



KROOMBIT DAM

EMERGENCY EVENT REPORT

20TH DEC 2010 to MARCH 2011

QFCI

Date:

Exhibit Number:

27/05/11 JM



SunWater 179 Turbot St., Brisbane PO Box 15536 City East QLD 4002

Emergency Event Recording Sheets

- Description of the Event
- Instrument Readings and Level Data
- Description of Damage
- Photos during and after the Event
- Details of Communication
- General Comments and/or EAP recommendations

Emergency Event Recording Sheets

• Description of the Event

Event Report - Kroombit Dam

Summary

Kroombit Dam was approximately 60% full in early December 2010. A series of rainfall events during mid December increased the storage level until it overflowed on the 20th. Prior to the spill event, downstream landholders were advised on the 15th of the probable spilling of the storage.

The peak of the event occurred on the 28th, after a large rainfall event. The peak flow would have occurred sometime during the night or early morning. Due to the flooding closing access roads, it was not possible to get anyone on site to observe the peak.

During January, February and early March the storage has continued to overtop regularly.

EMERGENCY ACTION PLAN - KROOMBIT DAM



EMERGENCY EVENT RECORD

COMPLETE THIS COVER SHEET AND ATTACH RELEVANT RECORDING SHEETS FROM SECTION 6.

1.	NATU	JRE	OF	THE	EVENT	(circle	the event)
						1000		,

	Spillway discharge	Earthquake	Piping	Water Quality	Terrorist Activity/Hoax/Other
Commencing:	Time: am/pm; [ළට Date _ 23/1 2/2010	Finishi	ng: Time:	am/pm; Date // 21-01-2011
2. DESCF	RIPTION OF THE EVENT	r	2	8-02-201	- 9-02-2011.
Attach relevant	sheets from Section 6.				

3. STATISTICS

Total inflow	80,850	Megalitres
Total discharge	76,250 (to end of Feb)	Megalitres
Capacity of Storage prior to inflow	68% (10/12/10)	%
Volume prior to inflow	10,000	Megalitres
Maximum inflow	28,000	ML/d
Maximum discharge	28,000	ML/d

4. EVENT PROGRESS

Attach copies of the Spillway Level versus Time Graph, the Record of Communication, the Log of Events / Actions, and Rainfall during a Flood Event (Section 6A).

5. GENERAL COMMENTS

Include in this section any observations or comments regarding the Event, such as Equipment malfunctions, improved Reporting, Safety issues, or any suggestions which may improve monitoring of the Event

6. DAMAGE REPORT

Detail any damage to the Dam wall (or Embankment), Spillway, Abutments or Stream bank in the downstream area of the Dam. Attach photos. Nil damage sustained to Dam infrastructure

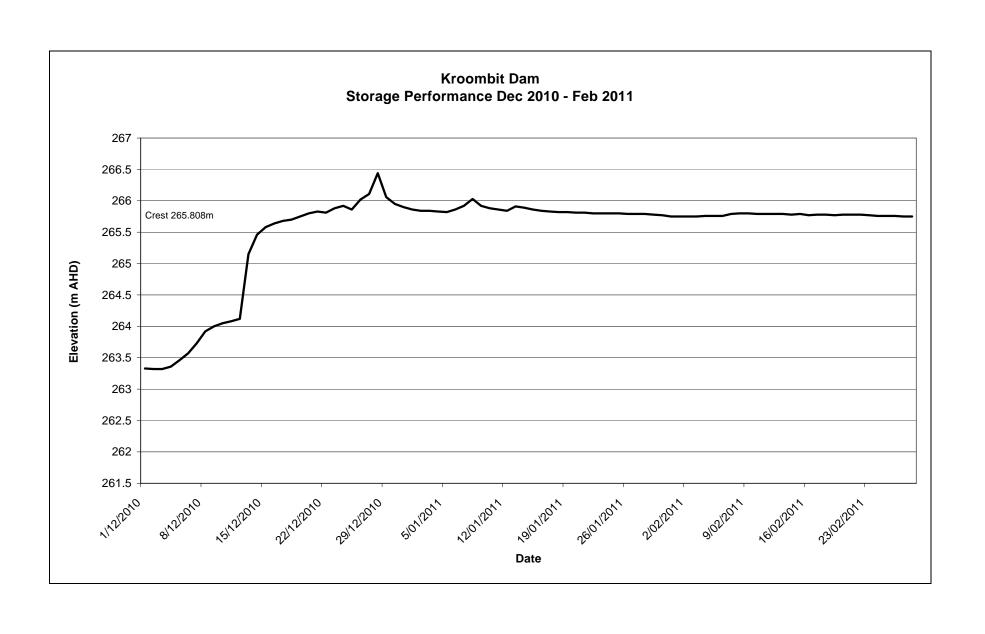
Name:...Daryl Conway.....Signed:....

