash flooding has been recorded in the Toowoomba area during Monday afternoon and rises are occurring in Gowrie Creek.

Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine, Myall Creek and Charleys Creek during Monday night and into Tuesday.

Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Loudoun Bridge to Dirranbandi.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Major flooding is easing in the upper Condamine River at Murrays Bridge. A moderate flood peak is expected in the upper Condamine River at Warwick by midnight Monday. Fast rises are occurring in the tributary streams downstream of Warwick with renewed rises and major flooding expected downstream to Tummaville during the next few days. These rises will extend downstream to Loudoun Bridge by the end of this week.

MYALL CREEK:

River levels have steadied at around 3.74 metres in Myall Creek at Dalby. This level is about 0.2 metres higher than peak recorded on 27th December 2010. Further heavy rainfall and renewed rises are possible at Dalby during tonight and Tuesday.

CHARLEYS CREEK:

Very heavy rainfall of up to 200 millimetres has been reported in the catchment of Charleys Creek in the area near Chinchilla. Fast rises will continue during tonight at Chinchilla with levels expected to reach 7 metres (major) during Tuesday morning and possibly above 7.5 metres later Tuesday.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:



Major flooding continues with renewed rises expected during the next several days. Flood levels could reach the high levels of late December 2010 at Condamine but it is too early to make peak predictions.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone, with renewed rises expected over the next several days. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 9pm Monday, the Balonne River at St George was 13.12 metres and falling slowly. Major flood levels will remain high (above 13 metres) until mid-week.

High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek.

The peak flow will be in the Dirranbandi during Wednesday and in the Hebel area later this week.

Predicted River Heights/Flows:

Condamine R at Warwick Peak up 6.5 metres (moderate) by midnight Monday.

Charleys Creek at Chinchilla Reach 7 metres (major) during Tuesday morning
Possibly reach 7.5 metres Tuesday afternoon

Myall Creek at Dalby Further rises and high level major flooding possible
if heavy rainfall returns to the catchment.

Balonne R at St George (manual) Remain above 13 metres for the next few days.

Next Issue:

The next warning will be issued at about 7am Monday or earlier if required.
(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	2.75m falling	09:37 PM MON 10/01/11
Condamine R at Elbow Valley #	5.43m rising	09:15 PM MON 10/01/11
Condamine R at Murrays Br #	7.45m falling	09:39 PM MON 10/01/11
Condamine R @ Warwick(Scots Col.) *	4.62m rising	08:20 PM MON 10/01/11
Condamine R at Warwick #	6.2m rising	04:41 PM MON 10/01/11
Glengallan Ck near Backwater Ck #	4.55m falling	09:06 PM MON 10/01/11
Condamine R at Tummaville *	7.1m rising	08:00 PM MON 10/01/11
Condamine R at Centenary Br	6.72m falling slowly	06:00 PM MON 10/01/11
North Condamine R at Lone Pine *	3.12m falling	09:00 PM MON 10/01/11
Oakey Ck at Fairview *	6.39m steady	08:00 PM MON 10/01/11
Condamine R at Loudoun Br *	6.45m rising	08:00 PM MON 10/01/11
Myall Ck at Dalby #	3.69m steady	09:03 PM MON 10/01/11
Condamine R at Warra-Kogan Rd Br	10.58m falling slowly	06:00 PM MON 10/01/11
Condamine R at Chinchilla Weir TW *	11.96m rising	08:30 PM MON 10/01/11
Charleys Ck at Chinchilla	4.93m rising	09:10 PM MON 10/01/11



Australian Government
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Condamine R at Condamine	9.55m rising fast	08:30 PM MON 10/01/11
Condamine R at Cotswold *	12.59m rising	08:00 PM MON 10/01/11
Balonne R at Warkon	10.99m falling slowly	09:00 AM MON 10/01/11
Yuleba Ck at Yuleba Forestry *	2.17m rising	08:10 PM MON 10/01/11
Balonne R at Surat * (auto)	10.92m rising	08:50 PM MON 10/01/11
Balonne R at Surat (manual)	11.55m falling slowly	06:00 AM MON 10/01/11
Balonne R at Weribone *	12.41m falling	08:50 PM MON 10/01/11
Balonne R at Warroo	14.9m falling slowly	06:00 AM MON 10/01/11
Maranoa R at Old Cashmere *	3.57m steady	08:00 PM MON 10/01/11
Balonne R at St George (manual)	13.12m falling slowly	09:00 PM MON 10/01/11
Balonne R at St George * (auto)	12.74m falling	08:20 PM MON 10/01/11
Balonne R at Whyenbah	8.11m steady	09:00 AM MON 10/01/11
Culgoa R at Woolerbilla *	6.47m rising	07:30 PM MON 10/01/11
Balonne R Minor at Dirranbandi	5.3m steady	06:00 AM MON 10/01/11
Narran R at Dirranbandi-Hebel Rd *	5.31m steady	03:00 PM MON 10/01/11
Ballandool R at Hebel-Bollon Rd *	3.8m steady	08:00 PM MON 10/01/11
Bokhara R at Hebel *	2.03m rising	08:30 PM MON 10/01/11

*,# from automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20032
Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts.

Issued at 11:00 pm on Monday 10 January 2011

Synoptic Situation: At 10pm EST, an upper level low was located over the far southeast of the Central Highlands and Coalfields district. The upper low is forecast to move southwest over the southern interior of Queensland while weakening during Tuesday.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts tonight. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

The heavy rain areas and thunderstorms are expected to contract into the Southeast Coast and eastern parts of the Darling Downs and Granite Belt districts during Tuesday. These conditions should gradually ease later in the day.

Recent events: In the 1 hour to 11pm EST Monday, Monsildale and Mt Stanley [situated in northern parts of the Southeast Coast district] both received 58mm. In the 13 hours since 9am EST Monday, Redbank Creek received 132mm, Ballon 124mm and Mt Castle 103mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 5am Tuesday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

**FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER
BELOW WIVENHOE INCLUDING BRISBANE CITY**

Issued at 12:06 AM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

The main flood waters in the Lockyer Creek are now at Glenore Grove, with strong stream rises expected overnight and early Tuesday morning in the Lockyer Creek downstream of Glenore Grove.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane overnight and through Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton this evening before the station failed. This level is well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently around Glenore Grove, with strong stream rises at Lyons Bridge expected in the next few hours. The Lockyer Creek at Glenore Grove has reached 14.60 metres at 11:30pm. A peak in the next few hours is expected, with flood levels in excess of 15 metres possible.

Renewed stream rises have commenced at the Lockyer River at Lyons Bridge with a peak between 16 and 16.5 metres expected early Tuesday morning.

BREMER RIVER:

The rainfall during Monday will lead to renewed rises and a return to moderate flood levels along the Bremer River to Walloon. Levels between 5 and 6 metres are expected at Rosewood overnight.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.



WARRILL CREEK

The rainfall during Monday has lead to increases in Warrill Creek with Amberley currently peaking around 6 metres.

MIDDLE AND LOWER BRISBANE:

Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 4am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	4.28m falling	08:40 PM MON 10/01/11
Sandy Creek at Sandy Creek Road #	2.45m rising	11:01 PM MON 10/01/11
Ma Ma Ck at Harm's *	2.28m falling	08:10 AM MON 10/01/11
Tenthill Ck at Tenthill *	4.07m falling	10:30 PM MON 10/01/11
Lockyer Ck at Gatton *	18.92m rising	6:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	5.63m falling	10:10 PM MON 10/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	8.56m falling	11:16 PM MON 10/01/11
Bill Gunn Dam #	110.1m steady	11:14 PM MON 10/01/11
Laidley Ck at Warrego Hwy *	5.8m rising	09:50 PM MON 10/01/11
Lockyer Ck at Glenore Grove #	14.6m rising	11:12 PM MON 10/01/11
Lockyer Ck at Lyons Br #	15.17m rising	10:38 PM MON 10/01/11
Lockyer Ck at Rifle Range Rd *	14.99m rising	08:40 PM MON 10/01/11
Lockyer Ck at O'Reilly's Weir #	17.5m rising	11:16 PM MON 10/01/11
Brisbane R at Lowood Pump Stn #	15.45m rising	11:10 PM MON 10/01/11



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Brisbane R at Savages Crossing #	15.25m falling	11:17 PM MON 10/01/11
Brisbane R at Burtons Br #	11.8m rising	11:14 PM MON 10/01/11
Brisbane R at Kholo Br #	7.41m rising	11:15 PM MON 10/01/11
Brisbane R at Mt Crosby #	15.31m rising	11:15 PM MON 10/01/11
Brisbane R at Colleges Crossing #	13.21m rising	11:18 PM MON 10/01/11
Warrill Ck at Greens Rd Amberley #	5.94m rising	11:08 PM MON 10/01/11
Bremer R at One Mile Br #	12.75m rising	11:08 PM MON 10/01/11
Bremer R at Hancocks Br Brassall #	10.13m rising	11:17 PM MON 10/01/11
Bremer R at Ipswich #	7.6m rising	11:17 PM MON 10/01/11
Brisbane R at Moggill #	6.42m rising	11:14 PM MON 10/01/11
Brisbane R at Jindalee Br #	3.9m rising	10:59 PM MON 10/01/11
Brisbane R at City Gauge #	1.05m rising	11:09 PM MON 10/01/11

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



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IDQ20780

Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY

FLASH FLOOD WARNING FOR LOCKYER CREEK

Issued at 12:19 AM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

Further rainfall during Monday has led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton this evening before the station failed. This level is well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently around Glenore Grove, with strong stream rises at Lyons Bridge expected in the next few hours. The Lockyer Creek at Glenore Grove has reached 14.60 metres at 11:30pm. A peak in the next few hours is expected, with flood levels in excess of 15 metres possible.

Renewed stream rises have commenced at the Lockyer River at Lyons Bridge with a peak between 16 and 16.5 metres expected early Tuesday morning.

Contact the SES on 132 500 for emergency assistance if required.

Next Issue:

The next warning will be issued at about 4am Tuesday.

Latest River Heights:

nil.

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

**FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER
BELOW WIVENHOE INCLUDING BRISBANE CITY**

Issued at 4:06 AM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge, with strong stream rises expected during Tuesday.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam are expected to increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

LOCKYER CREEK:

Extremely heavy rainfall during Monday led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton Monday evening before the station failed. This level was well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently arriving at Lyons Bridge, with strong stream rises expected in the next few hours. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood.

Renewed stream rises have commenced in Lockyer Creek at Lyons Bridge with a peak between 16 and 16.5 metres expected Tuesday morning. This is likely to be similar in level to the 1996 flood.

BREMER RIVER:

The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight Monday.

The Bremer River at Ipswich is expected to reach about 12.7 metres on Tuesday afternoon. Higher levels are possible.

WARRILL CREEK

Warrill Creek at Amberley peaked at 5.98 metres around 9pm Monday.



MIDDLE AND LOWER BRISBANE:

Moderate flooding is developing at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and levels of about 3 metres are expected with the high tides on Wednesday causing moderate flooding.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach about 12.7 metres (major) during Tuesday afternoon.

Moggill: Reach about 12 metres (minor) during Tuesday afternoon.

Jindalee: Reach about 7 metres (minor) overnight Tuesday.

Brisbane: Reach about 2.1 metres (minor) with the afternoon high tide on Tuesday. Reach about 3 metres (moderate) with the high tides on Wednesday.

(3 metres at the Brisbane City gauge is about 1.5 metres higher than the highest tide of the year at this location).

Further rises are possible at all four locations depending on further rain.

Next Issue:

The next warning will be issued at about 8am Tuesday.

Latest River Heights:

Lockyer Ck at Helidon #	12.68m steady	03:02 PM MON 10/01/11
Flagstone Ck at Brown-Zirbels Rd *	3.49m falling	02:10 AM TUE 11/01/11
Sandy Creek at Sandy Creek Road #	2.15m falling	03:19 AM TUE 11/01/11
Ma Ma Ck at Harm's *	3.26m rising	02:30 AM TUE 11/01/11
Tenthill Ck at Tenthill *	5.57m rising	02:40 AM TUE 11/01/11
Lockyer Ck at Gatton #	18.92m rising	06:30 PM MON 10/01/11
Laidley Ck at Mulgowie *	6.39m rising	02:20 AM TUE 11/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir #	7.84m rising	03:25 AM TUE 11/01/11
Laidley Ck at Warrego Hwy *	6.41m rising	02:00 AM TUE 11/01/11
Lockyer Ck at Glenore Grove #	13.8m falling	03:24 AM TUE 11/01/11
Lockyer Ck at Lyons Br #	15.55m rising	03:23 AM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	15.39m rising	02:40 AM TUE 11/01/11
Lockyer Ck at O'Reilly's Weir #	18m falling	03:28 AM TUE 11/01/11
Brisbane R at Lowood Pump Stn #	15.93m falling	03:31 AM TUE 11/01/11
Brisbane R at Savages Crossing #	15.89m rising	03:29 AM TUE 11/01/11
Brisbane R at Burtons Br #	12.22m rising	03:29 AM TUE 11/01/11
Brisbane R at Kholo Br #	7.99m rising	03:29 AM TUE 11/01/11
Brisbane R at Mt Crosby #	15.82m steady	03:30 AM TUE 11/01/11
Brisbane R at Mt Crosby #	14.08m falling	04:39 PM MON 10/01/11
Brisbane R at Colleges Crossing #	13.91m rising	03:32 AM TUE 11/01/11



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Bremer R at Rosewood#	5.56m falling	03:11 AM TUE 11/01/11
Bremer R at Five Mile Br Walloon #	6.4m rising	03:15 AM TUE 11/01/11
Warrill Ck at Greens Rd Amberley #	5.84m falling	03:29 AM TUE 11/01/11
Bremer R at One Mile Br #	13.75m rising	03:31 AM TUE 11/01/11
Bremer R at Hancocks Br Brassall #	11.33m rising	03:22 AM TUE 11/01/11
Bremer R at Ipswich #	8.55m rising	03:31 AM TUE 11/01/11
Brisbane R at Moggill #	7.07m rising	03:29 AM TUE 11/01/11
Brisbane R at Jindalee Br #	4.5m rising	03:29 AM TUE 11/01/11
Brisbane R at City Gauge #	1.4m falling	03:15 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20780

Australian Government Bureau of Meteorology
Queensland

FLASH FLOOD WARNING FOR LOCKYER CREEK

Issued at 4:10 AM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

Extremely heavy rainfall during Monday led to extreme rises in the Lockyer Creek catchment and Laidley Creek at Mulgowie. Record flood levels of 18.92 metres were recorded at Gatton Monday evening before the station failed. This level was well above the previous record peak of 16.33 metres from the February 1893 flood.

The main flood waters are currently arriving at Lyons Bridge, with strong stream rises expected in the next few hours. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood.

Renewed stream rises have commenced in Lockyer Creek at Lyons Bridge with a peak between 16 and 16.5 metres expected Tuesday morning. This is likely to be similar in level to the 1996 flood.

Contact the SES on 132 500 for emergency assistance if required.

Next Issue:

The next warning will be issued at about noon Tuesday.

Latest River Heights:

nil.

Warnings and River Height Bulletins are available at <http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



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IDQ20032
Australian Government Bureau of Meteorology
Queensland

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation

For people in the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts.

Issued at 5:05 am on Tuesday 11 January 2011

Synoptic Situation: At 4am EST, an upper level low was located over the Darling Downs and Granite Belt district. The upper low is forecast to move southwest over the southern interior of Queensland while weakening during the day.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast, Darling Downs and Granite Belt, far southern parts of the Wide Bay and Burnett and eastern parts of the Maranoa and Warrego districts today. Heavy falls may lead to localised flash flooding and/or worsen existing river flooding.

The heavy rain areas and thunderstorms are expected to contract to the south by late today, before gradually easing.

Recent events: Rainfall since 9am Monday Monsildale 160mm, Mt Stanley 135mm, and Redbank Creek 134mm.

Flood warnings are current for various rivers and streams in these districts; refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11am Tuesday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 6:55 AM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

A return to flood levels of around 3.7 metres is expected at Dalby later today. Moderate flooding is rising at Warwick. Fast rises and major flooding are developing in Hodgson and Dalrymple Creeks and are expected in the Condamine River downstream of Warwick to Tummaville during Tuesday and Wednesday.

Heavy rainfall of up to 200 millimetres has been recorded in the catchment of Charleys Creek just upstream of the Chinchilla area and fast rises to major flood levels are expected at Chinchilla during Tuesday.

Very heavy rainfall and flash flooding has been recorded in the Toowoomba area during Monday afternoon and rises continue in Gowrie Creek.

Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine, Myall Creek and Charleys Creek during Tuesday.

Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Loudoun Bridge to Dirranbandi.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Major flooding is rising again in the upper Condamine River at Murrays Bridge. Moderate flood levels will continue in the upper Condamine River at Warwick. It is not possible to forecast a peak at this stage with continued rainfall.

Further heavy rainfall is occurring this morning and renewed fast rises are likely in the tributary streams downstream of Warwick with renewed rises and major flooding expected downstream to Tummaville during the next few days. These rises will extend downstream to Loudoun Bridge by the end of this week.

MYALL CREEK:

River levels have fallen slightly and are currently around 3.5 metres at 6am at Dalby. Levels are likely to fall slightly during today but further rises are forecast with levels returning to about 3.7 metres today.

CHARLEYS CREEK:

Very heavy rainfall of up to 200 millimetres was reported in the catchment yesterday. Fast rises will continue during today at Chinchilla with levels expected to reach 7 metres (major) during Tuesday and possibly above 7.5 metres.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with renewed rises expected during the next several days. Flood levels could reach the high levels of late December 2010 at



Condamine but it is too early to make peak predictions.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone, with renewed rises expected over the next several days. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 6am Tuesday, the Balonne River at St George was 13.1 metres and falling slowly. Major flood levels will remain high (above 13 metres) until Wednesday.

High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek.

The peak flow will be in the Dirranbandi during Wednesday and in the Hebel area later this week.

Predicted River Heights/Flows:

Condamine R at Warwick Peak up 6.5 metres (moderate) during Tuesday. Further rises are possible as rainfall continues.

Charleys Creek at Chinchilla Reach 7 metres (major) during Tuesday morning
Possibly reach 7.5 metres Tuesday afternoon

Myall Creek at Dalby Fall this morning before rising again with a peak expected overnight to around 3.7 metres again.

Balonne R at St George (manual) Remain above 13 metres for the next few days.

Next Issue:

The next warning will be issued at about 2pm Tuesday or earlier if required.
(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	4.5m rising	06:10 AM TUE 11/01/11
Condamine R at Elbow Valley #	5.53m rising	05:31 AM TUE 11/01/11
Condamine R at Murrays Br #	7.5m rising	05:45 AM TUE 11/01/11
Condamine R @ Warwick(Scots Col.) *	5.18m steady	05:08 AM TUE 11/01/11
Glengallan Ck near Backwater Ck #	4.5m falling	06:05 AM TUE 11/01/11
Condamine R at Tumnaville *	9.77m rising	05:00 AM TUE 11/01/11
Condamine R at Centenary Br	6.8m rising	05:00 AM TUE 11/01/11
North Condamine R at Lone Pine *	3.76m rising	05:00 AM TUE 11/01/11
Oakey Ck at Fairview *	6.39m steady	05:00 AM TUE 11/01/11
Condamine R at Loudoun Br *	6.65m rising	05:00 AM TUE 11/01/11
Myall Ck at Dalby #	3.49m falling	06:08 AM TUE 11/01/11
Condamine R at Warra-Kogan Rd Br	10.58m falling slowly	06:00 PM MON 10/01/11
Condamine R at Chinchilla Weir TW *	12.18m rising	05:20 AM TUE 11/01/11
Charleys Ck at Chinchilla	6.24m rising slowly	06:00 AM TUE 11/01/11
Condamine R at Condamine	9.95m rising	12:00 AM TUE 11/01/11
Condamine R at Cotswold *	12.74m steady	05:30 AM TUE 11/01/11



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Yuleba Ck at Yuleba Forestry *	2.46m rising	05:30 AM TUE 11/01/11
Balonne R at Surat * (auto)	10.83m falling	05:30 AM TUE 11/01/11
Balonne R at Weribone *	12.34m steady	05:00 AM TUE 11/01/11
Maranoa R at Old Cashmere *	3.52m steady	05:20 AM TUE 11/01/11
Balonne R at St George (manual)	13.08m falling slowly	06:00 AM TUE 11/01/11
Balonne R at St George * (auto)	12.69m falling	05:20 AM TUE 11/01/11
Balonne R at Whyenbah	8.11m steady	09:00 AM MON 10/01/11
Culgoa R at Woolerbilla *	6.48m steady	04:00 AM TUE 11/01/11
Narran R at Dirranbandi-Hebel Rd *	5.31m steady	03:00 PM MON 10/01/11
Ballandool R at Hebel-Bollon Rd *	3.84m rising	11:40 PM MON 10/01/11
Bokhara R at Hebel *	2.1m steady	05:30 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20800

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE STANLEY RIVER AND BRISBANE RIVER ABOVE WIVENHOE DAM

Issued at 6:56 AM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

Further widespread rainfall totals of between 30-60mm has been recorded in the last 6 hours to 6am Tuesday across the upper Brisbane River catchment. Renewed rises and major flooding continues at Cooyar, Gregor and Cressbrook Creeks and along the upper Brisbane River at Linville at Devon Hills.

UPPER BRISBANE RIVER:

Further rises and major flooding continues in much of the upper Brisbane catchment during Tuesday morning. Further rainfall is forecast for the remainder of today.

STANLEY RIVER:

Renewed rises are occurring with the heavy rainfall in the Stanley River causing minor to moderate flooding at Peachester and Woodford. Rises are also occurring in Kilcoy Creek.

Weather Forecast:

Rain periods with possible thunder. Rain gradually easing later in the day.

Next Issue:

The next warning will be issued by 1pm Tuesday.

Latest River Heights:

Stanley R at Peachester #	5.52m falling	06:22 AM TUE 11/01/11
Stanley R at Woodford #	6.42m rising	06:32 AM TUE 11/01/11
Kilcoy Ck d/s Mt Kilcoy Weir #	4.82m steady	06:32 AM TUE 11/01/11
Stanley R at Somerset Dam HW #	103.26m rising	06:29 AM TUE 11/01/11
Cooyar Ck at Cooyar Ck #	8.92m falling	06:33 AM TUE 11/01/11
Brisbane R at Linville #	9.42m falling	06:33 AM TUE 11/01/11
Brisbane R at Devon Hills #	10.81m rising	06:03 AM TUE 11/01/11
Emu Ck at Boat Mountain #	7.66m rising	06:07 AM TUE 11/01/11
Maronghi Ck at Glendale *	2.81m steady	05:00 AM TUE 11/01/11
Brisbane R at Gregor Ck #	11.08m rising	06:32 AM TUE 11/01/11
Cressbrook Ck at Rosentreter's Br #	5.68m rising	06:12 AM TUE 11/01/11
Esk Ck at Falls Rd *	3.71m rising	05:40 AM TUE 11/01/11
Splityard Creek Dam #	162.7m rising	05:54 AM TUE 11/01/11
Brisbane R at Wivenhoe Dam HW #	73.59m rising	06:30 AM TUE 11/01/11
Brisbane R at Wivenhoe Dam TW #	41.9m falling	06:29 AM TUE 11/01/11

*,# denotes automatic station.

Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



Australian Government
Bureau of Meteorology

IDQ20780

Australian Government Bureau of Meteorology
Queensland

FINAL FLASH FLOOD WARNING FOR LOCKYER CREEK

Issued at 7:27 AM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

Moderate to major flooding continues along Lockyer Creek during Tuesday morning, where the main flood waters are currently arriving at Lyons Bridge.

A flood warning is current for the Lockyer, Bremer, Warrill and Brisbane River below Wivenhoe including Brisbane City.

A Severe Weather Warning for heavy rainfall and localised flash flooding is also current.

Weather Forecast:

Rain periods with possible thunder. Rain gradually easing later in the day.

Next Issue:

This is the final warning. River Height Bulletins will continue to be issued.

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20032
Australian Government Bureau of Meteorology
Queensland

Transmitters in the areas of the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi are REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to localised flash flooding and worsening the existing river flood situation

For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi.

Issued at 8:00 am on Tuesday 11 January 2011

Synoptic Situation: At 8am AEST, an upper level low was located over the Darling Downs and Granite Belt district and is forecast to move to the southwest and slowly weaken.

Heavy rain areas and thunderstorms are expected to continue through the Southeast Coast and Darling Downs and Granite Belt today. Heavy falls will lead to localised flash flooding and will worsen existing river flooding.

Currently, an intense slow moving band of rainfall extends from about Maroochydore to Warwick. Rainfall rates in this band are reaching 80 to 100 mm per hour.

Flood warnings are current for various rivers and streams in these districts. Please refer to these products [www.bom.gov.au/qld] for further information.

The Severe Weather Warning for the southern parts of Wide Bay and Burnett and eastern Maranoa and Warrego and northwestern parts of Darling Downs and Granite Belt districts has been cancelled. However showers and thunderstorms will persist through the area and may produce heavy rainfall in these parts.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11am Tuesday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY

**FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER
BELOW WIVENHOE INCLUDING BRISBANE CITY**

Issued at 9:28 AM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

Continuing heavy rainfall in the Lockyer Creek catchment is causing very fast rises along Tenthill Creek.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge, with strong stream rises during Tuesday and levels of above 17 metres are forecast.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will increase levels in Brisbane during Tuesday.

At the Brisbane City Gauge, minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and moderate flood levels of 2.6 metres with the overnight high tide. Further rises to 3.5 metres (major) is expected with the high tide on Wednesday afternoon with higher levels likely on Thursday.

LOCKYER CREEK:

Very heavy rainfall is continuing in the Lockyer Creek catchment and further very fast rises are being observed along Tenthill Creek this morning. Renewed rises are likely in the lower catchment during Tuesday prolonging major flooding. The Lockyer Creek at Glenore Grove peaked at 14.60 metres at 11:30pm, which is 0.3 metres below the 1974 flood. Renewed rises are likely at Glenore Grove today with a return to above 14 metres.

The main flood peak from Monday is currently approaching Lyons Bridge, with strong stream rises expected in the next few hours. A peak is expected above 17 metres at Lyons Bridge later today.

BREMER RIVER:

The Bremer River at Walloon has exceeded the moderate flood level. The Bremer River at Rosewood peaked at 5.8 metres around midnight Monday but renewed rises are expected as rainfall continues.

The Bremer River at Ipswich is expected to reach about 16 metres during Wednesday. Higher levels are expected.

WARRILL CREEK



Further rises are likely today as rainfall continues.

MIDDLE AND LOWER BRISBANE:

Moderate flooding will continue to rise at Savages Crossing and at Mt Crosby Weir.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), minor flood levels of about 2.1 metres are expected with the afternoon high tide on Tuesday and moderate flood levels of 2.6 metres with the overnight high tide. Higher flood levels to 3.5 metres (major) are expected with the high tide on Wednesday afternoon. Levels above 3.5 metres are expected on Thursday.

(3.5 metres at the Brisbane City gauge is about 2.5 metres higher than the highest tide of the year at this location).

Predicted River Heights/Flows:

Ipswich: Reach at least 16 metres (major) during Wednesday; further rises.

Moggill: Reach at least 15 metres (moderate) during Wednesday; further rises.

Jindalee: Reach at least 9 metres (moderate) late Wednesday; further rises.

Brisbane City: Reach about 2.6 metres (moderate) with the overnight high tide tonight. Reach 3.5 metres (major) with the high tides on Wednesday. Higher levels are expected on Thursday with the high tides.

(3.5 metres at the Brisbane City gauge is about 2 metres higher than the highest tide of the year at this location).

Further rises are expected at all four locations with continued rainfall.

Next Issue:

The next warning will be issued at about 3:30pm Tuesday.

Latest River Heights:

Flagstone Ck at Brown-Zirbels Rd *	3.53m rising	05:40 AM TUE 11/01/11
Sandy Creek at Sandy Creek Road #	2.9m rising	06:56 AM TUE 11/01/11
Ma Ma Ck at Harm's *	2.96m rising	05:40 AM TUE 11/01/11
Tenthill Ck at Tenthill *	5.57m rising	05:46 AM TUE 11/01/11
Laidley Ck at Mulgowie *	6.83m rising	05:00 AM TUE 11/01/11
Laidley Ck at Laidley	8.7m falling slowly	10:00 PM MON 10/01/11
Laidley Ck at Showground Weir *	8.74m rising	05:40 AM TUE 11/01/11
Laidley Ck at Warrego Hwy *	6.28m rising	05:00 AM TUE 11/01/11
Lockyer Ck at Glenore Grove #	13.48m rising	06:52 AM TUE 11/01/11
Lockyer Ck at Lyons Br #	16.09m rising	06:56 AM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	15.78m rising	05:40 AM TUE 11/01/11
Brisbane R at Lowood Pump Stn #	16.21m rising	06:55 AM TUE 11/01/11
Brisbane R at Savages Crossing #	16.17m rising	06:53 AM TUE 11/01/11
Brisbane R at Burtons Br #	12.92m rising	06:50 AM TUE 11/01/11
Brisbane R at Mt Crosby #	16.23m rising	06:36 AM TUE 11/01/11



Australian Government
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Brisbane R at Colleges Crossing #	14.51m rising	06:57 AM TUE 11/01/11
Bremer R at Rosewood #	5.32m rising	06:41 AM TUE 11/01/11
Warrill Ck at Amberley DNR *	6.78m rising	05:20 AM TUE 11/01/11
Bremer R at Ipswich #	9.25m rising	06:50 AM TUE 11/01/11
Brisbane R at Moggill #	7.62m rising	06:45 AM TUE 11/01/11
Brisbane R at Jindalee Br #	4.75m rising	06:26 AM TUE 11/01/11
Brisbane R at City Gauge #	0.95m falling	06:30 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20032
Australian Government Bureau of Meteorology
Queensland

Transmitters in the areas of the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi are REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to flash flooding and worsening the existing river flood situation

For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi.

Issued at 11:00 am on Tuesday 11 January 2011

Synoptic Situation: At 10am AEST, an upper level low was located over the southern Queensland interior and is forecast to move to the southwest and continue weakening. A surface trough lying over the Southeast Queensland Coast is expected to weaken overnight.

Heavy rain areas and local thunderstorms are expected to continue through the Southeast Coast and Darling Downs and Granite Belt today. Heavy falls will lead to flash flooding and will worsen existing river flooding.

Currently, an intense band of rainfall extends from about Tewantin to Warwick. Recent rainfall rates in this band have reached 80 to 100 mm per hour, particularly about the Brisbane and Lockyer Valleys. This rainfall band is expected to remain slow moving during the remainder of today.

Flood warnings are current for various rivers and streams in these districts. Please refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 2pm AEST Tuesday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 12:30 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

A return to flood levels of around 3.7 metres is expected at Dalby later today. Major flood levels are forecast of at least 7.3 metres at Warwick. Fast rises and major flooding are developing in Hodgson and Dalrymple Creeks and are expected in the Condamine River downstream of Warwick to Tummaville during Tuesday and Wednesday.

Heavy rainfall of up to 200 millimetres has been recorded in the catchment of Charleys Creek just upstream of the Chinchilla area and fast rises to major flood levels are expected at Chinchilla during Tuesday.

Very heavy rainfall and flash flooding has been recorded in the Toowoomba area during Monday afternoon and rises continue in Gowrie Creek.

Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine, Myall Creek and Charleys Creek during Tuesday.

Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Loudoun Bridge to Dirranbandi.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Major flooding is rising again in the upper Condamine River at Murrays Bridge. Moderate flood levels will continue in the upper Condamine River at Warwick. Major flood levels to at least 7.3 metres are forecast during today and overnight tonight.

