

Emergency Action Plan

Cooloolabin Dam

Expires: 1 May 2028

Dam ID.	Document No.	Version No.	Seqwater Approval Date:
255	ERP-00029	11.2	26 August 2025

This document is the property of Seqwater. It must not be copied or reproduced in any way whatsoever without the authority of Seqwater. This document is uncontrolled when printed. An electronic database manages and stores the controlled version.

Approved by the delegate of the Chief Executive,
Department of Local Government, Water and Volunteers
until 1 May 2028.

Quick Reference Guide

Dam Hazard	Activation Level			
	Alert	Lean Forward	Stand Up	Stand Down
Flood Event Table 5: Actions Table 6: Notifications	Alert (1) <ul style="list-style-type: none"> Lake level equal to or greater than Full Supply Level (293.00 m AHD); AND Bureau expected to issue flood warnings for Flood Warning catchment covering the Dam Catchment and/or watercourse. Alert (2) <ul style="list-style-type: none"> Spillway crest high level: ≥ 296.00 m AHD 	<ul style="list-style-type: none"> Flood of Record: Lake level equal to or greater than 296.48 m AHD. Activation level may be triggered by hydrologic modelling indicating likely exceedance of this level. 	<ul style="list-style-type: none"> Extreme Flood Level: Lake level equal to or greater than 296.60 m AHD. Activation level indicates potential need for downstream evacuations. Activate Wappa Dam EAP and consider if a cascade failure of Wappa Dam is feasible. 	<ul style="list-style-type: none"> Lake level below Full Supply Level; OR Lake Level equal to or greater than Full Supply Level and no current Flood Warnings in flood warning catchment covering the Dam Catchment and/or watercourse.
Significant Increase in Seepage or New Area of Seepage Table 7: Actions Table 10: Notifications	<ul style="list-style-type: none"> Earthquake of Magnitude 3 or higher detected in SEQ; OR Significant new or increased seepage areas identified at the Dam; OR Seepage areas containing earth material identified at the Dam. 	<ul style="list-style-type: none"> Seepage is increasing or earth material is evident in the existing seepage; AND/OR The seepage increases and cannot be controlled. 	<ul style="list-style-type: none"> Dam failure is judged likely via an identified failure mechanism; AND Activation level indicates potential need for downstream evacuations. 	<ul style="list-style-type: none"> Seepage through the Dam is controlled; AND No indicators of potential dam failure are present.
Structural Damage to Dam Table 9: Actions Table 10: Notifications	<ul style="list-style-type: none"> Earthquake of Magnitude 3 or higher detected in SEQ; OR New structural damage or movement areas identified at the Dam; OR Dam safety instrumentation data exceed documented trigger levels for multiple readings. 	<ul style="list-style-type: none"> A Terrorist Threat or Incident is reported at the Dam Site; OR New structural damage or movement areas have not stabilised and are demonstrating indications of continued worsening; AND/OR Dam safety instrumentation data continue to exceed documented trigger levels and are demonstrating indications of continued worsening. 	<ul style="list-style-type: none"> Dam failure judged likely via an identified failure mechanism; AND Activation level indicates potential need for downstream evacuations. 	<ul style="list-style-type: none"> Dam embankment is stable; AND No indicators of potential Dam failure are present.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	2 of 83

Contents

Quick Reference Guide	2
Distribution Control	5
Document version history	6
Glossary	7
1. Purpose	9
2. Scope	9
2.1. Engagement framework	9
2.2. Exercising of Emergency Action Plan	10
3. Roles and Responsibilities	11
4. Dam details	12
5. Dam hazards: Actions and notifications	14
5.1. Flood events	15
5.1.1. Flood Event triggers and actions for Seqwater	16
5.1.2. Flood Event notifications to external stakeholders	21
5.2. Significant dam seepage	27
5.3. Structural damage to the Dam	31
5.3.1. Potential indicators of structural damage to the Dam	31
5.4. Notification details for dam safety hazard events	37
6. Notification details	44
6.1. Media notifications	44
6.2. Public notification messages	44
6.3. Disaster Management Agency - flood event messaging	45
6.4. Disaster Management Agency - dam failure messaging	45
7. Dam failure flood maps	46
7.1. Near Population at Risk	46
7.2. Dam Failure Flood Maps	47
8. Maximum dam outflow flood maps (no dam failure)	49
8.1. Purpose and exclusions	49
8.2. Determination of maximum outflow	49
8.3. Relevance of maximum outflow maps	49

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	3 of 83

8.4.	Maximum outflow extent map limitations of accuracy	50
8.5.	Available flood intelligence for Disaster Management Groups	50
9.	References	52
	Appendix A – Contact register	53
	Appendix B – Dam Safety emergency – assistance to site.....	56
	Appendix C – Emergency Alert polygons and scripts	58
	Appendix D – Example LDMG Flood Event notification scripts.....	68
	Appendix E – General arrangement plans	71
	Appendix F – Identified structural failure modes	74
	Appendix G – Area map and site access arrangements	75
	Appendix H – Catchment area map	76
	Appendix I – Storage and discharge curves	77
	Appendix J – Seqwater Dam Safety management information.....	79
	Appendix K – Notification and management arrangements.....	81

Table Index

Table 1: Roles and responsibilities for dam safety management	11
Table 2: Relevant Disaster Management Groups for the Dam	11
Table 3: Basic Dam Details	12
Table 4: Design Flood Estimates	15
Table 5: Flood event triggers and actions for Seqwater	16
Table 6: Flood event notifications to external stakeholders	21
Table 7: Significant dam seepage triggers and actions for Seqwater	27
Table 8: Structural damage indicators	31
Table 9: Structural damage to the Dam triggers and actions for Seqwater	33
Table 10: Dam safety hazard notifications to external stakeholders	37
Table 11: Agency responsible for liaison with SDCC and initiation of Emergency Alert notifications (DAM FAILURE ONLY)	45
Table 12: Properties immediately downstream of Cooloolabin Dam in failure event	47
Table 13: Information to gather prior to the phone call conversation with external stakeholders	68
Table 14: Identified structural failure modes for Cooloolabin Dam.....	74
Table 15: Incident management roles.....	82

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	4 of 83

Distribution Control

Hard copy document distribution list

Controlled Document No.	Agency	Position	Location
1	Seqwater	Storage Supervisor	Cooloolabin Dam Office
2	Seqwater	Dam Safety Team	Flood Operations Centre, Brisbane

Electronic document distribution list

Group / Agency	Position	Location
Sunshine Coast Council	Disaster Management Lead	Maroochydore
Sunshine Coast District Disaster Management Group	District Disaster Executive Officer	Sunshine Coast
Seqwater	Incident and Emergency Management Team	Emergency Operations Centre, Brisbane and Ipswich

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	5 of 83

This document is the property of Seqwater. It must not be copied or reproduced in any way whatsoever without the authority of Seqwater. This document is uncontrolled when printed. An electronic database manages and stores the controlled version.

Document version history

EAP Version numbering convention

Seqwater EAP versions are identified as EAP Issue numbers.

If the EAP Issue number ends in a decimal point other than zero (e.g., 7.1) this indicates that the EAP contains only non-substantive amendments (e.g., contact updates or error corrections) and therefore has not been reviewed for technical content. These Issues have approval for Amendment by Agreement from the Dam Safety Regulator.

If the EAP Issue number ends in a zero (e.g. 7.0) this indicates that the EAP contains substantive amendments (e.g., inundation map updates or changes to trigger levels) and therefore has been reviewed for technical content. These Issues have been formally approved by the Dam Safety Regulator.

Version / Issue No.	Date	Version Description
0	October 2008	Original
1.0	August 2009	Revision 1
2.0	September 2010	Revision 2
2.1	June 2011	Contact register updated
3.0	September 2011	Revision 3
4.0	August 2012	Revision 4
5.0	November 2013	Revised and updated in accordance with new guidelines from the Department of Natural Resources, Mines and Energy
6.0	February 2015	Revised following discussions with the Department of Natural Resources, Mines and Energy and other stakeholders
7.0	August 2015	Revision 7
8.0	August 2016	Revision 8
9.0	June 2018	Revision 9
9.1	August 2019	Annual review and non-substantive amendments made.
10.0	June 2020	Revision 10 revised structure.
10.1	September 2021	Annual review and non-substantive amendments made.
10.2	September 2022	Annual review and non-substantive amendments made.
11.0	November 2023	Revised, updated and reformatted in accordance with new Guidelines, the updated Seqwater EAP template, and feedback received from DDMG and LDMG.
11.1	September 2024	Annual review and non-substantive amendments made.
11.2	August 2025	Annual review and non-substantive amendments made.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-0029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	6 of 83

Glossary

Term	Definitions
Consequence Category	The 'Consequence Category' approach quantitatively identifies the severity of dam failure consequences including life safety, damage to property and infrastructure, economic, health, social and environmental effects. Based on these identified consequences a Consequence Category from 'Very Low' through to 'Extreme' is assigned. Refer to <i>Queensland Dam Safety Management Guideline</i> for further information.
the Dam	Refers to the specific Dam mentioned on the front cover of this Emergency Action Plan, for which the Plan is written about.
Dam Hazard	A foreseeable situation that may: <ol style="list-style-type: none"> Cause or contribute to the failure of the Dam; or Require a release of water from the Dam that may cause harm to persons or property.
Dam Hazard Event	An event arising from a dam hazard where persons or property may be harmed because of the event; and where a coordinated response involving two or more Disaster Response Agencies is required.
Sunny Day Failure	A failure of the Dam that occurs when no natural flooding is occurring.
Emergency Event	An event arising from a dam hazard if: <ol style="list-style-type: none"> Persons or property may be harmed; and Any of the following apply: <ol style="list-style-type: none"> A coordinated response involving two or more Disaster Response Agencies is likely to be required; A disaster situation has been declared under the Disaster Management Act; An entity performing functions under the State Disaster Management Plan requires Seqwater to give the entity information about the event.
Disaster Management Agency	An agency with a management role in responding to an Emergency Event. Disaster Management Agencies include Local Disaster Management Groups, District Disaster Management Groups and Queensland Police Service.
Disaster Response Agency	Any Government Agency involved in Disaster Response.
Failure Impact Rating	A category 1 or 2 failure impact rating is allocated depending on the maximum population at risk assessed based on assumption of failure of a dam. <ul style="list-style-type: none"> Category 1: 2 to 100 people at risk if the dam were to fail. Category 2: more than 100 people at risk if the dam were to fail. Dams with category 1 or 2 failure impact ratings are referable dams under the Act.
Judged likely	Means an event or circumstance being, in the professional judgement of a Duty Engineer in the Seqwater Flood Operations Centre, sufficiently certain to occur.
Population at Risk	Persons in potentially habitable buildings that, as a result of a dam failure event, are impacted by flooding or increased flooding.
Near Population at Risk	Population residing in potentially habitable buildings located within the 0 to 1 hour Time to Flood dam failure extent that is shown on the Dam Failure Inundation Maps in Section 7.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	7 of 83

Abbreviation	Definitions
Act	Water Supply (Safety and Reliability) Act 2008
AEP	Annual Exceedance Probability
AHD	Australian Height Datum
ANCOLD	Australian National Committee of Large Dams
AWS	Australian Warning System
Bureau	Bureau of Meteorology
CEO	Chief Executive Officer
D/S	Downstream
DCF	Dam Crest Flood
DCL	Dam Crest Level
DDC	District Disaster Coordinator
DDMG	District Disaster Management Group
DDMP	District Disaster Management Plan
DLGWV	Department of Local Government, Water and Volunteers
EA	Emergency Alert
EAP	Emergency Action Plan
EER	Emergency Event Report
ERP	Emergency Response Plan
FSL	Full Supply Level
FOC	Flood Operations Centre
LB	Left bank
LDC	Local Disaster Coordinator
LDMG	Local Disaster Management Group
LDMP	Local Disaster Management Plan
LGA	Local Government Area
ML	Megalitres
M(L)	Magnitude (Local) – Earthquake magnitude as reported by Geoscience Australia
PAR	Population at Risk
PLL	Probable Loss of Life
PMF	Probable Maximum Flood
PMP	Probable Maximum Precipitation
PMPDF	Probable Maximum Precipitation Design Flood
QPS	Queensland Police Service
RB	Right bank
SDCC	State Disaster Coordination Centre
SDF	Sunny Day Failure
U/S	Upstream

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	8 of 83

1. Purpose

The purpose of this EAP is to allow Seqwater:

- To respond quickly to potential emergency incidents as soon as they are identified.
- To undertake targeted and effective intervention actions to prevent the situation developing into an emergency event.
- To provide appropriate and effective notifications in relation to dam safety emergency incidents and events, including flood events.

It is possible for more than one dam hazard to exist at the Dam at the one time. In such a circumstance, it may be necessary to act on the procedures within separate sections of this EAP simultaneously.

2. Scope

This EAP applies to all employees, contractors and consultants working for or on behalf of Seqwater, unless otherwise stated.

This EAP is supported by the following Seqwater internal programs and plans that aim to ensure the structural safety of each Seqwater dam and also ensure that Seqwater can respond effectively to any emergency event impacting on its water supply infrastructure:

- Seqwater Dam Safety Management Program;
- Seqwater Dam Safety Inspection and Surveillance Program;
- Seqwater Portfolio Risk Assessment Program;
- Seqwater Dam Portfolio – Routine Scheduled Maintenance and Capital Refurbishment Program;
- Emergency Response Plan;
- Seqwater Fatigue Management Plan.

Seqwater has developed this EAP to deal with reasonably foreseeable dam hazard events and emergency situations. However, there is always considerable uncertainty about how any emergency situation or flood event might develop and progress. Factors such as the weather, the dam failure mechanism, and the progression rate and size of the dam breach will affect the actions required to protect communities impacted by the emergency event. Therefore, in an actual emergency event some variation to the actions contained in this EAP may be necessary to protect communities downstream, particularly in situations where the event develops quite differently to what has been assumed in this EAP.

2.1. Engagement framework

This EAP is implemented under Seqwater's Emergency Response Plan which has been prepared in accordance with the provisions of the Act.

The Emergency Response Plan does not provide detailed site-specific or situation-specific actions for incidents or emergencies as that information is provided by other Seqwater documents, including this EAP. Specifically, this EAP provides response actions for the Dam should the following situations occur at the Dam:

- Dam outflows associated with flood events (refer to Section 5.1).
- Uncontrolled seepage from the Dam or structural damage to the Dam (refer to Sections 5.2 to 5.3).

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	9 of 83

2.2. Exercising of Emergency Action Plan

Seqwater runs a series of Flood Operations Centre exercises around October each year in preparation for the wet season. Seqwater's EAPs are exercised as part of this annual exercise series. Representatives from Local Disaster Management Groups, District Disaster Management Groups, State Disaster Coordination Centre and DLGWV are invited to participate in or observe these exercises. Recommendations from reviews of these exercises are incorporated into Seqwater's EAPs when appropriate.

Seqwater also conducts desktop exercises with Disaster Management Groups as part of these Groups exercising their flood and / or dam failure scenario responses.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	10 of 83

3. Roles and Responsibilities

The following table shows the entities with dam safety incident responsibilities for the Dam.

