Dam Summary Information Sheet

General Dam Information

Name of Dam	Blowering Dam	**Dam ID Number**	23
Description/Purpose	Blowering Dam is a 114m high earth and rockfill embankment dam, the embankment has a crest length of 735m. Blowering Dam is the most downstream dam on the Tumut River and provides storage to control the discharge from the Tumut Power Stations for use in the downstream Murrumbidgee and Coleambally Irrigation Areas. A hydroelectric plant (operated by Snowy Hydro Ltd) at the dam toe allows power generation during releases.		
Above the Safety Threshold	No		
Owner	WaterNSW		
Main Emergency Contact	04## ### ### – Contact Name – Role 04## ### ### – Contact Name – Role		
After Hours Contact	1800 ### ### – WaterNSW 24hr Incident Hotline		
Location of Dam	Blowering Dam is located on the Tumut River approximately 13km south of Tumut in Southern NSW.		
River/Stream/Catchment	Tumut River/410 Murrumbidgee River		
Towns Impacted	Tumut, Brundle, Jugiong, Gundagai, Wantabadgery, Oura, Wagga Wagga, and Narrandera.		
LGA's Impacted	Snowy Valleys Council, Cootamundra-Gundagai Regional Council, Wagga Wagga City Council, Narrandera Shire Council		

Alert Levels – Key Response Levels

White Alert The lowest level of dam safety emergency and is assigned for unusual incidents which have the potential to threaten the dam.	• White Alert Trigger Conditions.

Amber Alert The second highest level of dam safety emergency assigned when dam integrity is compromised.	•Amber Alert Trigger Conditions
Red Alert The highest level of dam safety emergency assigned when the dam is failing, or failure is imminent.	• Red Alert Trigger Conditions.

Downstream Communities and Consequences

Downstream Communities	See Inundation Maps for Detail. Includes Tumut, Brundle, Jugiong, Gundagai, Wantabadgery, Oura, Wagga Wagga, and Narrandera.				
'Sunny Day' Failure (SDF) *[Floods caused by the unexpected failure of the dam that may happen at any time and may not involve a rainfall event - including Earthquakes]*	Significant rise in water levels in Tumut River and Murrumbidgee River, extending to Narranderra				
Consequence Summary	Consequence Category	Population at Risk (PAR)	Potential Loss of Life (PLL)	Number of Dwellings	Flood Wave Depth and Travel Time
	Extreme	Total Day – # Night – #	Total Day – # Night – #	TBC	Tumut ##h (Peak ##h) Gundagai ##h (Peak ##h) Wagga Wagga ##h##min (Peak ##h)

'Probable Maximum Flood' Failure (PMF) *[The extreme flood for the catchment, typically presented as with and without dam failure]*	Significant rise in water levels in Tumut River and Murrumbidgee River, extending to Narranderra				
Consequence Summary	Consequence Category	Population at Risk (PAR)	Potential Loss of Life (PLL)	Number of Dwellings	Flood Wave Depth and Travel Time
	Extreme	Total Day – # (incremental #) Night – # (incremental #)	Total Day – # (incremental #) Night – # (incremental #)	TBC	**Tumut** Depth: #.##m (peak) Time: ##h##min (peak) **Gundagai** Depth: #.##m (peak) Time: ##h##min (peak) **Wagga Wagga** Depth: #.##m (peak) Time: ##h##min (peak)

Dam Characteristics and Hydrological Information

Type/Description	Earth and Rockfill Embankment Dam	**Outlet/Spillway**	
Height	114m	Inlet Works	
Crest Level	RL 390.35m AHD (at lowest point - right abutment at spillway interface)	Outlet Works	41m high Outlet Tower - Submerged trash rack structure. 3 x DN1500 Hollow Jet Valves 1 x DN760 Hollow Jet Valves
Crest Width	11.7m	Spillway Type	Uncontrolled curved ogee crest leading into lined chute with flip bucket
Crest Length	735m	Spillway Gated	No
Catchment Area	1,606km^2	Spillway Level	RL 379.27m AHD

Full Supply Level (FSL)	RL 379.27m AHD	Spillway Width	61m (tapers to 18.3m halfway down the chute)
Storage Capacity at FSL	1,631,410ML	Spillway Length	262m long concrete lined chute
Imminent Failure Level		Spillway Design Capacity	4,340m3/s at RL 390.128m
Freeboard Allowance/Maximum	11.08m (at FSL)	Streambed Level	

Warning and Monitoring Systems

Warning Systems	Detailed in the WaterNSW DSEP Supporting Document - The primary method of notfication of the downstream community of flood or potential flood is via the NSW State Emergency Service (NSW SES).	
Monitoring Systems	Instrumentation: Piezometers, Ground Water Boreholes, V-notch Weirs, Cross Arms, and Reservoir Level Gauge.	
Notification Protocols	Notfication protocols are mapped in Section 1A of the Blowering Dam DSEP 2023. Page 1.3 – Incident Action Flowchart	
Bureau of Meteorology Warnings and Stream Gauges	**BoM Warning Gauges** *[List of Bureau warning gauges]*	**Stream Gauges** *[List of stream gauges]*
NSW SES Local Flood Emergency Sub Plan Name		

Additonal Information

[Description of any other information that has not been covered, or may be relevant]

References

- Reference Documents

Prepared By	Contact Name	**Approved By**	*[Name]*
Position	WaterNSW Dam Safety Emergency Management Specialist	**Position**	*[Company + Position]*
Version Control	V2.0, October 2023, For NSW SES Review/Approval prior to use.		