Further heavy rainfall is occurring this morning and renewed fast rises are likely in the tributary streams downstream of Warwick with renewed rises and major flooding expected downstream to Tummaville during the next few days. These rises will extend downstream to Loudoun Bridge by the end of this week.

MYALL CREEK:

River levels have fallen slightly and are currently around 3.5 metres at 6am at Dalby. Levels are likely to fall slightly during today but further rises are forecast with levels returning to about 3.7 metres today.

CHARLEYS CREEK:

Very heavy rainfall of up to 200 millimetres was reported in the catchment yesterday. Fast rises will continue during today at Chinchilla with levels expected to reach 7 metres (major) during Tuesday and possibly above 7.5 metres.



CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with renewed rises expected during the next several days. Flood levels could reach the high levels of late December 2010 at Condamine but it is too early to make peak predictions.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone, with renewed rises expected over the next several days. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 6am Tuesday, the Balonne River at St George was 13.1 metres and falling slowly. Major flood levels will remain high (above 13 metres) until Wednesday.

High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek.

The peak flow will be in the Dirranbandi during Wednesday and in the Hebel area later this week.

Predicted River Heights/Flows:

Condamine R at Warwick Major flood levels of 7.3 metres later today and overnight. Further rises are possible as rainfall continues.

Charleys Creek at Chinchilla Reach 7 metres (major) during Tuesday morning
Possibly reach 7.5 metres Tuesday afternoon

Myall Creek at Dalby Fall this morning before rising again with a peak expected overnight to around 3.7 metres again.

Balonne R at St George (manual) Remain above 13 metres for the next few days.

Next Issue:

The next warning will be issued at about 2pm Tuesday or earlier if required.
(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	6.25m rising	11:53 AM TUE 11/01/11
Condamine R at Elbow Valley #	6.33m rising	12:20 PM TUE 11/01/11
Condamine R at Murrays Br #	8.15m rising	12:09 PM TUE 11/01/11
Condamine R @ Warwick(Scots Col.) *	6.05m rising	11:30 AM TUE 11/01/11
Condamine R at Warwick #	6.2m rising	04:41 PM MON 10/01/11
Glengallan Ck near Backwater Ck #	4.75m falling	12:17 PM TUE 11/01/11
Condamine R at Tummaville *	10.07m falling	11:00 AM TUE 11/01/11
Condamine R at Centenary Br	7.1m rising	10:45 AM TUE 11/01/11
North Condamine R at Lone Pine *	4.42m rising	11:00 AM TUE 11/01/11
Oakey Ck at Fairview *	6.39m steady	11:00 AM TUE 11/01/11
Condamine R at Loudoun Br *	6.78m rising	11:00 AM TUE 11/01/11
Myall Ck at Dalby #	3.14m falling	12:03 PM TUE 11/01/11



Australian Government
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Condamine R at Warra-Kogan Rd Br	12.4m rising fast	12:00 PM TUE 11/01/11
Condamine R at Chinchilla Weir TW *	12.22m rising	11:30 AM TUE 11/01/11
Charleys Ck at Chinchilla	6.37m rising slowly	09:50 AM TUE 11/01/11
Condamine R at Condamine	10.35m rising slowly	07:00 AM TUE 11/01/11
Condamine R at Cotswold *	12.87m rising	11:40 AM TUE 11/01/11
Yuleba Ck at Yuleba Forestry *	2.49m falling	11:20 AM TUE 11/01/11
Balonne R at Surat * (auto)	10.73m rising	11:50 AM TUE 11/01/11
Balonne R at Surat (manual)	12.22m falling	12:00 PM TUE 11/01/11
Bungil Ck at Roma	5m rising	11:45 AM TUE 11/01/11
Balonne R at Weribone *	12.26m falling	11:50 AM TUE 11/01/11
Maranoa R at Old Cashmere *	3.43m falling	11:50 AM TUE 11/01/11
Balonne R at St George (manual)	13.02m falling	11:45 AM TUE 11/01/11
Balonne R at St George * (auto)	12.68m steady	11:00 AM TUE 11/01/11
Culgoa R at Woolerbilla *	6.49m steady	10:00 AM TUE 11/01/11
Balonne R Minor at Dirranbandi	5.33m rising slowly	06:00 AM TUE 11/01/11
Narran R at Dirranbandi-Hebel Rd *	5.32m rising	12:00 PM TUE 11/01/11
Ballandool R at Hebel-Bollon Rd *	4.01m rising	11:20 AM TUE 11/01/11
Bokhara R at Hebel *	2.13m rising	10:10 AM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20800
Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE STANLEY RIVER AND BRISBANE RIVER ABOVE WIVENHOE DAM

Issued at 1:02 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

Further very heavy rainfall totals of between 100-150mm has been recorded in the 3 hours to 1pm Tuesday across the Stanley catchment above Somerset Dam. Fast rises and minor to moderate flooding is occurring along the Stanley River with higher levels expected. Moderate to major flooding has commenced to ease in Cooyar, Gregor and Cressbrook Creeks. Major flooding continues along the upper Brisbane River at Linville at Devon Hills where river levels are also easing.

UPPER BRISBANE RIVER:

The rainfall has eased in the upper Brisbane catchment above Wivenhoe Dam with less than 20mm recorded in the 3 hours to 1pm Tuesday. Whilst moderate to major flooding is generally easing, further rainfall is forecast for the remainder of today.

STANLEY RIVER:

Fast rises and minor to moderate flooding is occurring in the Stanley River above Somerset Dam, with further rises and higher flood levels expected during Tuesday afternoon with the continued very heavy rainfall. Creek rises continue in Kilcoy Creek.

Weather Forecast:

Rain periods with possible thunder. Moderate to heavy falls possible.

Next Issue:

The next warning will be issued at about 5pm Tuesday.

Latest River Heights:

Stanley R at Peachester #	8.1m rising	12:55 PM TUE 11/01/11
Stanley R at Woodford #	7.94m rising	12:56 PM TUE 11/01/11
Kilcoy Ck d/s Mt Kilcoy Weir #	5.6m steady	12:54 PM TUE 11/01/11
Stanley R at Somerset Dam HW #	103.7m rising	12:53 PM TUE 11/01/11
Cooyar Ck at Cooyar Ck #	6.78m falling	12:39 PM TUE 11/01/11
Brisbane R at Linville #	7.16m falling	12:57 PM TUE 11/01/11
Brisbane R at Devon Hills #	9.33m falling	12:46 PM TUE 11/01/11
Emu Ck at Boat Mountain #	9.32m steady	12:19 PM TUE 11/01/11
Maronghi Ck at Glendale *	3.55m falling	11:50 AM TUE 11/01/11
Brisbane R at Gregor Ck #	12.96m falling	12:56 PM TUE 11/01/11
Cressbrook Ck at Rosentreter's Br #	6.1m rising	12:54 PM TUE 11/01/11
Esk Ck at Falls Rd *	5.3m falling	11:40 AM TUE 11/01/11
Splityard Creek Dam #	162.25m rising	12:57 PM TUE 11/01/11
Brisbane R at Wivenhoe Dam HW #	74.23m falling	12:54 PM TUE 11/01/11
Brisbane R at Wivenhoe Dam TW #	44.8m rising	12:56 PM TUE 11/01/11

*,# denotes automatic station.

Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



Australian Government
Bureau of Meteorology

IDQ20032

Australian Government Bureau of Meteorology
Queensland

Transmitters in the areas of the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi are REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to flash flooding and worsening the existing river flood situation

For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi.

Issued at 2:00 pm on Tuesday 11 January 2011

Synoptic Situation: At 2 pm AEST, a surface trough was lying over the Southeast Queensland Coast and is expected to weaken overnight.

Heavy rain areas and local thunderstorms are expected to continue through the Southeast Coast and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Heavy falls will lead to flash flooding and will worsen existing river flooding.

Currently the focus of the heaviest rainfall extends from about Maroochydore to Warwick, including the Brisbane and Lockyer Valleys and Ipswich area. Recent rainfall rates in this band have reached 60 to 80 mm per hour. This rainfall band is expected to remain slow moving during the remainder of today and gradually weaken overnight and during Wednesday morning.

Flood warnings are current for various rivers and streams in these districts. Please refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 5 pm AEST Tuesday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 2:15 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

A return to flood levels of around 3.8 metres is expected at Dalby tonight. Major flood levels are forecast of at least 7.3 metres at Warwick during this afternoon. Major flooding has developed along the Condamine River downstream from Warwick to Tummalville and will continue during Wednesday.

Heavy rainfall of up to 200 millimetres has been recorded in the catchment of Charleys Creek just upstream of the Chinchilla area and fast rises and major flooding has developed at Chinchilla.

Very heavy rainfall and flash flooding has been recorded in the Toowoomba area during Monday afternoon and rises continue downstream in Gowrie Creek.

Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine and Myall Creek during Tuesday.

Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Loudoun Bridge to Dirranbandi.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Major flooding is extending along the Condamine River from Murrays Bridge to Loudoun Bridge. Rises continue at Warwick where river levels are expected to reach at least 7.3 metres during this afternoon.

Heavy rainfall continues to fall over the Upper Condamine area which may cause further rises.

MYALL CREEK:

River levels at Dalby have fallen and are currently around 3.1 metres at 1pm Tuesday. Further rises are expected with river levels returning to about 3.8 metres tonight.

CHARLEYS CREEK:

Very heavy rainfall of up to 200 millimetres was reported in the catchment yesterday. Fast rises will continue during today at Chinchilla with levels expected to reach 7 metres (major) later Tuesday and possibly above 7.5 metres overnight.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with renewed rises expected during the next several days. Flood levels should exceed 13 metres during Thursday and reach near the high levels of late December 2010 at Condamine, but it is too early to make peak



predictions.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone, with renewed rises expected over the next several days. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 11am Tuesday, the Balonne River at St George was 13.02 metres and falling slowly. Major flood levels will remain high (around 13 metres) until Wednesday.

High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek.

The peak flow will be in the Dirranbandi during Wednesday and in the Hebel area later this week.

Predicted River Heights/Flows:

Condamine R at:

Warwick Major flood levels of 7.3 metres during this afternoon. Further rises are possible as rainfall continues.

Condamine Exceed 13 metres during Thursday. Reach higher levels going into the weekend.

Charleys Creek at:

Chinchilla Reach 7 metres (major) during Tuesday night. Possibly reach 7.5 metres overnight and Wednesday.

Myall Creek at:

Dalby Fall this morning before rising again with a peak expected overnight to around 3.8 metres.

Balonne R at:

St George (manual) Remain above 13 metres for the next few days.

Next Issue:

The next warning will be issued at about 6pm Tuesday or earlier if required. (River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	6.25m rising	11:53 AM TUE 11/01/11
Condamine R at Elbow Valley #	6.48m rising	01:02 PM TUE 11/01/11
Condamine R at Murrays Br #	8.25m rising	01:07 PM TUE 11/01/11
Condamine R @ Warwick(Scots Col.) *	6.27m rising	12:22 PM TUE 11/01/11
Condamine R at Warwick #	6.2m rising	04:41 PM MON 10/01/11



Australian Government
Bureau of Meteorology

Glengallan Ck near Backwater Ck #	4.75m falling	01:07 PM TUE 11/01/11
Condamine R at Tummalville *	10.05m falling	12:00 PM TUE 11/01/11
Condamine R at Centenary Br	7.1m rising	10:45 AM TUE 11/01/11
North Condamine R at Lone Pine *	4.45m rising	12:00 PM TUE 11/01/11
Oakey Ck at Fairview *	6.4m steady	12:00 PM TUE 11/01/11
Condamine R at Loudoun Br *	6.8m rising	12:00 PM TUE 11/01/11
Myall Ck at Dalby #	3.09m falling	01:03 PM TUE 11/01/11
Condamine R at Warra-Kogan Rd Br	12.4m rising fast	12:00 PM TUE 11/01/11
Condamine R at Chinchilla Weir TW *	12.22m rising	11:30 AM TUE 11/01/11
Charleys Ck at Chinchilla	6.68m rising	12:30 PM TUE 11/01/11
Condamine R at Condamine	10.5m rising slowly	12:00 PM TUE 11/01/11
Condamine R at Cotswold *	12.87m rising	11:40 AM TUE 11/01/11
Yuleba Ck at Yuleba Forestry *	2.49m falling	11:20 AM TUE 11/01/11
Balonne R at Surat * (auto)	10.73m rising	11:50 AM TUE 11/01/11
Balonne R at Surat (manual)	12.22m falling	12:00 PM TUE 11/01/11
Bungil Ck at Roma	5m rising	11:45 AM TUE 11/01/11
Balonne R at Weribone *	12.26m falling	11:50 AM TUE 11/01/11
Maranoa R at Old Cashmere *	3.43m falling	11:50 AM TUE 11/01/11
Balonne R at St George (manual)	13.02m falling	11:45 AM TUE 11/01/11
Balonne R at St George * (auto)	12.68m steady	11:00 AM TUE 11/01/11
Culgoa R at Woolerbilla *	6.49m steady	10:00 AM TUE 11/01/11
Balonne R Minor at Dirranbandi	5.33m rising slowly	06:00 AM TUE 11/01/11
Narran R at Dirranbandi-Hebel Rd *	5.32m rising	12:00 PM TUE 11/01/11
Ballandool R at Hebel-Bollon Rd *	4.01m rising	11:20 AM TUE 11/01/11
Bokhara R at Hebel *	2.13m rising	10:10 AM TUE 11/01/11

*, # denotes automatic station.

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

PRIORITY - FOR IMMEDIATE BROADCAST

**FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER
BELOW WIVENHOE INCLUDING BRISBANE CITY**

Issued at 3:24 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected with the overnight high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon. River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will continue to increase flood levels in Brisbane during the next 36 hours.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge and are continuing to increase near record levels.

LOCKYER CREEK:

Very heavy rainfall is continuing in the Lockyer Creek catchment and further very fast rises are being observed. Major flooding will continue this evening throughout the catchment. Flood levels at Glenore Grove were at 15.2 metres at 3pm, which is 0.3 metres above the 1974 flood level.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge and are continuing to increase near record levels.

BREMER RIVER:

The Bremer River at Walloon has exceeded the major flood level. The Bremer River at Rosewood is expected to reach at least 7.6 metres during the next few hours.

The Bremer River at Ipswich is expected to reach about 22 metres during Wednesday. Higher levels are possible as rainfall continues.

WARRILL CREEK

Further rises are likely today as rainfall continues with major flooding from Kalbar to Amberley continuing. Levels at Amberley are expected to reach at least 7.5 metres overnight.

MIDDLE AND LOWER BRISBANE:

Moderate flooding will continue to rise at Savages Crossing and at Mt Crosby Weir with major flood levels exceeded overnight.



Australian Government
Bureau of Meteorology

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected tonight with the 3am high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon (3pm). River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Predicted River Heights/Flows:

Ipswich: Reach at least 22 metres (major) during Wednesday; further rises.

Moggill: Reach at least 22 metres (moderate) during Wednesday; further rises.

Jindalee: Reach at least 14.2 metres (moderate) late Wednesday; further rises.

Brisbane City: Reach about 3 metres (moderate) around 3am Wednesday.

Reach 4.5 metres (major) at 3pm Wednesday.

Exceed 1974 flood level (5.45 metres) on Thursday.

Next Issue:

The next warning will be issued at about 7pm Tuesday.

Latest River Heights:

Tenthill Ck at Tenthill *	5.58m rising	02:30 PM TUE 11/01/11
Laidley Ck at Laidley	8.85m steady	01:20 PM TUE 11/01/11
Laidley Ck at Showground Weir #	9.26m rising	03:10 PM TUE 11/01/11
Laidley Ck at Warrego Hwy *	7.37m steady	02:00 PM TUE 11/01/11
Lockyer Ck at Glenore Grove #	15.24m rising	03:04 PM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	16.65m rising	02:20 PM TUE 11/01/11
Brisbane R at Savages Crossing *	20.48m rising	02:40 PM TUE 11/01/11
Brisbane R at Mt Crosby #	20.10m rising	03:20 PM TUE 11/01/11
Brisbane R at Colleges Crossing #	15.41m rising	03:21 PM TUE 11/01/11
Bremer R at Rosewood #	7.48m rising	03:08 PM TUE 11/01/11
Bremer R at Walloon DERM *	9.85m rising	02:40 PM TUE 11/01/11
Warrill Ck at Amberley DNR *	8.09m rising	02:40 PM TUE 11/01/11
Bremer R at Ipswich #	12.05m rising	03:18 PM TUE 11/01/11
Brisbane R at Moggill #	10.22m rising	03:14 PM TUE 11/01/11
Brisbane R at Jindalee Br #	6.7m rising	03:11 PM TUE 11/01/11
Brisbane R at City Gauge #	1.9m rising	01:01 PM TUE 11/01/11

*automatic station

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20800

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE STANLEY RIVER AND BRISBANE RIVER ABOVE WIVENHOE DAM

Issued at 4:52 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

The rainfall in the catchments of the Upper Brisbane and Stanley Rivers has eased to around 20-30 millimetres in the last three hours.

Fast rises are causing major flooding in the Stanley River at Peachester and Woodford.

Moderate to major flooding continues to ease in Cooyar, Gregor and Cressbrook Creeks. Major flooding continues along the upper Brisbane River from Linville to Gregor Creek with levels now easing slowly.

Creek rises continue in Kilcoy Creek with levels expected to peak overnight.

Weather Forecast:

Rain periods with possible thunder. Moderate to heavy falls possible.

Next Issue:

The next warning will be issued at about 11pm Tuesday.

Latest River Heights:

Stanley R at Peachester #	8.86m falling	04:01 PM TUE 11/01/11
Stanley R at Woodford #	9.24m rising	03:58 PM TUE 11/01/11
Kilcoy Ck d/s Mt Kilcoy Weir #	5.68m steady	03:56 PM TUE 11/01/11
Stanley R at Somerset Dam HW #	104.16m rising	04:02 PM TUE 11/01/11
Cooyar Ck at Cooyar Ck #	5.6m falling	04:00 PM TUE 11/01/11
Brisbane R at Linville #	6.12m falling	03:51 PM TUE 11/01/11
Brisbane R at Devon Hills #	7.51m falling	04:02 PM TUE 11/01/11
Emu Ck at Boat Mountain #	6.52m falling	04:01 PM TUE 11/01/11
Maronghi Ck at Glendale *	2.92m steady	02:18 PM TUE 11/01/11
Brisbane R at Gregor Ck #	10.94m falling	04:02 PM TUE 11/01/11
Cressbrook Ck at Rosentreter's Br #	6.06m falling	03:54 PM TUE 11/01/11
Esk Ck at Falls Rd *	5.06m rising	02:30 PM TUE 11/01/11
Splityard Creek Dam #	160m falling	03:59 PM TUE 11/01/11
Brisbane R at Wivenhoe Dam HW #	74.59m rising	04:02 PM TUE 11/01/11
Brisbane R at Wivenhoe Dam TW #	26.45m steady	03:59 PM TUE 11/01/11

*,# from automatic station

Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



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Transmitters in areas of the Southeast Coast district and the Darling Downs and Granite Belt district southeast of Dalby to Goondiwindi are REQUESTED TO USE THE STANDARD EMERGENCY WARNING SIGNAL BEFORE BROADCASTING.

TOP PRIORITY FOR IMMEDIATE BROADCAST

SEVERE WEATHER WARNING

for heavy rainfall leading to flash flooding and worsening the existing river flood situation

For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi.

Issued at 5:00 pm on Tuesday 11 January 2011

Synoptic Situation: At 4 pm AEST, southeast Queensland was under the influence of a deep moist easterly airstream, with an upper trough located over the Darling Downs.

Heavy rain areas and local thunderstorms are expected to continue tonight through the Southeast Coast and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Heavy falls will lead to further localised flash flooding and will worsen existing river flooding.

The heavy rain areas are expected to gradually weaken overnight and during Wednesday morning.

Flood warnings are current for various rivers and streams in these districts. Please refer to these products [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- take care on the roads, especially in heavy downpours
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

The next warning is due to be issued by 11 pm AEST Tuesday.

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 6:44 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

Major flooding continues to rise and effect the towns of Warwick, Dalby and Chinchilla in the Upper Condamine River system. Moderate to major flooding extends along the entire Condamine and Balonne Rivers.

Heavy rain areas and local thunderstorms are expected to continue tonight through the Southeast Coast and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Heavy falls will lead to further localised flash flooding and will worsen existing river flooding.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Major flooding is extending along the Condamine River from Murrays Bridge to Loudoun Bridge. Rises continue at Warwick where river levels are forecast to reach 8.5 metres during tonight with major flooding. This is 0.6 metres higher than the peak reached in December 2010.

Heavy rainfall continues to fall over the Upper Condamine area which may cause further rises.

MYALL CREEK:

River levels at Dalby have fallen and are currently around 3.05 metres at 3pm Tuesday. Further rises are expected with river levels returning to about 3.8 metres tonight.

CHARLEYS CREEK:

At 5.30pm, Charleys Creek at Chinchilla was 6.9 metres and steady. Further rises are expected during Wednesday with levels up to 7.5 metres possible.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with renewed rises expected during the next few days. At Condamine Township, flood levels should exceed 13 metres during Thursday and continue rising.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone, with renewed rises expected over the next several days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 6pm Tuesday, the Balonne River at St George was 12.99 metres and falling slowly. Major flood levels will remain high (around 13 metres) into Wednesday.

High level major flooding is expected to continue in the Balonne River system



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Bureau of Meteorology

downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek.

The peak flow is currently in the Dirranbandi area and will reach the Hebel area later this week.

Predicted River Heights/Flows:

Condamine R at:

Warwick Reach 8.5 metres during this evening. Further rises are possible as rainfall continues.

Condamine Exceed 13 metres during Thursday.
Reach higher levels going into the weekend.

Charleys Creek at:

Chinchilla Reach 7 metres (major) during Tuesday night.
Possibly reach 7.5 metres during Wednesday.

Myall Creek at:

Dalby Reach 3.8 metres (major) during Wednesday morning.

Balonne R at:

St George (manual) Remain around 13 metres until Thursday.

Next Issue:

The next warning will be issued at about 11pm Tuesday.
(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	6.25m rising	11:53 AM TUE 11/01/11
Condamine R at Elbow Valley #	6.78m steady	05:08 PM TUE 11/01/11
Condamine R at Murrays Br #	8.9m falling	05:56 PM TUE 11/01/11
Condamine R @ Warwick(Scots Col.) *	7.47m rising	05:50 PM TUE 11/01/11
Condamine R at Warwick #	8.05m rising	05:30 PM TUE 11/01/11
Glengallan Ck near Backwater Ck #	4.75m rising	05:55 PM TUE 11/01/11
Condamine R at Tummalville *	10.09m rising	05:00 PM TUE 11/01/11
Condamine R at Centenary Br	7.05m steady	05:00 PM TUE 11/01/11
North Condamine R at Lone Pine *	4.57m rising	05:00 PM TUE 11/01/11
Oakey Ck at Fairview *	6.4m steady	05:00 PM TUE 11/01/11
Condamine R at Loudoun Br *	6.92m rising	05:00 PM TUE 11/01/11
Myall Ck at Dalby #	3.04m steady	03:03 PM TUE 11/01/11
Condamine R at Warra-Kogan Rd Br	12.73m rising	03:00 PM TUE 11/01/11
Condamine R at Chinchilla Weir TW *	12.28m rising	05:10 PM TUE 11/01/11
Charleys Ck at Chinchilla	6.8m rising	02:00 PM TUE 11/01/11
Condamine R at Condamine	10.6m rising	03:00 PM TUE 11/01/11
Condamine R at Cotswold *	13.03m rising	05:20 PM TUE 11/01/11
Yuleba Ck at Yuleba Forestry *	2.3m falling	05:10 PM TUE 11/01/11
Balonne R at Surat * (auto)	10.72m rising	05:30 PM TUE 11/01/11
Balonne R at Surat (manual)	11.18m falling slowly	05:50 PM TUE 11/01/11
Bungil Ck at Roma	4.75m falling slowly	02:30 PM TUE 11/01/11
Balonne R at Weribone *	12.2m falling	05:30 PM TUE 11/01/11
Maranoa R at Old Cashmere *	3.36m steady	05:10 PM TUE 11/01/11



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Balonne R at St George (manual)	13m falling	03:00 PM TUE 11/01/11
Balonne R at St George * (auto)	12.62m rising	05:40 PM TUE 11/01/11
Culgoa R at Woolerbilla *	6.5m steady	01:00 PM TUE 11/01/11
Balonne R Minor at Dirranbandi	5.33m rising slowly	06:00 AM TUE 11/01/11
Narran R at Dirranbandi-Hebel Rd *	5.32m steady	05:00 PM TUE 11/01/11
Ballandool R at Hebel-Bollon Rd *	4.12m rising	05:20 PM TUE 11/01/11
Bokhara R at Hebel *	2.17m rising	05:30 PM TUE 11/01/11

*,# from automatic station

Warnings and River Height Bulletins are available at
<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on
telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile,
public and satellite phones.



IDQ20805

Australian Government Bureau of Meteorology
Queensland

BROADCASTERS ARE REQUESTED TO USE THE STANDARD EMERGENCY WARNING
SIGNAL BEFORE
BROADCASTING.

PRIORITY - FOR IMMEDIATE BROADCAST

**FLOOD WARNING FOR THE LOCKYER, BREMER, WARRILL AND BRISBANE RIVER
BELOW WIVENHOE INCLUDING BRISBANE CITY**

Issued at 8:05 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected with the overnight high tide. Higher flood levels to about 4.5 metres (major) are expected with the high tide on Wednesday afternoon. River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Wivenhoe dam is providing significant mitigation of upper Brisbane floods. River flows from the Bremer and Lockyer catchments combined with releases from Wivenhoe dam will continue to increase flood levels in Brisbane during the next 36 hours.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge and are continuing to increase near record levels.

LOCKYER CREEK:

Very heavy rainfall is continuing in the Lockyer Creek catchment and further very fast rises are being observed. Major flooding will continue this evening throughout the catchment. Flood levels at Glenore Grove were at 15.2 metres at 3pm, which is 0.3 metres above the 1974 flood level.

The main flood waters in the Lockyer Creek are now arriving at Lyons Bridge and are continuing to increase near record levels.

BREMER RIVER:

The Bremer River at Walloon has exceeded the major flood level. The Bremer River at Rosewood has peaked at 7.5 metres around 5pm Tuesday.

The Bremer River at Ipswich is expected to reach around 21.5 metres during Wednesday.

WARRILL CREEK

Further rises are likely today as rainfall continues with major flooding from Kalbar to Amberley continuing. Levels at Amberley are expected to reach at least 8.0 metres overnight.



MIDDLE AND LOWER BRISBANE:

Moderate flooding will continue to rise at Savages Crossing and at Mt Crosby Weir with major flood levels exceeded overnight.

At the Brisbane City Gauge (lower end of Edward Street and at Thornton Street), moderate flood levels of about 3 metres are expected tonight with the 3am high tide. Higher flood levels to 4.5 metres (major) are expected with the high tide on Wednesday afternoon (3pm). River rises will continue into Thursday with levels higher than 1974 expected. The 1974 flood peak was 5.45 metres at the Brisbane City gauge.

Predicted River Heights/Flows:

Ipswich: Reach about 21.5 metres (major) during Wednesday; further rises possible.

Moggill: Reach about 21 metres (moderate) during Wednesday; further rises possible.

Jindalee: Reach about 14.2 metres (moderate) late Wednesday; further rises possible.

Brisbane City: Reach about 3 metres (moderate) around 3am Wednesday.

Reach about 4.5 metres (major) at 3pm Wednesday.

Exceed 1974 flood level (5.45 metres) on Thursday.

Next Issue:

The next warning will be issued at about midnight Tuesday.

Latest River Heights:

Tenthill Ck at Tenthill *	5.05m falling	06:20 PM TUE 11/01/11
Laidley Ck at Mulgowie *	1.9m steady	08:50 AM TUE 11/01/11
Laidley Ck at Laidley	8.85m steady	01:20 PM TUE 11/01/11
Laidley Ck at Showground Weir #	9.24m falling	07:31 PM TUE 11/01/11
Laidley Ck at Warrego Hwy *	7.37m steady	06:00 PM TUE 11/01/11
Lockyer Ck at Glenore Grove #	15.26m rising	07:31 PM TUE 11/01/11
Lockyer Ck at Rifle Range Rd *	16.66m rising	05:30 PM TUE 11/01/11
Brisbane R at Savages Crossing *	21.67m rising	05:40 PM TUE 11/01/11
Brisbane R at Kholo Br #	12.77m rising	03:28 PM TUE 11/01/11
Brisbane R at Colleges Crossing #	15.81m rising	04:05 PM TUE 11/01/11
Bremer R at Rosewood #	7.24m falling	07:29 PM TUE 11/01/11
Bremer R at Walloon DERM *	11.27m rising	06:00 PM TUE 11/01/11
Warrill Ck at Amberley DNR *	8.69m rising	05:40 PM TUE 11/01/11
Bremer R at Ipswich #	14.85m falling	07:33 PM TUE 11/01/11
Brisbane R at Moggill #	12.17m rising	07:32 PM TUE 11/01/11
Brisbane R at Jindalee Br #	7.95m rising	07:23 PM TUE 11/01/11
Brisbane R at City Gauge #	1.75m falling	06:57 PM TUE 11/01/11

*,# denotes an automatic station

Warnings and River Height Bulletins are available at

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



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Note: The Standard Emergency Warning Signal is no longer required.

TOP PRIORITY FOR IMMEDIATE BROADCAST
CANCELLATION - SEVERE WEATHER WARNING

For people in the Southeast Coast District and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi.

Issued at 10:00 pm on Tuesday 11 January 2011

Synoptic Situation: At 10 pm AEST, southeast Queensland was under the influence of a deep moist east to northeast airstream. A weakening upper trough was moving south.

Heavy rain areas have eased during the past few hours and further flash flooding due to rainfall is no longer expected.

Note that an extremely serious river and stream flood situation still exists. Refer to flood warnings [www.bom.gov.au/qld] for further information.

The State Emergency Service advises that people in the affected area should:

- avoid driving, walking or riding through flood waters
- avoid swimming in swollen rivers and creeks

Contact the SES on 132 500 for emergency assistance if required.

No further warnings are expected to be issued for this event

This warning is also available through TV and Radio broadcasts; the Bureau's website at www.bom.gov.au or call 1300 659 219. The Bureau and State Emergency Service would appreciate this warning being broadcast regularly.



IDQ20825

Australian Government Bureau of Meteorology
Queensland

PRIORITY

FLOOD WARNING FOR THE CONDAMINE AND BALONNE RIVER SYSTEM

Issued at 11:07 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

Major flooding continues to rise and effect the towns of Warwick, Dalby and Chinchilla in the Upper Condamine River system. Moderate to major flooding extends along the entire Condamine and Balonne Rivers.

Heavy rain areas and local thunderstorms are expected to continue tonight through the Southeast Coast and the Darling Downs and Granite Belt District southeast of Dalby to Goondiwindi. Heavy falls will lead to further localised flash flooding and will worsen existing river flooding.

CONDAMINE RIVER - UPPER CONDAMINE TO LOUDOUN BRIDGE:

Major flooding is extending along the Condamine River from Murrays Bridge to Loudoun Bridge. The Condamine River at Warwick peaked at 8.35 metres around 9pm Tuesday. This is 0.45 metres higher than the peak reached in December 2010.

MYALL CREEK:

River levels at Dalby are currently rising, with a peak around 3.8 metres expected overnight Tuesday or early Wednesday.

CHARLEYS CREEK:

At 5.30pm, Charleys Creek at Chinchilla was 6.9 metres and steady. Further rises are expected during Wednesday with levels up to 7.5 metres possible.