Table 1: Roles and responsibilities for dam safety management

Agency	Responsibilities
Seqwater	<ul style="list-style-type: none"> • Prepare, implement and maintain this EAP in accordance with the provisions of the Act; • Prepare, implement and maintain an ERP; • Maintain an ongoing Incident and Emergency Roster in accordance with the ERP; • Undertake emergency response at the dam site, including managing public safety, undertaking physical intervention actions to prevent the dam failing, and provide all dam overflow and dam safety notifications in accordance with the EAP.
Dam Safety Regulator (DLGWV)	<ul style="list-style-type: none"> • Provide regulatory input during a dam safety emergency in accordance with the requirements of the Act and the <i>Emergency Action Planning for Referable Dams Guideline</i>.
Local Disaster Management Groups	<ul style="list-style-type: none"> • Exercise primary responsibility for disaster response and management within its boundaries, in accordance with the Queensland <i>Disaster Management Act 2003</i>. • Deploy all appropriate resources to contribute to response and recovery during the dam safety emergency, until its resources are fully committed. • Mobilise disaster response assistance from other relevant Disaster Response Agencies, as appropriate during the emergency.
District Disaster Management Groups	<ul style="list-style-type: none"> • To complete the responsibilities of a District Disaster Management Group within its boundaries, in accordance with the Queensland <i>Disaster Management Act 2003</i>.

For Cooloolabin Dam, the following Local Governments and Districts form the LDMGs and DDMGs, listed in order of impact downstream of the Dam.

Table 2: Relevant Disaster Management Groups for the Dam

Group	Relevant Council areas for the Dam
Local Disaster Management Group	<ul style="list-style-type: none"> • Sunshine Coast
District Disaster Management Group	<ul style="list-style-type: none"> • Sunshine Coast

A Contact Register for these and other stakeholder agencies is included in Appendix A.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-0029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	11 of 83

4. Dam details

Table 3: Basic Dam Details

Item	Value
Population at Risk ¹ (Total Weighted)	Sunny Day Failure: less than 10
	Flood: 130 (Saddle Dam A Failure in PMF)
Failure Impact Rating	2
Consequence Category	High A
Dam Owner	Seqwater
Name of Lake	Lake Cooloolabin
Year Complete	1979, upgraded to improve structural safety in 2016 and 2018.
Location	Rocky Creek at AMTD 3.6 km Latitude 26° 33' 20" S Longitude 152° 52' 43" E Property description of lots inundated or partially inundated by storage or covered/partially covered by dam structure: Lot 18 SP297249
Water Course	Rocky Creek
Purpose	Town water
Type of Construction	Concrete gravity dam with earth fill abutments and five saddle dams
Catchment Area	8.1 km ²
FSL	293.0 m AHD (Fixed spillway crest was reduced by three metres (from 296.0 m AHD) in 2016.
Full Supply Capacity	8,183 ML
Surface Area at FSL	220 ha
MAIN DAM and SPILLWAY	
Main Dam Crest	297.91 m AHD
Main Dam Embankment Length	243 m (115 m concrete + 128 m earth embankment)
Maximum Height of Main Dam Embankment	19 m
Width at Top of Main Dam Embankment	6 m
Embankment Crest Elevation	297.91 m AHD (concrete section)
	298.90 m AHD (earth saddle dam)
Spillway Arrangement	Uncontrolled ogee crest with central low flow section
Spillway Crest Low Level (slot)	293.00 m AHD
Spillway Crest High Level	296.00 m AHD
Spillway Length (low and high)	57 m
Spillway Capacity ²	437m ³ /s

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	12 of 83

Item	Value
SADDLE DAM	
Saddle Dam Crest	298.9 m AHD
Saddle Dam Length	1,100 m (5 dams with total length of 1,100 m)
Maximum Height of Saddle Dam Embankment	Heights of 5 dams vary from 0.5m to 13.0m
HYDROLOGY	
Maximum Outflow as a Result of PMF³	216 m ³ /s
Peak Water Level as a Result of PMF³	297.02 m AHD
AEP of Spillway Capacity	> 1 in 10,000,000
OTHER	
Outlet Works	Wet well intake tower and uncontrolled spillway with energy dissipater.
Regulator valves	Nil (piped gravity outlet)
Hydroelectric Facilities	Nil
Notable flood events	1983, 2011 and 2013
Maximum Historic Storage Level	296.48 m AHD Feb 2013
¹ GHD Failure Impact Assessment, Cooloolabin Dam, 2017 (Total PAR)	
² Seqwater Revised Rating Curve for Cooloolabin Dam 2018	
³ Cooloolabin Dam Upgrade Revised FIA Final Report, October 2017	

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	13 of 83

5. Dam hazards: Actions and notifications

This section contains tables that provide activation triggers, actions, and notifications for the following dam hazards:

- Flood Events (Section 5.1).
- Significant dam Seepage (Section 5.2 and Section 5.4).
- Structural damage to the Dam (Section 5.3 and Section 5.4).

The following notes apply to all tables in Sections 5.1 to 5.4:

- Near PAR is persons potentially impacted in the first hour of a dam failure event as defined in Section 7.1.
- Emergency Alert PAR notifications will be made based on Seqwater's polygon boundaries that reside on the State Disaster Management Portal.
- At any point in time during an Emergency Event, the operational state of Disaster Management Groups may be at different activation levels shown in the tables due to other impacting circumstances.
- In an Emergency Event, the decision as to the level of activation of the EAP will be made by the Duty Manager on the advice of the Incident Management Team Leader. If a Duty Manager has not been appointed, the decision will be taken by the Incident Management Team Leader.
- Guidance on preparing and issuing the notifications required by the tables is contained in Section 6.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-0029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	14 of 83

5.1. Flood events

The main dam is of mass concrete construction, however, the saddle dams and left abutment are earth embankments that are unlikely to withstand being overtopped. However, the Dam crest level is 297.91 m AHD and therefore the Dam should be able to withstand a PMF event (see Table 1Table 4).

If a failure of Cooloolabin Dam were to occur during a flood event, a cascade failure of Wappa Dam is possible. Therefore, if there is any potential for a failure of Cooloolabin Dam to occur during a flood event, the Wappa Dam EAP must be activated and must be determined if a cascade failure of Wappa Dam is feasible.

Table 4: Design Flood Estimates
 (Source: Cooloolabin Dam AEP Review, Seqwater 2017)

AEP (1 in Y)	Peak height (m AHD)	Peak outflow (m ³ /s)	Critical duration (hrs)
5	293.72	9	72
10	293.87	11	72
20	294.05	15	72
50	294.25	19	48
100	294.40	23	48
200	294.58	28	48
500	294.83	35	48
1000	295.04	41	48
2000	295.26	49	48
5000	295.43	54	48
10,000	295.63	62	48
20,000	295.82	70	48
50,000	296.06	80	48
100,000	296.20	90	48
200,000	296.32	102	96
500,000	296.46	119	96
1,000,000	296.54	130	96
10,000,000	296.69	155	96
PMF	297.02	215	36

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	15 of 83

5.1.1. Flood Event triggers and actions for Seqwater

Table 5: Flood event triggers and actions for Seqwater

FLOOD EVENT TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Trigger / Lake Level (m AHD)	Flood Operations Centre Actions	Duty Manager Actions	Notifications
Stand Down (First Overflow)	<ul style="list-style-type: none"> • ≥ 293.00 m AHD; AND • Bureau NOT expected to issue Flood Warnings in flood warning catchment covering the Dam Catchment and/or watercourse 	<ul style="list-style-type: none"> • Operators to continue regular site monitoring and dam surveillance and to report any anomalies that have the potential to develop into a dam hazard to Seqwater FOC [REDACTED] or Incident Hotline [REDACTED] 	<ul style="list-style-type: none"> • No Duty Manager is appointed during normal dam operations. 	<ul style="list-style-type: none"> • Stakeholder and public notifications in accordance with Table 6.
Alert (1)	<ul style="list-style-type: none"> • ≥ 293.00 m AHD; AND • Bureau expected to issue flood warnings for Flood Warning catchment covering the Dam Catchment and/or watercourse. 	<ul style="list-style-type: none"> • Operators to continue regular site monitoring and dam surveillance and to report any anomalies that have the potential to develop into a dam hazard to Seqwater FOC [REDACTED] or Incident Hotline [REDACTED] • Consider increased on-site dam surveillance based on predicted size of the flood event. • No Incident Management Team formed at this Activation Level. 	<ul style="list-style-type: none"> • No Duty Manager is appointed at the Alert Activation Level. 	<ul style="list-style-type: none"> • Stakeholder and public notifications in accordance with Table 6.
Alert (2)	<ul style="list-style-type: none"> • Spillway crest high level: ≥ 296.00 m AHD 	<ul style="list-style-type: none"> • Notification to Sunshine Coast Council regardless of the Emergency Condition Level. 	<ul style="list-style-type: none"> • No Duty Manager is appointed at the Alert Activation Level. 	<ul style="list-style-type: none"> • Stakeholder and public notifications in accordance with Table 6.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	16 of 83

FLOOD EVENT TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Trigger / Lake Level (m AHD)	Flood Operations Centre Actions	Duty Manager Actions	Notifications
Lean Forward	<ul style="list-style-type: none"> Lake level has exceeded or is predicted to exceed: Flood of Record: ≥ 296.48 m AHD 	<ul style="list-style-type: none"> FOC commence 24/7 monitoring and use the real time ALERT system to constantly monitor the lake level and catchment rainfall in real time and using hydrologic models (if available for the Dam) to predict future lake levels. Raise an Incident by contacting Incident Hotline on [REDACTED] Establish an Event Log to record all significant events in preparation for the development of an Emergency Event Report. Consider implementing continuous on-site dam safety monitoring (if safe access is possible). Direct site staff to undertake manual lake level readings as required to verify ALERT system readings. Provide daily updates to the Seqwater Duty Manager. Escalate the EAP Activation Level as appropriate in accordance with observed site conditions. 	<ul style="list-style-type: none"> While the Activation Level is at the Lean Forward level, the incident will continue to be managed by the Incident Management Team (in the case of a flood event this is the Flood Operations Centre). If the emergency event is escalated to the Stand Up Activation Level, then a Duty Manager will be appointed. Consider development of structure for the management of the emergency event by Seqwater as described in Appendix K. 	<ul style="list-style-type: none"> Stakeholder notifications in accordance with Table 6. Incident Hotline: [REDACTED]

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 17 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

FLOOD EVENT TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Trigger / Lake Level (m AHD)	Flood Operations Centre Actions	Duty Manager Actions	Notifications
Stand Up (1)	<ul style="list-style-type: none"> Lake level has exceeded or is predicted to exceed: Extreme Flood Level: ≥ 296.60 m AHD; AND Dam failure is judged unlikely. The timing of escalations between Stand Up 1 and Stand Up 2/3 will depend on how the Flood Event develops. <p style="color: red; text-align: center;">This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> Activate the Wappa Dam EAP and consider if a cascade failure of Wappa Dam is feasible. Use the Event Log to record all significant events in preparation for the development of an Emergency Event Report. Mobilise site staff to 24/7 operations and direct staff to undertake a full dam surveillance inspection at least daily (if safe access is possible). Monitor the situation using the real time ALERT system to constantly monitor the lake level and catchment rainfall and using hydrologic models to predict future lake levels. Direct site staff to undertake manual lake level readings as required to verify ALERT system readings (if safe access is possible). 	<ul style="list-style-type: none"> Manage Seqwater’s emergency response. Provide appropriate ongoing notifications, including advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 6. 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 6.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 18 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

FLOOD EVENT TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Trigger / Lake Level (m AHD)	Flood Operations Centre Actions	Duty Manager Actions	Notifications
Stand Up (2)	<ul style="list-style-type: none"> • Lake level has exceeded or is predicted to exceed: Extreme Flood Level: ≥ 296.60 m AHD; AND • Dam failure is judged possible, but judged unlikely within the next 12 hours. • The timing of escalations between Stand Up 2/3 will depend on how the Flood Event develops. <p style="color: red; font-weight: bold;">This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> • As for above Activation Level. • Obtain expert dam safety advice and technical assistance as required. • Organise and manage any required remedial works on site as required. • Provide advice on the likelihood of dam failure and the need for downstream evacuations. 	<ul style="list-style-type: none"> • Manage Seqwater’s emergency response. • Provide advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 6. 	<ul style="list-style-type: none"> • Stakeholder and public notifications in accordance with Table 6.
Stand Up (3)	<ul style="list-style-type: none"> • Lake level has exceeded or is predicted to exceed: Extreme Flood Level: ≥ 296.60 m AHD; AND • Dam failure is currently occurring OR judged likely within the next 12 hours. <p style="color: red; font-weight: bold;">This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> • As for above Activation Level. 	<ul style="list-style-type: none"> • Manage Seqwater’s emergency response. • Provide advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 6. 	<ul style="list-style-type: none"> • Stakeholder and public notifications in accordance with Table 6.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 19 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

FLOOD EVENT TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Trigger / Lake Level (m AHD)	Flood Operations Centre Actions	Duty Manager Actions	Notifications
Stand Down (Normal Operations)	<ul style="list-style-type: none"> Lake level below FSL, < 293.00 m AHD. 	<ul style="list-style-type: none"> If the Activation Level has reached Lean Forward or Stand Up, prepare and submit an appropriate Emergency Event Report to DLGWV in accordance with the requirements of the Act. 	<ul style="list-style-type: none"> Close the incident in accordance with the requirements of the Emergency Response Plan. 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 6.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	20 of 83

5.1.2. Flood Event notifications to external stakeholders

The following table outlines the external notifications for flood events, as defined in Table 5. Notifications are listed in order of priority to be issued, and stakeholder agencies are listed in order of priority where required. Contact details can be found in Appendix A.