.. Designation Service Manager .. Date 14 / 3 / 20 11

Emergency Event Recording Sheets

• Instrument Readings and Level Data

Daily Storage Readings: Kroombit Dam								
Date	Elevation	Storage	Rainfall					
1/03/2011	(m AHD) 265.75	(ML) 14458	(mm) 0					
28/02/2011	265.75	14458	0					
27/02/2011	265.75	14458	0					
26/02/2011	265.76	14486	0					
25/02/2011 24/02/2011	265.76 265.76	14486 14486	0					
23/02/2011	265.76	14515	0					
22/02/2011	265.78	14543	4					
21/02/2011	265.78	14543	0					
20/02/2011	265.78	14543	0					
19/02/2011 18/02/2011	265.77 265.78	14515 14543	0					
17/02/2011	265.78	14543	0					
16/02/2011	265.77	14515	0					
15/02/2011	265.79	14572	3					
14/02/2011 13/02/2011	265.78 265.79	14543 14572	0					
12/02/2011	265.79	14572	0					
11/02/2011	265.79	14572	0					
10/02/2011	265.79	14572	0					
9/02/2011 8/02/2011	265.8 265.8	14600 14600	11 0					
7/02/2011	265.79	14572	1					
6/02/2011	265.76	14486	4					
5/02/2011	265.76	14486	0					
4/02/2011	265.76	14486	0					
3/02/2011 2/02/2011	265.75 265.75	14458 14458	0					
1/02/2011	265.75	14458	0					
31/01/2011	265.75	14458	0					
30/01/2011	265.77	14515	0					
29/01/2011 28/01/2011	265.78 265.79	14543 14572	0					
27/01/2011	265.79	14572	0					
26/01/2011	265.79	14572	0					
25/01/2011	265.8	14600	0					
24/01/2011 23/01/2011	265.8 265.8	14600 14600	0					
22/01/2011	265.8	14600	0					
21/01/2011	265.81	14600	3					
20/01/2011	265.81	14600	0					
19/01/2011	265.82	14600	0					
18/01/2011 17/01/2011	265.82 265.83	14600 14600	0					
16/01/2011	265.84	14600	0					
15/01/2011	265.86	14600	0					
14/01/2011 13/01/2011	265.89 265.91	14600 14600	0					
12/01/2011	265.84	14600	0					
11/01/2011	265.86	14600	0					
10/01/2011	265.88	14600	0					
9/01/2011	265.92	14600						
8/01/2011 7/01/2011	266.03 265.92	14600 14600	27					
6/01/2011	265.86	14600	30					
5/01/2011	265.82	14600	0					
4/01/2011	265.83	14600	4					
3/01/2011 2/01/2011	265.84 265.84	14600 14600	17 0					
1/01/2011	265.86	14600	0					
31/12/2010	265.9	14600	0					
30/12/2010	265.95	14600	0					
29/12/2010 28/12/2010	266.06 266.44	14600 14600	9 100					
27/12/2010	266.11	14600	49					
26/12/2010	266.02	14600	9					
25/12/2010	265.86	14600	8					
24/12/2010 23/12/2010	265.92 265.88	14600 14600	1 1					
22/12/2010	265.81	14600	0					
21/12/2010	265.83	14600	2					
20/12/2010	265.8	14600	8					
19/12/2010 18/12/2010	265.75 265.7	14458 14316	33					
17/12/2010	265.7	14259	0					
16/12/2010	265.64	14145						
15/12/2010	265.58	13976	0					
14/12/2010 13/12/2010	265.46 265.15	13641 12798	0 18					
12/12/2010	264.12	10243	10					
11/12/2010	264.08	10151	8					
10/12/2010	264.05	10083	0					