CONDAMINE RIVER - LOUDOUN BRIDGE TO COTSWOLD:

Major flooding continues with renewed rises expected during the next few days. At Condamine Township, flood levels should exceed 13 metres during Thursday and continue rising.

BALONNE RIVER TO BEARDMORE DAM:

Major flooding continues to fall slowly around Surat and Weribone, with renewed rises expected over the next several days. The river level at Warroo above Beardmore Dam is also falling very slowly.

BALONNE RIVER - ST GEORGE TO NSW BORDER:

At 6pm Tuesday, the Balonne River at St George was 12.99 metres and falling slowly. Major flood levels will remain high (around 13 metres) into Wednesday.

High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek.

The peak flow is currently in the Dirranbandi area and will reach the Hebel area later this week.

Predicted River Heights/Flows:



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Bureau of Meteorology

Condamine R at:
Warwick Fall slowly overnight.

Condamine Exceed 13 metres during Thursday. Reach higher levels going into the weekend.

Charleys Creek at:
Chinchilla Possibly reach 7.5 metres during Wednesday.

Myall Creek at:
Dalby Reach 3.8 metres (major) during Wednesday morning.

Balonne R at:
St George (manual) Remain around 13 metres until Thursday.

Next Issue:
The next warning will be issued at about 7am Wednesday.
(River heights are constantly updated on the Bureau website.)

Latest River Heights:

Condamine R at Killarney #	6.25m rising	11:53 AM TUE 11/01/11
Condamine R at Elbow Valley #	6.23m falling	10:28 PM TUE 11/01/11
Condamine R at Murrays Br #	8.5m falling	10:16 PM TUE 11/01/11
Condamine R @ Warwick(Scots Col.) *	7.71m falling	09:00 PM TUE 11/01/11
Condamine R @ Warwick	8.20m falling	10:45 PM TUE 11/01/11
Glengallan Ck near Backwater Ck #	4.6m falling	10:35 PM TUE 11/01/11
Condamine R at Tummalville *	10.56m rising	09:00 PM TUE 11/01/11
Condamine R at Centenary Br	7.05m steady	07:00 PM TUE 11/01/11
North Condamine R at Lone Pine *	4.65m rising	09:00 PM TUE 11/01/11
Oakey Ck at Fairview *	6.4m steady	08:00 PM TUE 11/01/11
Condamine R at Loudoun Br *	6.92m steady	09:00 PM TUE 11/01/11
Myall Ck at Dalby #	3.24m rising	10:18 PM TUE 11/01/11
Condamine R at Warra-Kogan Rd Br	13m rising	06:00 PM TUE 11/01/11
Condamine R at Chinchilla Weir TW *	12.35m falling	08:40 PM TUE 11/01/11
Charleys Ck at Chinchilla	6.9m steady	06:30 PM TUE 11/01/11
Condamine R at Condamine	11.07m rising	09:00 PM TUE 11/01/11
Condamine R at Cotswold *	13.15m rising	08:40 PM TUE 11/01/11
Yuleba Ck at Yuleba Forestry *	2.23m falling	08:20 PM TUE 11/01/11
Balonne R at Surat * (auto)	10.7m rising	08:50 PM TUE 11/01/11
Balonne R at Surat (manual)	11.18m falling slowly	05:50 PM TUE 11/01/11
Bungil Ck at Roma	4.75m falling slowly	02:30 PM TUE 11/01/11
Balonne R at Weribone *	12.16m falling	08:50 PM TUE 11/01/11
Maranoa R at Old Cashmere *	3.32m falling	08:20 PM TUE 11/01/11
Balonne R at St George (manual)	12.98m falling	09:00 PM TUE 11/01/11
Balonne R at St George * (auto)	12.62m rising	05:40 PM TUE 11/01/11
Culgoa R at Woolerbilla *	6.51m steady	07:00 PM TUE 11/01/11
Balonne R Minor at Dirranbandi	5.33m rising slowly	06:00 AM TUE 11/01/11
Narran R at Dirranbandi-Hebel Rd *	5.33m steady	08:00 PM TUE 11/01/11
Ballandool R at Hebel-Bollon Rd *	4.2m rising	08:30 PM TUE 11/01/11
Bokhara R at Hebel *	2.18m rising	08:00 PM TUE 11/01/11

Warnings and River Height Bulletins are available at



Australian Government
Bureau of Meteorology

<http://www.bom.gov.au/qld/flood/> . Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



IDQ20800

Australian Government Bureau of Meteorology
Queensland

FLOOD WARNING FOR THE STANLEY RIVER AND BRISBANE RIVER ABOVE WIVENHOE DAM

Issued at 11:18 PM on Tuesday the 11th of January 2011
by the Bureau of Meteorology, Brisbane.

The rainfall in the catchments of the Upper Brisbane and Stanley Rivers have continued to ease, with rainfall totals in the last three hours generally less than 10 millimetres.

Major flooding is now falling in the Stanley River at Woodford, the Brisbane River at Gregor Creek and at Rosentreter's on Cressbrook Creek.

River levels in the upper Brisbane and Stanley Rivers will continue to fall overnight.

Next Issue:

The next warning will be issued at about 10am Wednesday.

Latest River Heights:

Stanley R at Peachester #	7.86m steady	10:48 PM TUE 11/01/11
Stanley R at Woodford #	9.08m falling	10:50 PM TUE 11/01/11
Kilcoy Ck d/s Mt Kilcoy Weir #	5.41m steady	10:51 PM TUE 11/01/11
Cooyar Ck at Cooyar Ck #	4.22m falling	10:42 PM TUE 11/01/11

Brisbane R at Linville #	4.78m falling	10:48 PM TUE 11/01/11
Brisbane R at Devon Hills #	5.85m falling	10:50 PM TUE 11/01/11
Brisbane R at Gregor Ck #	8.04m falling	10:47 PM TUE 11/01/11
Cressbrook Ck at Rosentreter's Br #	5.84m rising	10:51 PM TUE 11/01/11

automatic station

Flood Warnings are also available on telephone 1300 659 219 at a low call cost of 27.5 cents, more from mobile, public and satellite phones.



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Appendix M

Interpreting Radar Images

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Appendix M

INTERPRETATION OF RADAR IMAGES

Weather Watch radars are very effective tools for the detection of rain. Bureau forecasters can interpret the patterns and intensity of the radar images to provide warnings of major weather events such as severe thunderstorms, tropical cyclones and areas of heavy rainfall.

The radar does not "see" clouds, as cloud droplets are too small, but does see the rainfall which those clouds produce. These areas of rain "seen" by the radar are often called radar echoes. The radar may sometimes detect echoes from aircraft, areas of smoke/ash from large fires, swarms of insects, flocks of birds or even the ground or sea surface, when unusual atmospheric conditions bend the radar beam back down to the surface. As a result, there may be patterns on the radar images that do not represent falling rain.

About radar measurement of rainfall

Radars do not directly measure rainfall rate; rather they send out pulses of high power electromagnetic energy and measure the small amount of energy that is reflected from the raindrops in a cloud. This returning energy can then be converted to a theoretical estimate of rainfall rate, but with many assumptions made along the way. In meteorological circles it is well known that even the best calibrated radars can produce poor estimates of rainfall rates in some situations, sometimes overestimating and sometimes under estimating rainfall rates by factors of 2 or more. Factors which affect the reliability of radar estimates of rainfall include:

- Variation in raindrop size distributions in space and time
- Radar calibration drift
- Attenuation of radar returns through radomes and in very heavy precipitation
- Vertical reflectivity variation, enhancement around the melting level and hail contamination
- Inability to measure rainfall near ground level at larger distances from the radar due to earth curvature
- evaporation, coalescence, horizontal displacement of raindrops by wind below the radar beam, especially as distance increases
- elevation limits (near range) & limited volume sampling
- atmospheric temperature inversions causing the radar beam path to bend, sometimes striking the ground
- unwanted reflections from the ground and sea (clutter)
- unwanted reflections from smoke, birds
- beam blockage by terrain
- radar beam spreading at larger distances causing range dependent errors

In order to correct for these deficiencies there are techniques that can be employed that use evenly spaced telemetered rain gauge data to correct radar estimates of rainfall to within

acceptable limits on most occasions. Around 25 gauges spread one every 2500 square kilometres is thought to be sufficient to correct radar measurements to provide satisfactorily accurate estimates of rainfall, however experience has shown that while this may be successful for evenly spread 'stratiform' rainfall, many more rain gauges are required to adequately capture actual rainfalls in localised 'convective' heavy rainfall events.

Radar-Derived Rainfall Accumulations

The use of radar information in combination with rain gauge measurements helps to improve rainfall estimates over those based on either form of measurement alone. This improvement is accomplished by adjusting, or calibrating, radar-rainfall data with data from rain gauges situated within the radar boundary. The rain gauge data allows forecasters to calibrate the radar data in the form of ground truth, and the radar data allows us to fill in the "gaps" between rain gauges.

Rain gauges accurately measure rainfall on the ground at point locations. Generally, rain gauges are distributed evenly across catchment areas, but there may be many kilometres between each gauge. In contrast, radar reflectivity represents precipitation occurring in the atmosphere over a large geographic area, and therefore provides good spatial coverage. However because weather radars do not point at the ground, radar reflectivity does not accurately represent rainfall on the ground. The radar-derived rainfall accumulations combine the benefits of both these systems - the accurate point data from the rain gauges and the excellent spatial coverage of the radar.

The science behind radar-derived rainfall accumulations is still relatively new and the products are dependent on accurate radar reflectivity, accurate rain gauge measurement, and error and bias correction.

Future Developments

The Bureau is researching the use of advanced techniques to adjust radar returns with rain gauge reports and use these to provide a better (though by no means perfect) estimation of rain rates. These techniques aim to reduce the impact of various sources of error mentioned above. The technique currently employed in the Bureau is known as "Rainfields". This new technique is currently provided in experimental forms. As yet there is no direct application to quantitative flood forecasting, but this may developed as the data is better incorporated into forecasting techniques.



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Appendix N

Climate monitoring and prediction advice leading up to the eastern Australian Floods

December 2010 to January 2011

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Appendix N - Climate Monitoring and Prediction advice leading up to the eastern Australian floods

The following document outlines Climate Prediction outputs in the lead-up to the summer of 2010-11, and the associated flooding events in eastern Australia.

1) **Media Release**

On June 24 2010 the Bureau of Meteorology issued a press release entitled “La Nina increasingly likely for 2010”¹ This press release noted:

“Historically, La Niña events have often, but not always, brought above average rainfall to much of Australia, particularly inland eastern and northern regions. Night time temperatures are also usually warmer than average. Tropical Cyclone risk for northern Australia also increases during La Niña events.

Widespread wet conditions and flooding events have accompanied a number of La Niña events in the past. Substantial flooding impacted NSW and Queensland in the event of 1998, while the event of 1988-89 saw flooding also occur in SA and Victoria.”

According to the Bureau Media interview records, this generated numerous media interviews for several Climate staff. News services (e.g., AAP) also issued copy using the press release alone, which appeared widely in both the Fairfax² and Murdoch³ press.

2) **POAMA Climate Model**

POAMA outlooks first hinted at the possibility of a La Niña event in May (**Figure 1**), when a small number of ensemble members touched on La Niña thresholds from August onwards. To some degree, other international models were ahead of POAMA in their predictions of a La Niña event: The National Climate Centre’s model survey of early May showed that five of seven models were indicating an enhanced chance of a La Niña by the southern spring. By June (**Figure 2**), the POAMA ensemble mean was indicating the event would remain at La Niña thresholds for much of the remainder of 2010.

By the first of July (**Figure 3**) the ensemble mean was below La Niña thresholds until January 2011, while by August (**Figure 4**) the model was indicating the event would be significantly below La Niña thresholds until March.

This was arguably the first indication that the La Niña event would be a strong one.

2) **ENSO Wrap Up.**

The ENSO Wrap Up product is released fortnightly during or approaching a possible La Niña or El Niño event, and less frequently when conditions are neutral. Archives of the ENSO Wrap Up may be found at: <http://www.bom.gov.au/climate/search/enso-wrap-up.shtml?bookmark=no-rm>

The first mention of a possible La Niña event occurred in the May 12 release, when it was noted that “Historically, about 40% of El Niño events are immediately followed by a La Niña.

¹ http://www.bom.gov.au/announcements/media_releases/ho/20100624.shtml

² E.g., <http://www.smh.com.au/environment/water-issues/la-nina-more-likely-than-not-20100623-yy63.html>

³ <http://www.adelaidenow.com.au/move-over-el-nino-la-linas-coming/story-e6frea6u-1225883354245>

Current conditions below the surface of the Pacific Ocean show large volumes of cooler than normal water, indicating that further cooling of the surface is likely. ... The majority of climate model predictions suggest the tropical Pacific will cool further during the coming months, with the possible development of La Niña conditions by late winter or spring. No climate models suggest a return to El Niño conditions."

The suggestion of a possible 2010 La Niña was increased gradually, in accordance with changing conditions in the Pacific and in increasingly emphatic model guidance. On June 9, the ENSO Wrap Up stated *"The majority of international computer models are forecasting continued cooling of the tropical Pacific to below La Niña thresholds in the coming months. Some current indicators are consistent with these forecasts."*

In association with the June 24 press release, the ENSO Wrap Up noted *"Sea surface temperatures in the central equatorial Pacific have continued to cool over the past fortnight, and are now generally cooler than average in areas east of the date-line. Below the surface of the tropical Pacific, temperatures are now more than 4°C cooler than average in some areas. Trade winds in the western Pacific have strengthened, while cloudiness near the date-line has reduced. These indicators, together with the Southern Oscillation Index (SOI) which has been consistently positive since April, are consistent with the developing stages of a La Niña event."*

The majority of climate models surveyed by the Bureau suggest current patterns and trends will continue, with a significant likelihood of further ocean cooling beyond La Niña thresholds before the end of the southern winter.

Historically, about 35 to 40% of El Niño events (such as occurred in 2009/10) are followed by a La Niña within the same year. The combination of current trends and model outlooks suggest the chance of a La Niña in 2010 is now clearly more likely than not."

As of July 21 issue, the ENSO Wrap Up, an explanation of possible impacts was included on the Wrap Up. The July 21 issue noted *"La Niña periods are usually, but not always, associated with above normal rainfall during the second half of the year across large parts of Australia, most notably eastern and northern regions. Night time temperatures are typically warmer than average and Tropical Cyclone risk for northern Australia increases during the cyclone season (November-April)."*

3) Tropical Cyclone Outlook

The 2010-11 Tropical Cyclone season outlook, issued on October 18 2010, can be found at: <http://www.bom.gov.au/climate/ahead/tc.shtml>. A set of "Key Messages" was distributed to Bureau staff to accompany the outlook and assist with their interactions with the public and media (**Attachment A**).

The tropical cyclone outlook noted that given the strength of La Niña conditions at the time (spring of 2010), there was a 98% chance of there being more tropical cyclones than normal during the season cyclone season with an 87% chance of more tropical cyclones than normal (average: 4) in the eastern region. Numerical values were assigned to the model outputs, with best estimates for the Australian region of 20 or 22 tropical cyclones, depending upon the predictor used compared to a long-term average of 12 cyclones. These values indicate the potential for a record number of tropical cyclones in the season.

4) External Briefings

During the lead up to the summer period, several briefings were given by Bureau staff to other government agencies and NGOs about the possibilities for the coming northern wet season/southern bushfire season and tropical cyclone period. While a significant factor was the outlook for tropical cyclones, the significantly wet outlook for November-January was also a noted factor.

In briefings given by Deputy Director (Services) Dr Ray Canterford to senior emergency managers in Canberra on 29 October 2010, and by Mr Perry Wiles to the Department of Human Services emergency management group, it was noted that the summer period had the potential for increased flooding frequency given the similarity between the current La Niña situation and past major La Niña years, as well as the fact that much of northern Australia was primed for flooding due to unusually heavy winter/spring rainfall. A copy of one of some of the relevant slides is in **Attachment B**. ‘

Importantly, It should also be noted that the Regional Director of Queensland (Mr Jim Davidson) briefed the Queensland Premier and Cabinet on 18th October. In that brief the following points were made:

- This is not a run-of-the-mill La Nina
- The current La Nina event is now quite strong and well established
- ... expect with some degree of confidence a fairly active cyclone season and a continuation of the above average rains and associated flooding
- Many catchments are saturated so runoff is likely to occur with less rainfall than normally required

Other major briefings to Queensland disaster managers during the lead-up to the floods appear in paragraph [107].

5) Seasonal Outlooks

Seasonal outlooks are typically issued by the Bureau in the last week of the month, valid for the following three month period. For predictors, they use information from the Indian and Pacific Oceans, for the previous month as well as two months prior to that. In effect, this means that the forecast issued is based upon data from a full month prior.

The seasonal outlook for the main wetting-up and flood period (November to January 2010-11) is shown in **Figure 5**. Significant high probabilities were observed for much of eastern and northern Australia, while odds were above 50% for virtually the entire continent. The verifying observations for the period (**Figure 6**) shows this indication of above average rainfall was true for much of the continent, with the main exception being in central Western Australia (it should be noted even this region had reduced odds in the seasonal outlook). Objective skill scores (final values shown on **Figure 7**) indicate that this period demonstrated high skill in Queensland, New South Wales and the Northern Territory. The resulting skill score for Australia was the highest recorded skill for a rainfall outlook in not only the previous 5 years (i.e., 60 seasonal outlooks) shown in **Figure 7**, but in the full independent (i.e., non model training) period back to year 2000 (126 outlooks).

The very high skill was primarily due to the strong La Niña conditions in the central equatorial Pacific, as well as some forcing from the Indian Ocean. A paper on the relative strength of the La Niña to previous events has been accepted for publication by the Bulletin of the Australian Meteorological and Oceanographic Society (Beard et. al., 2011). This paper indicates that in atmospheric terms, the August to December 2010 value of the Southern Oscillation Index of +21.1 was second only to the August to December 1917 value of +24.6. In considering other measures, the authors note; *“the four strongest events in recorded history (1917-18, 1955-56, 1975-76 and 2010-11) are tightly grouped, with precise analysis made difficult by the global warming signal in ocean data and the lack of high quality ocean data prior to (around) 1950. The major La Niña events of 1973-74 and 1988-89 are also comparable to 2010-11 on some measures.”*

It should be mentioned that the seasonal prediction model used by the Bureau of Meteorology was changed slightly in September, with the NINO3.4 index replacing the “SST1” Empirical Orthogonal Function principle component as the models representation of the El Niño – Southern Oscillation (ENSO) predictor. This change was necessitated by the continued warming trend in the SST1 predictor, which resulted in it being very slow to respond to the emerging La Niña conditions (see early 2010 in **Figure 7**). The change in the model may

have contributed somewhat to the high skill score, though it remains likely that the majority of the high skill was due to the strong La Niña conditions.

Other outlooks related to the event may be found in the Bureau of Meteorology's public seasonal outlook archive (<http://www.bom.gov.au/climate/ahead/archive/rainfall/index.shtml>). These indicate that, beginning with the September-November outlook, increasingly strong chances for above average rainfall in SE Queensland and NE New South Wales were issued, with odds in this area above 60% for the Oct-Dec forecast, and around 70% (or above) in this area for the Nov-Jan, Dec-Feb, Jan-Mar outlooks. It is worth noting many of these forecasts singled out southeast Queensland and northeast New South Wales as having highest probabilities on the east coast.

Probability maps and tables on the Water and the Land (WATL) website (<http://www.bom.gov.au/watl/rainfall/exceedance.shtml>) indicated a very high probability of parts of southeast Queensland receiving well above average rainfall. Brisbane, for instance, typically receives 346 mm for the November to January period (i.e., the climatological forecast for exceeding 346 mm is 50%). The WATL tables indicated that the 50% likelihood value was shifted to 436 mm. The November to January total rainfall for Brisbane was 853.4 mm.

Similarly, the WATL chance of exceedance table indicated the likelihood of receiving above 700 mm was 13%. While this value may appear low, historical observations for Brisbane (site 40214 Brisbane Regional Office, 1840-1993; site 40223, Brisbane Aero, 1994-2000; site 040913 Brisbane, 2001-2010;) indicate just ten occasions on which rainfall exceeded 700 mm in the 171 year period, suggesting the base rate for >700mm rainfall during the season is around 6%. In other words, the forecast of a 13% chance for November-January 2010-11 totals of at least 700mm was around double the climatological normal risk.

6) Additional La Niña and rainfall information

The Bureau of Meteorology website has a range of information relating to La Niña events and their impacts. The page entitled "Australian rainfall patterns during El Niño and La Niña events" (<http://www.bom.gov.au/climate/enso/ensorain.comp.shtml>) not only lists all El Niño and La Niña events since 1900, but includes information about their impacts. Average La Niña rainfall patterns are also shown on a link via this page, including a season-by-season list of the mean La Niña impact for each three month period in the initial and subsequent years of a La Niña event. For the November to January period (**Figure 8**) it is clear that the average impact is greatest in the SE Queensland region.

Similarly, the web page (http://www.bom.gov.au/jsp/ncc/climate_averages/tropical-cyclones/index.jsp) shows climatologies for tropical cyclones during El Niño and La Niña events. It is clear from this page that during a La Niña event, more tropical cyclones occur within the vicinity of the Queensland coastline than during all years, neutral years or El Niño years.

7) References

Beard, G., Chandler, E., Watkins, A.B and D.A. Jones, 2011. How does the 2010-11 La Niña compare with past La Niña events?, Bull. Aust. Met. Ocean. Soc., in press (February).

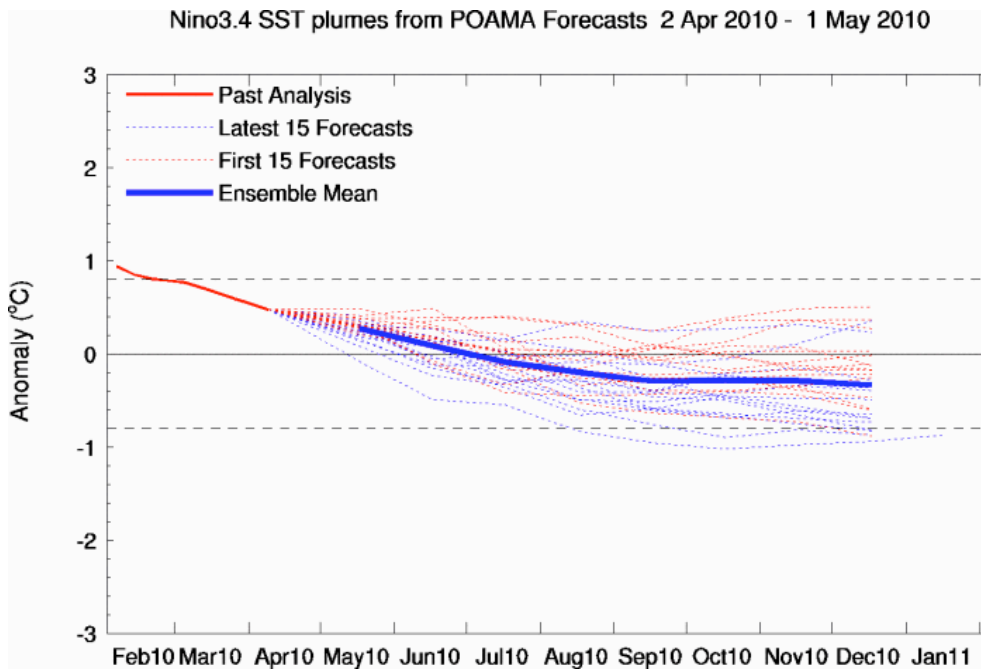


Figure 1. May 1 POAMA outlook

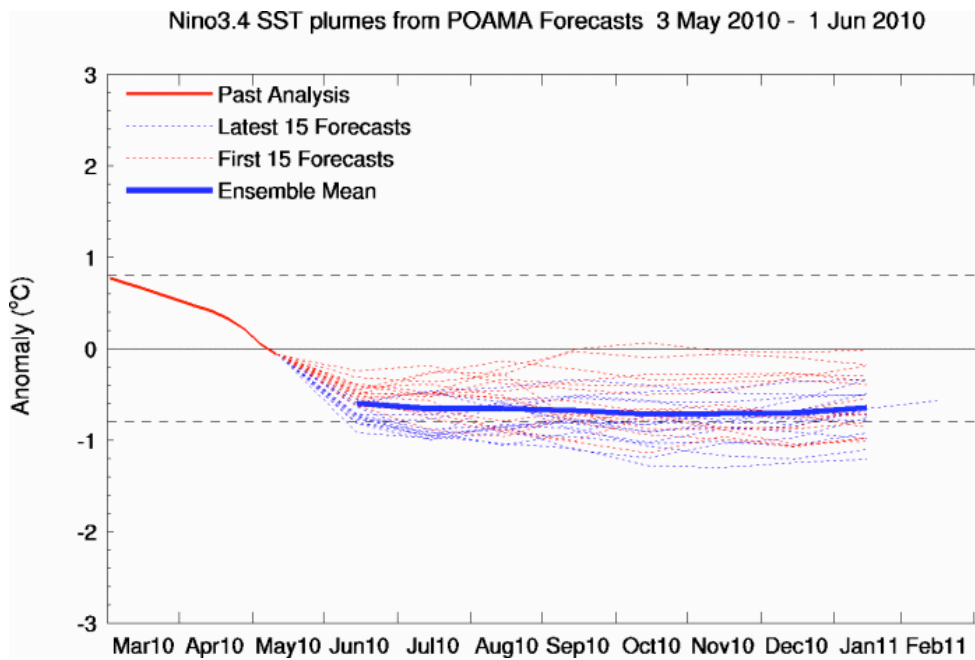


Figure 2. June 1 POAMA outlook

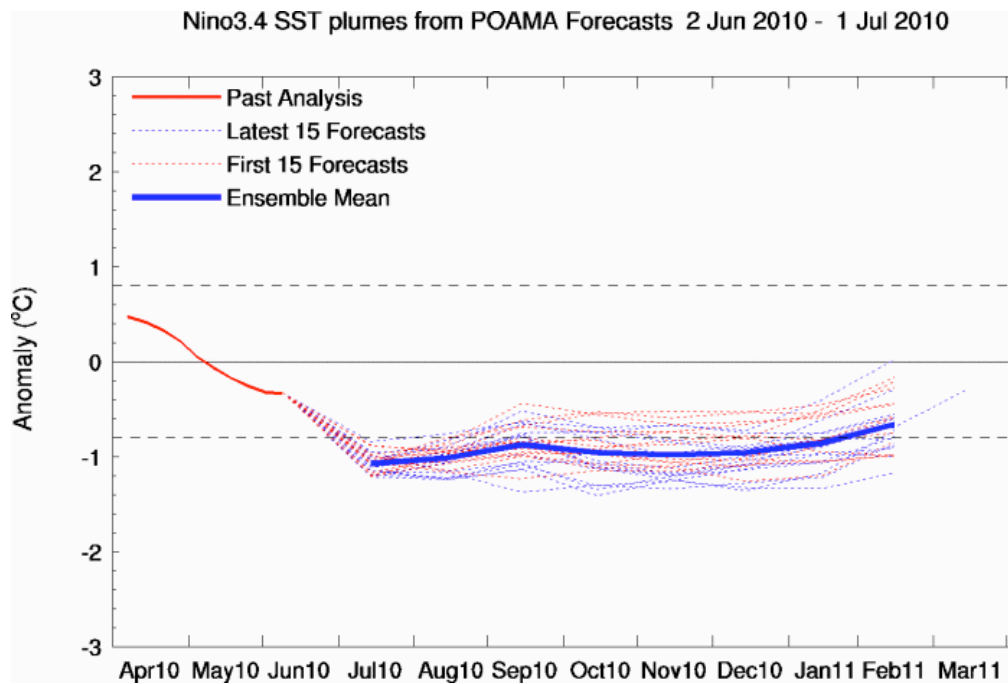


Figure 3. July 1 POAMA outlook

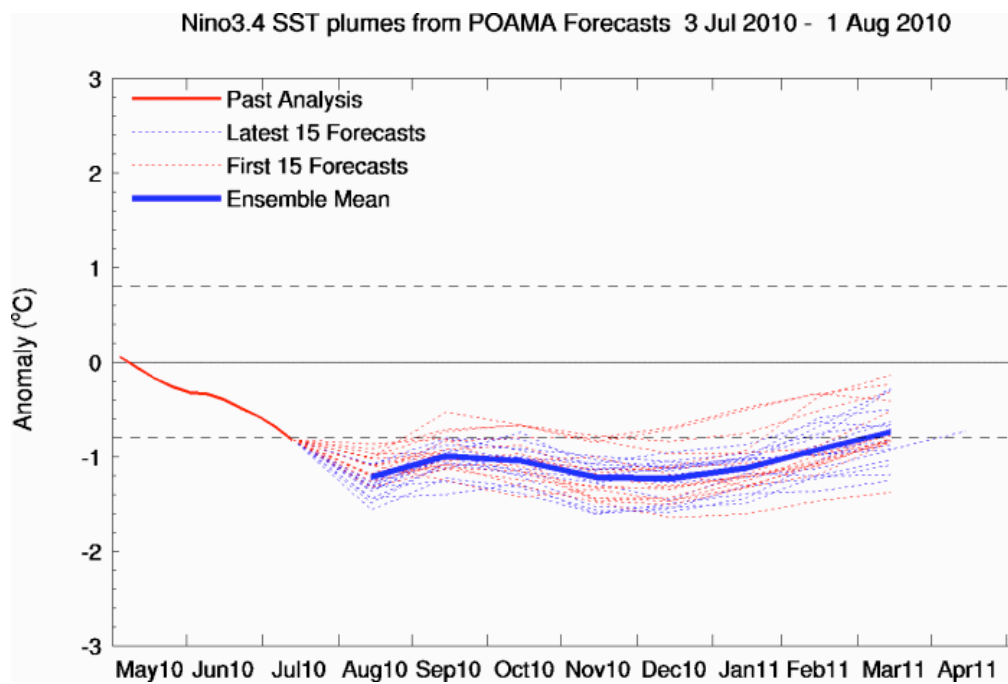


Figure 4. August 1 POAMA outlook

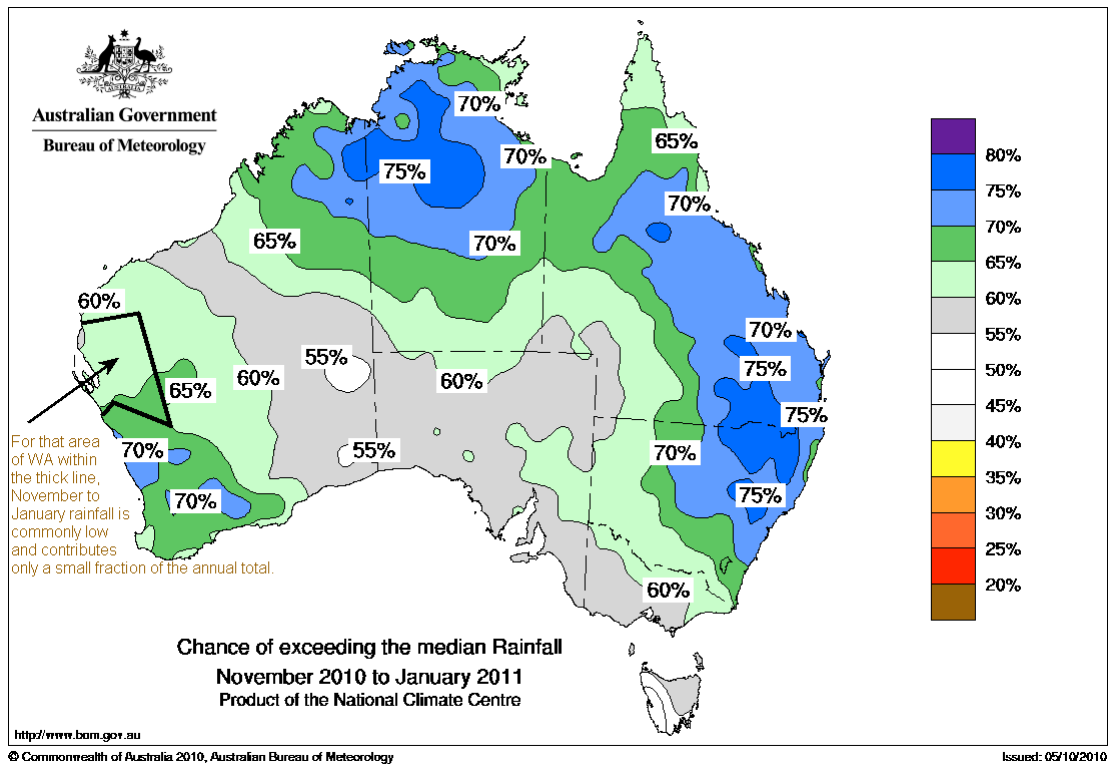


Figure 5. Seasonal Climate Outlook for rainfall over the November to January period.