Table 6: Flood event notifications to external stakeholders

FLOOD EVENT NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to contact	Method	Message content
Stand Down (First Overflow)	<ul style="list-style-type: none"> ≥ 293.00 m AHD; AND Bureau NOT expected to issue Flood Warnings in flood warning catchment covering the Dam Catchment and/or watercourse. 	<ul style="list-style-type: none"> Seqwater Dam Release Notification subscribers. 	<ul style="list-style-type: none"> Dam Release Notification Service. 	<ul style="list-style-type: none"> Cooloolabin Dam is spilling.
		<ul style="list-style-type: none"> General public. 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts. 	
Alert (1)	<ul style="list-style-type: none"> ≥ 293.00 m AHD; AND Bureau expected to issue Flood Warnings in in flood warning catchment covering the Dam Catchment and/or watercourse. 	<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: Talking Points issued a minimum of daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> Talking Points template as per <i>Seqwater's Dams Releases and Spilling Procedure</i>.
		<ul style="list-style-type: none"> Seqwater Dam Release Notification Subscribers. 	<ul style="list-style-type: none"> Dam Release Notification Service. 	<ul style="list-style-type: none"> Cooloolabin Dam is spilling, and the Bureau may / are issuing in flood warning catchment covering the Dam Catchment and/or watercourse.
		<ul style="list-style-type: none"> General Public. 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts. 	<ul style="list-style-type: none"> Cooloolabin Dam is spilling, and the Bureau may / are issuing in flood warning catchment covering the Dam Catchment and/or watercourse.
Alert (2)	<ul style="list-style-type: none"> ≥ 296.00 m AHD; Spillway crest high level. 	<ul style="list-style-type: none"> LDMG 1 Contact 	<ul style="list-style-type: none"> Telephone call to at least 1 contact at affected LDMG. 	<ul style="list-style-type: none"> Outflows from Cooloolabin Dam have reached a level to trigger the high-level spillway crest. Refer to Alert (2) notification template in Appendix D.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 21 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

FLOOD EVENT NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to contact	Method	Message content
Lean Forward	<ul style="list-style-type: none"> Lake level has exceeded or is predicted to exceed: Flood of Record: ≥ 296.48 m AHD 	<ul style="list-style-type: none"> LDMG 1 Contact Near PAR (via LDMG 1) 	<ul style="list-style-type: none"> Telephone call to at least 1 contact for the affected LDMG. 	<ul style="list-style-type: none"> Initial notification to provide a situation brief and identify any requirements for additional incident management arrangements. Refer to Lean Forward notification template in Appendix D. Discuss with LDMG 1 whether dam outflows could potentially cause flooding of residences within the area defined as containing the Near PAR. (Refer LDMG 1 to maximum outflow maps in Section 8.0).
		<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: Talking Points issued a minimum of daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> Talking Points template as per <i>Seqwater's Dams Releases and Spilling Procedure</i>.
		<ul style="list-style-type: none"> General Public 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts. 	<ul style="list-style-type: none"> Cooloolabin Dam is spilling, outflows have increased, and the Bureau may issue / are issuing in flood warning catchment covering the Dam Catchment and/or watercourse.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 22 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

FLOOD EVENT NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to contact	Method	Message content
Stand Up (1)	<ul style="list-style-type: none"> Lake level has exceeded or is predicted to exceed: Extreme Flood Level: ≥ 296.60 m AHD; AND Dam failure is judged unlikely. The timing of escalations between Stand Up 1 and Stand Up 2/3 will depend on how the Flood Event develops. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> LDMG 1 Contact DDMG 1 Contact 	<ul style="list-style-type: none"> Telephone call to at least 1 contact at each affected LDMG and DDMG. Arrange Teleconference call if possible. Email: Follow up telephone call with email of discussion. 	<ul style="list-style-type: none"> Refer to Stand Up notification template in Appendix D. The discussion with the LDMG should resolve the following issues: Should a Watch and Act EA be issued at Stand Up 1. At Stand Up 2, the <i>Watch and Act EA</i> should be issued, if not already issued at Stand Up 1. Confirm the arrangements including the Agency responsible for drafting and issuing the EA Request Form to SDCC.
		<ul style="list-style-type: none"> SDCC Watch Desk (QPS) 	<ul style="list-style-type: none"> Telephone call to [REDACTED] Email Watch and Act EA Request Form (Appendix C) to [REDACTED] <p><i>Details of the Agencies to take responsibility for this liaison and initiation are outlined in Table 11 in Section 6.4.</i></p>	<ul style="list-style-type: none"> Based on the above discussions with LDMGs and DDMGs, the agreed Agency responsible for initiating the <i>Watch and Act EA</i> is to alert SDCC that the EA Request is being prepared for issue.
		<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: Talking Points issued a minimum of daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> Talking Points template as per <i>Seqwater's Dams Releases and Spilling Procedure</i>.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 23 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

FLOOD EVENT NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to contact	Method	Message content
Stand Up (2)	<ul style="list-style-type: none"> Lake level has exceeded or is predicted to exceed: Extreme Flood Level: ≥ 296.60 m AHD; AND Dam failure is judged possible but judged unlikely within the next 12 hours. The timing of escalations between Stand Up 2/3 will depend on how the Flood Event develops. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> SDCC Watch Desk (QPS) 	<ul style="list-style-type: none"> Telephone call to [REDACTED] Email Watch and Act EA Request Form (Appendix C) to [REDACTED] <p><i>Details of the Agencies to take responsibility for this liaison and initiation are outlined in Table 11 in Section 6.4.</i></p>	<ul style="list-style-type: none"> Based on discussions with LDMGs and DDMGs at Stand Up 1, the Agency agreed to be responsible for initiating the Watch and Act EA is to request SDCC Watch Desk to immediately issue the EA. <i>If SDCC advise Emergency Alert is unavailable, contact affected LDMG to enact their communications and response processes.</i>
		<ul style="list-style-type: none"> LDMG 1 Contact DDMG 1 Contact 	<ul style="list-style-type: none"> Telephone call to at least 1 contact at each affected LDMG and DDMG. Arrange Teleconference call if possible. Email: Follow up telephone call with email of discussion. 	<ul style="list-style-type: none"> Refer to Stand Up notification template in Appendix D.
		<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: Talking Points issued a minimum of daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> Talking Points template as per <i>Seqwater's Dams Releases and Spilling Procedure</i>.
		<ul style="list-style-type: none"> General Public 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts as agreed with LDMGs. 	<ul style="list-style-type: none"> Refer to AWS format message templates in Appendix C for guidance.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 24 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

FLOOD EVENT NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to contact	Method	Message content
Stand Up (3)	<ul style="list-style-type: none"> Lake Level has exceeded or is predicted to exceed: Extreme Flood Level: ≥ 296.60 m AHD; AND Dam failure is currently occurring OR judged likely within the next 12 hours. <p style="color: red; text-align: center;">This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> SDCC Watch Desk (QPS) 	<ul style="list-style-type: none"> Telephone call to [REDACTED] Email Emergency Warning EA Request Form (Appendix C) to [REDACTED] <p><i>Details of the Agencies to take responsibility for this liaison and initiation are outlined in Table 11 in Section 6.4.</i></p>	<ul style="list-style-type: none"> Request that SDCC Watch Desk immediately issue the Emergency Warning EA (select between <i>Leave Immediately</i> or <i>Too Dangerous to Leave EA Request Forms</i>). <i>If SDCC advise Emergency Alert is unavailable, contact affected LDMG to enact their communications and response processes.</i>
		<ul style="list-style-type: none"> LDMG 1 Contact DDMG 1 Contact 	<ul style="list-style-type: none"> Telephone call to at least 1 contact at each affected LDMG and DDMG. Arrange Teleconference call if possible. Email: Follow up telephone call with email of discussion. 	<ul style="list-style-type: none"> Refer to Stand Up notification template in Appendix D.
		<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: Talking Points issued a minimum of twice daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> Talking Points template as per <i>Seqwater's Dams Releases and Spilling Procedure</i>.
		<ul style="list-style-type: none"> General Public 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts as agreed with LDMGs. 	<ul style="list-style-type: none"> What is the event? What is the status? Refer to AWS format message templates in Appendix C for guidance.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 25 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

FLOOD EVENT NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to contact	Method	Message content
Stand Down (Normal Operations)	<ul style="list-style-type: none"> Lake level falls below FSL: 293.00 m AHD. 	<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: If Talking Points issued in relation to wide-spread weather event, Final Talking Points issued once Event completed. 	<ul style="list-style-type: none"> Cooloolabin Dam has stopped spilling.
		<ul style="list-style-type: none"> Seqwater Dam Release Notification Subscribers 	<ul style="list-style-type: none"> Dam Release Notification Service. 	
	<ul style="list-style-type: none"> General Public 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts. 		
	<ul style="list-style-type: none"> Activation level has reached Stand Up AND an Emergency Alert has been issued. 	<ul style="list-style-type: none"> LDMG 1 Contact 	<ul style="list-style-type: none"> Email or phone call. 	<ul style="list-style-type: none"> If an EA has been issued, the EA issuer should consider the need for broadcasting an Advice-level Emergency Alert message, incorporating appropriate call-to-action language such as "<i>Threat Reduced</i>" or "<i>Return with Caution</i>" as per AWS guidelines.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	26 of 83

5.2. Significant dam seepage

Table 7: Significant dam seepage triggers and actions for Seqwater

SEEPAGE TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Triggers	Incident Management Team Actions	Duty Manager Actions	Notifications
Alert	<ul style="list-style-type: none"> Earthquake of M3 or higher detected in SEQ. 	<ul style="list-style-type: none"> Undertake routine dam safety inspection as soon as practical. Check dam safety instrumentation for indications of potential development of a structural dam safety issue. No further action required if no new seepage or damage is detected during inspection. 	<ul style="list-style-type: none"> Dam hazard to be managed by the Incident Management Team at the Alert Activation Level. 	<ul style="list-style-type: none"> Incident Hotline Stakeholder notifications in accordance with Table 10 (Section 5.4).
	<ul style="list-style-type: none"> Earthquake of M3 or higher detected in SEQ. Significant new or increased seepage areas identified at the Dam. Seepage areas containing earth material identified at the Dam. 	<ul style="list-style-type: none"> Manage physical response on site. IMT Leader to be an experienced Dam Safety Engineer. Establish an Event Log to record all significant events. Increase the frequency of on-site dam safety monitoring (if access is possible). Monitor the situation by estimating rate of seepage flow, observing clarity of seepage flow, making notes, and taking photographs. Determine if the new condition is related to a potential structural failure mechanism at the Dam. If it is safe to do so, instruct operators to undertake increased dam safety inspections and instrumentation readings. Organise and manage any remedial works on site. Provide daily updates to the Seqwater Duty Manager. Escalate the EAP Activation Level as appropriate in accordance with observed site conditions. 		

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	27 of 83

SEEPAGE TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Triggers	Incident Management Team Actions	Duty Manager Actions	Notifications
Lean Forward	<ul style="list-style-type: none"> Seepage is increasing or earth material is evident in the existing seepage and/or the increases cannot be controlled. 	<ul style="list-style-type: none"> Use Event Log to record all significant events in preparation for the development of an Emergency Event Report. Implement continuous on-site dam safety monitoring (if access is possible). Monitor the situation by estimating rate of seepage flow, observing clarity of seepage flow, making notes, and taking photographs. Determine if the new condition is related to a potential structural failure mechanism at the Dam. If it is safe to do so, instruct operators to undertake increased dam safety inspections and instrumentation readings. Obtain expert dam safety advice and technical assistance as required. Organise and manage any required remedial works on site. Provide update reports to the Duty Manager as directed. Provide advice on the likelihood of dam failure and the need for downstream evacuations. Escalate the EAP Activation Level as appropriate in accordance with observed site conditions. 	<ul style="list-style-type: none"> Manage Seqwater’s emergency response. Provide appropriate ongoing notifications, including advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 10 (Section 5.4). 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 10 (Section 5.4).

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	28 of 83

SEEPAGE TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Triggers	Incident Management Team Actions	Duty Manager Actions	Notifications
Stand Up (1)	<ul style="list-style-type: none"> Dam failure is judged possible via an identified failure mechanism (refer to Table 14). The timing of escalations between Stand Up 1 and Stand Up 2/3 will depend on how the potential failure event develops. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> As per previous Activation Level. 	<ul style="list-style-type: none"> Manage Seqwater’s emergency response. Provide appropriate ongoing notifications, including advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 10 (Section 5.4). 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 10 (Section 5.4).
Stand Up (2)	<ul style="list-style-type: none"> Dam failure is judged likely via an identified failure mechanism (refer to Table 14) but judged unlikely to occur within the next 12 hours. The timing of an escalation between Stand Up 2/3 will depend on how the potential failure event develops. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> As per previous Activation Level. 	<ul style="list-style-type: none"> Manage Seqwater’s emergency response. Provide appropriate ongoing notifications, including advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 10 (Section 5.4). 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 10 (Section 5.4).

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 29 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

SEEPAGE TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Triggers	Incident Management Team Actions	Duty Manager Actions	Notifications
Stand Up (3)	<ul style="list-style-type: none"> Dam failure is currently occurring; OR Dam failure judged likely via an identified failure mechanism (refer to Table 14) and judged likely to occur within the next 12 hours. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> As per previous Activation Level. 	<ul style="list-style-type: none"> Manage Seqwater’s emergency response. Provide appropriate ongoing notifications, including advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 10 (Section 5.4). 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 10 (Section 5.4).
Stand Down (Normal Operations)	<ul style="list-style-type: none"> Seepage through the Dam is controlled. No indicators of potential dam failure are present. 	<ul style="list-style-type: none"> If the Activation Level has reached Stand Up, prepare, and submit an appropriate Emergency Event Report to DLGWV in accordance with the requirements of the Act. 	<ul style="list-style-type: none"> Close the incident in accordance with the requirements of the Emergency Response Plan. 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 10 (Section 5.4).

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 30 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

5.3. Structural damage to the Dam

Structural damage to the Dam can be caused in many ways including earthquake, explosion, vandalism, or large objects crashing into the dam structure or lake. Structural damage can be identified through visual inspection or by examining instrumentation data that is collected for the Dam on a regular basis in accordance with ANCOLD guidelines.

If the dam hazard is a Terrorist Threat or Act, the incident will be managed by the Queensland Police Service with Seqwater providing input as required.

5.3.1. Potential indicators of structural damage to the Dam

There are many potential indicators of structural damage to a dam. The significance of these will depend on the particular event and the circumstances at the Dam. If new instances of any of the following indicators are discovered at the Dam, the actions in Table 9 should be followed.

All indicators should be checked for during routine inspections, with the table below listing events that may exacerbate these indicators.

Table 8: Structural damage indicators

Problem	General characteristic	When to Check	What to check for
Slide	Slide in downstream or upstream face.	After heavy or long periods of rainfall	Cracks or scarps near the crest and bulges at the toe.
Flow slide	Collapse and flow of soil around the reservoir rim.		Material displacement around the reservoir rim.
Gullying	No rock protection or vegetation cover on embankment batters or poor drainage.		Damage to rock protection and vegetation cover on embankment (and if present, saddle dam) batters.
Toe erosion	Erosion of embankment toe by spillway discharge or diversion flows.		Signs of erosion along embankment toe.
Spillway damage	Damage to the spillway, dissipater, or areas downstream of the spillway.	During and after spillway overflows	Damage or unusual flow patterns on spillway and areas downstream
Foundation failure	Sliding, rotation, or settlement of part or entire dam	After earthquakes	Evidence of foundation movement or displacement immediately adjacent to the Dam.
Landslide	Mass movement of soil or rock from slopes and valley walls around the storage.		Material displacement.
Damage to structural concrete	Movement or cracking of structural concrete.	<ul style="list-style-type: none"> After earthquakes When mechanical problems (such as burst pipes) occur 	Any movement or cracking of structural concrete.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	31 of 83

Problem	General characteristic	When to Check	What to check for
Failure of appurtenant structures or operating equipment	Loss of ability to supply water or discharge floods safely.	After detecting an operational anomaly	Identify and investigate cause of failure
Loss of storage contents	Excessive loss from the storage and / or occasionally increased seepage or increased groundwater levels near the storage.	Routine inspections	Environmental changes such as vegetation damage, salt scalds, etc
Wave erosion	Beaching or notching of the upstream face of the embankment by waves generated over long periods of strong wind.	During and after periods of strong wind	Signs of erosion on upstream face of embankment and saddle dams.
Major mechanical or electrical failures	Mechanical or electrical failures can impact on the operation of infrastructure at the Dam.	Routine maintenance	Report all mechanical and electrical failures impacting dam infrastructure to the appropriate line supervisor.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	32 of 83

Table 9: Structural damage to the Dam triggers and actions for Seqwater

STRUCTURAL DAMAGE TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Triggers	Incident Management Team Actions	Duty Manager Actions	Notifications
Alert	<ul style="list-style-type: none"> Earthquake of M3 or higher detected in SEQ. 	<ul style="list-style-type: none"> Undertake routine dam safety inspection as soon as practical. Check dam safety instrumentation for indications of potential development of a structural dam safety issue. No further action required if no new damage is detected during inspection. 	<ul style="list-style-type: none"> Dam hazard to be managed by the Incident Management Team at the Alert Activation Level. 	<ul style="list-style-type: none"> Incident Hotline [REDACTED] Stakeholder notifications in accordance with Table 10 (Section 5.4).
	<ul style="list-style-type: none"> Earthquake has damaged the Dam; OR New structural damage or movement areas identified at the Dam. OR Dam safety instrumentation data exceed documented trigger levels for multiple readings¹. 	<ul style="list-style-type: none"> Manage physical response on site. IMT Leader to be an experienced Dam Safety Engineer. Establish an Event Log to record all significant events. Increase the frequency of on-site dam safety monitoring (if access is possible). Monitor the situation by estimating rate of change to the new structural damage or movement areas, making notes, and taking photographs. Determine if the new condition is related to a potential structural failure mechanism at the Dam. If it is safe to do so, instruct operators to undertake increased dam safety inspections and instrumentation readings. Organise and manage any remedial works on site. Provide daily updates to the Seqwater Incident Duty Manager. Escalate the EAP Activation Level as appropriate in accordance with observed site conditions. 	<ul style="list-style-type: none"> Dam hazard to be managed by the Incident Management Team at the Alert Activation Level. 	<ul style="list-style-type: none"> Incident Hotline [REDACTED] Stakeholder notifications in accordance with Table 10 (Section 5.4).