KROOMBIT DAM	EAP						1	Flood ()pei	ation
Visual Inspection and Sto	rage Report									
Note: Refer to Page 2 for		ions **						Date:		
Total Note: to 1 ago 2 for		UN	MON	TUE	WED	1	'HU	FRI		SAT
Stored Water Level FSI	L 265.8 m	ION	IVIOIN	TOL	WED	'	nu	68. 7	\rightarrow	
				265.9	h	265.8				
Tail Water Level										
Daily Rainfall (mm) Mor	ming 9am							0		6 m
Eve	ening 3pm									
STAGE 1	STAGE 2		- STA	GE 3	STAC	25 4		6.	TAGE	E
at EL 265.8 m	up to EL 269.3		up to EL		up to EL		m	up to I		
Ut ELE ZOOLO IN	up to LL 200.0	70 111	up to LL	210.1 111		27 1.07	-			
	Visual Inspe	oction			First Inspecti	an l	100	cond	24	Third
	visuai ilispe	CHOH			mspecu	OH:		ection		pection
	Malk	OP Drive	at 10 km/hour 18	rito 'IAI' for well-	and 'D' for Drive)		(+)	6 hrs)	(+	12 hrs)
Main Embankment	(vvalk	OK DITVE	at 10 km/nour. W	rite vv for walk	and 'D' for Drive)	n		4.0		
Upstream Face (Use t	ninoculare)		Gener	al condition				U		
Damage, deterior		ata mo						se P		
Displacement of							1	11		
Displacement of	пріар піаспа	i, subs		of seepage				, Z		
Downstream face				al condition				"L	-	
Damage, deterior	ation of concre	oto mo				6000 GOOD				
Displacement of										
Displacement of	пргар плацепа	i, subs				-				
Spillway				of seepage			ماد			10.5
Spillway Concrete Structure				al condition	2	-	60			
Apron			Damage, de				NI			
Inlet Tower (within Ri	aht Ahutmant)		Damage, de		The second secon	-	NI			
met rower (within Ki	gni Abulment)			l condition	U	-	Colo			
Outlet Works			Damage, de	al condition		12	1-1			
Outlet Works				AND DESCRIPTION OF THE PROPERTY OF THE PROPERT	100	01	60			
Reservoir Rim (Use bir	raedusev.		Damage, de			-	M	- All		
Keservon Kim (Use bii	loculars)			l condition		-	600			
Area Downstream of	Dom			umps, slips		-	MI			
		on one		l condition		-	640	1)		
Geepage	from any locati	on apa					NI			
Dataila of algorificant about	N	1		page point		_	MI			
Details of significant change	es. New occurren	ces and	issues warra	nting further	attention					
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KROOMBIT DAM	I EAP				2200 8 10		Flood (peration	
Visual Inspection and St	orane Penor	+							
Note: Refer to Page 2 fo							Date:	21.12.10	, 🗏
Treatment to rage 2 to	r rocorunig n	SUN	MON	TUE	WED	THU	FRI	SAT	7
Stored Water Level FS	SL 265.8 m		265.83	102	265.81			JAI	1
7.00.05						265.9	2		-=
Tail Water Level (m) / . 47						2.27			
Daily Rainfall (mm) Mo	70 mg	20							
Ev	7 0 100	,,,	1						
Evening 3pm STAGE 1 STAGE 2 STAGE 3						E 4	6.	TAGE 5	-
at EL 265.8 m		. 269.33 m	up to EL		up to EL 2			L 271.95 m	
					First		econd	Third	1
	Visual I	nspection			Inspection		pection	Inspection	
					·		6 hrs)	(+12 hrs)	
		(Walk OR Drive	at 10 km/hour. Wr	ite 'W' for walk a		-			
Main Embankment					N		w	w	
Upstream Face (Use Damage, deterio		onoroto ==		l condition	NIL		11LCONT	wille	4
Displacement o							u L	te	
	. IIPIUP IIIC	atorial, Subt		of seepage			12	+6	
Downstream face				l condition			1 L Good	ic Goy	뻳
Damage, deterio	ration of c	oncrete, mo	ovement, dis	placement	NIL			ter	1=
Displacement of	f riprap ma	aterial, subs	sidence, slide	es, erosion	NIL N		iL	66	
				of seepage		- N	14	ote	
Spillway				l condition	-		1600	10 GOS	橿
Concrete Structure Apron			Damage, de		NIL		12		
Inlet Tower (within R	ight Abuto		Damage, de	condition	WIL		12	pe =	▐≣
The rest (Walling re	ign, / wan		Damage, de		NIL		12	wik	
Outlet Works	2012/12			condition	NIL		16001	NILGOS	
			Damage, de	terioration	NIL			MIL	
Reservoir Rim (Use b	inoculars)			condition	N14		L Caro	NILGOR	
Area Dawn steeren at	. D			mps, slips	NIL		14	NIL	
Area Downstream of		location on	General art from see	condition	NIL	aces N	L (cod)	N12 GOO!	
Seepage	nom any	ocation apa		page point	NIL	2	1	NIL	
Details of significant change	es. New occ	currences and				1 151		1016	
			HOUSE WALLEL	any faritre a	uoruon				
NO C						**********		***************************************	
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	5								
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					Manager				
			(tick if fax	rea)	Principal Engir	neer (Dam S	afety		
				1					
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Emergency Event Recording Sheets