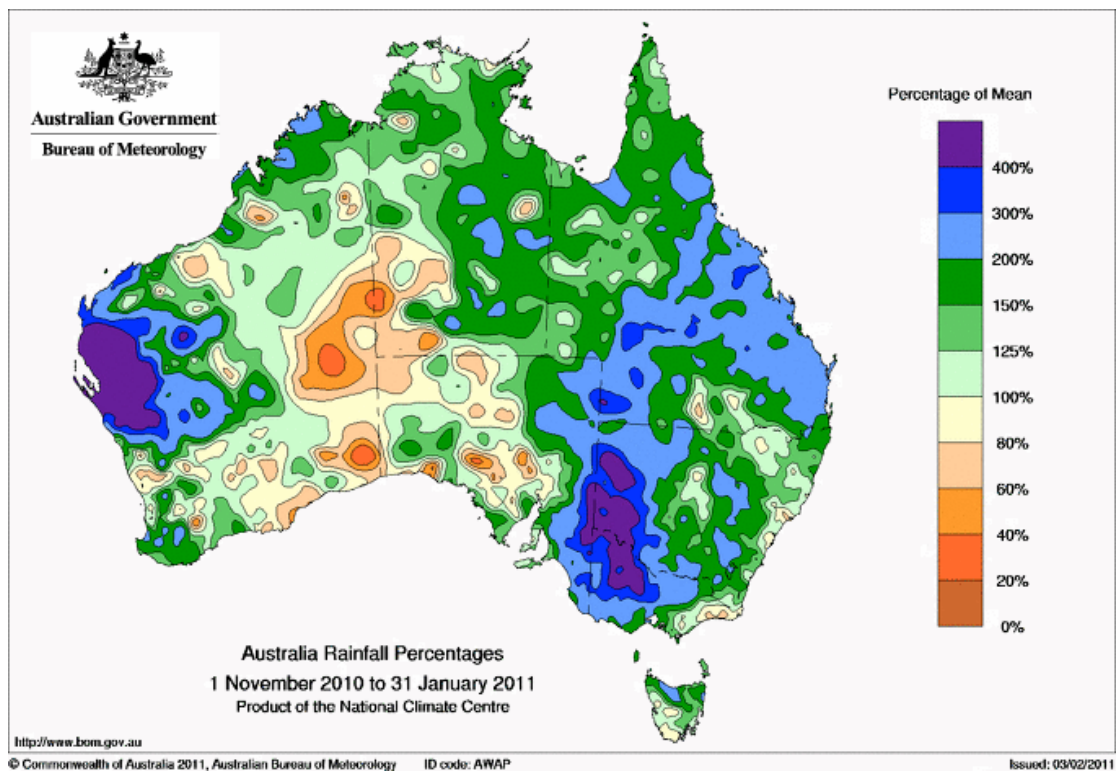


Figure 6. Rainfall percentage of normal as observed for November to January 2010-11

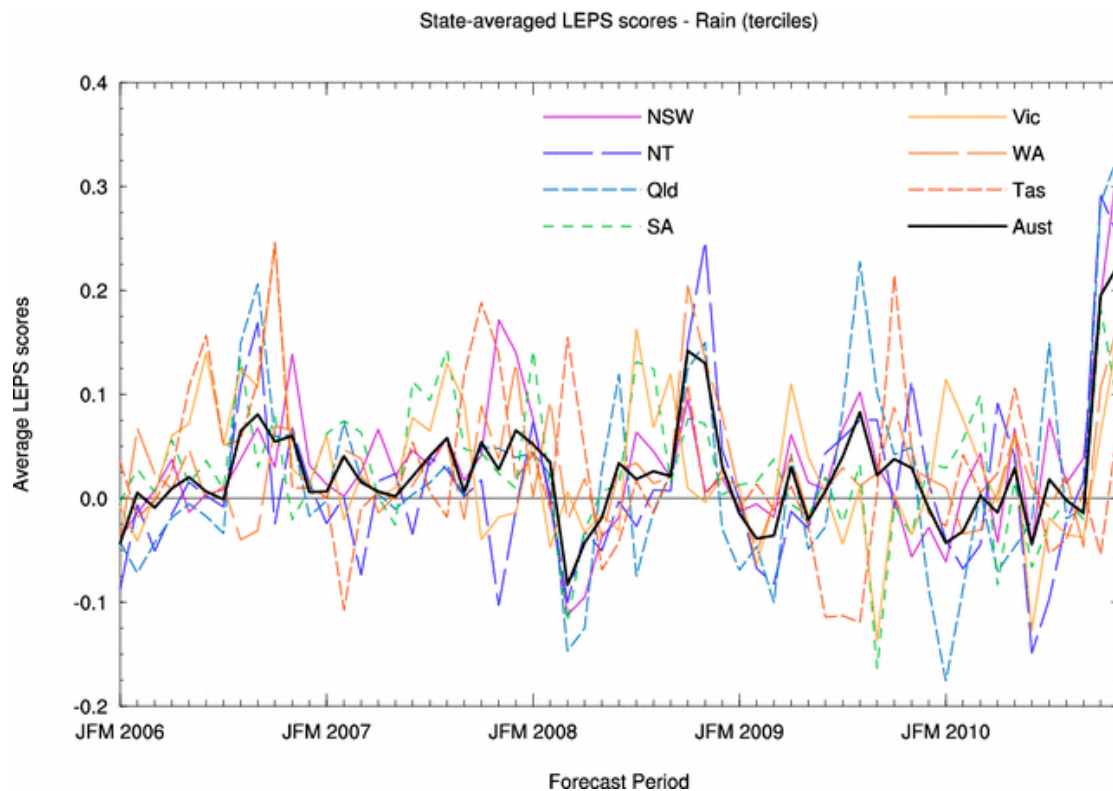


Figure 7. Linear Error in Probability space scores for the rainfall seasonal outlooks 2006-2010

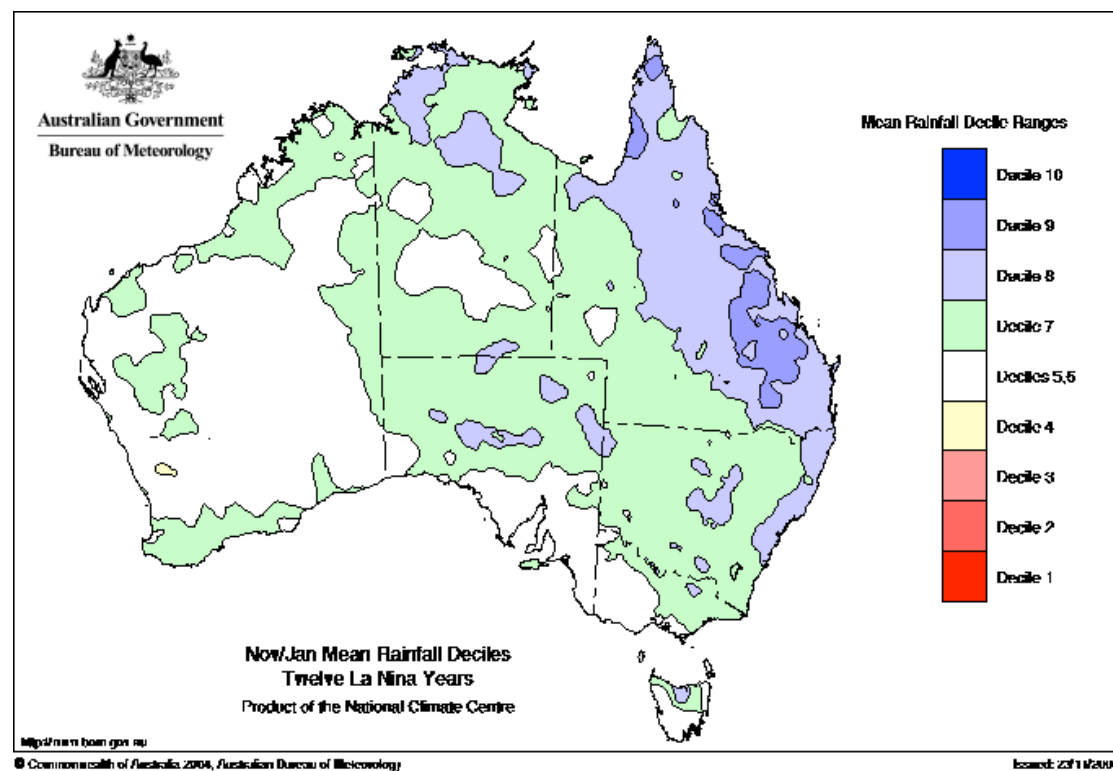


Figure 8. Average rainfall deciles for the twelve strongest La Niña events since 1900 for the November to January period.

Key messages for the 2010/11 Tropical Cyclone Season Outlook

To be issued Monday 18 October 2010

Australian region: <http://www.bom.gov.au/climate/ahead/tc.shtml>
South Pacific region: <http://www.bom.gov.au/climate/ahead/south-pacific/tc.shtml>

Key messages:

- The Australian region is forecast to experience a significantly above average number of tropical cyclones during the 2010/11 tropical cyclone season, with the most likely number being around 20 to 22. The long term average is 12.
- There have been 19 tropical cyclones recorded in the seasons of 1962-63, 1973-74 and 1983-84, however data prior to the modern satellite era (i.e., prior to the 1980's) are unlikely to have correctly captured all tropical cyclones, particularly over the open oceans.
- Forecast numbers are indicative only. It is very likely (>90%) that tropical cyclone numbers will exceed the average of 12. Based upon past above/below average outlooks, forecasts for the Australian region have a high level of confidence.
- An above average number of tropical cyclones are likely to occur in the southwest South Pacific region, with the most likely number being around 7 to 8, against an average of 5.
- An above average tropical cyclone season for Australia and the southwest South Pacific is consistent with current well-developed La Niña conditions. During La Niña events, warmer waters than normal in the western Pacific and regions to the north of Australia, and associated changes in circulation, help focus tropical cyclone activity into the Coral and Timor seas. A map showing average La Niña tropical cyclone locations is available on the following page (**Figure 1**) or from: http://www.bom.gov.au/jsp/ncc/climate_averages/tropical-cyclones/index.jsp?period=lan#maps
- The current La Nina is already at moderate to strong levels with the typical peak of the event still some 2-3 months away. The Southern Oscillation Index (SOI) for September was +25, the highest September value since 1917 (+29.7), while temperatures below the surface of the central to eastern Pacific Ocean are up to 5°C cooler than normal indicating a very well developed event. The latest La Niña information is available from: <http://www.bom.gov.au/climate/enso/>
- This forecast is for the year from July 1 2010 to June 30 2011. Most tropical cyclones in the Southern Hemisphere occur between the months of November and the following April.

Additional information relating to potential questions:

- *Why do the forecast regions differ from the standard regions?*

Tropical cyclone seasonal outlooks use a slightly different area to enable our model to have enough data to make a statistically sensible forecast. However, as the forecast regions are approximately the same as the official forecast regions, outlooks can be considered generally indicative for each area.

- *What is the forecast for coastal crossings/tropical cyclone intensity?*

The statistical model we current use can only predict the likelihood of the total number of cyclones during a cyclone season, and at present cannot forecast coastal crossings or intensity. However, this season is forecast to have a large number of tropical cyclones and therefore it is reasonable to assume that this would increase the odds of landfall or intense

cyclones occurring in the Australian region. Future research may enable us to develop capabilities for such forecasts.

- *Is the high forecast number due to climate change?*

It is not possible to assign the higher number of tropical cyclones forecast to climate change. Trends over the past century in the two indicators used in the forecast model are opposite to those which produces a forecast for higher numbers of tropical cyclones in the Australian region. The central equatorial Pacific has warmed by around 0.5°C over the past half century, while the Southern Oscillation Index (SOI) has a downwards trend over a similar period. Both of these trends towards “warmer” ENSO conditions are opposite to the “cooler” ENSO conditions which would cause our model to predict high tropical cyclone numbers near Australia.

- *What impact does climate change have on Tropical Cyclones?*

The lack of high quality historical tropical cyclone data, particularly prior to the satellite era, means it is difficult to make statements about overall trends in tropical cyclones in the past. Climate models suggest that in the future there is likely to be a shift towards fewer, but more intense, tropical cyclones, with greater rainfall in areas nearer the storms than previously observed for similar systems. Further reading on climate change and cyclones is available from Knutson et al., (2010): <http://www.nature.com/ngeljournal/v3/n3/abs/ngel779.html>

- *Do you expect the outlooks to fall within that exact number range?*

The forecasts are indicative only, and are simply the most likely number of tropical cyclones that the two models (one using the SOI and one using central equatorial Pacific Ocean temperatures) forecast. We would expect the total number of tropical cyclones to be in the vicinity of the values, though not necessarily within any specific range. A good guide is to look at the probability of an above average number of tropical cyclones over the season. For Australia, this probability is extremely high, at 98%. When run over previous seasons, the model has a high degree of skill in forecasting above or below average seasons.

- *Why does the sum of the three regions exceed the Australian total?*

Tropical cyclones numbers are simply the number of cyclones that may occur in each region, and hence if a tropical cyclone travels from one region to the next it will be counted in both areas. However it will only be counted once for Australia.

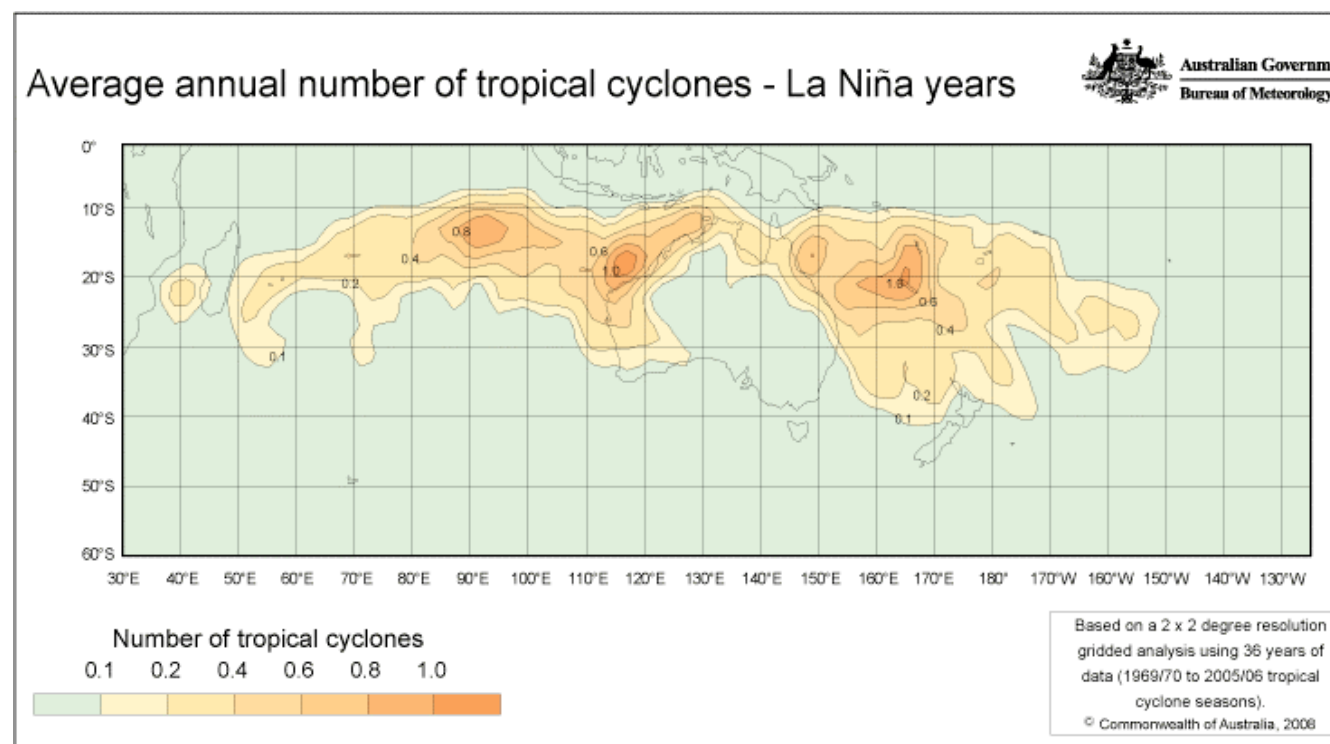
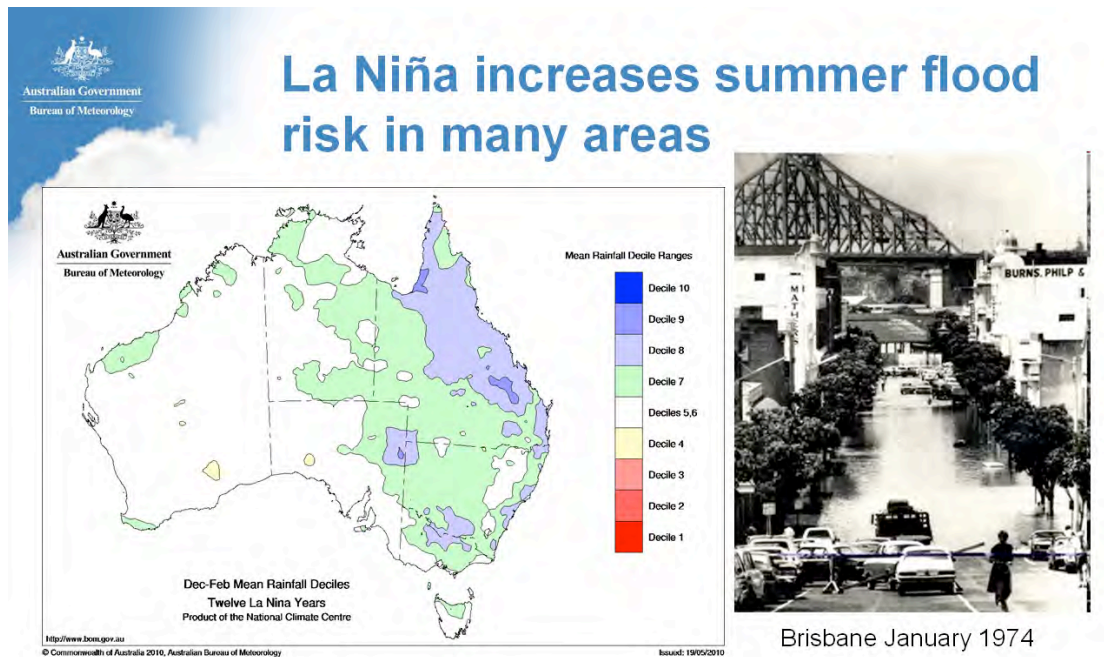
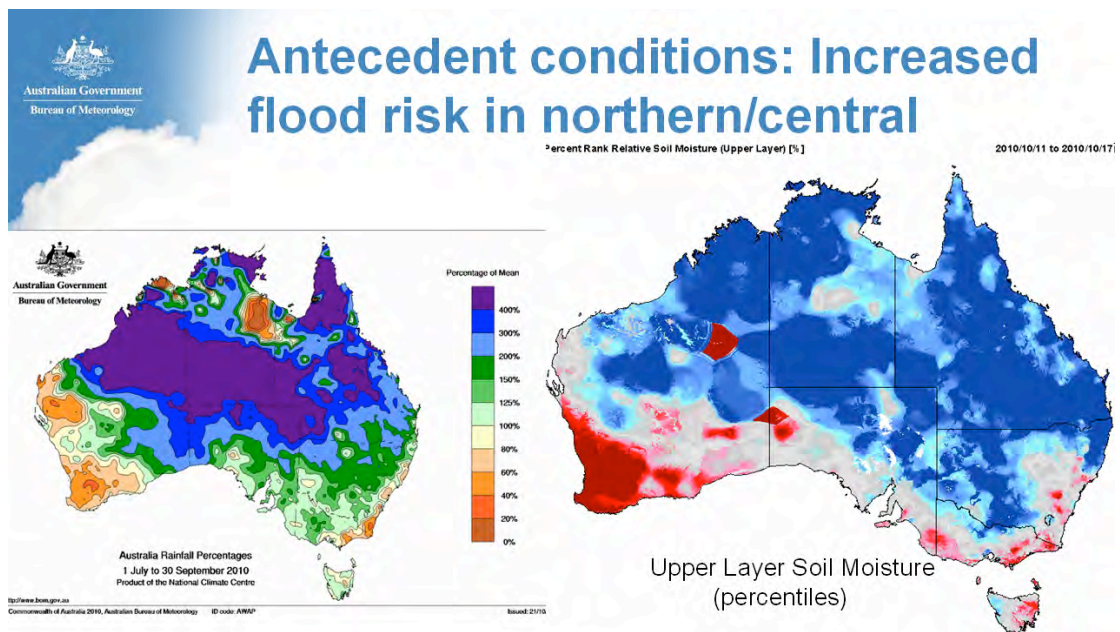


Figure 9. Tropical Cyclone activity during La Nina periods, using data from 1969-2006.



- La Niña summer periods are typically in the wettest 30% of summers for much of eastern Australia



- Large parts of the continent are already 'wet up' and primed if short term heavy rainfall occurs
- Heaviest falls in the past have accompanied land falling tropical cyclones



Australian Government
Bureau of Meteorology

Appendix O

Table of all peak heights recorded in the Bureau's Peak Height Database

1 December 2010 – 12 March 2011

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Appendix O: Table of all peak heights recorded in the Bureau Peak Height Database
between 1/12/2010 and 12/3/2011

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
LOGAN-ALBERT					
Albert R					
40936	0	LUMEAH ALERT	10/01/2011 12:15	4.96	Below Minor
40936	0	LUMEAH ALERT	11/01/2011 10:45	5.16	Minor
540082	0	BEAUDESERT P/S TM	11/01/2011 11:30	7.24	Moderate
540082	0	BEAUDESERT P/S TM	11/01/2011 11:30	7.24	Moderate
40937	0	BENOBLE ALERT	11/01/2011 8:00	3.64	Minor
40938	0	BROMFLEET ALERT	11/01/2011 18:00	11.82	Minor
40761	0	WOLFFDENE ALERT	12/01/2011 2:15	6.99	Minor
Upper Logan R					
40754	0	RATHDOWNEY TM	10/01/2011 16:00	8.75	Moderate
40754	0	RATHDOWNEY TM	11/01/2011 19:00	10.64	Major
40943	0	DIECKMANS BRIDGE ALERT	10/01/2011 9:50	5.29	Moderate
40714	0	ROUND MOUNTAIN TM	11/01/2011 21:30	14.07	Major
40939	0	BEAUDESERT ALERT	11/01/2011 15:15	6.64	Minor
Teviot Bk					
40841	0	CROFTBY TM	11/01/2011 17:00	5.46	Moderate
40949	0	BOONAH ALERT	10/01/2011 17:35	6.7	Major
40949	0	BOONAH ALERT	11/01/2011 17:00	7.2	Major
Logan R d/s Yarrahappini					
40940	0	YARRAHAPPINI ALERT	12/01/2011 10:00	15.12	Moderate
540214	0	SOUTH MACLEAN TM	12/01/2011 16:15	13.77	Moderate
40542	0	MACLEAN BRIDGE	28/12/2010 20:00	14.63	Moderate
40542	0	MACLEAN BRIDGE	12/01/2011 20:00	15.65	Moderate
40665	0	WATERFORD	13/01/2011 12:15	7	Minor
40878	0	WATERFORD ALERT	13/01/2011 7:30	7.05	Minor
BRISBANE					
Stanley R to Somerset Dam					
540059	0	PEACHESTER ALERT	20/12/2010 8:10	4.7	Below Minor
540059	0	PEACHESTER ALERT	9/01/2011 20:30	9.04	Major
540059	0	PEACHESTER ALERT	11/01/2011 15:20	8.96	Moderate
540337	0	WOODFORD ALERT-P	20/12/2010 6:50	5.22	Minor
540337	0	WOODFORD ALERT-P	7/01/2011 19:00	5.04	Minor
540337	0	WOODFORD ALERT-P	10/01/2011 2:30	8.68	Major
540337	0	WOODFORD ALERT-P	11/01/2011 18:30	9.38	Major
540482	0	MT KILCOY WEIR ALERT	21/12/2010 2:00	5.52	Unknown
540482	0	MT KILCOY WEIR ALERT	7/01/2011 21:00	5.85	Unknown
540482	0	MT KILCOY WEIR ALERT	9/01/2011 17:30	7.26	Unknown

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
Brisbane R to Wivenhoe					
540146	0	COOYAR CREEK ALERT	21/12/2010 1:15	5.58	Minor
540146	0	COOYAR CREEK ALERT	27/12/2010 17:40	6.98	Moderate
540146	0	COOYAR CREEK ALERT	6/01/2011 15:13	7.78	Moderate
540146	0	COOYAR CREEK ALERT	7/01/2011 18:45	6.02	Minor
540146	0	COOYAR CREEK ALERT	9/01/2011 17:00	9.48	Major
540146	0	COOYAR CREEK ALERT	11/01/2011 2:00	10.22	Major
540261	0	LINVILLE ALERT	20/12/2010 1:50	6.26	Moderate
540261	0	LINVILLE ALERT	24/12/2010 8:35	3.22	Minor
540261	0	LINVILLE ALERT	27/12/2010 21:44	6.12	Moderate
540261	0	LINVILLE ALERT	6/01/2011 19:20	6.38	Moderate
540261	0	LINVILLE ALERT	7/01/2011 23:15	6.88	Major
540261	0	LINVILLE ALERT	9/01/2011 20:25	10.14	Major
540261	0	LINVILLE ALERT	11/01/2011 2:00	10.22	Major
540188	0	DEVON HILLS ALERT	20/12/2010 2:50	6.81	Moderate
540188	0	DEVON HILLS ALERT	24/12/2010 12:13	3.35	Minor
540188	0	DEVON HILLS ALERT	28/12/2010 0:29	6.63	Moderate
540188	0	DEVON HILLS ALERT	6/01/2011 21:45	6.59	Moderate
540188	0	DEVON HILLS ALERT	8/01/2011 1:00	7.15	Major
540188	0	DEVON HILLS ALERT	9/01/2011 21:25	11.25	Major
540188	0	DEVON HILLS ALERT	11/01/2011 4:30	11.02	Major
540045	0	BOAT MOUNTAIN TM	11/01/2011 7:50	10.78	Major
540141	0	BOAT MOUNTAIN ALERT	20/12/2010 8:15	5.02	Minor
540141	0	BOAT MOUNTAIN ALERT	27/12/2010 19:59	5.58	Minor
540141	0	BOAT MOUNTAIN ALERT	7/01/2011 2:30	4.42	Below Minor
540141	0	BOAT MOUNTAIN ALERT	7/01/2011 22:00	4.5	Minor
540141	0	BOAT MOUNTAIN ALERT	10/01/2011 0:20	11.02	Major
540446	0	GLENDALE TM	20/12/2010 2:00	2.61	Unknown
540446	0	GLENDALE TM	27/12/2010 16:00	2.77	Unknown
540446	0	GLENDALE TM	9/01/2011 20:10	8.23	Unknown
540139	0	GREGOR CK ALERT-P	20/12/2010 6:00	7.58	Major
540139	0	GREGOR CK ALERT-P	24/12/2010 14:21	4.02	Minor
540139	0	GREGOR CK ALERT-P	28/12/2010 2:36	7.72	Major
540139	0	GREGOR CK ALERT-P	7/01/2011 1:00	6.94	Moderate
540139	0	GREGOR CK ALERT-P	8/01/2011 3:30	7.92	Major
540139	0	GREGOR CK ALERT-P	9/01/2011 22:15	14.56	Major
540139	0	GREGOR CK ALERT-P	11/01/2011 11:15	13.38	Major
540139	0	GREGOR CK ALERT-P	11/01/2011 11:20	6.1	Moderate
540148	0	ROSENTERTERS BRIDGE AL	27/12/2010 17:00	3.38	Minor
540148	0	ROSENTERTERS BRIDGE AL	7/01/2011 15:15	3.16	Minor
540148	0	ROSENTERTERS BRIDGE AL	9/01/2011 19:00	5.7	Major
540148	0	ROSENTERTERS BRIDGE AL	10/01/2011 16:00	6.8	Major
540441	0	FALLS RD TM	19/12/2010 22:21	3.74	Unknown