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 33 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

STRUCTURAL DAMAGE TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Triggers	Incident Management Team Actions	Duty Manager Actions	Notifications
Lean Forward	<ul style="list-style-type: none"> • Terrorist Threat or act is reported at the Dam, OR • New structural damage or movement areas have not stabilised and are demonstrating indications of continued worsening. • Dam safety instrumentation data continue to exceed documented trigger levels and are demonstrating indications of continued worsening¹. 	<ul style="list-style-type: none"> • Use Event Log to record all significant events in preparation for the development of an Emergency Event Report. • Implement continuous on-site dam safety monitoring (if access is possible). • Monitor the situation by estimating rate of change to the new structural damage or movement areas, making notes, and taking photographs. • Determine if the new condition is related to a potential structural failure mechanism at the Dam. • If it is safe to do so, instruct operators to undertake increased dam safety inspections and instrumentation readings. • Obtain expert dam safety advice and technical assistance as required. • Organise and manage any required remedial works on site. • Provide update reports to the Duty Manager as directed. • Provide advice on the likelihood of dam failure and the need for downstream evacuations. • Escalate the EAP Activation Level as appropriate in accordance with observed site conditions. 	<ul style="list-style-type: none"> • Manage Seqwater’s emergency response. • Provide appropriate ongoing notifications, including advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 10 (Section 5.4). 	<ul style="list-style-type: none"> • Stakeholder and public notifications in accordance with Table 10 (Section 5.4).

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 34 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

STRUCTURAL DAMAGE TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Triggers	Incident Management Team Actions	Duty Manager Actions	Notifications
Stand Up (1)	<ul style="list-style-type: none"> Dam failure is judged possible due to structural damage¹. The timing of escalations between Stand Up 1 and Stand Up 2/3 will depend on how the potential failure event develops. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> As per previous Activation Level. 	<ul style="list-style-type: none"> Manage Seqwater’s emergency response. Provide appropriate ongoing notifications, including advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 10 (Section 5.4). 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 10 (Section 5.4).
Stand Up (2)	<ul style="list-style-type: none"> Dam failure is judged likely due to structural damage but judged unlikely to occur within the next 12 hours. The timing of an escalation between Stand Up 2/3 will depend on how the potential failure event develops¹. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> As per previous Activation Level. 	<ul style="list-style-type: none"> Manage Seqwater’s emergency response. Provide appropriate ongoing notifications, including advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 10 (Section 5.4). 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 10 (Section 5.4).

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 35 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

STRUCTURAL DAMAGE TRIGGERS AND ACTIONS FOR SEQWATER				
Activation Level	Triggers	Incident Management Team Actions	Duty Manager Actions	Notifications
Stand Up (3)	<ul style="list-style-type: none"> Dam failure is currently occurring; OR Dam failure is judged likely due to structural damage and judged likely to occur within the next 12 hours¹. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> As per previous Activation Level. 	<ul style="list-style-type: none"> Manage Seqwater’s emergency response. Provide appropriate ongoing notifications, including advice in relation to the need for downstream evacuations, to stakeholders and the public, in accordance with Table 10 (Section 5.4). 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 10 (Section 5.4).
Stand Down (Normal Operations)	<ul style="list-style-type: none"> Dam embankment is stable. No indicators of potential dam failure are present. 	<ul style="list-style-type: none"> If the Activation Level has reached Stand Up, prepare, and submit an appropriate Emergency Event Report to DLGWV in accordance with the requirements of the Act. 	<ul style="list-style-type: none"> Close the incident in accordance with the requirements of the Emergency Response Plan. 	<ul style="list-style-type: none"> Stakeholder and public notifications in accordance with Table 10 (Section 5.4).

¹ Seqwater collects and analyses data from the dam safety instrumentation at the dam using an information management database. Review of instrumentation data within the database can support engineering judgements associated with the possibility or the likelihood of dam failure. However, because of the limited coverage of instrumentation and uncertain linkage to an actual failure mechanism occurring, instrumentation data at the Dam should not be used in isolation to make engineering judgements on the possibility or likelihood of dam failure.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 36 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

5.4. Notification details for dam safety hazard events

The following table summarises the external notifications to be made when increased seepage or structural damage to the Dam is identified, as outlined in Table 7 (Section 5.2) and Table 9 (Section 5.3). Notifications are listed in order of priority to be issued, and stakeholder agencies are listed in order of priority where required. Contact details can be found in Appendix A.

Table 10: Dam safety hazard notifications to external stakeholders

DAM SAFETY HAZARD NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to Contact	Method	Message Content
Alert	<ul style="list-style-type: none"> • New event impacted the Dam: <ul style="list-style-type: none"> ○ Seepage ○ Earthquake greater than M3 in SEQ ○ Physical damage ○ Dam safety instrumentation data exceed documented trigger levels for multiple readings. 	<ul style="list-style-type: none"> • All SEQ Disaster Management Agencies, including DLGWV with responsibilities in dam safety incidents for the Dam. 	<ul style="list-style-type: none"> • Email: Situation Report issued a minimum of daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> • Advise EAP is at Alert • What is the event? • What is the status? • Impacts of event on dam safety not fully understood, but the Dam is not expected to be at any risk of failure.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 37 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

DAM SAFETY HAZARD NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to Contact	Method	Message Content
Lean Forward	<ul style="list-style-type: none"> Terrorist Act is reported at the Dam. 	<ul style="list-style-type: none"> Priority 1: Triple zero, 000 (call immediately if lives are at immediate risk). Priority 2: Police Link, 131 444; OR Local Police Station; OR Crime Stoppers, 1800 333 000 (if no immediate life threat but are witnessing suspicious behaviour currently occurring at or around critical infrastructure). Priority 3: National Security Hotline, 1800 1234 00 (to report suspicious activity or behaviour). 	<ul style="list-style-type: none"> Telephone Call to report the Terrorist Act. 	<ul style="list-style-type: none"> Advise EAP is at Lean Forward What is the event? What is the status?
	<ul style="list-style-type: none"> Terrorist Act is reported at the Dam; OR Seepage is increasing or earth material is evident in the existing seepage and/or the increases cannot be controlled; OR Structural damage or movement areas have not stabilised and are demonstrating indications of continued worsening; OR 	<ul style="list-style-type: none"> LDMG 1 Contact 	<ul style="list-style-type: none"> Telephone call to at least 1 contact for the affected LDMG. 	<ul style="list-style-type: none"> Advise EAP is at Lean Forward What is the event? What is the status? Requirements for additional incident management?
		<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incident for the Dam. 	<ul style="list-style-type: none"> Email: Situation Report issued a minimum of daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> Advise EAP is at Lean Forward What is the event? What is the status?

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 38 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

DAM SAFETY HAZARD NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to Contact	Method	Message Content
	<ul style="list-style-type: none"> Dam safety instrumentation data continue to exceed documented trigger levels and are demonstrating indications of continued worsening. 	<ul style="list-style-type: none"> General Public 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts as agreed with LDMGs. 	<ul style="list-style-type: none"> What is the event? What is the status?
Stand Up (1)	<ul style="list-style-type: none"> Dam failure is judged possible via an identified failure mechanism (refer to Table 14); OR Dam failure is judged possible due to structural damage. The timing of escalations between Stand Up 1 and Stand Up 2-3 will depend on how the potential failure event develops. <p>This situation is an Emergency. Evacuations must be considered</p>	<ul style="list-style-type: none"> LDMG 1 Contact DDMG 1 Contact 	<ul style="list-style-type: none"> Telephone call to at least 1 contact at each affected LDMG and DDMG. Arrange Teleconference call if possible. Email: Follow up telephone call with email of discussion. 	<ul style="list-style-type: none"> Advise EAP is at Stand Up What is the event? What is the status? <p>The discussion with the LDMG should resolve the following issues in relation to EAs:</p> <ul style="list-style-type: none"> Should a Watch and Act EA be issued at Stand Up 1. At Stand Up 2, the <i>Watch and Act EA</i> should be issued, if not already issued at Stand Up 1. Confirm the arrangements including the Agency responsible for drafting and issuing the EA Request Form to SDCC.
		<ul style="list-style-type: none"> SDCC Watch Desk (QPS) 	<ul style="list-style-type: none"> Telephone call to [redacted] Email EA to [redacted] <p><i>Details of the Agencies to take responsibility for this liaison and</i></p>	<ul style="list-style-type: none"> Based on the above discussions with LDMGs and DDMGs, the agreed Agency responsible for initiating the <i>Watch and Act EA</i> is to alert SDCC that the EA Request Form is being prepared for issue.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 39 of 83
---------------------	---------------------------	-----------------------------	------------------------------	---	-------------------

DAM SAFETY HAZARD NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to Contact	Method	Message Content
			<i>initiation are outlined in Table 11 in Section 6.4.</i>	
		<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: Talking Points issued a minimum of daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> Talking Points template as per <i>Seqwater's Dams Releases and Spilling Procedure</i>.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 40 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

DAM SAFETY HAZARD NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to Contact	Method	Message Content
Stand Up (2)	<ul style="list-style-type: none"> Dam failure is judged likely via an identified failure mechanism (refer to Table 14) but judged unlikely to occur within the next 12 hours OR; Dam failure is judged likely due to structural damage, but judged unlikely to occur within the next 12 hours. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> SDCC Watch Desk (QPS) 	<ul style="list-style-type: none"> Telephone call to [REDACTED] Email Watch and Act EA Request Form (Appendix C) to [REDACTED] <p><i>Details of the Agencies to take responsibility for this liaison and initiation are outlined in Table 11 in Section 6.4.</i></p>	<ul style="list-style-type: none"> Based on discussions with LDMGs and DDMGs at Stand Up 1, the Agency agreed to be responsible for initiating the <i>Watch and Act EA</i> is to request SDCC Watch Desk to immediately issue the EA. <i>If SDCC advise Emergency Alert is unavailable, contact affected LDMG to enact their communications and response processes.</i>
		<ul style="list-style-type: none"> LDMG 1 Contact DDMG 1 Contact 	<ul style="list-style-type: none"> Telephone call to at least 1 contact at each affected LDMG and DDMG. Arrange Teleconference call if possible. Email: Follow up telephone call with email of discussion. 	<ul style="list-style-type: none"> Advise EAP is at Stand Up What is the event? What is the status?
		<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: Talking Points issued a minimum of daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> Talking Points template as per <i>Seqwater's Dams Releases and Spilling Procedure.</i>
		<ul style="list-style-type: none"> General Public 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts as agreed with LDMGs. 	<ul style="list-style-type: none"> What is the event? What is the status?

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 41 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

DAM SAFETY HAZARD NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to Contact	Method	Message Content
Stand Up (3)	<ul style="list-style-type: none"> Dam failure is currently occurring; OR Dam failure judged likely via an identified failure mechanism (refer to Table 14) and judged likely to occur within the next 12 hours; OR Dam failure is judged likely due to structural damage and judged likely to occur within the next 12 hours. <p>This situation is an Emergency. Evacuations must be considered.</p>	<ul style="list-style-type: none"> SDCC Watch Desk (QPS) 	<ul style="list-style-type: none"> Telephone call to [REDACTED] Email <i>Emergency Warning EA Request Form (Appendix C)</i> to [REDACTED] <p><i>Details of the Agencies to take responsibility for this liaison and initiation are outlined in Table 11 in Section 6.4.</i></p>	<ul style="list-style-type: none"> Request that SDCC Watch Desk immediately issue the <i>Emergency Warning EA</i> (select between <i>Leave Immediately</i> or <i>Too Dangerous to Leave EA Request Forms</i>). <i>If SDCC advise Emergency Alert is unavailable, contact affected LDMG to enact their communications and response processes.</i>
		<ul style="list-style-type: none"> LDMG 1 Contact DDMG 1 Contact 	<ul style="list-style-type: none"> Telephone call to at least 1 contact at each affected LDMG and DDMG. Arrange Teleconference call if possible. Email: Follow up telephone call with email of discussion. 	<ul style="list-style-type: none"> Advise EAP is at Stand Up What is the event? What is the status?
		<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: Talking Points issued a minimum of daily unless it is agreed that less frequent updates are appropriate. 	<ul style="list-style-type: none"> Talking Points template as per <i>Seqwater's Dams Releases and Spilling Procedure</i>.
		<ul style="list-style-type: none"> General Public 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts as agreed with LDMGs. 	<ul style="list-style-type: none"> What is the event? What is the status?

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 42 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

DAM SAFETY HAZARD NOTIFICATIONS TO EXTERNAL STAKEHOLDERS				
Activation Level	Trigger for communications	Group to Contact	Method	Message Content
Stand Down	<ul style="list-style-type: none"> Dam safety hazard is stable. No indicators of potential dam failure are present. 	<ul style="list-style-type: none"> All SEQ Disaster Management Agencies, including DLGWV, with responsibilities in dam safety incidents. 	<ul style="list-style-type: none"> Email: Final Talking Points issued. 	<ul style="list-style-type: none"> What is the event? What is the status? Advise EAP has been deactivated.
		<ul style="list-style-type: none"> General Public 	<ul style="list-style-type: none"> Information on Seqwater webpage and social media accounts. 	
	<ul style="list-style-type: none"> Activation level has reached Stand Up AND an Emergency Alert has been issued. 	<ul style="list-style-type: none"> LDMG 1 Contact 	<ul style="list-style-type: none"> Email or phone call. 	<ul style="list-style-type: none"> If an EA has been issued, the EA issuer should consider the need for broadcasting an Advice-level Emergency Alert message, incorporating appropriate call-to-action language such as "<i>Threat Reduced</i>" or "<i>Return with Caution</i>" as per AWS guidelines.

Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 43 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

6. Notification details

This section provides guidance around developing and issuing the notifications required in Section 5.