• Description of Damage

Nil Damage recorded

Emergency Event Recording Sheets

• Photos during and after the Event



11/1/2011

Emergency Event Recording Sheets

• Details of Communication

ENACRGENCY ACTION PLAN - KROOMBIT DAM

KROOMBIT DAM - EMERGENCY ACTION PLAN RECORD OF COMMUNICATION

DATE	TIME	CONTACT PERSON / TELEPHONE NO.	CALL IN / OUT	MESSAGE	RECORDED BY (INITIALS)
15/2/10	7:45	16005		46/1 4185066	
15/12/10	7:48	A VANASIONES		Socie To Ohlon	
15/12/10	7:50	G. MAGUIRE		No Body Hour No DOSULLING MINE	4
15/12/10	7.55	J. SHEP HORD		LEFT MESSALL	
15/12/10	7.57	B. CURRIGA.		4641 MBS266	
15/12/10	8:00	L. POKARITA	.4	Loule to owner	
15/12/10	8-02	J. Ross		LEFT MESSOLE	
15/12/10	6-04	1 PRICE		Sport to owner	
15/12/16	6.05	C. BOLTON		Spoke To ourth	
15/12/10	8-08	BETTEL HELP PULLEY		Not Proudent	
15/12/10	8-10	NA RAZOUT		LEKT MEGGAGE	
5/12/10	8:12	H. HOWARD		LE PT MUSSALL	
15/12/10	8115	MY LURTZ		spoke to ownth	

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EMERGENCY ACTION PLAN

KROOMBIT DAM



KROOMBIT DAM - EMERGENCY ACTION PLAN RECORD OF COMMUNICATION

DATE	TIME	CONTACT PERSON / TELEPHONE NO.	CALL IN / OUT	MESSAGE	RECORDED BY (INITIALS)
20.12.10	10:15	Mal Halwala. BSC-Colin Head	out.	Kroombit Dan overflowing	
22:12:10	1330	BSC-Colin Head	Out.	Kroombit Dan storage level.	
22.12.10	1330	OldPolice-Leisa	aut	Kroombit Dan storage level. Kroombit Dan storage level.	

Emergency Event Recording Sheets

General Comments and/or EAP recommendations

EAP Recommendations:

 The EAP was considered adequate, with no major issues noted during the event.