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
540441	0	FALLS RD TM	26/12/2010 23:00	3.63	Unknown
540441	0	FALLS RD TM	27/12/2010 18:30	3.82	Unknown
540441	0	FALLS RD TM	7/01/2011 16:20	4.56	Unknown
540441	0	FALLS RD TM	9/01/2011 19:20	6.77	Unknown
540441	0	FALLS RD TM	10/01/2011 15:00	8.84	Unknown
Lockyer Ck to Lyons Br					
40829	0	HELIDON TM	10/01/2011 15:10	13.88	Major
540143	0	HELIDON ALERT	16/12/2010 21:30	5.14	Minor
540143	0	HELIDON ALERT	19/12/2010 20:50	3.98	Below Minor
540143	0	HELIDON ALERT	26/12/2010 22:12	4.76	Minor
540143	0	HELIDON ALERT	27/12/2010 15:33	5.52	Minor
540143	0	HELIDON ALERT	6/01/2011 12:00	6.3	Minor
540143	0	HELIDON ALERT	7/01/2011 18:15	4.2	Minor
540143	0	HELIDON ALERT	9/01/2011 21:00	6.98	Moderate
540143	0	HELIDON ALERT	10/01/2011 1:00	7	Moderate
540143	0	HELIDON ALERT	10/01/2011 15:00	12.74	Major
540405	0	FLAGSTONE CK TM	16/12/2010 23:30	4.28	Unknown
540405	0	FLAGSTONE CK TM	19/12/2010 19:30	4.49	Unknown
540405	0	FLAGSTONE CK TM	26/12/2010 21:00	5.5	Unknown
540405	0	FLAGSTONE CK TM	27/12/2010 14:30	7.16	Unknown
540405	0	FLAGSTONE CK TM	6/01/2011 11:30	7	Unknown
540405	0	FLAGSTONE CK TM	10/01/2011 16:50	6.74	Unknown
540386	0	SANDY CREEK ROAD ALERT	6/01/2011 14:31	2.4	Minor
540386	0	SANDY CREEK ROAD ALERT	7/01/2011 18:30	2.4	Minor
540386	0	SANDY CREEK ROAD ALERT	9/01/2011 21:02	4.45	Major
540386	0	SANDY CREEK ROAD ALERT	10/01/2011 0:28	4.45	Major
540386	0	SANDY CREEK ROAD ALERT	10/01/2011 17:21	3.85	Moderate
540386	0	SANDY CREEK ROAD ALERT	11/01/2011 8:42	4.65	Major
540386	0	SANDY CREEK ROAD ALERT	11/01/2011 17:27	4.9	Major
540406	0	MA MA CREEK TM	19/12/2010 16:40	3.17	Unknown
540406	0	MA MA CREEK TM	26/12/2010 21:40	3.91	Unknown
540406	0	MA MA CREEK TM	27/12/2010 13:50	5.5	Unknown
540067	0	TENTHILL TM	6/01/2011 13:40	3.93	Below Minor
540152	0	TENTHILL ALERT	19/12/2010 20:30	2.72	Below Minor
540152	0	TENTHILL ALERT	27/12/2010 16:33	8.74	Major
540156	0	GATTON ALERT	5/12/2010 7:56	7.6	Minor
540156	0	GATTON ALERT	17/12/2010 7:40	7.38	Minor
540156	0	GATTON ALERT	20/12/2010 2:50	10.12	Moderate
540156	0	GATTON ALERT	23/12/2010 18:40	7.82	Minor
540156	0	GATTON ALERT	6/01/2011 18:20	12.74	Moderate
540156	0	GATTON ALERT	10/01/2011 4:20	14.46	Moderate
540156	0	GATTON ALERT	11/01/2011 12:10	16.5	Major
40835	0	MULGOWIE TM	4/12/2010 23:20	8.14	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
40835	0	MULGOWIE TM	26/12/2010 22:00	7.52	Major
40835	0	MULGOWIE TM	27/12/2010 17:00	9.1	Major
40835	0	MULGOWIE TM	6/01/2011 14:00	7.79	Major
40835	0	MULGOWIE TM	10/01/2011 16:00	7.88	Major
40716	0	LAIDLEY	26/12/2010 21:00	7.6	Major
40716	0	LAIDLEY	27/12/2010 20:03	8.8	Major
40716	0	LAIDLEY	10/01/2011 22:00	8.7	Major
40716	0	LAIDLEY	11/01/2011 13:20	8.85	Major
40716	0	LAIDLEY	19/01/2011 22:30	7.6	Major
540158	0	SHOWGROUND WEIR ALERT	5/12/2010 4:14	9.36	Major
540158	0	SHOWGROUND WEIR ALERT	19/12/2010 21:35	5.82	Below Minor
540158	0	SHOWGROUND WEIR ALERT	23/12/2010 15:40	6.08	Minor
540158	0	SHOWGROUND WEIR ALERT	27/12/2010 1:26	9.3	Major
540158	0	SHOWGROUND WEIR ALERT	27/12/2010 19:44	9.36	Major
540158	0	SHOWGROUND WEIR ALERT	6/01/2011 17:10	9.26	Major
540158	0	SHOWGROUND WEIR ALERT	10/01/2011 19:15	9.3	Major
540158	0	SHOWGROUND WEIR ALERT	11/01/2011 8:50	9.26	Major
540158	0	SHOWGROUND WEIR ALERT	19/01/2011 23:40	8.38	Major
540050	0	WARREGO HIGHWAY TM	20/12/2010 8:00	4.78	Minor
540050	0	WARREGO HIGHWAY TM	24/12/2010 1:00	4.85	Minor
540050	0	WARREGO HIGHWAY TM	27/12/2010 8:00	5.96	Major
540050	0	WARREGO HIGHWAY TM	28/12/2010 3:00	6.37	Major
540050	0	WARREGO HIGHWAY TM	7/01/2011 2:00	5.34	Moderate
540050	0	WARREGO HIGHWAY TM	11/01/2011 3:00	6.42	Major
540050	0	WARREGO HIGHWAY TM	20/01/2011 6:00	5.29	Moderate
540149	0	GLENORE GROVE ALERT	20/12/2010 8:50	9.66	Minor
540149	0	GLENORE GROVE ALERT	23/12/2010 23:55	8.4	Minor
540149	0	GLENORE GROVE ALERT	27/12/2010 11:20	12.76	Moderate
540149	0	GLENORE GROVE ALERT	27/12/2010 21:55	14.5	Major
540149	0	GLENORE GROVE ALERT	6/01/2011 22:15	11.36	Moderate
540149	0	GLENORE GROVE ALERT	10/01/2011 6:45	13.02	Major
540149	0	GLENORE GROVE ALERT	10/01/2011 23:30	14.62	Major
540149	0	GLENORE GROVE ALERT	11/01/2011 17:00	15.34	Major
540149	0	GLENORE GROVE ALERT	20/01/2011 4:50	8.62	Minor
40662	0	LYONS BRIDGE	11/01/2011 17:30	17.5	Major
540174	0	LYONS BRIDGE ALERT-P	20/12/2010 15:30	11.39	Minor
540174	0	LYONS BRIDGE ALERT-P	24/12/2010 8:40	10.41	Minor
540174	0	LYONS BRIDGE ALERT-P	28/12/2010 10:59	15.87	Major
540174	0	LYONS BRIDGE ALERT-P	11/01/2011 17:30	17.25	Major
540174	0	LYONS BRIDGE ALERT-P	20/01/2011 12:08	11.01	Minor
40817	0	RIFLE RANGE ROAD TM	20/12/2010 17:20	11.05	Minor
40817	0	RIFLE RANGE ROAD TM	24/12/2010 10:30	10.18	Below Minor
40817	0	RIFLE RANGE ROAD TM	28/12/2010 12:10	15.88	Major
40817	0	RIFLE RANGE ROAD TM	6/01/2011 7:00	12.38	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
40817	0	RIFLE RANGE ROAD TM	11/01/2011 16:10	16.67	Major
40817	0	RIFLE RANGE ROAD TM	20/01/2011 12:00	10.85	Minor
540153	0	O'REILLY'S WEIR ALERT	30/12/2010 22:40	12.28	Minor
Brisbane R..Wivenhoe-Moggill					
540183	0	LOWOOD PUMP STN ALERT-B	21/12/2010 23:14	10.25	Unknown
540183	0	LOWOOD PUMP STN ALERT-B	31/12/2010 7:30	10.79	Unknown
540183	0	LOWOOD PUMP STN ALERT-B	11/01/2011 23:43	22.87	Unknown
540150	0	SAVAGES CROSSING ALERT	22/12/2010 4:00	10.35	Minor
540150	0	SAVAGES CROSSING ALERT	30/12/2010 10:12	10.83	Minor
540150	0	SAVAGES CROSSING ALERT	12/01/2011 2:10	24.15	Major
540257	0	BURTONS BRIDGE ALERT	22/12/2010 7:30	8.54	Unknown
540257	0	BURTONS BRIDGE ALERT	30/12/2010 10:45	8.78	Unknown
540257	0	BURTONS BRIDGE ALERT	12/01/2011 9:34	18.82	Unknown
540256	0	KHOLO BRIDGE ALERT	22/12/2010 12:50	2.57	Unknown
540256	0	KHOLO BRIDGE ALERT	30/12/2010 18:45	3.09	Unknown
540199	0	MT CROSBY ALERT	22/12/2010 13:00	11.2	Minor
540199	0	MT CROSBY ALERT	30/12/2010 20:50	11.64	Minor
540199	0	MT CROSBY ALERT	12/01/2011 9:00	26.18	Major
Bremer R to Ipswich					
540157	0	ADAMS BRIDGE ALERT	4/12/2010 23:43	4.01	Minor
540157	0	ADAMS BRIDGE ALERT	16/12/2010 17:20	4.39	Minor
540157	0	ADAMS BRIDGE ALERT	26/12/2010 20:52	4.29	Minor
540157	0	ADAMS BRIDGE ALERT	27/12/2010 16:43	4.67	Minor
540157	0	ADAMS BRIDGE ALERT	6/01/2011 14:15	4.51	Minor
540157	0	ADAMS BRIDGE ALERT	11/01/2011 19:00	5.05	Moderate
540315	0	STOKES CROSSING ALERT	5/12/2010 2:30	4	Minor
540315	0	STOKES CROSSING ALERT	16/12/2010 19:40	4.25	Minor
540315	0	STOKES CROSSING ALERT	26/12/2010 22:40	4.45	Minor
540315	0	STOKES CROSSING ALERT	27/12/2010 18:26	4.65	Minor
540315	0	STOKES CROSSING ALERT	6/01/2011 17:20	4.5	Minor
540314	0	SPRESSERS BRIDGE ALERT	17/12/2010 2:00	3.2	Below Minor
540314	0	SPRESSERS BRIDGE ALERT	20/12/2010 1:00	3.2	Below Minor
540314	0	SPRESSERS BRIDGE ALERT	25/12/2010 21:47	4.42	Moderate
540314	0	SPRESSERS BRIDGE ALERT	27/12/2010 3:51	5.87	Major
540314	0	SPRESSERS BRIDGE ALERT	27/12/2010 22:24	5.87	Major
540314	0	SPRESSERS BRIDGE ALERT	6/01/2011 23:18	5.62	Major
540314	0	SPRESSERS BRIDGE ALERT	11/01/2011 16:25	7.17	Major
540314	0	SPRESSERS BRIDGE ALERT	20/01/2011 4:50	5.52	Major
540317	0	GREY'S PLAINS ROAD ALERT	4/12/2010 21:30	3.24	Unknown
540317	0	GREY'S PLAINS ROAD ALERT	16/12/2010 20:40	1.74	Unknown
540317	0	GREY'S PLAINS ROAD ALERT	19/12/2010 17:35	1.74	Unknown
540317	0	GREY'S PLAINS ROAD ALERT	26/12/2010 19:42	3.04	Unknown
540317	0	GREY'S PLAINS ROAD ALERT	27/12/2010 14:03	3.39	Unknown
540064	0	GRANDCHESTER ALERT	14/12/2010 19:20	3.18	Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
540064	0	GRANDCHESTER ALERT	19/12/2010 19:00	3.48	Minor
540064	0	GRANDCHESTER ALERT	6/01/2011 13:30	3.38	Minor
540064	0	GRANDCHESTER ALERT	11/01/2011 8:00	5.43	Major
540064	0	GRANDCHESTER ALERT	11/01/2011 14:30	5.28	Major
540064	0	GRANDCHESTER ALERT	19/01/2011 20:30	4.88	Moderate
540194	0	KUSS ROAD ALERT	5/12/2010 4:35	6.78	Minor
540194	0	KUSS ROAD ALERT	19/12/2010 23:00	6.86	Minor
540194	0	KUSS ROAD ALERT	6/01/2011 19:00	7.12	Moderate
540313	0	ROSEWOOD WWTP ALERT	5/12/2010 6:30	6.95	Below Minor
540313	0	ROSEWOOD WWTP ALERT	6/01/2011 21:30	6.58	Below Minor
540313	0	ROSEWOOD WWTP ALERT	11/01/2011 15:30	7.83	Minor
540313	0	ROSEWOOD WWTP ALERT	20/01/2011 3:30	6.63	Below Minor
540193	0	ROSEWOOD ALERT	5/12/2010 9:45	5.1	Moderate
540193	0	ROSEWOOD ALERT	15/12/2010 5:40	4.38	Minor
540193	0	ROSEWOOD ALERT	17/12/2010 4:30	4.96	Minor
540193	0	ROSEWOOD ALERT	20/12/2010 3:00	5.34	Moderate
540193	0	ROSEWOOD ALERT	24/12/2010 0:40	4.58	Minor
540193	0	ROSEWOOD ALERT	7/01/2011 0:18	5.58	Moderate
540193	0	ROSEWOOD ALERT	11/01/2011 15:30	7.5	Major
540193	0	ROSEWOOD ALERT	20/01/2011 5:15	5.48	Moderate
540147	0	WALLOON ALERT-P	15/12/2010 11:30	3.8	Minor
540147	0	WALLOON ALERT-P	17/12/2010 9:00	4.78	Minor
540147	0	WALLOON ALERT-P	20/12/2010 7:00	5.48	Minor
540147	0	WALLOON ALERT-P	24/12/2010 5:25	4.1	Minor
540147	0	WALLOON ALERT-P	7/01/2011 4:18	5.86	Moderate
540147	0	WALLOON ALERT-P	11/01/2011 17:00	8.9	Major
540147	0	WALLOON ALERT-P	20/01/2011 9:00	5.72	Moderate
540081	0	WALLOON TM	15/12/2010 15:00	4.73	Below Minor
540081	0	WALLOON TM	17/12/2010 11:00	5.76	Minor
540081	0	WALLOON TM	20/12/2010 9:00	6.43	Minor
540081	0	WALLOON TM	24/12/2010 8:00	5.07	Minor
540081	0	WALLOON TM	7/01/2011 6:00	6.82	Moderate
540081	0	WALLOON TM	11/01/2011 19:00	11.27	Major
540081	0	WALLOON TM	20/01/2011 11:00	6.69	Moderate
40838	0	THREE MILE BRIDGE ALERT	15/12/2010 16:40	12.7	Below Minor
40838	0	THREE MILE BRIDGE ALERT	17/12/2010 13:30	15.7	Minor
40838	0	THREE MILE BRIDGE ALERT	20/12/2010 11:10	16.75	Moderate
540364	0	MOOGERAH DAM HW TM	27/12/2010 17:30	2.22	Unknown
540364	0	MOOGERAH DAM HW TM	7/01/2011 17:20	0.94	Unknown
540364	0	MOOGERAH DAM HW TM	11/01/2011 18:50	2.7	Unknown
540474	0	MOOGERAH DAM ALERT	11/01/2011 18:36	157.6	Unknown
540365	0	TOOHILLS CROSSING TM	4/12/2010 20:20	3.76	Unknown
540365	0	TOOHILLS CROSSING TM	13/12/2010 22:20	5.84	Unknown

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
540365	0	TOOHILLS CROSSING TM	27/12/2010 14:50	6.08	Unknown
540151	0	KALBAR WEIR ALERT	5/12/2010 0:20	77.57	Minor
540151	0	KALBAR WEIR ALERT	14/12/2010 1:15	78.15	Moderate
540151	0	KALBAR WEIR ALERT	19/12/2010 16:50	77.03	Minor
540151	0	KALBAR WEIR ALERT	27/12/2010 18:00	79.99	Major
540151	0	KALBAR WEIR ALERT	6/01/2011 15:40	77.35	Minor
540151	0	KALBAR WEIR ALERT	7/01/2011 8:00	77.07	Minor
540151	0	KALBAR WEIR ALERT	11/01/2011 19:35	80.29	Major
540057	0	KALBAR WEIR TW TM	5/12/2010 1:00	6.84	Minor
540057	0	KALBAR WEIR TW TM	14/12/2010 1:25	7.59	Moderate
540057	0	KALBAR WEIR TW TM	19/12/2010 17:00	6.27	Minor
540057	0	KALBAR WEIR TW TM	27/12/2010 19:10	9.24	Major
540057	0	KALBAR WEIR TW TM	6/01/2011 16:10	6.62	Minor
540057	0	KALBAR WEIR TW TM	7/01/2011 8:00	6.67	Minor
540057	0	KALBAR WEIR TW TM	11/01/2011 21:00	9.68	Major
40440	0	KALBAR	27/12/2010 18:00	10.6	Major
40440	0	KALBAR	10/01/2011 18:00	9.95	Major
40440	0	KALBAR	11/01/2011 0:00	10.9	Major
540154	0	HARRISVILLE ALERT	5/12/2010 11:30	4.62	Moderate
540154	0	HARRISVILLE ALERT	14/12/2010 8:00	4.54	Moderate
540154	0	HARRISVILLE ALERT	27/12/2010 21:15	5.76	Major
540154	0	HARRISVILLE ALERT	7/01/2011 18:40	4.38	Moderate
540154	0	HARRISVILLE ALERT	11/01/2011 20:00	5.98	Major
540316	0	CHURCHBANK WEIR ALERT	20/12/2010 6:00	2.36	Moderate
540316	0	CHURCHBANK WEIR ALERT	24/12/2010 1:20	1.46	Minor
540316	0	CHURCHBANK WEIR ALERT	28/12/2010 2:30	3.32	Major
540316	0	CHURCHBANK WEIR ALERT	7/01/2011 22:00	2.16	Moderate
540180	0	AMBERLEY ALERT-P	14/12/2010 20:00	4.4	Minor
540180	0	AMBERLEY ALERT-P	17/12/2010 13:30	4.78	Minor
540180	0	AMBERLEY ALERT-P	20/12/2010 11:40	5.28	Minor
540180	0	AMBERLEY ALERT-P	24/12/2010 6:00	4.48	Minor
540180	0	AMBERLEY ALERT-P	28/12/2010 10:10	7.32	Major
540180	0	AMBERLEY ALERT-P	8/01/2011 1:00	5.18	Minor
540180	0	AMBERLEY ALERT-P	20/01/2011 3:20	4.74	Minor
40816	0	AMBERLEY (DNR) TM	14/12/2010 21:40	5.16	Minor
40816	0	AMBERLEY (DNR) TM	17/12/2010 15:00	5.58	Minor
40816	0	AMBERLEY (DNR) TM	20/12/2010 14:00	6.06	Minor
40816	0	AMBERLEY (DNR) TM	24/12/2010 8:00	5.28	Minor
40816	0	AMBERLEY (DNR) TM	28/12/2010 12:00	8.24	Major
40816	0	AMBERLEY (DNR) TM	8/01/2011 4:00	6	Minor
40816	0	AMBERLEY (DNR) TM	20/01/2011 4:00	5.68	Minor
540065	0	PEAK CROSSING ALERT	20/12/2010 2:00	2.16	Minor
540065	0	PEAK CROSSING ALERT	26/12/2010 23:00	3.81	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
540216	0	BERRY'S LAGOON TM	17/12/2010 15:00	19.07	Unknown
540216	0	BERRY'S LAGOON TM	20/12/2010 11:30	20.33	Unknown
540216	0	BERRY'S LAGOON TM	27/12/2010 14:30	23.42	Unknown
540216	0	BERRY'S LAGOON TM	28/12/2010 7:15	23.52	Unknown
540216	0	BERRY'S LAGOON TM	7/01/2011 10:15	20.1	Unknown
40836	0	ONE MILE BRIDGE ALERT	15/12/2010 18:55	7.55	Below Minor
40836	0	ONE MILE BRIDGE ALERT	17/12/2010 15:15	10.05	Minor
40836	0	ONE MILE BRIDGE ALERT	20/12/2010 12:50	11.55	Minor
40836	0	ONE MILE BRIDGE ALERT	27/12/2010 15:30	15	Major
40836	0	ONE MILE BRIDGE ALERT	28/12/2010 8:00	15.1	Major
40836	0	ONE MILE BRIDGE ALERT	7/01/2011 10:15	11.3	Minor
40836	0	ONE MILE BRIDGE ALERT	20/01/2011 13:40	11.05	Minor
540250	0	BRASSALL(HANCOCKS BR) AL	20/12/2010 13:00	8.33	Minor
540250	0	BRASSALL(HANCOCKS BR) AL	27/12/2010 14:20	12.68	Major
540250	0	BRASSALL(HANCOCKS BR) AL	28/12/2010 8:30	12.93	Major
40101	0	IPSWICH	12/01/2011 13:45	19.25	Major
40831	0	IPSWICH ALERT	27/12/2010 17:30	8.5	Minor
40831	0	IPSWICH ALERT	28/12/2010 8:15	8.5	Minor
40812	0	MOGGILL ALERT	22/12/2010 12:15	3.02	Below Minor
40812	0	MOGGILL ALERT	12/01/2011 14:15	17.87	Major
540192	0	JINDALEE ALERT	22/12/2010 11:15	2.4	Below Minor
540192	0	JINDALEE ALERT	12/01/2011 18:50	12.9	Major
40690	0	BRISBANE CITY TM	13/01/2011 3:00	4.46	Major
540198	0	BRISBANE CITY ALERT	22/12/2010 10:30	1.85	Minor
540198	0	BRISBANE CITY ALERT	13/01/2011 3:00	4.46	Major
PINE					
Pine/Caboolture R					
540444	0	CEDAR CK RD ALERT	11/01/2011 10:00	5.31	Unknown
540205	0	DRAPERS CROSSING ALERT	11/01/2011 14:30	7.32	Major
540415	0	CASH'S CROSSING ALERT	11/01/2011 15:15	5.6	Below Minor
540414	0	NORMANBY WAY ALERT	11/01/2011 18:00	4.99	Major
540189	0	BAXTERS CREEK ALERT	11/01/2011 11:00	9.2	Unknown
540483	0	KOBBLE CK AL	11/01/2011 11:15	5.72	Unknown
540202	0	NORTH PINE DAM ALERT	11/01/2011 15:00	41.08	Unknown
540412	0	YOUNGS CROSSING ALERT	11/01/2011 17:25	13.27	Major
540439	0	LAWNTON ALERT	11/01/2011 17:00	5.92	Unknown
540417	0	MURRUMBA DOWNS ALERT	11/01/2011 18:25	3.74	Moderate
540242	0	BURPENGARY (DALE ST) AL	11/01/2011 12:35	11.19	Major
540244	0	WAMURAN ALERT	11/01/2011 12:55	30.67	Major
540357	0	UPPER CABOOLTURE ALERT	11/01/2011 10:50	13.01	Major
540243	0	CABOOLTURE WTP ALERT	11/01/2011 13:20	10.94	Major
MAROOCHY					
Maroochy/Mooloolah R					
540300	0	MOOLOOLAH TM	9/01/2011 19:00	5.76	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
540346	0	EWEN MADDOCK DAM AL	10/01/2011 4:25	26.58	Moderate
540344	0	JORDAN ST AL	9/01/2011 20:45	5.35	Major
540350	0	PALMVIEW AL	9/01/2011 22:45	5.04	Moderate
540351	0	MERIDAN WAY AL	10/01/2011 3:00	2.81	Minor
540421	0	TANAWHA ALERT	9/01/2011 18:15	1.7	Minor
540342	0	OLD GYMPIE RD AL	9/01/2011 17:50	4.9	Major
540093	0	EUMUNDI ALERT	9/01/2011 19:00	6.77	Major
540263	0	KIAMBA TM	9/01/2011 15:00	3.77	Minor
540092	0	YANDINA ALERT	9/01/2011 15:15	3.58	Moderate
540092	0	YANDINA ALERT	20/01/2011 1:20	2.48	Minor
540095	0	DUNETHIN ROCK ALERT	9/01/2011 16:40	3	Moderate
540223	0	YANDINA CREEK ALERT	9/01/2011 19:25	5.56	Below Minor
540218	0	DOONAN CREEK ALERT	9/01/2011 16:10	4.45	Moderate
540088	0	WARANA BRIDGE ALERT	9/01/2011 16:35	6.64	Minor
540083	0	DIDDILLIBAH ALERT	10/01/2011 1:40	4.31	Moderate
540222	0	EUDLO ALERT	9/01/2011 18:00	4.55	Below Minor
540289	0	KIELS MOUNTAIN TM	10/01/2011 0:01	3.18	Minor
NOOSA					
Noosa R					
540308	0	BOREEN POINT ALERT	10/01/2011 19:20	1.83	Minor
540309	0	LAKE COOROIBAH ALERT	11/01/2011 20:40	1.68	Moderate
40757	0	LAKE COOROIBAH	11/01/2011 21:00	1.55	Moderate
540310	0	TEWANTIN ALERT	11/01/2011 12:15	1.15	Minor
MARY					
Mary R u/s Gympie					
540332	0	BELLBIRD CREEK ALERT	7/01/2011 17:15	4.93	Below Minor
540332	0	BELLBIRD CREEK ALERT	9/01/2011 21:35	8.88	Major
540331	0	KENILWORTH H/S ALERT	20/12/2010 6:20	4.02	Minor
540331	0	KENILWORTH H/S ALERT	7/01/2011 19:00	5.62	Minor
540331	0	KENILWORTH H/S ALERT	9/01/2011 22:45	11.27	Major
540331	0	KENILWORTH H/S ALERT	10/01/2011 2:00	15.75	Major
540330	0	MOY POCKET ALERT	20/12/2010 9:40	8.5	Minor
540330	0	MOY POCKET ALERT	29/12/2010 0:15	7.5	Minor
540330	0	MOY POCKET ALERT	7/01/2011 23:30	9.7	Minor
540264	0	BORUMBA DAM HW TM	7/01/2011 20:00	1.92	Below Minor
540264	0	BORUMBA DAM HW TM	9/01/2011 16:45	3.21	Moderate
40099	0	IMBIL PO	7/01/2011 3:00	5.9	Minor
40099	0	IMBIL PO	9/01/2011 12:30	8.2	Major
40099	0	IMBIL PO	9/01/2011 21:00	8.2	Major
40780	0	HYGAIT TM	7/01/2011 23:40	6.25	Minor
40780	0	HYGAIT TM	9/01/2011 17:30	6.53	Moderate
40778	0	ZACHARIAH TM	7/01/2011 22:10	8.04	Moderate
40781	0	DAGUN POCKET TM	13/12/2010 5:00	9.46	Minor
40781	0	DAGUN POCKET TM	29/12/2010 10:00	10.72	Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
540327	0	LAKE MACDONALD DRIVE AL	12/12/2010 23:50	3.15	Below Minor
540327	0	LAKE MACDONALD DRIVE AL	7/01/2011 19:00	4.8	Minor
540327	0	LAKE MACDONALD DRIVE AL	9/01/2011 17:30	5.6	Major
540326	0	COORAN ALERT	13/12/2010 2:30	5.57	Below Minor
540326	0	COORAN ALERT	29/12/2010 6:10	7.22	Minor
540326	0	COORAN ALERT	8/01/2011 6:00	8.92	Moderate
540326	0	COORAN ALERT	10/01/2011 1:35	10.22	Moderate
40426	0	GYMPIE	11/01/2011 5:00	19.45	Major
40993	0	GYMPIE ALERT	13/12/2010 13:15	9.44	Minor
40993	0	GYMPIE ALERT	20/12/2010 3:00	10.89	Minor
40993	0	GYMPIE ALERT	29/12/2010 14:45	11.74	Minor
Mary R d/s Gympie					
40824	0	FISHERMANS POCKET TM	13/12/2010 17:00	10.67	Minor
40824	0	FISHERMANS POCKET TM	21/12/2010 7:20	12.09	Minor
40824	0	FISHERMANS POCKET TM	29/12/2010 17:00	13	Moderate
540404	0	GLASTONBURY TM	7/01/2011 19:00	6.77	Unknown
40811	0	KILKIVAN TM	7/01/2011 22:00	8.99	Major
40811	0	KILKIVAN TM	11/01/2011 5:20	8.68	Major
540043	0	BROOYAR TM	7/01/2011 4:30	12.94	Major
540043	0	BROOYAR TM	11/01/2011 11:00	10.64	Major
40688	0	MIVA	8/01/2011 9:00	18.5	Major
40688	0	MIVA	11/01/2011 18:00	19.8	Major
40826	0	MIVA TM	13/12/2010 13:00	9.52	Moderate
40826	0	MIVA TM	20/12/2010 22:00	10.95	Moderate
40826	0	MIVA TM	29/12/2010 14:00	12.55	Moderate
40826	0	MIVA TM	8/01/2011 11:20	18.28	Major
40825	0	MARODIAN TM	29/12/2010 5:00	10.99	Moderate
40825	0	MARODIAN TM	7/01/2011 6:30	11.99	Moderate
40833	0	HOME PARK TM	13/12/2010 14:50	8.58	Minor
40833	0	HOME PARK TM	21/12/2010 5:30	9.62	Moderate
40833	0	HOME PARK TM	29/12/2010 18:00	12.28	Moderate
40833	0	HOME PARK TM	8/01/2011 21:00	18.7	Major
40833	0	HOME PARK TM	12/01/2011 6:00	18.73	Major
40203	0	TIARO	8/01/2011 0:00	17.1	Major
40203	0	TIARO	12/01/2011 8:00	17	Major
540039	0	THE BARRAGE TM	21/12/2010 5:15	5.88	Below Minor
540039	0	THE BARRAGE TM	29/12/2010 0:30	7.07	Minor
540039	0	THE BARRAGE TM	9/01/2011 6:25	11.53	Major
540039	0	THE BARRAGE TM	12/01/2011 17:30	11.41	Major
540288	0	TAGIGAN ROAD TM	10/01/2011 4:00	6.44	Minor
40679	0	BAUPLE EAST TM	21/12/2010 11:00	7.97	Below Minor
40679	0	BAUPLE EAST TM	8/01/2011 7:00	10.25	Minor
540251	0	TEDDINGTON WEIR HW	20/12/2010 12:00	9.98	Below Minor
540251	0	TEDDINGTON WEIR HW	22/12/2010 3:00	9.91	Below Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
40896	0	TEDDINGTON WEIR HW TM	8/01/2011 10:40	11.48	Major
40896	0	TEDDINGTON WEIR HW TM	9/01/2011 8:40	11.48	Major
540027	0	TINANA BARRAGE HW TM	9/01/2011 12:00	7.99	Minor
40443	0	MARYBOROUGH	9/01/2011 13:00	8.2	Moderate
40443	0	MARYBOROUGH	12/01/2011 21:00	7.95	Minor
BURRUM					
Cherwell/Burrum R					
540267	0	LENTHALLS DAM HW TM	28/12/2010 18:00	28.18	Unknown
40906	0	LENTHALLS DAM ALERT	12/12/2010 21:55	27.7	Unknown
40907	0	HOWARD ALERT	12/12/2010 14:00	6.37	Minor
40907	0	HOWARD ALERT	28/12/2010 14:45	7.42	Minor
40904	0	RAILWAY BRIDGE ALERT	12/12/2010 19:40	8.77	Major
40904	0	RAILWAY BRIDGE ALERT	28/12/2010 14:15	8.32	Major
40903	0	PACIFIC HAVEN ALERT	12/12/2010 22:00	3.9	Major
40903	0	PACIFIC HAVEN ALERT	28/12/2010 15:30	4.3	Major
540076	0	BRUCE HIGHWAY TM	12/12/2010 22:00	9.96	Minor
540076	0	BRUCE HIGHWAY TM	28/12/2010 10:30	9.31	Minor
539061	0	BURRUM HIGHWAY TM	13/12/2010 0:08	11.01	Major
539061	0	BURRUM HIGHWAY TM	28/12/2010 12:00	11.17	Major
539103	0	LEESONS TM	28/12/2010 20:00	10.64	Unknown
539059	0	ELLIOTT TM	12/12/2010 23:00	3.88	Minor
539059	0	ELLIOTT TM	28/12/2010 13:00	4.92	Moderate
539060	0	DR MAYS CROSSING TM	13/12/2010 0:01	3.2	Major
539060	0	DR MAYS CROSSING TM	28/12/2010 16:00	3.9	Major
BURNETT					
Upper Burnett R					
539044	0	UPPER MONAL TM	26/12/2010 14:00	3.11	Unknown
539044	0	UPPER MONAL TM	28/12/2010 2:00	3.69	Unknown
539040	0	MONTO TM	13/12/2010 0:25	5.01	Unknown
539040	0	MONTO TM	23/12/2010 3:00	4.52	Unknown
539040	0	MONTO TM	26/12/2010 22:00	5.57	Unknown
539040	0	MONTO TM	28/12/2010 6:00	6.49	Unknown
539040	0	MONTO TM	28/12/2010 8:20	5.89	Unknown
539040	0	MONTO TM	6/01/2011 13:20	4.08	Unknown
539040	0	MONTO TM	8/01/2011 23:00	4.27	Unknown
539040	0	MONTO TM	13/01/2011 2:45	4.13	Unknown
539088	0	DAKIEL TM	27/12/2010 23:00	6.6	Unknown
539088	0	DAKIEL TM	12/01/2011 19:00	5.44	Unknown
39319	0	ABERCORN TM	14/12/2010 13:00	5.82	Minor
39319	0	ABERCORN TM	21/12/2010 6:00	6.29	Moderate
39319	0	ABERCORN TM	22/12/2010 22:00	6.32	Moderate
39319	0	ABERCORN TM	23/12/2010 15:00	6.62	Moderate
39000	0	ABERCORN	14/12/2010 18:00	5.8	Minor
39000	0	ABERCORN	21/12/2010 9:00	6	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
39000	0	ABERCORN	23/12/2010 18:00	6.37	Moderate
39000	0	ABERCORN	27/12/2010 18:00	8	Major
39000	0	ABERCORN	28/12/2010 21:00	8.45	Major
39000	0	ABERCORN	7/01/2011 0:00	6.5	Moderate
39000	0	ABERCORN	8/01/2011 9:00	5.92	Minor
39000	0	ABERCORN	9/01/2011 18:00	5.7	Minor
539039	0	YARROL TM	13/12/2010 5:00	3.78	Below Minor
539039	0	YARROL TM	20/12/2010 14:00	3.46	Below Minor
539039	0	YARROL TM	23/12/2010 2:30	3.37	Below Minor
539039	0	YARROL TM	28/12/2010 6:00	6.49	Moderate
539039	0	YARROL TM	13/01/2011 1:00	5.07	Minor
539052	0	LANDS END TM	21/12/2010 16:00	3.42	Minor
539052	0	LANDS END TM	27/12/2010 21:20	6.81	Major
539035	0	JOHN GOLEBY WEIR HW TM	28/12/2010 3:55	5.01	Moderate
539035	0	JOHN GOLEBY WEIR HW TM	29/12/2010 4:30	5.24	Moderate
39318	0	CERATODUS TM	14/12/2010 3:00	5.76	Minor
39318	0	CERATODUS TM	21/12/2010 7:00	6.51	Moderate
39318	0	CERATODUS TM	23/12/2010 4:30	7.84	Moderate
39318	0	CERATODUS TM	23/12/2010 23:00	8.66	Major
39318	0	CERATODUS TM	28/12/2010 6:50	13.07	Major
39318	0	CERATODUS TM	29/12/2010 5:00	13.33	Major
39318	0	CERATODUS TM	7/01/2011 10:00	6.82	Moderate
39318	0	CERATODUS TM	8/01/2011 10:00	7.04	Moderate
39318	0	CERATODUS TM	9/01/2011 21:10	6.73	Moderate
39318	0	CERATODUS TM	10/01/2011 20:30	6.47	Minor
539051	0	WURUMA DAM HW TM	28/12/2010 4:50	3.38	Major
539051	0	WURUMA DAM HW TM	7/01/2011 0:01	1.03	Moderate
39259	0	EIDSVOLD BRIDGE	21/12/2010 16:30	6.45	Minor
39259	0	EIDSVOLD BRIDGE	28/12/2010 0:00	16.2	Major
39259	0	EIDSVOLD BRIDGE	7/01/2011 11:00	7.85	Minor
39259	0	EIDSVOLD BRIDGE	14/01/2011 3:00	7.45	Minor
39321	0	EIDSVOLD TM	14/12/2010 14:00	4.13	Minor
39321	0	EIDSVOLD TM	21/12/2010 16:00	4.84	Minor
39321	0	EIDSVOLD TM	24/12/2010 4:00	7.57	Moderate
39321	0	EIDSVOLD TM	28/12/2010 10:30	14.28	Major
39321	0	EIDSVOLD TM	8/01/2011 1:00	6.46	Minor
Auburn R					
39177	0	GLENWOOD	21/12/2010 12:00	9.1	Moderate
39177	0	GLENWOOD	23/12/2010 17:30	12.55	Major
39177	0	GLENWOOD	29/12/2010 3:00	14.7	Major
539037	0	GLENWOOD TM	21/12/2010 15:20	7.39	Moderate
539037	0	GLENWOOD TM	23/12/2010 19:00	10.42	Major
539037	0	GLENWOOD TM	10/01/2011 21:20	5.6	Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
539042	0	BROVINIA TM	12/12/2010 6:00	6.23	Minor
539042	0	BROVINIA TM	20/12/2010 5:00	8.47	Moderate
539042	0	BROVINIA TM	23/12/2010 17:00	11.47	Major
539042	0	BROVINIA TM	27/12/2010 16:00	11.75	Major
539042	0	BROVINIA TM	8/01/2011 14:00	5.16	Minor
539042	0	BROVINIA TM	11/01/2011 3:00	14.43	Major
Boyne and Stuart R					
540056	0	CARTERS TM	20/12/2010 8:00	7.25	Major
540056	0	CARTERS TM	24/12/2010 2:00	8.38	Major
540056	0	CARTERS TM	27/12/2010 18:00	8.24	Major
540056	0	CARTERS TM	10/01/2011 8:00	5.8	Moderate
540056	0	CARTERS TM	11/01/2011 6:00	8.91	Major
540231	0	WEENS BRIDGE TM	20/12/2010 12:00	8.63	Unknown
540231	0	WEENS BRIDGE TM	24/12/2010 4:00	8.34	Unknown
540231	0	WEENS BRIDGE TM	27/12/2010 23:00	8.73	Unknown
540231	0	WEENS BRIDGE TM	4/01/2011 2:00	6.66	Unknown
540231	0	WEENS BRIDGE TM	8/01/2011 7:00	8.36	Unknown
540231	0	WEENS BRIDGE TM	9/01/2011 19:00	9.18	Unknown
540231	0	WEENS BRIDGE TM	11/01/2011 6:00	9.97	Unknown
540055	0	PROSTON TM	20/12/2010 15:00	7.65	Major
540055	0	PROSTON TM	23/12/2010 13:00	7.82	Major
540055	0	PROSTON TM	24/12/2010 2:00	7.47	Major
540055	0	PROSTON TM	11/01/2011 3:00	9.56	Major
540055	0	PROSTON TM	12/01/2011 7:00	8.83	Major
540262	0	BOONDOOMA DAM HW TM	20/12/2010 18:00	2.57	Moderate
540262	0	BOONDOOMA DAM HW TM	24/12/2010 7:00	3.15	Major
540262	0	BOONDOOMA DAM HW TM	28/12/2010 4:10	3.46	Major
540262	0	BOONDOOMA DAM HW TM	9/01/2011 6:00	1.5	Minor
540262	0	BOONDOOMA DAM HW TM	11/01/2011 16:00	3.7	Major
40455	0	DUNOLLIE	24/12/2010 12:30	9.25	Major
40455	0	DUNOLLIE	27/12/2010 20:30	10.45	Major
40455	0	DUNOLLIE	9/01/2011 10:00	5.75	Minor
40455	0	DUNOLLIE	12/01/2011 2:00	9.65	Major
539069	0	COORANGA TM	12/12/2010 4:10	5.82	Minor
539069	0	COORANGA TM	21/12/2010 6:00	10.58	Major
539069	0	COORANGA TM	24/12/2010 17:00	11.75	Major
539069	0	COORANGA TM	27/12/2010 21:00	13.36	Major
539069	0	COORANGA TM	9/01/2011 16:00	7.51	Major
539069	0	COORANGA TM	10/01/2011 23:00	11.64	Major
539069	0	COORANGA TM	12/01/2011 0:20	12.25	Major
539038	0	DERRA TM	12/12/2010 14:20	3.9	Minor
539038	0	DERRA TM	21/12/2010 10:25	8.41	Major
539038	0	DERRA TM	24/12/2010 18:50	10.07	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
539038	0	DERRA TM	28/12/2010 6:45	14.6	Major
539038	0	DERRA TM	9/01/2011 21:15	5.89	Major
539038	0	DERRA TM	11/01/2011 1:50	9.87	Major
539038	0	DERRA TM	12/01/2011 2:25	10.35	Major
539066	0	MUNDUBBERA HW TM	27/12/2010 23:00	21.18	Major
39320	0	MUNDUBBERA TW TM	22/12/2010 0:50	9.31	Minor
39320	0	MUNDUBBERA TW TM	24/12/2010 9:20	13.11	Moderate
39320	0	MUNDUBBERA TW TM	27/12/2010 23:00	18.29	Major
39320	0	MUNDUBBERA TW TM	9/01/2011 5:00	7.14	Minor
39320	0	MUNDUBBERA TW TM	11/01/2011 15:00	11.82	Moderate
39073	0	MUNDUBBERA	21/12/2010 23:00	9.72	Minor
39073	0	MUNDUBBERA	24/12/2010 6:00	13.85	Moderate
39073	0	MUNDUBBERA	28/12/2010 9:00	18.82	Major
39073	0	MUNDUBBERA	9/01/2011 6:00	7.55	Minor
39073	0	MUNDUBBERA	11/01/2011 15:00	12.3	Moderate
539055	0	REID CREEK TM	22/12/2010 18:00	3.98	Unknown
539055	0	REID CREEK TM	26/12/2010 16:40	3.94	Unknown
539055	0	REID CREEK TM	28/12/2010 1:00	4.07	Unknown
539049	0	WHARTON WEIR TM	23/12/2010 0:45	96.13	Below Minor
539049	0	WHARTON WEIR TM	24/12/2010 12:20	98.8	Moderate
39323	0	GAYNDAH FLUME TM	23/12/2010 1:40	9.29	Moderate
39323	0	GAYNDAH FLUME TM	28/12/2010 16:10	16.34	Major
39323	0	GAYNDAH FLUME TM	9/01/2011 11:00	6.68	Minor
39323	0	GAYNDAH FLUME TM	11/01/2011 23:00	10.32	Moderate
39191	0	GAYNDAH	24/12/2010 10:30	11.6	Moderate
39191	0	GAYNDAH	28/12/2010 14:00	15.6	Major
Barker and Barambah Cks					
540041	0	BROOKLANDS TM	19/12/2010 21:00	6.4	Minor
540041	0	BROOKLANDS TM	23/12/2010 14:00	7	Moderate
540041	0	BROOKLANDS TM	10/01/2011 0:01	6.08	Minor
540041	0	BROOKLANDS TM	10/01/2011 5:00	8.68	Major
40500	0	EMBREYS BRIDGE	20/12/2010 6:00	6.88	Moderate
40500	0	EMBREYS BRIDGE	24/12/2010 0:01	6.9	Moderate
40500	0	EMBREYS BRIDGE	27/12/2010 19:00	6.94	Moderate
40500	0	EMBREYS BRIDGE	7/01/2011 4:00	5.4	Minor
40500	0	EMBREYS BRIDGE	8/01/2011 0:01	6.8	Moderate
40500	0	EMBREYS BRIDGE	10/01/2011 9:00	7	Major
40500	0	EMBREYS BRIDGE	11/01/2011 9:00	7.08	Major
540042	0	GLENMORE TM	21/12/2010 7:00	4.02	Major
540042	0	GLENMORE TM	28/12/2010 7:00	4.45	Major
540042	0	GLENMORE TM	10/01/2011 2:00	4.61	Major
540042	0	GLENMORE TM	11/01/2011 7:00	6.66	Major
540025	0	WEST BARAMBAH TM	20/12/2010 7:00	7.31	Unknown