6.1. Media notifications

Once an Emergency Event has reached a Stand Up Activation Level, Seqwater will issue media releases/statements a minimum of daily and make a spokesperson available for daily media conferences or briefings if requested to do so by media organisations. This will continue until the responsibility for the management of the incident response is taken over by another Agency. Once this occurs, Seqwater will provide information to that Agency in accordance with directions received.

6.2. Public notification messages

The content of notification messages sent out in a real time dam safety emergency will depend on many factors. These factors include, but are not limited to:

- The type of emergency encountered.
- Whether localised or widespread flooding is occurring in conjunction with the dam safety emergency.
- The location and state of local evacuation centres.
- The state, condition, and capacity of transport routes likely to be used for evacuation.
- The estimated time to dam failure.

As some of these factors depend upon disaster management arrangements that would be put in place by Local Disaster Management Groups, Seqwater works with these Groups to develop a range of appropriate specific messaging in readiness for a range of potential dam safety emergency events and scenarios. In an emergency event, messaging will primarily focus on providing the following information:

- The nature of the emergency.
- The area impacted by the emergency.
- The expected time that the impacts will commence.
- Instructions to evacuate to or remain in a safe area.

Seqwater has uploaded messages to the State Disaster Management Portal for use by the SDCC if needed during an Emergency Event. These messages and associated approval forms are contained in Appendix C. These messages can be used as starting points by Disaster Management Agencies to formulate a situation appropriate message in an Emergency Event. Alternatively, Seqwater will initiate issuing these messages via an EA if considered appropriate due to the fast-developing nature of the Emergency Event.

Seqwater is committed to providing education to communities around living downstream of a dam and staying informed during the wet season. As such, Seqwater takes part in community events and hosts tours of its dams when opportunities arise. Seqwater also develops educational flyers on dams that are handed out during community events. Mail outs are also developed and issued to residents living downstream of dams when appropriate.

Seqwater updates its website (Dams | Seqwater) to include information on EAPs and the actions that needs to be take in the event of an emergency. Seqwater's website provides information on the following:

- Gated dams and flood operations manual
- Ungated dams and spilling
- Emergency Action Plans
- Dam release notification service
- Summer preparedness

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	44 of 83

6.3. Disaster Management Agency - flood event messaging

Seqwater has developed notification scripts which will be used as a basis for developing stakeholder messaging during flood events. Copies of these scripts are contained in Appendix D. In a flood event, Seqwater will edit these scripts as the situation requires.

Stakeholders may also be advised of the Dam status at levels below the triggers specified in Section 5.1 in accordance with pre-agreed protocols. In some situations when the Seqwater Flood Operations Centre is mobilised, predicted peak lake levels and outflows may also be provided, however the provision of this information cannot be guaranteed. These notifications will be made by telephone as a first priority.

6.4. Disaster Management Agency - dam failure messaging

If a potential dam failure situation arises, Seqwater will provide appropriate notifications and inter-agency coordination to Local Councils and Disaster Management Stakeholders, as outlined in Table 6 and Table 10. Seqwater will provide these notifications and two-way communication in accordance with the Emergency Response Plan. The Emergency Response Plan provides for verbal communication (typically teleconference) supplemented with written Situation Reports. Dam failure emergencies can develop rapidly. The need for direct verbal communication for expediency of response should be assumed unless a situation specific assessment identifies sufficient time is available for alternative communication.

If a situation arises where the failure of the Dam is considered possible, Seqwater or the Agency managing the overall emergency response will liaise directly with the State Disaster Coordination Centre to issue appropriate notifications to persons located downstream of the Dam using EA. Details of the Agencies to take responsibility for this liaison and initiation are outlined in Table 11.

Table 11: Agency responsible for liaison with SDCC and initiation of Emergency Alert notifications (DAM FAILURE ONLY)

Speed of development of hazard arising from dam failure	Agency responsible for liaising with SDCC
Greater than 12 hours	Lead Emergency Response Agency (likely downstream LDMG / DDMG), with advice from Seqwater
Less than 12 hours	Seqwater

To assist with expediting this process, pre-approved Emergency Alert messages and polygons are available in Appendix C and have been uploaded to the SDCC Disaster Management Portal.

Once a notification is initiated from EA, consequential management measures undertaken by the SDCC Watch Desk will be event dependent but will normally include:

- Informing others of the notifications, with primary considerations being:
 - Media (particularly local radio), through QPS Media and Corporate Communications
 - CEOs of impacted Local Government Areas
 - Minister's Office
- Ensuring, together with Telstra, that the use of the system does not adversely affect the telecommunications network
- Ensuring pre-prepared websites have relevant information
- Establishment of a system to measure the effectiveness of the campaign and other messages on the ground.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-0029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	45 of 83

7. Dam failure flood maps

7.1. Near Population at Risk

Seqwater defines Near Population at Risk as the population residing in potentially habitable buildings located within the 0 to 1-hour Time to Flood dam failure event extent that is shown on the Dam Failure Inundation maps in Section 7.2.

As shown in Figure 1, there is one residence in very close proximity to Cooloolabin Dam that can potentially be impacted in a Dam Failure Event. Emergency Services Personnel should be aware of these residences and properties listed in Table 12 when preparing for evacuations. All listed properties are in the Sunshine Coast Local Government Area.



Figure 1: Residence in close proximity to Cooloolabin Dam

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	46 of 83

Table 12: Properties immediately downstream of Cooloolabin Dam in failure event

Lot and Plan	Address	Suburb	Post Code	LGA
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

7.2. Dam Failure Flood Maps

The following maps provide an indication of potential flood inundation from a failure of the Dam. Determining the extent of this flood inundation involves complex modelling techniques that contain considerable uncertainties. Accordingly, in a potential dam failure scenario it is recommended that all areas within the Probable Maximum Flood (PMF) failure extent be evacuated, with evacuation priority given to areas close to the Dam.

Google Earth (.kml) files showing PMF and Sunny Day Failure inundation extents are available to Disaster Management Groups as a component of this Emergency Action Plan. These files can generally be used more effectively than hardcopy maps, and so are recommended for use by Disaster Management Groups as the primary source of dam failure inundation information.

These maps have been developed to assist emergency event response and evacuation. The purpose of the maps is to provide a guide that allows Disaster Management Groups to understand the potential area that may be impacted by a dam failure scenario.

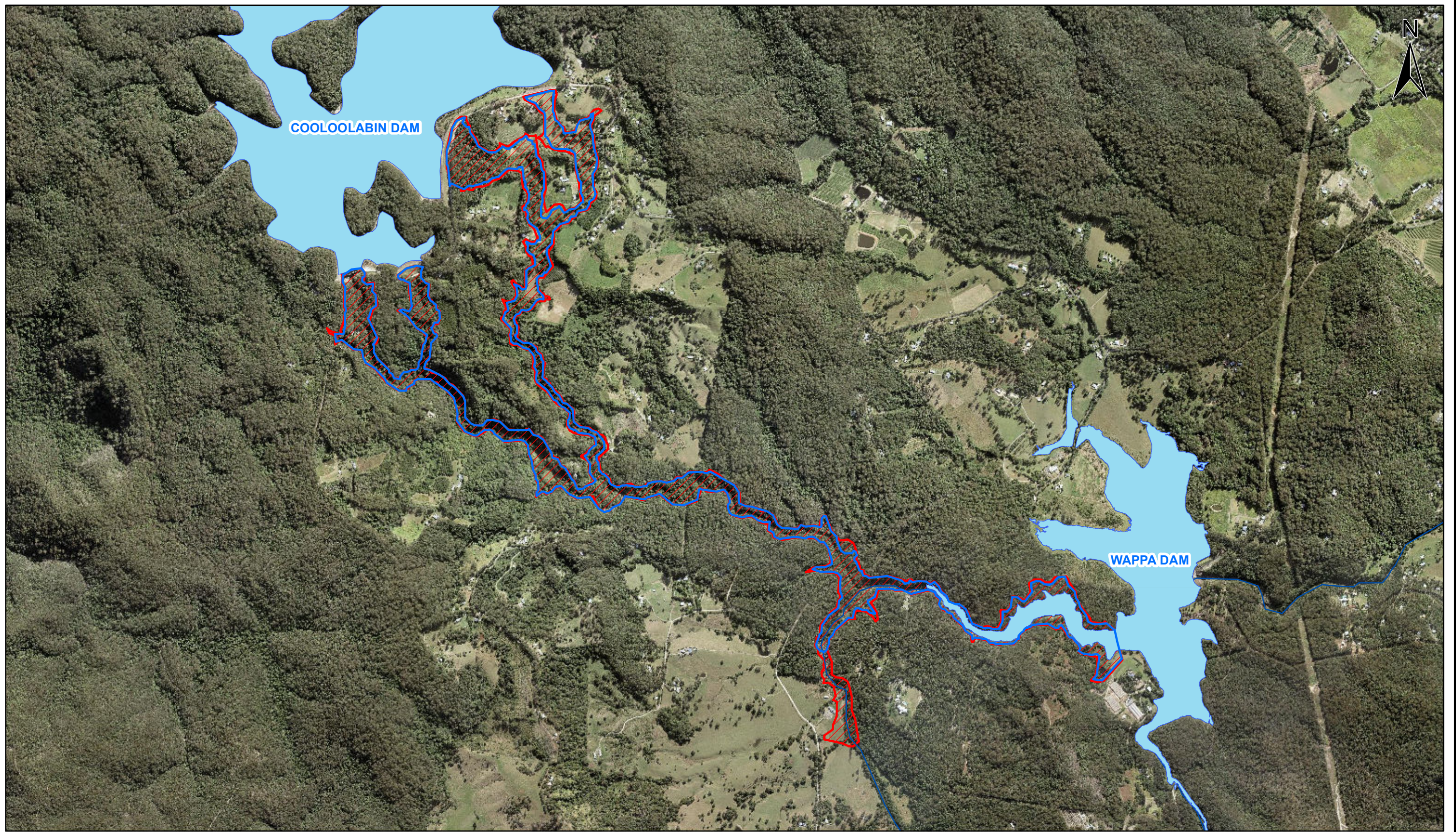
A dam failure may cause considerable damage to the road network downstream of the Dam due to extreme flood level rises, high velocities and debris that could potentially be generated by the failure. Therefore, for emergency event planning purposes, it should be assumed that all roads within the dam failure inundation extents on the following maps would be rendered unserviceable should a failure of the Dam occur.






The maps do not define property flood risks and do not in any way relate to flooding potential associated with natural flood events that do not involve a failure of the Dam. Property flood risk is generally defined by flood studies and associated land use planning controls prepared by and made available to the public by Local Governments.

The maps do not define the probability of a flood or the probability of dam failure. Dam failure risk at all Seqwater dams is very low.

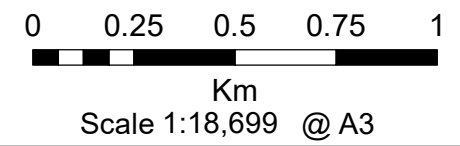
The 'Time to Flood' extents shown on the maps should be regarded as an indication only. In an actual dam failure scenario, 'Time to Flood' extents will be heavily influenced by factors that cannot be predicted with any degree of certainty. These factors include the nature of the dam failure, the speed at which the failure develops, the final size of the dam breach, and concurrent rainfall and flooding.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	47 of 83



- Legend**
-  Sunny Day Failure Line
 -  Major Roads
 -  Water Storage
 -  Major Waterway
- PMFF Extent and Time to Flood (hours)**
-  0-1


**Cooloolabin Dam
Probable Maximum
Flood Failure and Sunny Day Failure
Map 1**



Disclaimer: Seqwater makes no representation or warranty as to the accuracy, completeness, reliability or suitability of the GIS data and any other information provided by Seqwater for any specific purpose and disclaims any responsibility or liability for any expenses, losses, damages and costs which may be suffered or incurred as a result of or in connection with using or relying on the data or the information provided by Seqwater. Please ensure the map attached accurately represents the location of proposed works. you have any queries, please contact Seqwater.

Date: 27/09/2021

Copyright of data is as follows:
 Cadastre (c) 2015 Department of Natural Resources and Mines. 2013 Aerial Photography (c) QSIC Spatial Imagery Subscription Plan




8. Maximum dam outflow flood maps (no dam failure)

The following maps provide an indication of potential flood inundation close to the Dam that may occur due to the maximum spillway flow from the Dam in situations where the Dam does not fail. **For maps that account for dam failure, see Section 7.**

These maps do not show the maximum possible flooding downstream of the Dam because such flooding can be influenced by sources of floodwater that are not part of releases or outflows from the Dam. Such sources include run-off generated from localised flash flooding generated from unpredictable high intensity rainstorms occurring downstream of the Dam.

These maps do not replace approved flood maps for the area that have been published by a Local Government Authority, Disaster Management Group, State Government Agency, or Federal Government Agency. However, these maps can be used as a guide to potential flooding due to outflows from the Dam in the absence of approved flood maps.

8.1. Purpose and exclusions

The following maps have been produced to identify the areas likely to be flooded by a dam hazard event which is associated with natural flooding caused by water that has flowed naturally into the Dam.

The occurrence of a such an event does not automatically mean that there are concerns for the structural safety of the Dam or that emergency intervention is required at the Dam. In most cases, the occurrence of a such an event is an indication that sufficient rainfall has fallen to cause flooding. This flooding would be worse if the Dam had not been constructed.

8.2. Determination of maximum outflow

Seqwater has calculated the maximum outflow from the Dam to assist stakeholders to assess the potential impacts of major floods. Maximum outflow has been calculated by assuming that the lake level in the Dam has reached the Dam crest and the Dam has not failed. If the water level in the Dam exceeds the crest, the Dam is likely to fail.

8.3. Relevance of maximum outflow maps

Spillway flows from the Dam can combine with other downstream flows to produce an emergency for people and property downstream of the Dam (for example an *event* or *disaster* as defined in the *Disaster Management Act 2003*). This EAP does not define the disaster or emergency response actions for downstream flooding of this nature.

The following maps provide an indication of the potential hazard area that may be impacted by spillway outflows or releases from the Dam. In the absence of more detailed flood maps, these maps can be used to assist Disaster Management Groups and the public in identifying areas that may be potentially impacted by dam outflows.

The emergency response to flooding within these areas is led by Local Disaster Management Groups, with a range of agencies (including Seqwater) supporting these Groups in accordance with the *Queensland Disaster Management Arrangements*. Seqwater's contribution is providing information on the nature of the hazard arising from outflows from the Dam. The following maps assist in providing that information.

As noted above, when using the following maps, it is important to understand that the maps do not identify all possible downstream flooding scenarios. Downstream flooding could be significantly different to that shown in the maps due to the circumstances of each flood event. Some examples include, but are not limited to:

- Flooding at the Dam and no other floodwaters joining downstream of the Dam, which means the downstream flooding is entirely due to the Dam outflows.
- No flooding at the Dam and flooding occurs downstream due to rainfall downstream of the Dam or rainfall and flows on tributary catchments that join downstream of the Dam, which means that the Dam is not contributing to flooding.
- Flooding at the Dam and downstream flooding is more than dam outflows due to inflows from rainfall downstream of the Dam or rainfall and inflows on tributary catchments downstream of the Dam, which means that the Dam is partially contributing to flooding.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	49 of 83

These numerous combinations of contribution to downstream flooding mean these maps should not be used as an alternative to published flood maps, but rather should be used to support other flood map information.

8.4. Maximum outflow extent map limitations of accuracy

Determining the extent of dam outflow flood inundation involves complex modelling techniques that contain considerable uncertainties. The map accuracy can be limited by:

- Accuracy of topographic survey;
- Accuracy of modelling methods;
- Omissions of hydraulic structures; and
- Omission of any changes to channel and floodplain conditions (e.g. land development) that occurred after the time of the survey information used to produce the maps.

The maps do not define property flood risks.

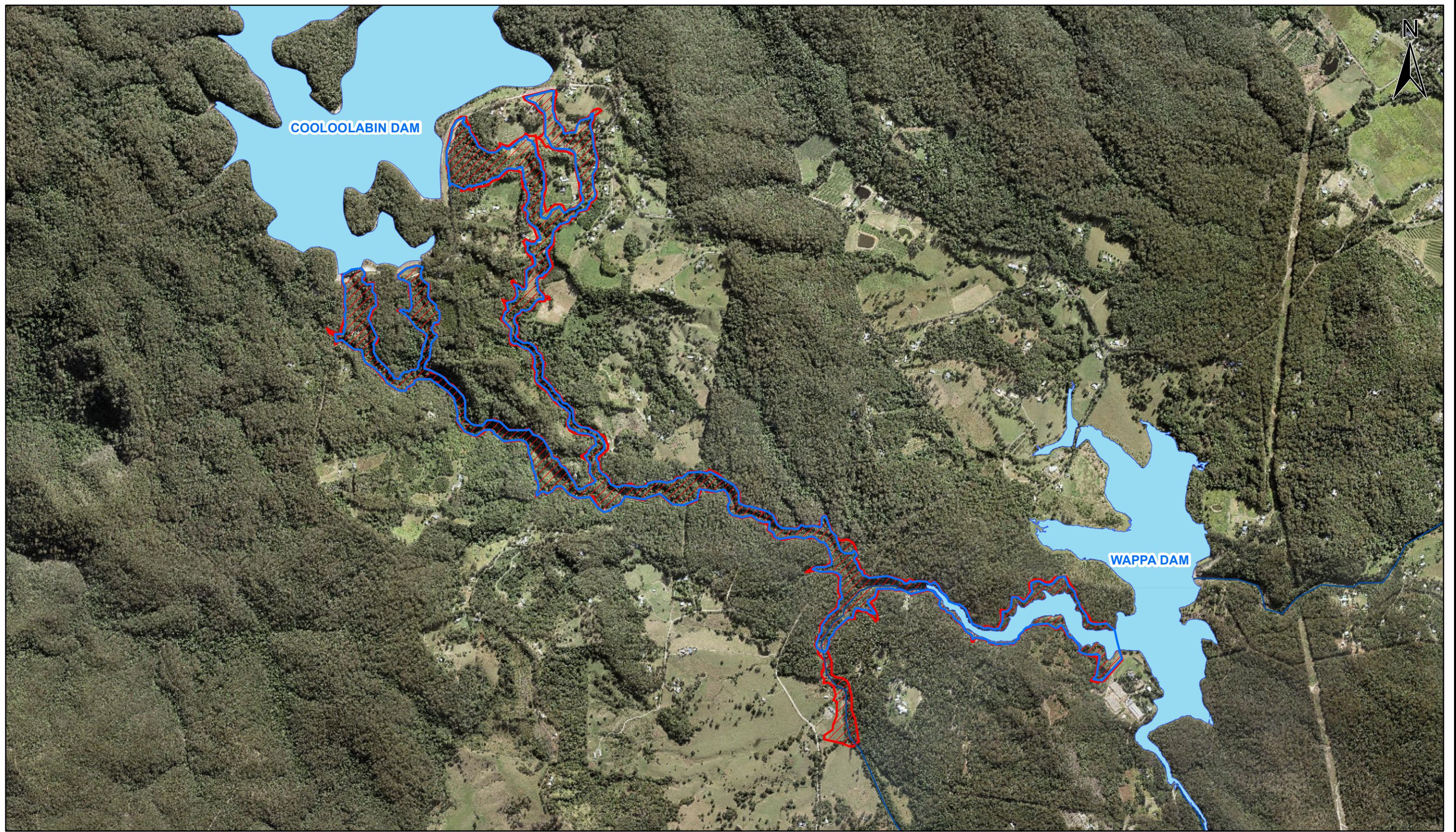
The maps do not define the probability of a flood.

The maps only show the maximum spillway outflow. The maps do not show outflow conditions for any of the trigger levels and notifications as defined in Section 5.1.





8.5. Available flood intelligence for Disaster Management Groups

In addition to the information contained in this EAP, Disaster Management Agencies can obtain real time information on dam levels and dam outflows for all Seqwater's un-gated dams during flood events directly and on a continuing basis at

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-0029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	50 of 83



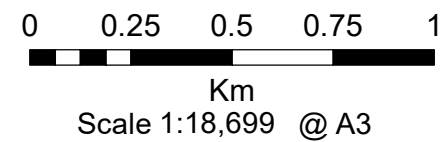
Legend

-  Sunny Day Failure Line
-  Major Roads
-  Water Storage
-  Major Waterway

PMFF Extent and Time to Flood (hours)

-  0-1


**Cooloolabin Dam
Probable Maximum
Flood Failure and Sunny Day Failure
Map 1**



Disclaimer:
Seqwater makes no representation or warranty as to the accuracy, completeness, reliability or suitability of the GIS data and any other information provided by Seqwater for any specific purpose and disclaims any responsibility or liability for any expenses, losses, damages and costs which may be suffered or incurred as a result of or in connection with using or relying on the data or the information provided by Seqwater. Please ensure the map attached accurately represents the location of proposed works. you have any queries, please contact Seqwater.

Date: 27/09/2021

Copyright of data is as follows:
Cadastre (c) 2015 Department of Natural Resources and Mines. 2013 Aerial Photography (c) QSIC Spatial Imagery Subscription Plan



9. References

Description	Status	Location
<i>Water Supply (Safety and Reliability) Act 2008</i>	Current as at 1 July 2024	https://www.legislation.qld.gov.au/view/whole/pdf/inforce/current/act-2008-034
<i>Queensland Disaster Management Act 2003</i>	Current as at 1 July 2024	Disaster Management Act 2003 (legislation.qld.gov.au)
Queensland State Disaster Management Plan 2024-25	Version 2.0	https://www.disaster.qld.gov.au/_data/assets/pdf_file/0031/528448/Interim-Queensland-State-Disaster-Management-Plan-2024-25.pdf
Bulk Authority Emergency Response Plan	Version 6, 2023	ERP-00001
Seqwater Dam Safety Management Program	2021, Version 3.0	PLN-00336
Seqwater Dams – Release and Spilling Communication Procedure	2024, Version 7.0	PRO-00598
Seqwater Fatigue Management Procedure	2024, Version 7.0	PRO-00696

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	52 of 83

Appendix A – Contact register

Appendix A and Appendix B have been redacted

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	53 of 83

Appendix C – Emergency Alert polygons and scripts

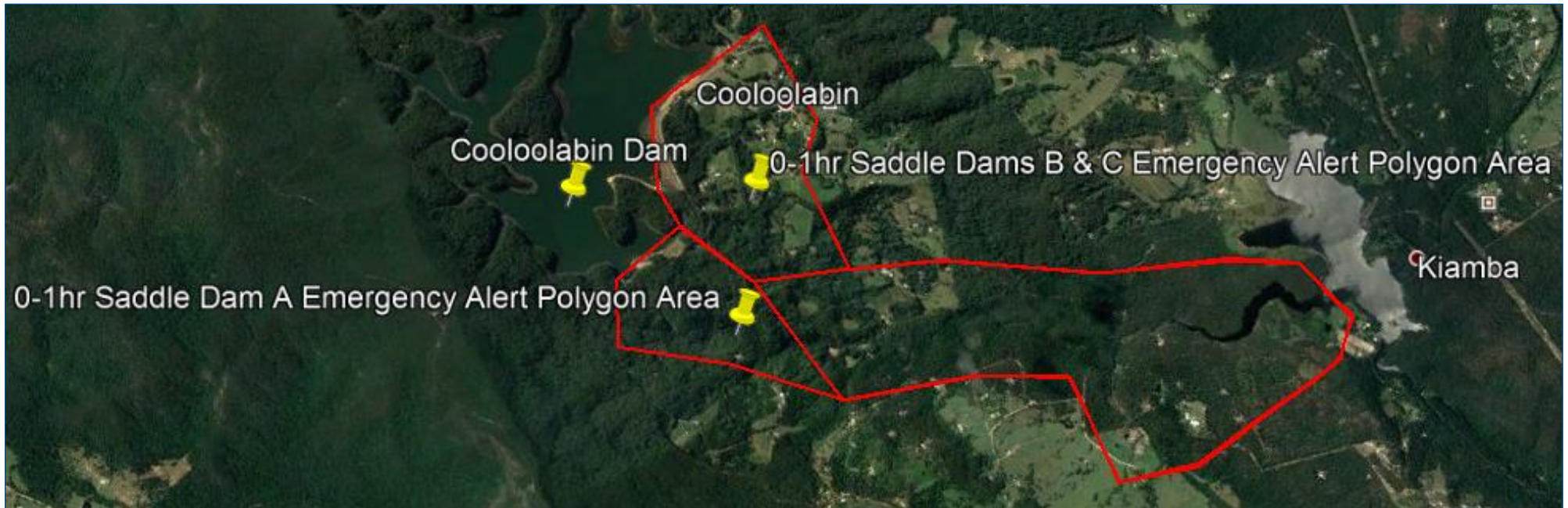
Emergency Alert polygons

Emergency Alert (EA) is the system used by Seqwater to warn populations at risk downstream of the Dam of a potential or actual dam failure. Details of EA can be found at <http://www.disaster.qld.gov.au/>.

The EA system can import digital spatial data files (polygons in Google Earth KML format) that define a particular geographic area for the issue of an EA. For an Emergency Event associated with potential or actual dam failure, these polygons have been defined by Seqwater and extend over the Dam Failure Flood Maps shown in Section 7. The polygons are not defined exactly to the extents of Dam Failure Flood Maps due to the requirements for EA polygons, which require simplified area shapes for expediency of use.


Polygons in KML format for EA have been uploaded to reside directly within the SDCC Disaster Management Portal for immediate use by the SDCC Watch Desk if needed during an Emergency Event.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	58 of 83





Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	59 of 83

OFFICIAL – SEQWATER – WATCH AND ACT – EMERGENCY ALERT REQUEST FORM

 Queensland Government	PHONE THE [REDACTED] – ADVISE EA IS BEING DEVELOPED	
	EMERGENCY ALERT REQUEST	
Location of Alert: Cooloolabin Dam – Major issue detected, may lead to potential dam failure flood event (e.g. Suburb, Town)		Date: Click or tap to enter a date.
LGA/Agency requesting: Seqwater		Time: Click or tap here
Requesting Officer (e.g. Disaster Coordinator/Incident Controller) Name: <ENTER SEQWATER PERSONNEL DETAILS> Agency/Position: Seqwater		Telephone: [REDACTED] (SDCC Watch Desk may telephone you)
Email: [REDACTED]		
Advised LDC/LDMG: <input type="checkbox"/> YES DDC/DDMG: <input type="checkbox"/> YES Neighbouring LDMG/LGA: <input type="checkbox"/> YES <input type="checkbox"/> N/A		
Send Alert	Immediately: <input type="checkbox"/> YES	Scheduled: <input type="checkbox"/> YES Date & Time Click or tap here to enter text.
Event Type	<input type="checkbox"/> Cyclone <input type="checkbox"/> Storm Tide <input type="checkbox"/> Flash Flood <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Bushfire <input type="checkbox"/> Fire Incident <input type="checkbox"/> Smoke / Toxic Plume <input type="checkbox"/> Chemical Spill <input type="checkbox"/> Tsunami (Sent as Location Based Text Message ONLY) <input type="checkbox"/> Other (please specify): Click or tap here to enter text.	
Distributed by: (Channel)	<input type="checkbox"/> Voice (Landline only) <input checked="" type="checkbox"/> SMS – Location Based (Location of phone at time of distribution) <input type="checkbox"/> SMS – Service Address Based (Registered billing address)	
Message Severity	<input type="checkbox"/> Emergency Warning (Activates SEWS) <input checked="" type="checkbox"/> Watch & Act <input type="checkbox"/> Advice	
Threat Direction Required? (e.g. Fire, Chemical Spill, Dam Spill)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	Threat location indicated on map? Only For Emergency Warning Voice & Service Address SMS
EA Messaging Filename (Doc, Pdf): Click or tap here to enter text.		Polygon Filename, (Kml, Kmz, Gml, GeoJSON): DIRECTION BASED ON HOURLY PROGRESSION AS REFERENCED IN FILE NAME [REDACTED] [REDACTED] Number of polygons 2 (if multiple, attach list in order of priority)
Supplied via: <input checked="" type="checkbox"/> DM Portal <input type="checkbox"/> Email <input type="checkbox"/> Verbal <input type="checkbox"/> Other (please specify):		Supplied via: <input checked="" type="checkbox"/> DM Portal <input type="checkbox"/> Email <input type="checkbox"/> Verbal <input type="checkbox"/> Other (please specify):
Voice: Type or handwriting, max 4000 characters incl spaces. (Ideally message should be <450 characters)		Voice type: Male <input type="checkbox"/> Female <input type="checkbox"/>
Click or tap here to enter text.		
SMS: Type or handwriting, use capitals to highlight warning level, hazard, location and call to action statement. Max 612 characters incl spaces. (Ideally should be < 160 characters incl. spaces) WATCH and ACT message from Seqwater. Cooloolabin Dam possibility of dam failure. PREPARE TO LEAVE AND/OR MOVE TO HIGHER GROUND away from Rocky Creek, South Maroochy River and Coochin Creek. Warn others. Listen to local ABC radio or www.disaster.qld.gov.au/warnings. If your life is in danger, call 000.		
Remove EA from websites:	<input type="checkbox"/> 12 hrs <input type="checkbox"/> 24 hrs <input type="checkbox"/> 48 hrs <input type="checkbox"/> Specify Date & Time: <input checked="" type="checkbox"/> Check back in 12 hrs: <input type="checkbox"/> Replace previous EA message : Click or tap here Contact #: Click or tap here .	
Requesting Officer: Click or tap here to enter text. Signature: Click or tap here to enter text. Date: Click or tap here to enter text.		
Send to [REDACTED] to confirm receipt		
FOR USE BY SDCC		
EA Request Form completed by: SDCC Watch Desk <input type="checkbox"/> Requesting Officer <input type="checkbox"/>		
Notification of any delays provided to Requestor: <input type="checkbox"/> YES <input type="checkbox"/> NO		
EA User Name: Click or tap here to enter text.		Emergency Alert No:
Signature: Click or tap here to enter text.		Click or tap here
Date: Click or tap here to enter text.		EMS EA Campaign Report ID:
Authorising Officer Name: Click or tap here to enter text.		Click or tap here
Signature: Click or tap here to enter text.		Date: Click or tap here to enter text.
Report provided to Requestor on EA outcomes: <input type="checkbox"/> YES <input type="checkbox"/> NO		