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
540025	0	WEST BARAMBAH TM	27/12/2010 23:00	7.92	Unknown
540025	0	WEST BARAMBAH TM	8/01/2011 0:10	10.34	Unknown
540025	0	WEST BARAMBAH TM	10/01/2011 3:00	8.55	Unknown
540025	0	WEST BARAMBAH TM	11/01/2011 5:30	12.19	Unknown
540053	0	BJELKE PETERSEN DAM HWTM	21/12/2010 23:00	1.07	Below Minor
540053	0	BJELKE PETERSEN DAM HWTM	28/12/2010 20:40	1.89	Minor
40834	0	LITZOWS TM	20/12/2010 10:00	7.4	Below Minor
40834	0	LITZOWS TM	28/12/2010 2:00	8.27	Minor
40834	0	LITZOWS TM	8/01/2011 1:00	11.57	Major
40834	0	LITZOWS TM	10/01/2011 5:00	9.25	Moderate
40834	0	LITZOWS TM	11/01/2011 6:00	13.15	Major
540362	0	JOE SIPPEL WEIR HW TM	20/12/2010 14:40	2.51	Moderate
540362	0	JOE SIPPEL WEIR HW TM	28/12/2010 4:50	2.72	Moderate
540362	0	JOE SIPPEL WEIR HW TM	7/01/2011 3:40	2.7	Moderate
540362	0	JOE SIPPEL WEIR HW TM	8/01/2011 2:10	3.26	Major
540362	0	JOE SIPPEL WEIR HW TM	11/01/2011 7:40	3.88	Major
540361	0	JOE SIPPEL WEIR TW TM	20/12/2010 18:20	8.56	Moderate
540361	0	JOE SIPPEL WEIR TW TM	28/12/2010 4:10	8.77	Moderate
540361	0	JOE SIPPEL WEIR TW TM	7/01/2011 3:40	8.75	Moderate
540361	0	JOE SIPPEL WEIR TW TM	8/01/2011 2:30	9.39	Major
540361	0	JOE SIPPEL WEIR TW TM	11/01/2011 7:20	9.98	Major
540077	0	FICKS CROSSING TM	21/12/2010 8:00	7.29	Minor
540077	0	FICKS CROSSING TM	28/12/2010 21:00	8.88	Moderate
539077	0	SILVERLEAF WEIR HW TM	21/12/2010 20:15	3.61	Moderate
539077	0	SILVERLEAF WEIR HW TM	29/12/2010 6:10	4.24	Moderate
539077	0	SILVERLEAF WEIR HW TM	8/01/2011 15:00	4.52	Major
539077	0	SILVERLEAF WEIR HW TM	11/01/2011 17:40	4.94	Major
539073	0	SILVERLEAF WEIR TW TM	21/12/2010 15:00	8.87	Minor
539073	0	SILVERLEAF WEIR TW TM	29/12/2010 6:50	9.49	Moderate
539073	0	SILVERLEAF WEIR TW TM	8/01/2011 16:05	9.8	Moderate
539073	0	SILVERLEAF WEIR TW TM	11/01/2011 16:55	10.23	Major
40837	0	STONELANDS TM	22/12/2010 21:10	7.96	Below Minor
40837	0	STONELANDS TM	23/12/2010 13:45	8.05	Below Minor
40837	0	STONELANDS TM	29/12/2010 13:25	9.94	Minor
540075	0	ETTIEWYN TM	20/12/2010 10:00	8.13	Moderate
540075	0	ETTIEWYN TM	28/12/2010 2:00	9.52	Major
540075	0	ETTIEWYN TM	8/01/2011 12:00	10.33	Major
540075	0	ETTIEWYN TM	11/01/2011 23:00	8.54	Moderate
40428	0	BRIAN PASTURES	20/12/2010 12:30	5.4	Below Minor
40428	0	BRIAN PASTURES	23/12/2010 7:00	5.3	Below Minor
40428	0	BRIAN PASTURES	27/12/2010 18:00	8.15	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
40428	0	BRIAN PASTURES	8/01/2011 22:00	9.2	Major
40428	0	BRIAN PASTURES	12/01/2011 11:00	10.6	Major
Lower Burnett R					
39193	0	MT LAWLESS TM	23/12/2010 5:40	6.84	Moderate
39193	0	MT LAWLESS TM	24/12/2010 15:00	8.81	Major
39193	0	MT LAWLESS TM	28/12/2010 15:30	13.6	Major
39193	0	MT LAWLESS TM	8/01/2011 10:00	8.17	Major
39193	0	MT LAWLESS TM	12/01/2011 12:50	10.56	Major
539045	0	CORINGA TM	12/12/2010 19:00	7.25	Major
539045	0	CORINGA TM	20/12/2010 3:40	7.95	Major
539045	0	CORINGA TM	23/12/2010 2:40	6.32	Moderate
539045	0	CORINGA TM	27/12/2010 23:45	10.09	Major
539045	0	CORINGA TM	7/01/2011 1:00	7.91	Major
539045	0	CORINGA TM	11/01/2011 1:00	5.94	Minor
539108	0	PARADISE DAM HW TM	23/12/2010 9:00	70.25	Moderate
539108	0	PARADISE DAM HW TM	24/12/2010 22:45	70.89	Moderate
39184	0	PARADISE DAM	29/12/2010 5:45	73.56	Major
39184	0	PARADISE DAM	9/01/2011 12:30	70.84	Moderate
39184	0	PARADISE DAM	11/01/2011 23:00	72.1	Major
539021	0	FIG TREE TM	23/12/2010 10:00	11.23	Moderate
539021	0	FIG TREE TM	25/12/2010 3:10	12.74	Major
539021	0	FIG TREE TM	9/01/2011 19:00	11.41	Moderate
539021	0	FIG TREE TM	12/01/2011 23:50	14.3	Major
539094	0	MT RAWDON TM	17/12/2010 3:20	3.24	Unknown
539094	0	MT RAWDON TM	19/12/2010 17:40	3.7	Unknown
539094	0	MT RAWDON TM	22/12/2010 15:30	3.68	Unknown
39313	0	WALLA TM	12/12/2010 17:10	7.99	Minor
39313	0	WALLA TM	23/12/2010 12:40	11.86	Moderate
39313	0	WALLA TM	25/12/2010 2:40	12.46	Major
39313	0	WALLA TM	29/12/2010 0:00	20.1	Major
39313	0	WALLA TM	10/01/2011 0:01	12.41	Major
39313	0	WALLA TM	13/01/2011 3:00	15.37	Major
539089	0	WALLA WEIR HW TM	12/12/2010 17:00	21.75	Moderate
539089	0	WALLA WEIR HW TM	13/12/2010 6:50	24.97	Major
539089	0	WALLA WEIR HW TM	23/12/2010 16:00	23.03	Major
539089	0	WALLA WEIR HW TM	25/12/2010 10:40	23.63	Major
539089	0	WALLA WEIR HW TM	26/12/2010 20:00	23.69	Major
539089	0	WALLA WEIR HW TM	29/12/2010 15:50	29.11	Major
539096	0	WALLA WEIR TW TM	12/12/2010 18:25	9.98	Unknown
539096	0	WALLA WEIR TW TM	25/12/2010 11:00	15.3	Unknown
539096	0	WALLA WEIR TW TM	26/12/2010 20:45	15.41	Unknown
539096	0	WALLA WEIR TW TM	13/01/2011 6:50	17.12	Unknown
539058	0	WOONGARRA P/S TM	12/12/2010 21:15	5.43	Below Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
539058	0	WOONGARRA P/S TM	24/12/2010 0:01	7.16	Below Minor
539058	0	WOONGARRA P/S TM	25/12/2010 19:20	8.2	Below Minor
539058	0	WOONGARRA P/S TM	27/12/2010 1:55	8.44	Below Minor
39170	0	BUNDABERG	30/12/2010 10:00	7.92	Major
39170	0	BUNDABERG	10/01/2011 12:00	4.03	Minor
39170	0	BUNDABERG	13/01/2011 15:00	5.76	Moderate
KOLAN					
Kolan R					
539048	0	SPRINGFIELD TM	12/12/2010 21:00	6.94	Below Minor
539048	0	SPRINGFIELD TM	26/12/2010 19:30	8.33	Minor
539048	0	SPRINGFIELD TM	28/12/2010 7:45	9.28	Moderate
539048	0	SPRINGFIELD TM	12/01/2011 23:00	8.54	Minor
539050	0	FRED HAIGH DAM HW TM	29/12/2010 0:01	3.85	Major
539050	0	FRED HAIGH DAM HW TM	13/01/2011 18:00	1.56	Moderate
39011	0	MONDURAN	29/12/2010 6:00	9.1	Major
539046	0	GIN GIN CREEK TM	12/12/2010 18:00	5.68	Minor
539046	0	GIN GIN CREEK TM	26/12/2010 19:00	6.79	Minor
539046	0	GIN GIN CREEK TM	28/12/2010 9:00	8.52	Moderate
539047	0	BUCCA WEIR HW TM	12/12/2010 14:05	18.73	Moderate
539091	0	GOOBURRUM P/S TM	12/12/2010 22:40	6.15	Major
539091	0	GOOBURRUM P/S TM	28/12/2010 17:45	8.28	Major
BAFFLE					
539085	0	MIMDALE TM	13/12/2010 20:40	14.15	Major
539085	0	MIMDALE TM	29/12/2010 3:00	16.91	Major
539085	0	MIMDALE TM	14/01/2011 1:00	11.48	Minor
39246	0	BARNETTS ROAD	28/12/2010 19:00	4.05	Unknown
BOYNE					
539084	0	MILTON TM	12/12/2010 18:00	6.1	Unknown
539084	0	MILTON TM	26/12/2010 19:00	7.24	Unknown
539084	0	MILTON TM	28/12/2010 7:10	7.77	Unknown
539087	0	MARLUA TM	12/12/2010 10:00	5.84	Unknown
539087	0	MARLUA TM	26/12/2010 11:20	7.02	Unknown
539087	0	MARLUA TM	28/12/2010 3:00	8.03	Unknown
539086	0	AWOONGA DAM HW TM	28/12/2010 14:50	4.16	Unknown
FITZROY					
Dawson R					
535032	0	UTOPIA DOWNS TM	3/12/2010 1:35	10.64	Moderate
535032	0	UTOPIA DOWNS TM	5/12/2010 17:00	12.63	Moderate
535032	0	UTOPIA DOWNS TM	13/12/2010 7:00	8.89	Moderate
535032	0	UTOPIA DOWNS TM	21/12/2010 10:00	10.91	Moderate
535032	0	UTOPIA DOWNS TM	28/12/2010 12:00	14.25	Major
535032	0	UTOPIA DOWNS TM	7/01/2011 10:00	6.48	Minor
35271	0	TARANA CROSSING	5/12/2010 6:00	11.95	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
35271	0	TARANA CROSSING	12/12/2010 18:00	11.45	Moderate
35271	0	TARANA CROSSING	21/12/2010 6:00	11.2	Moderate
35271	0	TARANA CROSSING	28/12/2010 18:00	12.5	Major
35271	0	TARANA CROSSING	7/01/2011 15:00	8.15	Minor
535013	0	WINDAMERE TM	5/12/2010 3:00	7.94	Moderate
535013	0	WINDAMERE TM	12/12/2010 1:00	9.96	Major
535013	0	WINDAMERE TM	20/12/2010 9:00	8.78	Moderate
535013	0	WINDAMERE TM	27/12/2010 13:00	10.52	Major
535013	0	WINDAMERE TM	6/01/2011 18:00	3.18	Below Minor
35273	0	CHILGERRIE HILL	5/12/2010 16:30	8.3	Moderate
35273	0	CHILGERRIE HILL	12/12/2010 15:00	10.4	Major
35273	0	CHILGERRIE HILL	20/12/2010 6:30	9.45	Major
35273	0	CHILGERRIE HILL	27/12/2010 23:00	10.85	Major
35273	0	CHILGERRIE HILL	7/01/2011 3:00	5.4	Minor
35115	0	TAROOM	7/01/2011 21:00	5.65	Minor
35282	0	TAROOM TM	5/12/2010 9:00	7.28	Major
35282	0	TAROOM TM	20/12/2010 19:00	7.09	Major
35282	0	TAROOM TM	29/12/2010 19:00	10.43	Major
35282	0	TAROOM TM	8/01/2011 3:00	5.65	Minor
535055	0	BROADMERE TM	4/12/2010 17:00	7.51	Unknown
535055	0	BROADMERE TM	7/12/2010 1:00	6.96	Unknown
535055	0	BROADMERE TM	20/12/2010 3:40	10.82	Unknown
535049	0	LA PALMA TM	2/12/2010 12:00	5.06	Unknown
535049	0	LA PALMA TM	7/12/2010 7:00	5.3	Unknown
535049	0	LA PALMA TM	21/12/2010 11:00	5.61	Unknown
535049	0	LA PALMA TM	25/12/2010 2:00	5.69	Unknown
535049	0	LA PALMA TM	28/12/2010 11:00	7.7	Unknown
535045	0	GLEBE WEIR TW TM	8/12/2010 14:20	13.66	Major
535045	0	GLEBE WEIR TW TM	15/12/2010 20:30	12.36	Major
535045	0	GLEBE WEIR TW TM	23/12/2010 23:55	13.56	Major
535045	0	GLEBE WEIR TW TM	31/12/2010 5:20	18.81	Major
539070	0	GYRANDA WEIR TM	9/12/2010 10:00	3.4	Major
539070	0	GYRANDA WEIR TM	16/12/2010 6:20	2.9	Moderate
539070	0	GYRANDA WEIR TM	23/12/2010 16:35	3.76	Major
539070	0	GYRANDA WEIR TM	25/12/2010 6:45	3.72	Major
539070	0	GYRANDA WEIR TM	27/12/2010 19:45	4.8	Major
539065	0	ISLA-DELUSION XING TM	9/12/2010 8:00	10.37	Major
539065	0	ISLA-DELUSION XING TM	16/12/2010 21:30	9.98	Moderate
539065	0	ISLA-DELUSION XING TM	23/12/2010 23:59	10.45	Major
539065	0	ISLA-DELUSION XING TM	25/12/2010 8:35	10.49	Major
539065	0	ISLA-DELUSION XING TM	27/12/2010 20:20	10.89	Major
539065	0	ISLA-DELUSION XING TM	31/12/2010 12:40	11.21	Major
539065	0	ISLA-DELUSION XING TM	10/01/2011 4:55	8.16	Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
39315	0	THEODORE	10/12/2010 14:00	13	Major
39315	0	THEODORE	17/12/2010 19:30	12.09	Major
39315	0	THEODORE	25/12/2010 15:00	13.56	Major
39315	0	THEODORE	1/01/2011 10:00	14.7	Major
539043	0	WOODLEIGH TM	11/12/2010 12:00	15.37	Major
539043	0	WOODLEIGH TM	18/12/2010 14:00	13.97	Moderate
539043	0	WOODLEIGH TM	26/12/2010 6:00	16.56	Major
539043	0	WOODLEIGH TM	29/12/2010 4:00	18.34	Major
539043	0	WOODLEIGH TM	2/01/2011 5:00	18.45	Major
539043	0	WOODLEIGH TM	11/01/2011 19:00	9.77	Minor
539081	0	MOURA WEIR TM	12/12/2010 5:30	5.39	Moderate
539081	0	MOURA WEIR TM	18/12/2010 23:40	4.51	Moderate
539081	0	MOURA WEIR TM	29/12/2010 14:00	6.65	Major
539081	0	MOURA WEIR TM	2/01/2011 18:00	6.7	Major
539081	0	MOURA WEIR TM	12/01/2011 3:55	1.72	Minor
39296	0	MOURA	12/12/2010 6:00	12.1	Major
39296	0	MOURA	19/12/2010 6:00	11.4	Moderate
39296	0	MOURA	28/12/2010 6:00	12.5	Major
535021	0	REDCLIFFE TM	4/12/2010 12:00	7.95	Major
535021	0	REDCLIFFE TM	13/12/2010 0:01	4.06	Minor
535021	0	REDCLIFFE TM	24/12/2010 2:00	8.21	Major
535021	0	REDCLIFFE TM	27/12/2010 2:00	7.34	Major
535021	0	REDCLIFFE TM	28/12/2010 16:50	9.01	Major
35227	0	KARAMEA	6/12/2010 9:00	9.85	Major
35227	0	KARAMEA	15/12/2010 9:00	7.6	Minor
535050	0	ROUNDSTONE CREEK TM	1/12/2010 7:00	4.2	Unknown
535050	0	ROUNDSTONE CREEK TM	6/12/2010 16:00	5.34	Unknown
535050	0	ROUNDSTONE CREEK TM	20/12/2010 9:30	7.46	Unknown
535050	0	ROUNDSTONE CREEK TM	23/12/2010 11:40	9.11	Unknown
535050	0	ROUNDSTONE CREEK TM	27/12/2010 17:40	9.04	Unknown
539095	0	BINDAREE TM	13/12/2010 21:00	13.74	Unknown
539095	0	BINDAREE TM	21/12/2010 1:00	12.75	Unknown
539095	0	BINDAREE TM	25/12/2010 18:30	15.35	Unknown
539095	0	BINDAREE TM	29/12/2010 3:50	15.85	Unknown
539080	0	BARALABA HWTM	14/12/2010 11:20	3.58	Major
539080	0	BARALABA HWTM	21/12/2010 10:10	2.9	Major
39143	0	BARALABA	13/12/2010 15:00	12.15	Major
39143	0	BARALABA	21/12/2010 6:00	11.2	Major
39143	0	BARALABA	29/12/2010 21:00	15.25	Major
39143	0	BARALABA	4/01/2011 6:00	14.1	Major
39143	0	BARALABA	22/01/2011 15:00	7.15	Minor
539079	0	BARALABA TW TM	14/12/2010 3:15	12.32	Major
539079	0	BARALABA TW TM	21/12/2010 8:45	11.43	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
539079	0	BARALABA TW TM	29/12/2010 19:00	15.34	Major
535015	0	BECKERS TM	14/12/2010 14:00	13.64	Major
535015	0	BECKERS TM	21/12/2010 17:00	12.49	Major
535015	0	BECKERS TM	30/12/2010 0:01	19.47	Major
Don R					
539062	0	KINGSBOROUGH TM	26/12/2010 9:10	8.62	Major
539068	0	GOOVIGEN TM	7/01/2011 13:00	9.43	Moderate
539068	0	GOOVIGEN TM	10/01/2011 0:01	6.61	Minor
539056	0	KENBULA TM	26/12/2010 3:40	3.31	Unknown
539056	0	KENBULA TM	27/12/2010 16:30	2.96	Unknown
539016	0	WURA TM	3/12/2010 21:00	4.87	Minor
539016	0	WURA TM	26/12/2010 6:20	9.53	Major
539016	0	WURA TM	6/01/2011 9:00	4.21	Minor
39308	0	RANNES	13/12/2010 9:00	5.6	Below Minor
39308	0	RANNES	28/12/2010 7:00	11.5	Major
39308	0	RANNES	7/01/2011 15:00	6.65	Minor
39308	0	RANNES	8/01/2011 10:00	6.8	Minor
539057	0	RANNES TM	5/12/2010 9:00	5.14	Below Minor
539057	0	RANNES TM	13/12/2010 12:00	5.55	Below Minor
539057	0	RANNES TM	27/12/2010 2:00	9.97	Moderate
539057	0	RANNES TM	28/12/2010 12:00	11.71	Major
539057	0	RANNES TM	7/01/2011 13:00	6.75	Minor
539057	0	RANNES TM	8/01/2011 15:00	6.95	Minor
35270	0	NEWLANDS	14/12/2010 6:00	14.5	Moderate
35270	0	NEWLANDS	29/12/2010 17:00	18.55	Major
539090	0	KNEBWORTH TM	14/12/2010 22:00	13.8	Moderate
539090	0	KNEBWORTH TM	30/12/2010 4:20	17.84	Major
Comet R					
535054	0	REWAN TM	4/12/2010 8:00	5.2	Unknown
535054	0	REWAN TM	19/12/2010 13:25	3.85	Unknown
535052	0	LAKE BROWN TM	5/12/2010 17:00	5.87	Unknown
535052	0	LAKE BROWN TM	21/12/2010 6:00	5.5	Unknown
535052	0	LAKE BROWN TM	23/12/2010 19:00	5.51	Unknown
535052	0	LAKE BROWN TM	27/12/2010 22:00	9.91	Unknown
535090	0	THE LAKE ALERT	6/12/2010 9:20	13.97	Major
535090	0	THE LAKE ALERT	28/12/2010 11:25	17.27	Major
535010	0	THE LAKE TM	21/12/2010 17:20	12.43	Major
35276	0	SPRINGSURE CREEK JUNCTION AL	4/12/2010 0:45	11.6	Unknown
35276	0	SPRINGSURE CREEK JUNCTION AL	7/12/2010 8:00	10.95	Unknown
35276	0	SPRINGSURE CREEK JUNCTION AL	29/12/2010 4:00	12.5	Unknown
535094	0	COMET WEIR ALERT	4/12/2010 20:13	12.19	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
535094	0	COMET WEIR ALERT	8/12/2010 10:40	10.49	Major
535094	0	COMET WEIR ALERT	29/12/2010 17:00	13.94	Major
Nogoa R					
535099	0	RAYMOND ALERT	6/12/2010 13:00	5.7	Below Minor
535099	0	RAYMOND ALERT	21/12/2010 14:50	8.05	Minor
535029	0	CRAIGMORE TM	29/12/2010 9:00	18.16	Major
35251	0	CRAIGMORE AL	4/12/2010 11:15	10.56	Minor
35251	0	CRAIGMORE AL	21/12/2010 23:40	10.56	Minor
535101	0	FAIRBAIRN DAM AL	6/12/2010 12:30	1.92	Below Minor
535019	0	FAIRBAIRN DAM TM	31/12/2010 0:01	5.58	Major
35260	0	EMERALD	31/12/2010 4:00	16.05	Major
535076	0	EMERALD ALERT	3/12/2010 16:15	10.6	Below Minor
535076	0	EMERALD ALERT	6/12/2010 17:00	10.95	Below Minor
535076	0	EMERALD ALERT	31/12/2010 4:00	16.05	Major
535103	0	SANDY CREEK BRIDGE TM	28/12/2010 11:00	6.56	Unknown
35187	0	VALERIA AL	4/12/2010 15:25	9.45	Major
35187	0	VALERIA AL	20/12/2010 16:45	7.6	Below Minor
35187	0	VALERIA AL	29/12/2010 2:00	9.4	Major
535100	0	SAPPHIRE AL	26/12/2010 7:30	5.75	Unknown
535100	0	SAPPHIRE AL	26/12/2010 8:00	5.75	Unknown
535064	0	MIDDLE RIDGE TM	2/12/2010 21:30	1.38	Unknown
535064	0	MIDDLE RIDGE TM	3/12/2010 3:50	1.14	Unknown
535077	0	RUBYVALE ALERT	2/12/2010 22:20	2.2	Unknown
535077	0	RUBYVALE ALERT	3/12/2010 4:20	2.15	Unknown
535017	0	GREGORY HIGHWAY TM	30/12/2010 5:00	9.61	Moderate
535098	0	GREGORY HIGHWAY ALERT	4/12/2010 3:30	10.37	Major
535098	0	GREGORY HIGHWAY ALERT	21/12/2010 18:20	7.97	Below Minor
535097	0	DUCKPONDS ALERT	5/12/2010 14:30	13.58	Major
535097	0	DUCKPONDS ALERT	1/01/2011 0:25	15.03	Major
Mackenzie R					
535095	0	RILEYS CROSSING ALERT	5/12/2010 23:00	20.26	Unknown
535095	0	RILEYS CROSSING ALERT	30/12/2010 8:00	22.76	Unknown
35269	0	YAKCAM	6/12/2010 9:00	20.3	Major
35269	0	YAKCAM	30/12/2010 15:00	23.05	Major
535027	0	BEDFORD WEIR HW TM	6/12/2010 21:50	129.97	Unknown
535026	0	BEDFORD WEIR TW TM	1/01/2011 2:00	22.29	Major
535096	0	BEDFORD WEIR ALERT	7/12/2010 8:25	19.14	Major
535023	0	BINGEGANG HW TM	8/12/2010 10:00	8.09	Major
35295	0	BINGEGANG WEIR ALERT	2/01/2011 3:00	10.5	Minor
35266	0	BINGEGANG	2/01/2011 0:00	17.45	Major
Connors R					
534006	0	GOONYELLA TM	3/12/2010 10:50	4.8	Below Minor
534006	0	GOONYELLA TM	19/12/2010 18:20	6.51	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
534006	0	GOONYELLA TM	28/12/2010 4:00	5.49	Minor
534006	0	GOONYELLA TM	28/12/2010 4:00	5.49	Minor
534006	0	GOONYELLA TM	31/01/2011 13:00	4.71	Below Minor
534026	0	ISAAC RIVER BRIDGE TM	3/12/2010 15:40	4.56	Unknown
534026	0	ISAAC RIVER BRIDGE TM	12/12/2010 4:00	5.81	Unknown
534026	0	ISAAC RIVER BRIDGE TM	19/12/2010 22:10	8.33	Unknown
534026	0	ISAAC RIVER BRIDGE TM	31/01/2011 16:40	4.76	Unknown
534003	0	DEVERILL TM	3/12/2010 21:00	6.02	Below Minor
534003	0	DEVERILL TM	12/12/2010 11:30	9.24	Moderate
534003	0	DEVERILL TM	20/12/2010 7:00	10.47	Moderate
534003	0	DEVERILL TM	28/12/2010 13:00	9.92	Moderate
534003	0	DEVERILL TM	31/01/2011 22:00	6.62	Below Minor
533091	0	MT BRIDGET TM	3/12/2010 15:40	12.84	Moderate
533091	0	MT BRIDGET TM	26/12/2010 6:30	11.08	Moderate
533091	0	MT BRIDGET TM	31/01/2011 18:50	7.99	Below Minor
33083	0	CARDOWAN	3/12/2010 19:00	13.9	Moderate
33083	0	CARDOWAN	31/01/2011 17:00	8	Below Minor
533113	0	PROSPECT CREEK TM	26/12/2010 7:20	10.9	Unknown
533113	0	PROSPECT CREEK TM	31/01/2011 12:40	10.72	Unknown
534005	0	FUNNEL CREEK TM	4/12/2010 0:20	9.27	Major
534005	0	FUNNEL CREEK TM	26/12/2010 15:00	9.07	Major
534005	0	FUNNEL CREEK TM	31/01/2011 21:10	9.16	Major
533030	0	BRAESIDE TM	3/12/2010 11:00	7.19	Minor
533030	0	BRAESIDE TM	26/12/2010 1:00	9.08	Moderate
533030	0	BRAESIDE TM	31/01/2011 5:15	7.33	Minor
533103	0	NEBO TM	3/12/2010 4:20	3.28	Unknown
533103	0	NEBO TM	25/12/2010 20:30	5.15	Unknown
533103	0	NEBO TM	31/01/2011 9:20	3.61	Unknown
534027	0	BEE CREEK TM	3/12/2010 15:20	9.3	Unknown
534027	0	BEE CREEK TM	19/12/2010 23:10	9.96	Unknown
534027	0	BEE CREEK TM	26/12/2010 10:10	10.38	Unknown
534027	0	BEE CREEK TM	28/12/2010 14:20	10.41	Unknown
534027	0	BEE CREEK TM	31/01/2011 16:20	9	Unknown
534027	0	BEE CREEK TM	1/02/2011 6:10	8.97	Unknown
534004	0	PINK LAGOON TM	5/12/2010 6:00	13.43	Moderate
534004	0	PINK LAGOON TM	14/12/2010 9:00	9.58	Moderate
534004	0	PINK LAGOON TM	21/12/2010 7:00	10.13	Moderate
534004	0	PINK LAGOON TM	27/12/2010 18:45	14.01	Moderate
534004	0	PINK LAGOON TM	2/02/2011 14:00	12.9	Moderate
534014	0	YATTON TM	6/12/2010 7:00	15.54	Moderate
534014	0	YATTON TM	15/12/2010 17:00	13.58	Moderate
534014	0	YATTON TM	23/12/2010 15:00	13.87	Moderate
534014	0	YATTON TM	28/12/2010 17:00	16.54	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
Fitzroy R d/s Riverslea					
34096	0	TARTRUST TM	7/12/2010 21:00	14.82	Moderate
34096	0	TARTRUST TM	30/12/2010 4:45	16.13	Major
34096	0	TARTRUST TM	3/01/2011 16:00	16.34	Major
535024	0	COOLMARINGA TM	9/12/2010 6:30	18.28	Moderate
39044	0	RIVERSLEA TM	12/12/2010 14:30	20.73	Minor
39044	0	RIVERSLEA TM	1/01/2011 11:30	27.38	Major
33285	0	THE GAP TM	13/12/2010 23:00	14.8	Moderate
33076	0	YAAMBA	4/12/2010 18:00	10.5	Minor
33076	0	YAAMBA	14/12/2010 9:00	14.1	Moderate
33076	0	YAAMBA	4/01/2011 9:00	16.55	Major
533110	0	BYFIELD TM	26/12/2010 11:00	5.98	Unknown
533110	0	BYFIELD TM	28/12/2010 12:00	5.92	Unknown
33310	0	SOUTH YAAMBA TM	15/12/2010 11:00	9.88	Minor
33310	0	SOUTH YAAMBA TM	4/01/2011 10:00	12.6	Moderate
539078	0	STANWELL TM	26/12/2010 7:00	8.6	Major
539078	0	STANWELL TM	28/12/2010 2:00	8.43	Major
39264	0	ROCKHAMPTON	16/12/2010 5:30	7.65	Moderate
39264	0	ROCKHAMPTON	4/01/2011 15:15	9.2	Major
539101	0	RAGLAN CK TM	26/12/2010 9:30	9.05	Unknown
539101	0	RAGLAN CK TM	28/12/2010 1:19	9.28	Unknown
PIONEER					
Pioneer R					
33301	0	WHITEFORD'S ALERT	30/12/2010 7:50	5.79	Minor
33301	0	WHITEFORD'S ALERT	18/01/2011 18:45	5.34	Minor
33301	0	WHITEFORD'S ALERT	31/01/2011 7:45	7.64	Major
33299	0	SARICH'S ALERT	30/12/2010 8:35	8.09	Moderate
33299	0	SARICH'S ALERT	18/01/2011 19:40	6.79	Minor
33299	0	SARICH'S ALERT	31/01/2011 8:00	9.74	Major
533059	0	FINCH HATTON ALERT	24/12/2010 0:30	5.3	Major
533059	0	FINCH HATTON ALERT	30/12/2010 3:20	4.45	Moderate
533059	0	FINCH HATTON ALERT	31/01/2011 2:20	4.85	Moderate
33281	0	GARGETT TM	24/12/2010 3:20	7.01	Minor
33281	0	GARGETT TM	30/12/2010 5:00	6.33	Minor
33281	0	GARGETT TM	31/01/2011 5:00	6.69	Minor
33304	0	GARGETT ALERT	24/12/2010 3:00	7.5	Minor
33304	0	GARGETT ALERT	30/12/2010 5:15	6.9	Minor
33304	0	GARGETT ALERT	31/01/2011 4:55	7.2	Minor
533069	0	MIRANI WEIR HW TM	24/12/2010 4:50	49.06	Below Minor
533069	0	MIRANI WEIR HW TM	30/12/2010 7:30	49.63	Minor
533069	0	MIRANI WEIR HW TM	31/01/2011 7:50	50.52	Moderate
33302	0	MIRANI WEIR ALERT	24/12/2010 4:45	7.66	Minor
33302	0	MIRANI WEIR ALERT	30/12/2010 7:30	8.26	Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
33302	0	MIRANI WEIR ALERT	31/01/2011 7:40	9.81	Moderate
33300	0	DUMBLETON ROCKS ALERT	30/12/2010 9:15	17.9	Minor
33300	0	DUMBLETON ROCKS ALERT	31/01/2011 8:45	18.55	Minor
533105	0	DUMBLETON WEIR T/W TM	31/01/2011 9:40	13.81	Unknown
533060	0	HOSPITAL BRIDGE ALERT	20/12/2010 9:40	7.17	Minor
533060	0	HOSPITAL BRIDGE ALERT	31/01/2011 10:27	8.12	Minor
DON					
Don R					
33265	0	IDA CREEK ALERT	3/12/2010 12:09	2.41	Below Minor
33265	0	IDA CREEK ALERT	24/12/2010 3:15	2.31	Below Minor
33265	0	IDA CREEK ALERT	3/01/2011 17:40	3.31	Minor
33265	0	IDA CREEK ALERT	18/01/2011 23:50	2.86	Minor
33265	0	IDA CREEK ALERT	31/01/2011 1:30	2.41	Below Minor
33267	0	MT DANGAR ALERT	3/12/2010 13:30	2.7	Minor
33267	0	MT DANGAR ALERT	25/12/2010 11:24	3.05	Minor
33267	0	MT DANGAR ALERT	3/01/2011 18:55	2.7	Minor
33267	0	MT DANGAR ALERT	19/01/2011 19:50	3.1	Minor
33267	0	MT DANGAR ALERT	31/01/2011 1:50	2.65	Minor
33268	0	REEVES ALERT	3/12/2010 15:00	3.11	Minor
33268	0	REEVES ALERT	24/12/2010 8:09	3.31	Minor
33268	0	REEVES ALERT	3/01/2011 20:00	4.41	Minor
33268	0	REEVES ALERT	19/01/2011 21:00	4.56	Minor
33268	0	REEVES ALERT	31/01/2011 3:40	3.81	Minor
33264	0	BOWEN PUMP STATION ALERT	3/12/2010 17:48	2.9	Minor
33264	0	BOWEN PUMP STATION ALERT	24/12/2010 11:56	3.04	Minor
33264	0	BOWEN PUMP STATION ALERT	3/01/2011 22:07	3.6	Minor
33264	0	BOWEN PUMP STATION ALERT	19/01/2011 23:30	3.75	Minor
33264	0	BOWEN PUMP STATION ALERT	31/01/2011 6:50	3.25	Minor
BURDEKIN					
Belyando R to Mt Douglas					
35236	0	RIVINGTON	27/12/2010 14:20	9	Major
35229	0	ALPHA	20/12/2010 19:40	6.8	Below Minor
35229	0	ALPHA	28/12/2010 8:00	9	Major
535053	0	VIOLET GROVE TM	30/11/2010 23:00	6.6	Unknown
535053	0	VIOLET GROVE TM	21/12/2010 9:00	7.53	Unknown
535053	0	VIOLET GROVE TM	28/12/2010 13:00	10.56	Unknown
36083	0	ALBRO	5/12/2010 0:01	5	Moderate
36083	0	ALBRO	31/12/2010 6:20	7.7	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
536007	0	BELYANDO CROSSING TM	23/12/2010 11:00	5.47	Unknown
536007	0	BELYANDO CROSSING TM	1/01/2011 10:00	7.22	Unknown
Suttor R to BFD					
534016	0	EAGLEFIELD TM	1/12/2010 0:30	8.74	Unknown
534016	0	EAGLEFIELD TM	3/12/2010 20:40	10.33	Unknown
534016	0	EAGLEFIELD TM	20/12/2010 2:30	10.21	Unknown
534016	0	EAGLEFIELD TM	28/12/2010 13:00	9.56	Unknown
534019	0	BOWEN DEVELOPMENT RD TM	3/12/2010 14:00	4.71	Unknown
534019	0	BOWEN DEVELOPMENT RD TM	22/12/2010 8:00	5.16	Unknown
534019	0	BOWEN DEVELOPMENT RD TM	30/12/2010 22:00	4.93	Unknown
534012	0	ST ANNS ALERT	5/12/2010 9:30	5.94	Minor
534012	0	ST ANNS ALERT	14/12/2010 3:20	5.39	Minor
534012	0	ST ANNS ALERT	17/12/2010 5:40	5.24	Minor
534012	0	ST ANNS ALERT	1/01/2011 21:35	7.54	Moderate
Cape R to BFD					
534010	0	TAEMAS ALERT	1/01/2011 11:15	6.99	Minor
Lower Burdekin R d/s BFD					
34029	0	BURDEKIN DAM	28/12/2010 9:00	3.63	Minor
534013	0	HYDRO SITE TM	28/12/2010 8:00	13.28	Minor
533015	0	JACKS CREEK ALERT	24/12/2010 12:00	12.32	Minor
533015	0	JACKS CREEK ALERT	26/12/2010 6:00	10.67	Minor
533015	0	JACKS CREEK ALERT	28/12/2010 10:30	9.07	Minor
533015	0	JACKS CREEK ALERT	31/01/2011 15:47	10.72	Minor
33291	0	DALBEG ALERT	27/12/2010 12:30	13.06	Minor
33287	0	MILLAROO ALERT	27/12/2010 9:00	12.08	Minor
33286	0	CLARE ALERT	27/12/2010 10:35	11.4	Minor
33288	0	INKERMAN BRIDGE ALERT	27/12/2010 10:40	8.6	Minor
HAUGHTON					
Haughton R					
533055	0	MT PICCANINNY ALERT	26/12/2010 6:34	5.57	Major
533072	0	MAJOR CREEK ALERT	26/12/2010 11:39	8.49	Moderate
533056	0	POWERLINE ALERT	26/12/2010 21:53	7.1	Moderate
533051	0	GIRU ALERT	26/12/2010 22:08	2.84	Major
ROSS					
Ross R					
532043	0	BOHLE RIVER ALERT	20/12/2010 20:45	4.37	Minor
HERBERT					
Herbert R u/s Glen Eagle					
531015	0	SILVER VALLEY TM	25/12/2010 12:00	6.34	Moderate
531059	0	RAVENSHOE TM	25/12/2010 10:00	6.77	Unknown