The EA Manual, EA Quick Reference Guide, EA Request Form Template are available at: www.disaster.qld.gov.au

 <p>Queensland Government</p>	<p>PHONE THE [REDACTED] – ADVISE EA IS BEING DEVELOPED</p>	
	<h1>EMERGENCY ALERT REQUEST</h1>	
Location of Alert: Cooloolabin Dam – Potential for dam failure flood event (e.g. Suburb, Town)		Date: Click or tap to enter a date.
LGA/Agency requesting: Seqwater		Time: Click or tap here
Requesting Officer (e.g. Disaster Coordinator/Incident Controller) Name: <ENTER SEQWATER PERSONNEL DETAILS> Agency/Position: Seqwater		Telephone: [REDACTED] (SDCC Watch Desk may telephone you)
Email: [REDACTED]		
Advised LDC/LDMG: <input type="checkbox"/> YES DDC/DDMG: <input type="checkbox"/> YES Neighbouring LDMG/LGA: <input type="checkbox"/> YES <input type="checkbox"/> N/A		
Send Alert	Immediately: <input type="checkbox"/> YES	Scheduled: <input type="checkbox"/> YES Date & Time Click or tap here to enter text.
Event Type	<input type="checkbox"/> Cyclone <input type="checkbox"/> Storm Tide <input type="checkbox"/> Flash Flood <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Bushfire <input type="checkbox"/> Fire Incident <input type="checkbox"/> Smoke / Toxic Plume <input type="checkbox"/> Chemical Spill <input type="checkbox"/> Tsunami (Sent as Location Based Text Message ONLY) <input type="checkbox"/> Other (please specify): Click or tap here to enter text.	
Distributed by: (Channel)	<input type="checkbox"/> Voice (Landline only) <input checked="" type="checkbox"/> SMS – Location Based (Location of phone at time of distribution) <input type="checkbox"/> SMS – Service Address Based (Registered billing address)	
Message Severity	<input checked="" type="checkbox"/> Emergency Warning (Activates SEWS) <input type="checkbox"/> Watch & Act <input type="checkbox"/> Advice	
Threat Direction Required? (e.g. Fire, Chemical Spill, Dam Spill)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	Threat location indicated on map? Only For Emergency Warning Voice & Service Address SMS
EA Messaging Filename (Doc, Pdf): Click or tap here to enter text.	Polygon Filename, (Kml, Kmz, Gml, GeoJSON): DIRECTION BASED ON HOURLY PROGRESSION AS REFERENCED IN FILE NAME [REDACTED] [REDACTED] [REDACTED]	
Supplied via: <input checked="" type="checkbox"/> DM Portal <input type="checkbox"/> Email <input type="checkbox"/> Verbal <input type="checkbox"/> Other (please specify):	Supplied via: <input checked="" type="checkbox"/> DM Portal <input type="checkbox"/> Email <input type="checkbox"/> Verbal <input type="checkbox"/> Other (please specify):	
Voice: Type or handwriting, max 4000 characters incl spaces. (Ideally message should be <450 characters)		Voice type: Male <input type="checkbox"/> Female <input type="checkbox"/>
Click or tap here to enter text.		
SMS: Type or handwriting, use capitals to highlight warning level, hazard, location and call to action statement. Max 612 characters incl spaces. (Ideally should be < 160 characters incl. spaces)		
EMERGENCY WARNING message from Seqwater. Cooloolabin Dam imminent failure risk. LEAVE IMMEDIATELY to a safe place on high ground away from Rocky Creek, South Maroochy River and Coochin Creek. Warn others. Listen to local ABC radio or www.disaster.qld.gov.au/warnings. If your life, is in danger call 000.		
Remove EA from websites:	<input type="checkbox"/> 12 hrs <input type="checkbox"/> 24 hrs <input type="checkbox"/> 48 hrs <input type="checkbox"/> Specify Date & Time: <input checked="" type="checkbox"/> Check back in 12 hrs: <input type="checkbox"/> Replace previous EA message : Click or tap here Contact #: Click or tap here .	
Requesting Officer: Click or tap here to enter text. Signature: Click or tap here to enter text.		Date: Click or tap here to enter text.
<p>Send to [REDACTED] to confirm receipt</p>		
FOR USE BY SDCC		
EA Request Form completed by: SDCC Watch Desk <input type="checkbox"/> Requesting Officer <input type="checkbox"/>		
Notification of any delays provided to Requestor: <input type="checkbox"/> YES <input type="checkbox"/> NO		
EA User Name: Click or tap here to enter text.		Emergency Alert No: Click or tap here EMS EA Campaign Report ID: Click or tap here
Signature: Click or tap here to enter text. Date : Click or		
Authorising Officer Name: Click or tap here to enter text.		
Signature: Click or tap here to enter text. Date: Click or t		
Report provided to Requestor on EA outcomes: <input type="checkbox"/> YES <input type="checkbox"/> NO		
The EA Manual, EA Quick Reference Guide, EA Request Form Template are available at: www.disaster.qld.gov.au		

 <p>Queensland Government</p>	PHONE THE [REDACTED] – ADVISE EA IS BEING DEVELOPED	
	<h1 style="margin: 0;">EMERGENCY ALERT REQUEST</h1>	
Location of Alert: Cooloolabin Dam – Potential for dam failure flood event (e.g. Suburb, Town)		Date: Click or tap to enter a date.
LGA/Agency requesting: Seqwater		Time: Click or tap here
Requesting Officer (e.g. Disaster Coordinator/Incident Controller) Name: <ENTER SEQWATER PERSONNEL DETAILS> Agency/Position: Seqwater		Telephone: [REDACTED] (SDCC Watch Desk may telephone you)
Email: [REDACTED]		
Advised LDC/LDMG: <input type="checkbox"/> YES DDC/DDMG: <input type="checkbox"/> YES Neighbouring LDMG/LGA: <input type="checkbox"/> YES <input type="checkbox"/> N/A		
Send Alert	Immediately: <input type="checkbox"/> YES	Scheduled: <input type="checkbox"/> YES Date & Time Click or tap here to enter text.
Event Type	<input type="checkbox"/> Cyclone <input type="checkbox"/> Storm Tide <input type="checkbox"/> Flash Flood <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Bushfire <input type="checkbox"/> Fire Incident <input type="checkbox"/> Smoke / Toxic Plume <input type="checkbox"/> Chemical Spill <input type="checkbox"/> Tsunami (Sent as Location Based Text Message ONLY) <input type="checkbox"/> Other (please specify): Click or tap here to enter text.	
Distributed by: (Channel)	<input type="checkbox"/> Voice (Landline only) <input checked="" type="checkbox"/> SMS – Location Based (Location of phone at time of distribution) <input type="checkbox"/> SMS – Service Address Based (Registered billing address)	
Message Severity	<input checked="" type="checkbox"/> Emergency Warning (Activates SEWS) <input type="checkbox"/> Watch & Act <input type="checkbox"/> Advice	
Threat Direction Required? (e.g. Fire, Chemical Spill, Dam Spill)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	Threat location indicated on map? <input type="checkbox"/> YES Only For Emergency Warning Voice & Service Address SMS <input checked="" type="checkbox"/> N/A
EA Messaging Filename (Doc, Pdf): Click or tap here to enter text.	Polygon Filename, (Kml, Kmz, Gml, GeoJSON): DIRECTION BASED ON HOURLY PROGRESSION AS REFERENCED IN FILE NAME [REDACTED] [REDACTED] [REDACTED] Number of polygons 2 (if multiple, attach list in order of priority)	
Supplied via: <input checked="" type="checkbox"/> DM Portal <input type="checkbox"/> Email <input type="checkbox"/> Verbal <input type="checkbox"/> Other (please specify):	Supplied via: <input checked="" type="checkbox"/> DM Portal <input type="checkbox"/> Email <input type="checkbox"/> Verbal <input type="checkbox"/> Other (please specify):	
Voice: Type or handwriting, max 4000 characters incl. spaces. (Ideally message should be <450 characters)		Voice type: Male <input type="checkbox"/> Female <input type="checkbox"/>
Click or tap here to enter text.		
SMS: Type or handwriting, use capitals to highlight warning level, hazard, location and call to action statement. Max 612 characters incl. spaces. (Ideally should be < 160 characters incl. spaces)		
EMERGENCY WARNING message from Seqwater. Cooloolabin Dam imminent failure risk. TOO DANGEROUS TO LEAVE. Get up as high as you can where you are. Warn others. Listen to local ABC radio or www.disaster.qld.gov.au/warnings. If your life is in danger call 000.		
Remove EA from websites:	<input type="checkbox"/> 12 hrs <input type="checkbox"/> 24 hrs <input type="checkbox"/> 48 hrs <input type="checkbox"/> Specify Date & Time: <input checked="" type="checkbox"/> Check back in 12 hrs: <input type="checkbox"/> Replace previous EA message : Click or tap here Contact #:Click or tap here .	
Requesting Officer: Click or tap here to enter text. Signature: Click or tap here to enter text.		Date: Click or tap here to enter text.
Send to [REDACTED] to confirm receipt		
FOR USE BY SDCC		
EA Request Form completed by: SDCC Watch Desk <input type="checkbox"/> Requesting Officer <input type="checkbox"/>		
Notification of any delays provided to Requestor: <input type="checkbox"/> YES <input type="checkbox"/> NO		
EA User Name: Click or tap here to enter text.		Emergency Alert No:
Signature: Click or tap here to enter text.		Date :Click or
Authorising Officer Name: Click or tap here to enter text.		Click or tap here
Signature: Click or tap here to enter text.		EMS EA Campaign Report ID:
Date: Click or t		Click or tap here
Report provided to Requestor on EA outcomes: <input type="checkbox"/> YES <input type="checkbox"/> NO		

The EA Manual, EA Quick Reference Guide, EA Request Form Template are available at: www.disaster.qld.gov.au

AWS messaging

The following templates may be used to develop a message to be released alongside the relevant Emergency Alert messages during a dam failure event. The LOCATION, HAZARD and CALL TO ACTION should be reviewed and selected as appropriate for the current situation.

The list of places identified in the following templates are locations that fall within the PMF-Failure polygons for Cooloolabin Dam. Refinement of the impacted areas should occur in real-time if the situation permits.

The following templates can be used to create messages to warn people likely to be flooded to get ready to leave for their own safety. This could be due to danger from flooding, or likelihood of extended isolation

The Watch and Act messages provided below are for using the following situations:

- Table 6: Flood Event, Stand Up (2)
- Table 10: Dam safety hazard, Stand Up (2)

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	63 of 83



WATCH AND ACT

PREPARE TO LEAVE AND/OR MOVE TO HIGHER GROUND

Sunshine Coast Council Area

Flood: Possible Failure of Cooloolabin Dam

Issued: [time, day, date, year]

Next update: [time, day, date, year] or as the situation changes.

[Insert issuing agency] advises people in the following area(s):

- Cooloolabin
- Kiamba

To **PREPARE TO LEAVE AND/OR MOVE TO HIGHER GROUND** to a safer place away from flooding by [time, date]. This is due to the [minor/moderate/major/flash] flooding occurring downstream of Cooloolabin Dam and in proximity to Rocky Creek, South Maroochy River, Coochin Creek and connected creeks. An [evacuation centre/registration point/assembly area] has been set up here [insert link/area].

For non-life-threatening flood and storm emergency assistance, contact SES on 132500, 132500.qld.gov.au, or the SES Assistance Qld app on Android or iOS. In a life-threatening situation, call Triple Zero (000) immediately.

What are we expecting?

The Bureau of Meteorology advises

- Once the floodwater reaches [X] metres, expected at [Time AM/PM today/tomorrow date], safe evacuation routes are likely to be cut off.

What you need to do:

- Prepare to leave and/ or move to a higher ground to a safer place so you can go quickly if the water levels in Rocky Creek, South Maroochy River, Coochin Creek and connected creeks start to rise. Get ready now.
- Advise your family, friends, or neighbours of your location.
- Decide how you will get to your safe place. If you come to a flooded road, turn around and go another way. Do not drive through floodwater.
- Help others if you can.

If you are inside and can't leave safely:

- Stay inside and watch for rising flood water.
- If floodwater comes inside, move to a higher point like the kitchen bench or second storey and call Triple Zero (000).

If you find it hard to move quickly or have special or medical needs:

- Use your Person-Centred Emergency Plan (P-CEP) now if you have one.
- Make sure you have enough medicine for at least one week.
- If anyone in your house uses powered medical equipment, like a dialysis machine or ventilator, decide now where you will go in case you lose power.
- Call your support person or service to organise transport if you need to leave.
- Leaving early is safer than waiting.

If you are a tourist, visitor, camper or caravanner:

- Campers and caravanners should start packing up now.
- If you do not need to be in the warning area, leave now. Check road conditions and plan your route before you leave.
- Be ready to move if the situation gets worse.
- Ask the campground owners whether the site floods.
- Check your surroundings of water catchments, and monitor conditions.

For more information:

- For Sunshine Coast Council updates and a map of areas that may flood, go to [Disaster Hub - Sunshine Coast](#)
- Listen to your local radio [add ABC local radio or other station and frequency].
- For power outage information go to [energex.com.au](#) or [ergon.com.au/network](#) [select energy provider].
- Check the latest weather, warnings, rainfall, and river heights at the [Bureau of Meteorology Queensland website](#).
- For information on what to do during a disaster visit the [Get Ready Queensland website \(During a Disaster\)](#).
- Check road closures at [the QLD Traffic website](#) or for phone service call 13 19 40.
- Check disruptions to public transport at the [Translink website](#).
- For Seqwater Dam Levels related information go to [seqwater.com.au/dam-levels](#)

The Emergency Warning messages provided below are for use in the following situations:

- Table 6: Flood Event, Stand Up (3)
- Table 10: Dam safety hazard, Stand Up (3)

The Emergency Warning templates below can be used to develop messages to warn people still in the area to either leave immediately or that it may be too dangerous to leave, and they should get as high as safely possible.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-0029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	65 of 83



EMERGENCY WARNING

LEAVE IMMEDIATELY

[NAME OF LOCAL GOVERNMENT]

Flood: Imminent Failure Risk of Cooloolabin Dam

Issued: [time, day, date, year]

Next update: [time, day, date, year] or as the situation changes.

[Insert issuing agency] advises people in the following area(s):

- [List places as per relevant Watch and Act template]

to **LEAVE IMMEDIATELY** due to imminent failure risk of **Cooloolabin Dam**. There is also likely to be dangerous, fast-moving flooding and debris along **Rocky Creek, South Maroochy River, Coochin Creek and connected creeks** and/or near **Cooloolabin Dam**. **Your life is at risk.**

An **[evacuation centre/registration point/assembly]** area has been set up here **(insert area)**.

If your life is in danger, call Triple Zero (000) immediately.

What are we expecting?

- **Roads and bridges may be closed.**
- **Evacuation routes may be cut off soon.**
- **If you remain in the area, you may become trapped without power, water, and other essential services.**

What you need to do:

- Leave now and go to a safe place in a high part of **[town/your suburb/your city]** away from the flood. This could be with your family or friends.
- Take your mobile phone, charger, medicine, identification, cash, and keys with you.
- If you come to a flooded road, turn around and go another way. Do not drive through floodwater.
- Decide how you will get to your safe place.
- If you have children make sure they are with you or an adult you trust.
- Take your pets and companion animals for safe travel.
- Help others if you can.