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
531060	0	WOOROORA TM	25/12/2010 15:00	8.27	Unknown
531078	0	CAMERON CREEK TM	25/12/2010 14:40	6.15	Unknown
532066	0	GLENEAGLE TM	25/12/2010 21:10	8.15	Major
32169	0	GLENEAGLE ALERT	25/12/2010 21:38	8.08	Major
Herbert R d/s Glen Eagle					
532080	0	BLENCOE FALLS TM	25/12/2010 15:00	6.83	Unknown
32170	0	NASH'S CROSSING ALERT	25/12/2010 11:51	8.1	Major
32184	0	ZATTAS ALERT	25/12/2010 13:27	6.78	Moderate
532010	0	GOWRIE CREEK TM	25/12/2010 9:35	7.23	Moderate
32174	0	ABERGOWRIE ALERT	23/12/2010 13:00	6.85	Minor
32174	0	ABERGOWRIE ALERT	25/12/2010 19:05	11.5	Moderate
32091	0	ELPHINSTONE PKT	23/12/2010 15:00	7.45	Minor
32091	0	ELPHINSTONE PKT	25/12/2010 21:00	13.1	Moderate
32091	0	ELPHINSTONE PKT	27/12/2010 15:00	8.65	Minor
532028	0	ABERGOWRIE BRIDGE ALERT	23/12/2010 15:00	7.54	Minor
532028	0	ABERGOWRIE BRIDGE ALERT	25/12/2010 20:30	13.14	Moderate
532011	0	RUNNING CREEK TM	25/12/2010 14:30	6.2	Moderate
32173	0	PEACOCK SIDING ALERT	23/12/2010 14:20	11.15	Minor
32173	0	PEACOCK SIDING ALERT	25/12/2010 18:38	9.7	Below Minor
532067	0	TREBONNE AL	23/12/2010 19:00	9.91	Below Minor
532067	0	TREBONNE AL	26/12/2010 1:20	12.81	Major
32171	0	INGHAM PUMP STATION AL	23/12/2010 20:20	10.35	Minor
32171	0	INGHAM PUMP STATION AL	26/12/2010 2:10	12.95	Major
32094	0	GAIRLOCH	23/12/2010 21:00	9.95	Minor
32094	0	GAIRLOCH	26/12/2010 1:00	11.7	Major
532027	0	GAIRLOCH ALERT	23/12/2010 20:00	10.09	Minor
532027	0	GAIRLOCH ALERT	26/12/2010 1:30	12.09	Major
32185	0	HALIFAX ALERT	23/12/2010 21:45	5.17	Major
32185	0	HALIFAX ALERT	26/12/2010 1:18	5.37	Major
TULLY					
Tully R					
531085	0	TULLY GORGE TM	25/12/2010 8:50	5.74	Unknown
531057	0	BOLINDA ESTATE ALERT	25/12/2010 9:14	5.9	Moderate
32115	0	EURAMO	26/12/2010 6:00	8.71	Moderate
532059	0	EURAMO ALERT	23/12/2010 22:55	6.84	Minor
532059	0	EURAMO ALERT	26/12/2010 6:12	8.54	Moderate
532061	0	UPPER MURRAY ALERT	23/12/2010 11:32	6.52	Minor
532061	0	UPPER MURRAY ALERT	25/12/2010 10:58	9.17	Major
532061	0	UPPER MURRAY ALERT	21/01/2011 23:30	6.77	Minor
JOHNSTONE					
Johnstone R					
531084	0	GLEN ALLYN TM	25/12/2010 8:30	5.61	Unknown
32165	0	NERADA ALERT	25/12/2010 9:08	9.98	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
32165	0	NERADA ALERT	20/01/2011 20:45	7.03	Moderate
32166	0	TUNG OIL ALERT	25/12/2010 10:06	9	Major
32166	0	TUNG OIL ALERT	20/01/2011 21:50	6.55	Below Minor
532023	0	MCAVOY BRIDGE ALERT	25/12/2010 12:07	7.1	Major
532023	0	MCAVOY BRIDGE ALERT	20/01/2011 23:30	4.15	Below Minor
32161	0	CORSIS ALERT	25/12/2010 10:13	5.99	Moderate
32155	0	CENTRAL MILL TM	25/12/2010 13:00	8.1	Moderate
32160	0	CENTRAL MILL ALERT	25/12/2010 12:38	7.95	Minor
532025	0	MOURILYAN MILL ALERT	25/12/2010 15:24	10.57	Unknown
32163	0	INNISFAIL WHARF ALERT	25/12/2010 13:20	5.13	Minor
531026	0	JAPOONVALE TM	25/12/2010 7:00	5.09	Unknown
MULGRAVE-RUSSELL					
Mulgrave-Russell R					
531076	0	THE FISHERIES ALERT	23/12/2010 7:33	3.9	Minor
531076	0	THE FISHERIES ALERT	25/12/2010 8:00	9	Major
531052	0	PEETS BRIDGE ALERT	23/12/2010 9:56	5.4	Minor
531052	0	PEETS BRIDGE ALERT	25/12/2010 9:18	9.75	Major
531051	0	GORDONVALE ALERT	25/12/2010 10:09	16.41	Major
531024	0	BUCKLANDS TM	25/12/2010 11:10	7.87	Moderate
531022	0	THE BOULDERS TM	25/12/2010 6:30	6.63	Major
531074	0	CLYDE RD ALERT	25/12/2010 11:37	1.16	Moderate
CONDAMINE-BALONNE					
Condamine R u/s Warwick					
541039	0	BROSNANS BARN TM	27/12/2010 14:30	6.15	Major
541039	0	BROSNANS BARN TM	10/01/2011 12:00	3.97	Minor
41463	0	KILLARNEY	10/01/2011 11:05	4.9	Minor
41537	0	KILLARNEY ALERT	27/12/2010 14:00	5.5	Moderate
41537	0	KILLARNEY ALERT	10/01/2011 11:35	4.85	Minor
41535	0	ELBOW VALLEY ALERT	24/12/2010 5:25	3.08	Minor
41535	0	ELBOW VALLEY ALERT	27/12/2010 21:40	6.13	Major
41533	0	EMU VALE ALERT	27/12/2010 14:00	7.95	Major
41533	0	EMU VALE ALERT	10/01/2011 12:30	4.95	Below Minor
41536	0	MURRAYS BRIDGE ALERT	5/12/2010 9:10	5.05	Moderate
41536	0	MURRAYS BRIDGE ALERT	5/12/2010 20:25	5.05	Moderate
41536	0	MURRAYS BRIDGE ALERT	20/12/2010 3:00	4.65	Minor
41536	0	MURRAYS BRIDGE ALERT	23/12/2010 22:55	5	Moderate
41536	0	MURRAYS BRIDGE ALERT	27/12/2010 17:45	8.4	Major
541036	0	SWANFELS TM	27/12/2010 13:00	3.66	Minor
541036	0	SWANFELS TM	10/01/2011 11:50	2.68	Below Minor
41530	0	YANGAN ALERT	27/12/2010 14:00	7.65	Minor
41530	0	YANGAN ALERT	10/01/2011 13:30	5	Below Minor
41532	0	CONNOLLY DAM ALERT	27/12/2010 13:40	1.08	Major
41532	0	CONNOLLY DAM ALERT	11/01/2011 17:20	0.93	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
41503	0	WARWICK (SCOTS COLLEGE) TM	27/12/2010 21:00	7.09	Major
41503	0	WARWICK (SCOTS COLLEGE) TM	11/01/2011 20:00	7.73	Major
41357	0	WARWICK	27/12/2010 21:45	7.9	Major
41357	0	WARWICK	11/01/2011 20:00	8.35	Major
Condamine R..Warwick to Loudoun Br					
41531	0	GLENGALLAN CREEK ALERT	19/12/2010 23:00	4.35	Moderate
41531	0	GLENGALLAN CREEK ALERT	23/12/2010 16:00	4.4	Moderate
41531	0	GLENGALLAN CREEK ALERT	27/12/2010 14:45	4.8	Moderate
41531	0	GLENGALLAN CREEK ALERT	11/01/2011 12:15	4.8	Moderate
41473	0	PRATTEN	28/12/2010 5:30	9.55	Major
41516	0	ALLORA TM	17/12/2010 2:10	4.39	Minor
41516	0	ALLORA TM	19/12/2010 21:00	5.5	Major
41516	0	ALLORA TM	11/01/2011 10:00	7.1	Major
41345	0	ALLORA	23/12/2010 15:30	5.52	Moderate
41345	0	ALLORA	27/12/2010 15:00	7.21	Major
541048	0	VICTORIA HILL TM	20/12/2010 11:40	3.7	Minor
541048	0	VICTORIA HILL TM	27/12/2010 20:40	5.05	Major
541048	0	VICTORIA HILL TM	12/01/2011 5:40	5.15	Major
41518	0	AIDES BRIDGE TM	19/12/2010 20:00	6.07	Major
41404	0	ELLANGOWAN	27/12/2010 9:00	4.85	Major
41404	0	ELLANGOWAN	11/01/2011 21:00	4.75	Major
41405	0	FELTON	27/12/2010 14:00	6.3	Major
41405	0	FELTON	10/01/2011 18:00	5.5	Major
41515	0	FELTON TM	19/12/2010 21:00	2.69	Major
41515	0	FELTON TM	27/12/2010 15:00	3.34	Major
41515	0	FELTON TM	10/01/2011 20:00	2.98	Major
41514	0	LEYBURN TM	27/12/2010 19:00	4.9	Major
41514	0	LEYBURN TM	11/01/2011 17:00	4.02	Major
41499	0	TUMMAVILLE TM	20/12/2010 17:00	7.84	Minor
41499	0	TUMMAVILLE TM	27/12/2010 20:00	11.15	Major
41499	0	TUMMAVILLE TM	8/01/2011 10:00	8.22	Moderate
41499	0	TUMMAVILLE TM	12/01/2011 4:00	10.91	Major
541040	0	YARRAMALONG TM	20/12/2010 17:35	5.69	Moderate
541040	0	YARRAMALONG TM	12/01/2011 8:00	8.77	Major
41472	0	CENTENARY BRIDGE	8/12/2010 5:00	6	Moderate
41472	0	CENTENARY BRIDGE	15/12/2010 5:00	6.35	Moderate
41472	0	CENTENARY BRIDGE	21/12/2010 11:00	6.9	Moderate
41472	0	CENTENARY BRIDGE	28/12/2010 7:00	8.3	Major
41472	0	CENTENARY BRIDGE	8/01/2011 17:30	6.94	Moderate
41472	0	CENTENARY BRIDGE	12/01/2011 12:00	8.02	Major
41498	0	CECIL PLAINS TM	23/12/2010 13:00	6.67	Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
41498	0	CECIL PLAINS TM	28/12/2010 19:00	9.22	Major
41498	0	CECIL PLAINS TM	13/01/2011 8:00	8.77	Major
541047	0	PAMPAS BRIDGE TM	28/12/2010 3:00	3.59	Major
541047	0	PAMPAS BRIDGE TM	7/01/2011 7:00	2.86	Minor
541047	0	PAMPAS BRIDGE TM	12/01/2011 13:00	3.44	Moderate
541056	0	LONE PINE TM	28/12/2010 2:00	6.36	Major
541056	0	LONE PINE TM	6/01/2011 21:00	3.79	Minor
541056	0	LONE PINE TM	11/01/2011 23:00	4.67	Moderate
541056	0	LONE PINE TM	13/01/2011 11:00	4.87	Moderate
541093	0	CRANLEY TM	10/01/2011 14:20	4.6	Unknown
41479	0	FAIRVIEW TM	20/12/2010 23:00	5.91	Moderate
541054	0	LOUDOUN BRIDGE TM	21/12/2010 12:00	5.73	Major
541054	0	LOUDOUN BRIDGE TM	29/12/2010 11:00	8.18	Major
541054	0	LOUDOUN BRIDGE TM	13/01/2011 20:00	7.65	Major
41339	0	LOUDOUN BRIDGE	29/12/2010 11:00	11.2	Major
41339	0	LOUDOUN BRIDGE	13/01/2011 20:00	7.65	Moderate
Myall Ck					
541043	0	CLYDESDALE ALERT	18/12/2010 6:00	3.83	Moderate
541043	0	CLYDESDALE ALERT	20/12/2010 1:40	4.78	Major
541043	0	CLYDESDALE ALERT	24/12/2010 6:10	2.93	Minor
541043	0	CLYDESDALE ALERT	27/12/2010 13:50	4.78	Major
541043	0	CLYDESDALE ALERT	8/01/2011 4:20	4.08	Major
541043	0	CLYDESDALE ALERT	10/01/2011 2:50	4.83	Major
541043	0	CLYDESDALE ALERT	11/01/2011 10:00	4.78	Major
541042	0	MOFFATT ALERT	20/12/2010 2:10	2.35	Below Minor
541042	0	MOFFATT ALERT	23/12/2010 20:45	1.55	Below Minor
541042	0	MOFFATT ALERT	27/12/2010 23:20	2.4	Below Minor
541042	0	MOFFATT ALERT	8/01/2011 0:15	1.95	Below Minor
541042	0	MOFFATT ALERT	10/01/2011 1:20	2.35	Below Minor
541042	0	MOFFATT ALERT	11/01/2011 11:00	2.65	Below Minor
41478	0	DALBY	20/12/2010 13:25	2.94	Minor
41478	0	DALBY	27/12/2010 18:50	3.54	Major
41478	0	DALBY	7/01/2011 8:00	2.39	Minor
41478	0	DALBY	10/01/2011 16:45	3.74	Major
41478	0	DALBY	12/01/2011 3:30	3.49	Moderate
541041	0	DALBY ALERT	20/12/2010 13:25	2.94	Minor
541041	0	DALBY ALERT	27/12/2010 18:50	3.54	Major
541041	0	DALBY ALERT	7/01/2011 8:00	2.39	Minor
541041	0	DALBY ALERT	10/01/2011 16:45	3.74	Major
541041	0	DALBY ALERT	12/01/2011 3:30	3.49	Moderate
Condamine..Ranges-Cotswold					
41346	0	RANGES BRIDGE	8/12/2010 16:00	6.5	Moderate
41346	0	RANGES BRIDGE	14/12/2010 15:45	6.35	Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
41346	0	RANGES BRIDGE	21/12/2010 21:00	8.45	Major
41346	0	RANGES BRIDGE	25/12/2010 6:00	7.75	Major
41346	0	RANGES BRIDGE	29/12/2010 11:30	11	Major
41486	0	WARRA-KOGAN RD BR	23/12/2010 6:00	10.5	Major
41486	0	WARRA-KOGAN RD BR	30/12/2010 6:00	15	Major
41486	0	WARRA-KOGAN RD BR	14/01/2011 6:00	14.15	Major
41490	0	BRIGALOW BRIDGE TM	23/12/2010 13:50	11.21	Major
41490	0	BRIGALOW BRIDGE TM	30/12/2010 11:00	14.84	Major
41490	0	BRIGALOW BRIDGE TM	14/01/2011 21:20	14.15	Major
41517	0	CHINCHILLA WEIR TM	31/12/2010 3:30	15.38	Major
41517	0	CHINCHILLA WEIR TM	15/01/2011 11:00	14.39	Major
41409	0	BERUNA	22/12/2010 9:00	7.2	Major
41409	0	BERUNA	25/12/2010 16:30	7.75	Major
41409	0	BERUNA	28/12/2010 15:00	7.95	Major
41476	0	BURNCLUITH BRIDGE	23/12/2010 12:00	4.35	Moderate
41351	0	CHINCHILLA	24/12/2010 5:30	5.33	Moderate
41351	0	CHINCHILLA	28/12/2010 6:00	7.24	Major
41351	0	CHINCHILLA	12/01/2011 10:15	7.45	Major
541074	0	CHINCHILLA TM	28/12/2010 7:00	9.58	Unknown
42048	0	CONDAMINE	1/01/2011 6:15	15.25	Major
42048	0	CONDAMINE	16/01/2011 9:00	14.67	Major
42098	0	COTSWOLD TM	14/12/2010 21:20	8.12	Minor
42098	0	COTSWOLD TM	2/01/2011 21:10	17.82	Major
42098	0	COTSWOLD TM	17/01/2011 17:00	16.99	Major
Balonne R..Cotswold-Beardmore					
42107	0	GILWEIR TM	21/12/2010 1:00	10.54	Minor
42107	0	GILWEIR TM	28/12/2010 3:00	13.1	Major
42113	0	PINE HILL CROSSING	22/12/2010 6:00	8	Major
42113	0	PINE HILL CROSSING	28/12/2010 18:00	10.8	Major
43052	0	WARKON	16/12/2010 21:00	9.86	Major
43052	0	WARKON	3/01/2011 7:00	12.03	Major
43052	0	WARKON	17/01/2011 9:00	11.79	Major
543008	0	YULEBA FORESTRY TM	22/12/2010 14:10	7.31	Moderate
543008	0	YULEBA FORESTRY TM	29/12/2010 5:10	8.88	Major
43063	0	SURAT	9/12/2010 6:00	8.05	Moderate
43063	0	SURAT	19/12/2010 9:00	8.8	Moderate
43063	0	SURAT	4/01/2011 5:45	12.75	Major
43063	0	SURAT	18/01/2011 22:00	12.4	Major
543005	0	SURAT TM	19/12/2010 10:10	8.63	Major
543005	0	SURAT TM	23/12/2010 11:20	8.91	Major
543005	0	SURAT TM	4/01/2011 6:20	12.3	Major
543005	0	SURAT TM	18/01/2011 21:10	11.9	Major
43105	0	TABERST M	5/12/2010 3:00	5.77	Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
43105	0	TABERSTM	5/12/2010 9:10	5.05	Minor
43105	0	TABERSTM	28/12/2010 8:00	4.76	Below Minor
43074	0	ROMA	5/12/2010 20:30	6.8	Moderate
43074	0	ROMA	13/12/2010 4:30	5.6	Below Minor
43074	0	ROMA	20/12/2010 9:30	5.55	Below Minor
43074	0	ROMA	28/12/2010 9:00	6.8	Moderate
43077	0	GARRABARRA	7/12/2010 19:30	6.25	Moderate
43077	0	GARRABARRA	21/12/2010 21:00	6.6	Moderate
43077	0	GARRABARRA	29/12/2010 0:01	8.75	Major
43080	0	KARoola PARK	5/12/2010 9:00	5.45	Minor
43101	0	WERIBONE TM	9/12/2010 23:59	9.24	Moderate
43101	0	WERIBONE TM	5/01/2011 4:00	13.5	Major
43101	0	WERIBONE TM	19/01/2011 20:40	13.15	Major
43107	0	WARROO	11/12/2010 9:00	7.7	Below Minor
43107	0	WARROO	22/01/2011 6:00	14.5	Major
Maranoa R					
43111	0	CURRAWONG	4/12/2010 15:00	4	Minor
43111	0	CURRAWONG	12/12/2010 22:00	4.15	Minor
43111	0	CURRAWONG	19/12/2010 15:00	3.9	Minor
43111	0	CURRAWONG	21/12/2010 6:00	3.25	Minor
43111	0	CURRAWONG	29/12/2010 5:00	5.5	Moderate
43102	0	MITCHELL TM	4/12/2010 21:00	4.36	Moderate
43102	0	MITCHELL TM	13/12/2010 1:00	3.93	Moderate
43102	0	MITCHELL TM	19/12/2010 17:20	4.76	Moderate
43102	0	MITCHELL TM	29/12/2010 8:30	5.74	Major
43099	0	SPRINGFIELD	4/12/2010 2:00	5.75	Below Minor
43099	0	SPRINGFIELD	5/12/2010 12:00	8.2	Major
43099	0	SPRINGFIELD	13/12/2010 12:00	7.22	Moderate
43099	0	SPRINGFIELD	20/12/2010 6:30	8	Major
43099	0	SPRINGFIELD	21/12/2010 9:00	7.75	Moderate
43099	0	SPRINGFIELD	29/12/2010 18:00	9.3	Major
44075	0	WOODLANDS	6/12/2010 6:00	6.59	Moderate
44075	0	WOODLANDS	14/12/2010 15:00	6.4	Moderate
44075	0	WOODLANDS	22/12/2010 18:00	6.62	Moderate
44075	0	WOODLANDS	31/12/2010 15:00	6.97	Moderate
43100	0	OLD CASHMERE TM	9/12/2010 14:10	5.98	Moderate
43100	0	OLD CASHMERE TM	17/12/2010 6:20	5.78	Moderate
43100	0	OLD CASHMERE TM	24/12/2010 21:40	6.09	Moderate
Balonne R d/s Beardmore Dam					
43053	0	ST GEORGE	11/12/2010 9:00	8.05	Major
43053	0	ST GEORGE	17/12/2010 9:00	7.49	Major
43053	0	ST GEORGE	8/01/2011 12:00	13.2	Major
43053	0	ST GEORGE	23/01/2011 21:00	12.49	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
44154	0	WHYENBAH	12/12/2010 10:00	7.33	Major
44154	0	WHYENBAH	19/12/2010 9:00	7	Major
44154	0	WHYENBAH	28/12/2010 9:00	7.56	Major
44154	0	WHYENBAH	11/01/2011 9:00	8.14	Major
44154	0	WHYENBAH	23/01/2011 9:00	8.05	Major
544017	0	HASTINGS TM	12/12/2010 16:20	6.16	Major
544017	0	HASTINGS TM	19/12/2010 6:00	5.92	Major
544017	0	HASTINGS TM	27/12/2010 21:30	6.29	Major
544017	0	HASTINGS TM	10/01/2011 18:10	6.53	Major
544017	0	HASTINGS TM	23/01/2011 18:00	6.46	Major
544018	0	WHYENBAH TM	12/12/2010 17:10	6.2	Major
544018	0	WHYENBAH TM	19/12/2010 8:00	5.98	Major
544018	0	WHYENBAH TM	28/12/2010 4:00	6.34	Major
544018	0	WHYENBAH TM	24/01/2011 20:00	6.49	Major
44117	0	DIRRANBANDI	12/01/2011 6:00	5.34	Major
44117	0	DIRRANBANDI	25/01/2011 6:00	5.27	Major
544016	0	HEBEL TM	16/01/2011 20:00	2.37	Major
544016	0	HEBEL TM	29/01/2011 20:00	2.32	Major
Wallam/Mungallala Creeks					
44056	0	MUNGALLALA	19/12/2010 18:00	2.9	Below Minor
BORDER RIVERS					
Macintyre R u/s Holdfast					
54147	0	WALLANGRA (MACINTYRE)	12/01/2011 0:30	4.38	Unknown
54147	0	WALLANGRA (MACINTYRE)	12/01/2011 14:30	4.48	Unknown
554001	0	PINDARI DAM LEVEL	11/01/2011 8:00	1.49	Unknown
554001	0	PINDARI DAM LEVEL	12/01/2011 1:20	1.73	Unknown
54145	0	ASHFORD (SEVERN R)	11/01/2011 22:45	7.45	Major
54145	0	ASHFORD (SEVERN R)	12/01/2011 6:45	7.55	Major
554002	0	RIDGELANDS	12/01/2011 17:45	10.03	Unknown
554014	0	YETMAN (BRIDGE GAUGE)	12/01/2011 23:45	9.96	Major
54156	0	HOLDFAST	13/01/2011 6:30	8.55	Unknown
Dumaresq R					
541082	0	MOUNTAIN STATION CREEK ALERT	10/01/2011 12:00	1.75	Minor
541082	0	MOUNTAIN STATION CREEK ALERT	11/01/2011 8:20	2.05	Minor
541081	0	STORM KING DAM HEADWATER ALERT	10/01/2011 12:26	0.5	Major
541081	0	STORM KING DAM HEADWATER ALERT	11/01/2011 7:59	0.9	Major
541085	0	DALCOUTH AL	10/01/2011 13:41	2.85	Major
541085	0	DALCOUTH AL	11/01/2011 9:04	2.95	Major
541084	0	KETTLE SWAMP CREEK AL	10/01/2011 14:30	2.15	Major
541084	0	KETTLE SWAMP CREEK AL	11/01/2011 12:45	1.65	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
541086	0	GRANITE STREET ALERT	10/01/2011 13:50	2.68	Major
541086	0	GRANITE STREET ALERT	11/01/2011 9:50	2.88	Major
541087	0	STANTHORPE ALERT	10/01/2011 14:40	4.87	Major
541087	0	STANTHORPE ALERT	11/01/2011 11:00	4.97	Major
541090	0	ACCOMODATION CREEK ALERT	11/01/2011 9:40	4.2	Major
541089	0	BALLANDEAN ALERT	28/12/2010 1:10	3.57	Moderate
541089	0	BALLANDEAN ALERT	10/01/2011 19:00	5.22	Major
541089	0	BALLANDEAN ALERT	11/01/2011 15:00	5.47	Major
541053	0	FARNBRO TM	27/12/2010 9:40	2.82	Minor
541053	0	FARNBRO TM	11/01/2011 15:00	5.43	Major
541088	0	BROADWATER CREEK ALERT	27/12/2010 14:07	3.9	Moderate
541088	0	BROADWATER CREEK ALERT	10/01/2011 15:30	3.5	Moderate
541088	0	BROADWATER CREEK ALERT	11/01/2011 12:30	3.8	Moderate
541052	0	GLENLYON DAM TW TM	12/01/2011 5:00	3.28	Minor
556002	0	DONALDSON	11/01/2011 19:15	8.42	Unknown
54146	0	HAYSTACK	11/01/2011 16:30	5.66	Unknown
41540	0	BEARDY JUNCTION	7/01/2011 9:00	6.05	Minor
41540	0	BEARDY JUNCTION	12/01/2011 1:30	9.9	Major
54155	0	BONSHAW (DUMARESQ R)	12/01/2011 5:45	8.12	Unknown
41403	0	TEXAS	12/01/2011 8:35	9.21	Major
41548	0	TEXAS TM	12/01/2011 8:35	9.21	Major
541065	0	OAKY CREEK TM	12/01/2011 15:30	3.94	Minor
541067	0	GLENARBON WEIR TM	8/01/2011 18:00	4.03	Unknown
541067	0	GLENARBON WEIR TM	12/01/2011 20:45	6.86	Unknown
Macintyre Bk					
41491	0	BARONGAROOK TM	27/12/2010 16:30	4.9	Moderate
41491	0	BARONGAROOK TM	6/01/2011 17:00	4.38	Minor
41491	0	BARONGAROOK TM	11/01/2011 10:45	5.09	Moderate
41495	0	TERRAINE TM	6/01/2011 16:30	3.94	Moderate
41495	0	TERRAINE TM	11/01/2011 10:45	3.58	Moderate
541033	0	COOLMUNDA DAM HW TM	28/12/2010 2:00	0.25	Minor
41137	0	COOLMUNDA DAM TW TM	28/12/2010 2:35	1.97	Minor
41137	0	COOLMUNDA DAM TW TM	11/01/2011 17:34	4.47	Minor
41406	0	INGLEWOOD BRIDGE	7/01/2011 2:00	8.67	Minor
41123	0	INGLEWOOD BRIDGE TM	28/12/2010 8:30	8.38	Minor
41123	0	INGLEWOOD BRIDGE TM	7/01/2011 3:00	8.67	Minor
41123	0	INGLEWOOD BRIDGE TM	11/01/2011 23:53	9.15	Moderate
41133	0	WOODSPRING TM	7/01/2011 3:50	7.19	Major
41133	0	WOODSPRING TM	12/01/2011 3:40	7.6	Major
41391	0	WOODSPRING	28/12/2010 2:00	9	Major
41391	0	WOODSPRING	7/01/2011 6:00	7.2	Major
41391	0	WOODSPRING	12/01/2011 2:00	7.7	Major

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
41520	0	INGLEWOOD WEIR TM	7/01/2011 3:50	9.1	Major
41520	0	INGLEWOOD WEIR TM	12/01/2011 1:40	9.66	Major
41519	0	BOOBA SANDS TM	29/12/2010 4:00	8.03	Major
41519	0	BOOBA SANDS TM	7/01/2011 22:40	8.33	Major
41519	0	BOOBA SANDS TM	12/01/2011 20:00	8.81	Major
Macintyre R d/s New Bengella					
41506	0	BENGALLA TM	31/12/2010 0:40	6.56	Moderate
41506	0	BENGALLA TM	9/01/2011 0:20	8.72	Moderate
41506	0	BENGALLA TM	13/01/2011 7:10	10.94	Major
41507	0	NEW KILDONAN TM	30/12/2010 10:00	6	Moderate
41507	0	NEW KILDONAN TM	9/01/2011 18:30	8.89	Moderate
41507	0	NEW KILDONAN TM	14/01/2011 1:10	13.06	Major
53101	0	BOGGABILLA (MACINTYRE R)	30/12/2010 16:00	7.14	Minor
53101	0	BOGGABILLA (MACINTYRE R)	9/01/2011 22:30	9.91	Minor
53101	0	BOGGABILLA (MACINTYRE R)	14/01/2011 8:00	12.56	Major
41350	0	GOONDIWINDI	9/01/2011 19:00	8.94	Major
41350	0	GOONDIWINDI	14/01/2011 7:00	10.64	Major
41500	0	GOONDIWINDI TM	30/12/2010 17:00	6.92	Moderate
541030	0	GOONDIWINDI WEIR TM	30/12/2010 17:00	6.39	Moderate
541030	0	GOONDIWINDI WEIR TM	9/01/2011 0:01	7.62	Moderate
541030	0	GOONDIWINDI WEIR TM	14/01/2011 6:20	8.04	Moderate
541070	0	CARANA WEIR TM	31/12/2010 4:00	5.07	Moderate
541070	0	CARANA WEIR TM	10/01/2011 19:00	5.99	Major
541072	0	OONAVALE TM	11/01/2011 21:50	6.58	Unknown
53109	0	TERREWAH	23/12/2010 10:00	6.56	Moderate
52084	0	BOOMI WEIR	6/01/2011 6:45	2.42	Unknown
552012	0	KANOWNA (MACINTYRE)	11/01/2011 13:30	5.45	Unknown
Weir R					
41508	0	O'CONNOR TM	28/12/2010 7:40	14.58	Major
41508	0	O'CONNOR TM	7/01/2011 9:00	5.15	Minor
41508	0	O'CONNOR TM	10/01/2011 14:30	4.92	Minor
41508	0	O'CONNOR TM	12/01/2011 0:40	11.86	Major
41485	0	RETREAT BRIDGE TM	29/12/2010 23:10	12.82	Major
41485	0	RETREAT BRIDGE TM	4/01/2011 14:10	3.83	Below Minor
41485	0	RETREAT BRIDGE TM	8/01/2011 5:00	4.84	Below Minor
41485	0	RETREAT BRIDGE TM	13/01/2011 7:20	10.34	Major
41488	0	BALLYMENA TM	30/12/2010 21:40	11.14	Major
41488	0	BALLYMENA TM	5/01/2011 9:10	3.71	Below Minor
41488	0	BALLYMENA TM	9/01/2011 0:10	4.84	Below Minor
41488	0	BALLYMENA TM	14/01/2011 5:30	9.96	Major
542004	0	GUNN BRIDGE (DNR) TM	31/12/2010 7:40	7.64	Major
542004	0	GUNN BRIDGE (DNR) TM	5/01/2011 19:00	2.9	Below Minor
542004	0	GUNN BRIDGE (DNR) TM	9/01/2011 8:00	3.94	Below Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
542004	0	GUNN BRIDGE (DNR) TM	14/01/2011 20:20	7.31	Major
41489	0	MEDPARK BRIDGE TM	7/01/2011 23:40	4.21	Moderate
41366	0	GIDDI GIDDI SOUTH	17/01/2011 9:00	6.05	Major
41112	0	GIDDI GIDDI SOUTH TM	3/01/2011 8:10	5.66	Moderate
41112	0	GIDDI GIDDI SOUTH TM	3/01/2011 8:10	5.65	Moderate
41112	0	GIDDI GIDDI SOUTH TM	12/01/2011 5:15	4.2	Minor
42097	0	HARTMANN BRIDGE TM	4/01/2011 12:00	5.09	Moderate
42097	0	HARTMANN BRIDGE TM	12/01/2011 22:20	4.04	Minor
42097	0	HARTMANN BRIDGE TM	19/01/2011 14:00	5.54	Moderate
42104	0	SURREY TM	5/01/2011 13:00	5.61	Major
42104	0	SURREY TM	21/01/2011 6:00	5.67	Major
42066	0	TALWOOD	8/01/2011 9:00	3.77	Moderate
MOONIE					
Moonie R					
41493	0	THE DEEP CROSSING	27/12/2010 23:59	5.65	Major
41493	0	THE DEEP CROSSING	12/01/2011 3:00	3.3	Moderate
41368	0	TARTHA	28/12/2010 18:30	7	Major
42100	0	SOUTHWOOD	13/12/2010 5:00	5	Moderate
42100	0	SOUTHWOOD	29/12/2010 15:00	6.9	Major
42100	0	SOUTHWOOD	7/01/2011 22:00	4.85	Moderate
42100	0	SOUTHWOOD	13/01/2011 5:45	5.35	Moderate
42053	0	FLINTON	16/12/2010 9:00	3.8	Minor
42053	0	FLINTON	25/12/2010 15:00	3.08	Minor
42053	0	FLINTON	29/12/2010 18:00	4.03	Moderate
42053	0	FLINTON	2/01/2011 6:00	5.05	Major
42053	0	FLINTON	12/01/2011 15:00	4	Moderate
42053	0	FLINTON	17/01/2011 15:00	3.81	Minor
542006	0	FLINTON TM	26/12/2010 1:30	5.23	Unknown
542006	0	FLINTON TM	29/12/2010 16:00	6.26	Unknown
542006	0	FLINTON TM	12/01/2011 17:00	6.52	Unknown
43097	0	TEELBA	6/01/2011 8:00	5.4	Minor
43097	0	TEELBA	11/01/2011 20:30	5.05	Minor
42103	0	MT DRIVEN	4/01/2011 13:45	7.21	Major
42103	0	MT DRIVEN	14/01/2011 9:00	5.85	Moderate
44194	0	NINDIGULLY	6/01/2011 6:00	3.88	Moderate
44194	0	NINDIGULLY	16/01/2011 9:00	3.26	Moderate
42105	0	NINDIGULLY TM	6/01/2011 19:00	5.71	Moderate
42105	0	NINDIGULLY TM	16/01/2011 22:00	5.25	Moderate
542009	0	THALLON BRIDGE	8/01/2011 17:00	5.28	Major
542009	0	THALLON BRIDGE	18/01/2011 6:00	4.84	Moderate
42076	0	THALLON	9/01/2011 5:50	5.36	Major
42106	0	FENTON TM	26/12/2010 8:00	3.97	Minor
42106	0	FENTON TM	11/01/2011 12:00	4.94	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
42106	0	FENTON TM	20/01/2011 20:00	4.68	Moderate
WARREGO					
Warrego R u/s Charleville					
44190	0	LOCHINVAR	3/12/2010 15:00	4	Moderate
44190	0	LOCHINVAR	12/12/2010 8:00	5.6	Major
44190	0	LOCHINVAR	20/12/2010 6:30	6.05	Major
44190	0	LOCHINVAR	29/12/2010 1:00	8.65	Major
44199	0	WETLANDS	3/12/2010 9:00	3.8	Moderate
44199	0	WETLANDS	20/12/2010 9:00	3.9	Moderate
544011	0	AUGATHELLA TM	13/12/2010 1:00	5.94	Moderate
544011	0	AUGATHELLA TM	21/12/2010 21:50	6.07	Major
544011	0	AUGATHELLA TM	30/12/2010 2:20	6.46	Major
35283	0	DRENSMAINE	12/12/2010 1:00	4.6	Minor
44200	0	BIDDENHAM TM	5/12/2010 4:00	2.24	Minor
44200	0	BIDDENHAM TM	6/12/2010 2:00	2.5	Minor
44200	0	BIDDENHAM TM	13/12/2010 9:30	5.35	Moderate
44200	0	BIDDENHAM TM	21/12/2010 23:00	4.77	Moderate
44200	0	BIDDENHAM TM	30/12/2010 2:20	6.46	Major
44201	0	THE 27 MILE GARDEN TM	6/12/2010 18:00	3.02	Moderate
44201	0	THE 27 MILE GARDEN TM	9/12/2010 17:00	2.66	Minor
44201	0	THE 27 MILE GARDEN TM	14/12/2010 4:00	4.46	Major
44201	0	THE 27 MILE GARDEN TM	23/12/2010 1:10	4.22	Major
44156	0	CHARLEVILLE RV	1/12/2010 23:59	2.75	Below Minor
44156	0	CHARLEVILLE RV	8/12/2010 4:00	3.36	Below Minor
44156	0	CHARLEVILLE RV	15/12/2010 6:30	5.19	Moderate
44156	0	CHARLEVILLE RV	23/12/2010 23:59	4.85	Minor
44156	0	CHARLEVILLE RV	1/01/2011 3:00	5.09	Moderate
Warrego R d/s Charleville					
44208	0	WARILDA	11/12/2010 6:00	5.05	Major
44208	0	WARILDA	14/12/2010 15:00	4.4	Moderate
44208	0	WARILDA	25/12/2010 12:00	3.7	Minor
44208	0	WARILDA	29/12/2010 15:00	3.85	Minor
44209	0	OAKPARK	8/12/2010 11:00	4.5	Moderate
44209	0	OAKPARK	9/12/2010 19:15	4.8	Moderate
44209	0	OAKPARK	12/12/2010 19:00	5	Major
544021	0	BINNOWEE TM	13/12/2010 19:50	5.55	Moderate
544021	0	BINNOWEE TM	29/12/2010 17:00	4.21	Minor
44206	0	BAKERS BEND TM	15/12/2010 13:00	6.95	Minor
44206	0	BAKERS BEND TM	2/01/2011 0:01	6.11	Minor
544014	0	WYANDRA TM	1/12/2010 10:00	5.52	Below Minor
544014	0	WYANDRA TM	17/12/2010 3:00	6.81	Minor
544014	0	WYANDRA TM	3/01/2011 8:00	6.14	Minor
44174	0	WALLEN	2/12/2010 18:00	5.45	Minor

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
44174	0	WALLEN	18/12/2010 6:00	7.3	Moderate
44174	0	WALLEN	27/12/2010 18:00	5.72	Minor
44174	0	WALLEN	4/01/2011 5:00	6.35	Minor
544024	0	WALLEN TM	2/12/2010 17:00	5.92	Minor
544024	0	WALLEN TM	18/12/2010 9:50	7.59	Moderate
544019	0	CUNNAMULLA WEIR TM	4/12/2010 4:00	6.89	Moderate
544019	0	CUNNAMULLA WEIR TM	19/12/2010 21:00	7.65	Major
544019	0	CUNNAMULLA WEIR TM	29/12/2010 7:20	7.02	Moderate
44210	0	ROCKY	5/12/2010 15:00	4.1	Moderate
44210	0	ROCKY	21/12/2010 21:30	4.69	Moderate
44210	0	ROCKY	30/12/2010 15:00	4.2	Moderate
PAROO					
Paroo R					
44222	0	QUILPETA	5/12/2010 9:00	2	Minor
44222	0	QUILPETA	11/12/2010 15:00	2.7	Minor
44153	0	EULO	5/12/2010 6:00	3.4	Moderate
44153	0	EULO	9/12/2010 6:00	3.4	Moderate
44153	0	EULO	16/12/2010 18:00	3.8	Moderate
544015	0	CAIWARRO TM	9/12/2010 4:00	2.76	Moderate
544015	0	CAIWARRO TM	20/12/2010 11:40	2.86	Moderate
44181	0	HUNGERFORD	10/12/2010 15:00	1.7	Moderate
44181	0	HUNGERFORD	22/12/2010 16:00	1.64	Moderate
BULLOO					
Bulloo R					
45043	0	ADAVALE	10/12/2010 18:30	3.6	Moderate
45043	0	ADAVALE	27/12/2010 19:00	3.1	Minor
45044	0	QUILPIE	14/12/2010 6:00	5.15	Major
545007	0	QUILPIE TM	13/12/2010 13:00	5.24	Major
545001	0	AUTUMNVALE TM	7/12/2010 19:00	6.05	Moderate
545001	0	AUTUMNVALE TM	22/12/2010 7:40	5.92	Moderate
45045	0	THARGOMINDAH	9/12/2010 6:00	4.88	Moderate
45045	0	THARGOMINDAH	15/12/2010 15:00	4.57	Moderate
45045	0	THARGOMINDAH	23/12/2010 15:00	4.78	Moderate
COOPER CREEK					
Thomson R					
536006	0	BOWEN DOWNS TM	1/12/2010 20:00	2.99	Unknown
536006	0	BOWEN DOWNS TM	31/12/2010 11:00	4.78	Unknown
36037	0	MUTTABURRA	31/12/2010 9:00	4.7	Minor
36013	0	CAMOOOLA PARK	20/12/2010 18:00	4.1	Moderate
36161	0	LONGREACH TM	4/12/2010 3:00	2.73	Below Minor
36161	0	LONGREACH TM	1/01/2011 9:00	4.62	Moderate
537004	0	STONEHENGE TM	2/12/2010 1:00	4.34	Moderate
537004	0	STONEHENGE TM	31/12/2010 4:00	4.21	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
38037	0	JUNDAH	3/12/2010 7:00	4.25	Moderate
38037	0	JUNDAH	2/01/2011 6:00	4.05	Moderate
Barcoo R					
35049	0	GILLESPIE	1/12/2010 6:00	4.15	Minor
35049	0	GILLESPIE	20/12/2010 20:00	6.6	Minor
35049	0	GILLESPIE	28/12/2010 6:00	6.1	Minor
35259	0	DUNEIRA	20/12/2010 9:00	2.8	Minor
536003	0	BLACKALL TM	20/12/2010 22:00	5.51	Moderate
536003	0	BLACKALL TM	30/12/2010 1:00	4.53	Minor
36169	0	COOLAGH	5/12/2010 8:00	5.2	Moderate
36169	0	COOLAGH	23/12/2010 6:00	6.25	Major
36169	0	COOLAGH	30/12/2010 7:00	6.3	Major
35286	0	GLENCOE	24/12/2010 17:00	2.65	Moderate
35286	0	GLENCOE	27/12/2010 20:00	3.5	Major
35285	0	JERICO	28/12/2010 23:00	3.8	Major
536002	0	BARCADDINE WEIR TM	29/12/2010 1:00	3.14	Major
36026	0	ISISFORD	6/12/2010 12:30	5.94	Moderate
36026	0	ISISFORD	13/12/2010 23:00	6.84	Major
36026	0	ISISFORD	21/12/2010 18:00	4.81	Minor
36026	0	ISISFORD	24/12/2010 9:00	6.44	Major
36026	0	ISISFORD	1/01/2011 6:00	6.97	Major
36104	0	OMA	6/12/2010 19:30	5.42	Moderate
36104	0	OMA	14/12/2010 6:00	6.33	Major
36104	0	OMA	20/12/2010 18:00	4.88	Minor
36104	0	OMA	24/12/2010 16:00	5.96	Moderate
36104	0	OMA	1/01/2011 18:00	6.42	Major
36094	0	WAHROONGHA	15/12/2010 6:00	4.85	Moderate
36094	0	WAHROONGHA	26/12/2010 6:00	4.6	Moderate
36094	0	WAHROONGHA	2/01/2011 6:00	4.95	Moderate
38034	0	GLENLOCK	2/12/2010 4:00	6.45	Major
38034	0	GLENLOCK	17/12/2010 15:00	5.55	Moderate
38034	0	GLENLOCK	28/12/2010 5:30	5.45	Moderate
38034	0	GLENLOCK	4/01/2011 15:00	5.7	Moderate
538001	0	RETREAT TM	3/12/2010 16:00	10.13	Major
538001	0	RETREAT TM	19/12/2010 20:00	7.89	Major
538001	0	RETREAT TM	29/12/2010 13:00	7.39	Major
538001	0	RETREAT TM	6/01/2011 14:00	8.3	Major
Cooper Ck					
38038	0	WINDORAH	6/12/2010 6:00	5.67	Major
38038	0	WINDORAH	13/12/2010 6:00	5.33	Major
38038	0	WINDORAH	20/12/2010 15:00	5.14	Major
38038	0	WINDORAH	7/01/2011 6:00	5.22	Major
38038	0	WINDORAH	15/01/2011 15:00	4.67	Moderate

STATION NO.	SENS NO.	STATION NAME	DATE	HEIGHT	FLOOD CLASS
38038	0	WINDORAH	20/01/2011 6:00	4.65	Moderate
NICHOLSON					
Nicholson/Gregory R					
529009	0	GREGORY DOWNS TM	21/01/2011 7:20	6.12	Minor
FLINDERS					
Flinders R					
30024	0	HUGHENDEN	19/01/2011 6:00	3.17	Moderate
530009	0	RICHMOND TM	19/01/2011 23:00	6.25	Moderate
530009	0	RICHMOND TM	21/01/2011 2:00	5.58	Minor
NORMAN					
Norman R					
29154	0	YAPPAR RIVER	19/01/2011 19:00	2.45	Minor
GILBERT					
Gilbert R					
30112	0	NORTH HEAD	20/01/2011 9:00	5.35	Minor
30158	0	GREEN HILLS	20/01/2011 21:00	5	Minor
30157	0	RIVERVIEW (GILBERT RV)	21/01/2011 6:00	3.6	Below Minor
533095	0	ROCKFIELDS TM	21/01/2011 10:00	7.21	Minor
530015	0	SPANNER WATERHOLE TM	21/01/2011 1:30	5.69	Unknown
530014	0	KIDSTON DAM HWTM	20/01/2011 2:50	38	Unknown
530014	0	KIDSTON DAM HW TM	21/01/2011 2:45	37.82	Unknown
530013	0	KIDSTON DAM TW TM	21/01/2011 2:50	4.26	Unknown
530007	0	EINASLEIGH TM	21/01/2011 12:00	8.51	Below Minor
30018	0	GEORGETOWN	22/12/2010 7:30	3.82	Below Minor
MITCHELL					
528009	0	ROOKWOOD TM	21/01/2011 7:00	10.72	Unknown
528009	0	ROOKWOOD TM	21/01/2011 23:00	10.87	Unknown
528003	0	TRIMBLES CROSSING TM	22/01/2011 2:10	16.81	Unknown
531087	0	COOKTOWN CROSSING TM	22/01/2011 14:00	6.45	Unknown
528006	0	OK BRIDGE TM	22/01/2011 6:40	12.76	Unknown
528001	0	GAMBOOLA TM	22/01/2011 17:40	17.88	Unknown
531031	0	PALMER RIVER TM	22/01/2011 6:10	4.61	Unknown
527013	0	DRUMDUFF TM	24/01/2011 1:30	10.61	Unknown
29038	0	KOWANYAMA AP	28/12/2010 8:25	3.15	Moderate