For more information:

- For **[Local Government area]** updates and a map of areas that may flood, go to **[website/disaster dashboard]**.
- Listen to your local radio **[add ABC local radio or other station and frequency]**.
- For power outage information go to energex.com.au or ergon.com.au/network **[select energy provider]**.
- Check the latest weather, warnings, rainfall, and river heights at the Bureau of Meteorology Queensland website.
- For non-life-threatening flood and storm emergency assistance, contact SES on 132500, 132500.qld.gov.au, or the SES Assistance Qld app on Android or iOS.
- Check road closures at the QLD Traffic website or for phone service call 13 19 40.
- Check disruptions to public transport at the Translink website.
- For Seqwater Dam Levels related information go to seqwater.com.au/dam-levels.



EMERGENCY WARNING

TOO DANGEROUS TO LEAVE

[NAME OF LOCAL GOVERNMENT]

Flood: Imminent Failure Risk of Cooloolabin Dam

Issued: [time, day, date, year]

Next update: [time, day, date, year] or as the situation changes

[Insert issuing agency] advises the people in the following area(s):

- [Add location(s) here]

Must stay in place, it is **TOO DANGEROUS TO LEAVE**.

Get up as high as you can where you are. Imminent failure risk of **Cooloolabin Dam**. There is also likely to be dangerous, fast-moving flooding and debris along **Rocky Creek, South Maroochy River, Coochin Creek and connected creeks** and/or near **Cooloolabin Dam**. Evacuation routes are now cut off by flooding. **Your life is at risk.**

If your life is in danger, call Triple Zero (000) immediately.

Emergency services may not be able get to you because it is too dangerous.

What are we expecting?

The Bureau of Meteorology advises [insert BOM prediction here, including time/when it's expected to hit].

- Homes and buildings are [badly / fully] flooded.
- Main roads are closed.
- Evacuation routes are closed.
- Power, phones, internet, and water [might stop working / have stopped working].

What you need to do:

- Stay where you are and get up as high as you safely can. This could be upstairs or on the roof if it is safe to do so.
- If you have children make sure they are with you or an adult you trust.
- Help other people who are with you if you can.
- Stay in place until you are rescued, or the water goes down enough to safely leave.

For more information:

- Follow our local council disaster dashboard here [insert disaster dashboard link].
- Listen to your local radio [add ABC local radio or other station and frequency].
- For power outage information go to energex.com.au or ergon.com.au/network [select energy provider].
- Check the latest weather, warnings, rainfall, and river heights at the Bureau of Meteorology Queensland website.
- For non-life-threatening flood and storm emergency assistance, contact SES on 132500, 132500.qld.gov.au, or the SES Assistance Qld app on Android or iOS.
- Check road closures at the QLD Traffic website or for phone service call 13 19 40.
- Check disruptions to public transport at the Translink website.
- For Seqwater Dam Levels related information go to seqwater.com.au/dam-levels.

Appendix D – Example LDMG Flood Event notification scripts

The following summaries and scripts can be used to develop key messages with external agencies during Flood Events. These conversations are intended to initially be a telephone conversation with the same key messages of the conversation then sent in a follow up email to the agency contacted, including the FOC email.

Consider the impact of concurrent downstream flooding and the contribution of dam outflows in relation to this when having these conversations. Current Flood Warnings for the area may provide guidance as to the current impacts.

Before you make the relevant notification, ensure you have the following information and inform the Duty Senior Flood Operations Engineer that the call is being made.

Table 13: Information to gather prior to the phone call conversation with external stakeholders

Information	Response for phone conversation
Dam Name and Trigger Level exceeded	
Current Lake Level and Trend (rising / falling / steady)	
Contact Name and number for Local Government Agency (are there multiple impacted?)	
Contact Name and number for DLGWV	
Is there current Flood Warnings for the downstream watercourse? If so, what levels?	
Is this notification based on predicted lake levels from a model run (with or without rainfall forecasts) or actual lake levels?	
If a model has been calibrated for the dam, can further information about peak levels and timing be provided? It's OK to answer NO.	
Is there an understanding of the Bureau Provider Forecast that can be provided? It's OK to answer NO.	
Is there an operator on site or is surveillance available?	
What is the next trigger level (m AHD) for the Dam?	

The text in black would generally be expected to be provided in all situations. The text in red would be provided only if relevant to the situation being reported.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	68 of 83

Alert (2) – Spillway crest high level trigger notification

Hello, this is [YOUR NAME] from the Seqwater Flood Operations Centre. I'm calling regarding a notification required under the Cooloolabin Dam Emergency Action Plan.

This notification is to inform that outflows from Cooloolabin Dam have reached a level to trigger the high-level spillway crest. The high-level spillway trigger is identified as lake level **296.00 m AHD**.

The lake level is currently **XXX and rising / steady**. **The level is expected to continue to rise / peak by XXXX / start to fall soon**. This is subject to any further rainfall within the catchment.

The Cooloolabin Dam EAP is **now at / expected to soon reach** the Alert Activation Level. Your organisation should enact any plans related to this trigger.

We will not contact you when the lake level falls below this trigger level listed in the EAP, which is **296.48 m AHD**. **This is / is not expected to happen within the next XX hours**. However, please don't hesitate to contact the Flood Operations Centre on [REDACTED] if you require any further information. For media enquiries, please contact [REDACTED] For Seqwater media related enquiries, please contact Seqwater's Media Team on [REDACTED]

Lean Forward – Flood of Record notification

Hello, this is [YOUR NAME] from the Seqwater Flood Operations Centre. I'm calling regarding a Lean Forward notification required under the Cooloolabin Dam Emergency Action Plan.

This notification is related to exceeding the Flood of Record for Cooloolabin Dam, identified as lake level **296.48 m AHD**.

The lake level is currently **XXX m AHD and rising / steady**. The level is expected to **continue to rise / peak by TIME / reach the trigger by XXX**. This is subject to further rainfall within the catchment.

This level indicates the dam is **expected to experience / is experiencing** the highest water level at the dam since construction, and the performance of the dam at these loads has not been physically validated. While we are not anticipating any issues, we are monitoring the situation and will notify you if any dam safety concerns are identified during surveillance. The Cooloolabin Dam EAP is **now at / will soon reach** the Lean Forward Activation Level. Your organisation should enact any of your organisations plans related to this trigger.

While dam failure is judged unlikely, for your awareness, Emergency Services Personnel should be aware of the properties listed in Table 12 of the EAP when preparing for evacuations. Refer to Section 7.2 for dam failure inundation maps from a failure of the Dam.

We will not contact you again unless the lake level reaches the next trigger level listed in the EAP, which is **296.60 m AHD**. **This is / is not expected to happen within the next XXX hours**. However, please don't hesitate to contact the Flood Operations Centre on [REDACTED] if you require any further information. For Seqwater media related enquiries, please contact Seqwater's Media Team on [REDACTED]

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	69 of 83

Stand Up – Dam Safety (Flood Event Trigger)

(The need for evacuation of persons downstream of the Dam must be discussed)

Hello, this is [YOUR NAME] from the Seqwater Flood Operations Centre. I'm calling regarding the issue of a Stand Up notification required under the Cooloolabin Dam Emergency Action Plan.

This Stand Up notification is related to the Dam Safety - Flood trigger, identified as lake level **296.60 m AHD**. Cooloolabin Dam is experiencing an Emergency Flood Level. While Dam failure is / is not imminent, residents should prepare to evacuate.

The lake level is currently **XXX m AHD** and **rising / steady**. The level is expected to **continue to rise / peak by XXXX / start to fall soon**. This is subject to any further rainfall within the catchment. **There is the potential for the lake level to overtop the dam and outflows increase significantly**. We are monitoring the situation.

The Cooloolabin Dam EAP is **now at / expected to soon reach** the Stand Up Activation Level. **Due to the speed of the situation, the Watch & Act / Emergency Warning Emergency Alert has been / should be issued**. Your organisation should enact any plans related to this trigger, including any necessary evacuations of downstream communities.

The Cooloolabin Dam EAP will be activated and in accordance with this activation, the possibility of a cascade failure of Wappa Dam will be determined.

(If EA already triggered): Be aware your community will be receiving these messages, be prepared for enquiries. Our communications team is available to assist with message content and sharing if required. {Contact number to be provided in email}.

We will follow this phone call up with an email, which will confirm this conversation **and include the pre-agreed content of the next EA that would be issued**. **If no adjustments are provided, we will request the issuing of this EA when we reach XXX and notify your organisation**.

We will not contact you again unless the situation changes significantly, **or another Emergency Alert is required to be issued**. **This is / is not** expected to happen within the next XXXX hours.

Emergency Services Personnel should be aware of the properties listed in Table 12 of the EAP when preparing for evacuations. Refer to Section 7.2 for dam failure inundation maps from a failure of the Dam.

In summary, Cooloolabin Dam is experiencing an Emergency Flood Level. While Dam failure **is / is not imminent**, residents should prepare to evacuate. We will be in further contact if the situation changes. Please don't hesitate to contact the Flood Operations Centre on [REDACTED] if you require any further information. For Seqwater media related enquiries, please contact Seqwater's Media Team on [REDACTED]

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-0029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	70 of 83

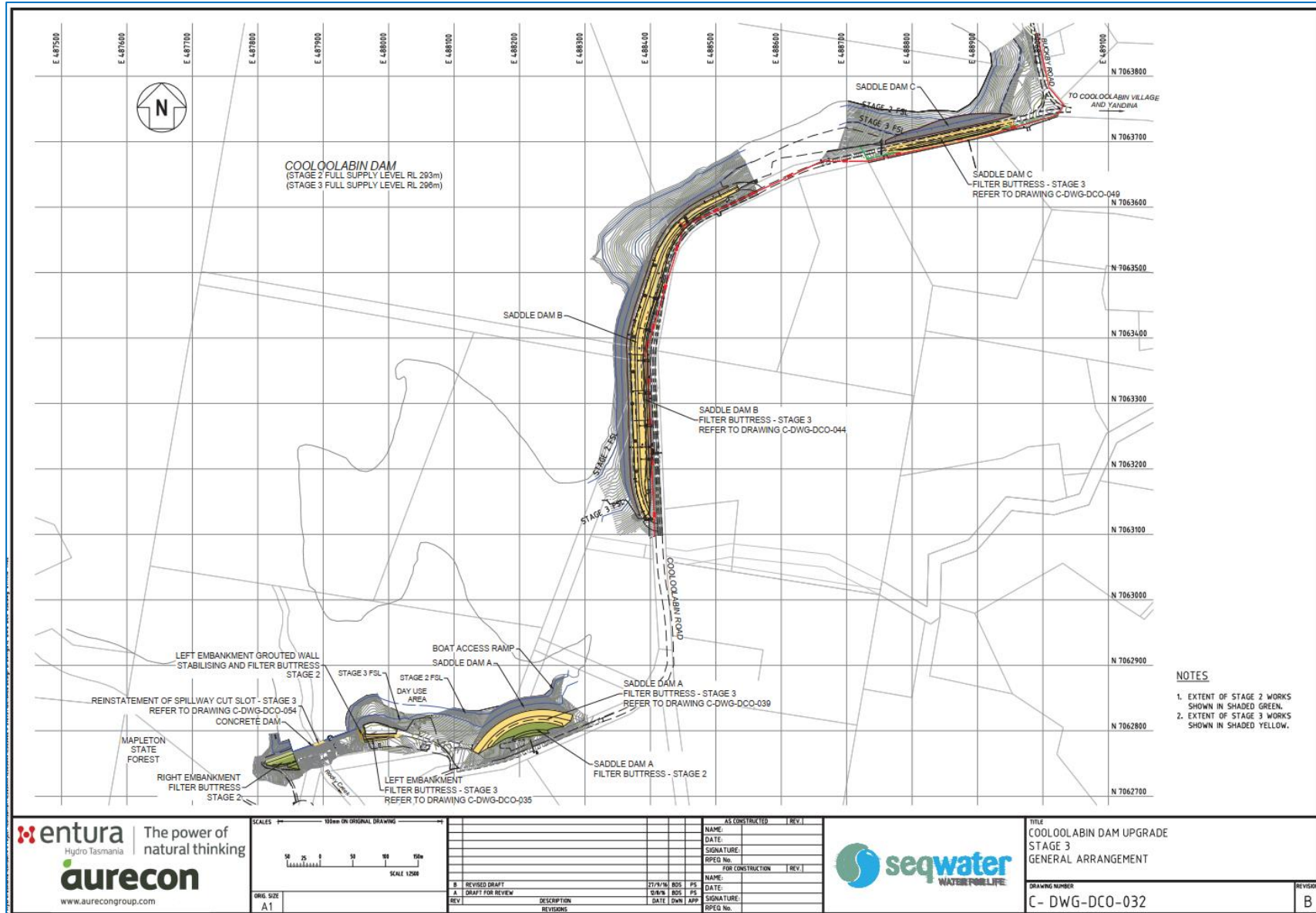
Appendix E – General arrangement plans

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-0029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	71 of 83

This document is the property of Seqwater. It must not be copied or reproduced in any way whatsoever without the authority of Seqwater. This document is uncontrolled when printed. An electronic database manages and stores the controlled version.



Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	72 of 83



Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 73 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

Appendix F – Identified structural failure modes

A Dam Safety Risk Assessment undertaken in accordance with ANCOLD Guidelines has been completed for Cooloolabin Dam. The failure modes that remained after the risk assessment screening process, their initiating events, and the section of this EAP under which these failure modes would be managed if a dam hazard trigger associated with the failure mode occurs is summarised in the table below.

Table 14: Identified structural failure modes for Cooloolabin Dam

Failure Mode Description	Initiating Event	Relevant Section of EAP for Actions	Relevant Section of EAP for Notifications
Piping in the following areas: <ul style="list-style-type: none"> Main Dam through the interface between the concrete section and the earth section. Main Dam through the right bank training wall interface. Main Dam Earth Embankment. Saddle Dam A. Saddle Dam B. Saddle Dam C. 	Flood	Section 5.1 – flood event. Section 5.2 – should any new seepage, increased seepage or seepage containing earth material be identified.	Use Table 6 for flood event notifications and Table 10 for notifications for dam seepage triggers and actions.
Piping in the following areas: <ul style="list-style-type: none"> Main Dam through the interface between the concrete section and the earth section. Main Dam through the right bank training wall interface. Main Dam Earth Embankment. Saddle Dam A. Saddle Dam B. Saddle Dam C. 	Seepage or Earthquake	Use Section 5.2 – should any new seepage, increased seepage or seepage containing earth material be identified.	Use Table 10 for notifications for dam seepage and structural damage triggers and actions.
Saddle Dam A - Stability Failure	Flood	Section 5.1 – flood event Section 5.3 – structural damage or movement areas identified following an earthquake event.	Use Table 6 for flood event notifications and Table 10 for notifications for dam structural damage triggers and actions.
Saddle Dam A - Stability Failure	Movement or Earthquake	Section 5.3 - should any new structural damage or movement areas associated with Saddle Dam A be identified either during a routine dam safety inspection or in an inspection initiated immediately following an earthquake event.	Table 10 for notifications for dam structural damage triggers and actions.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	74 of 83

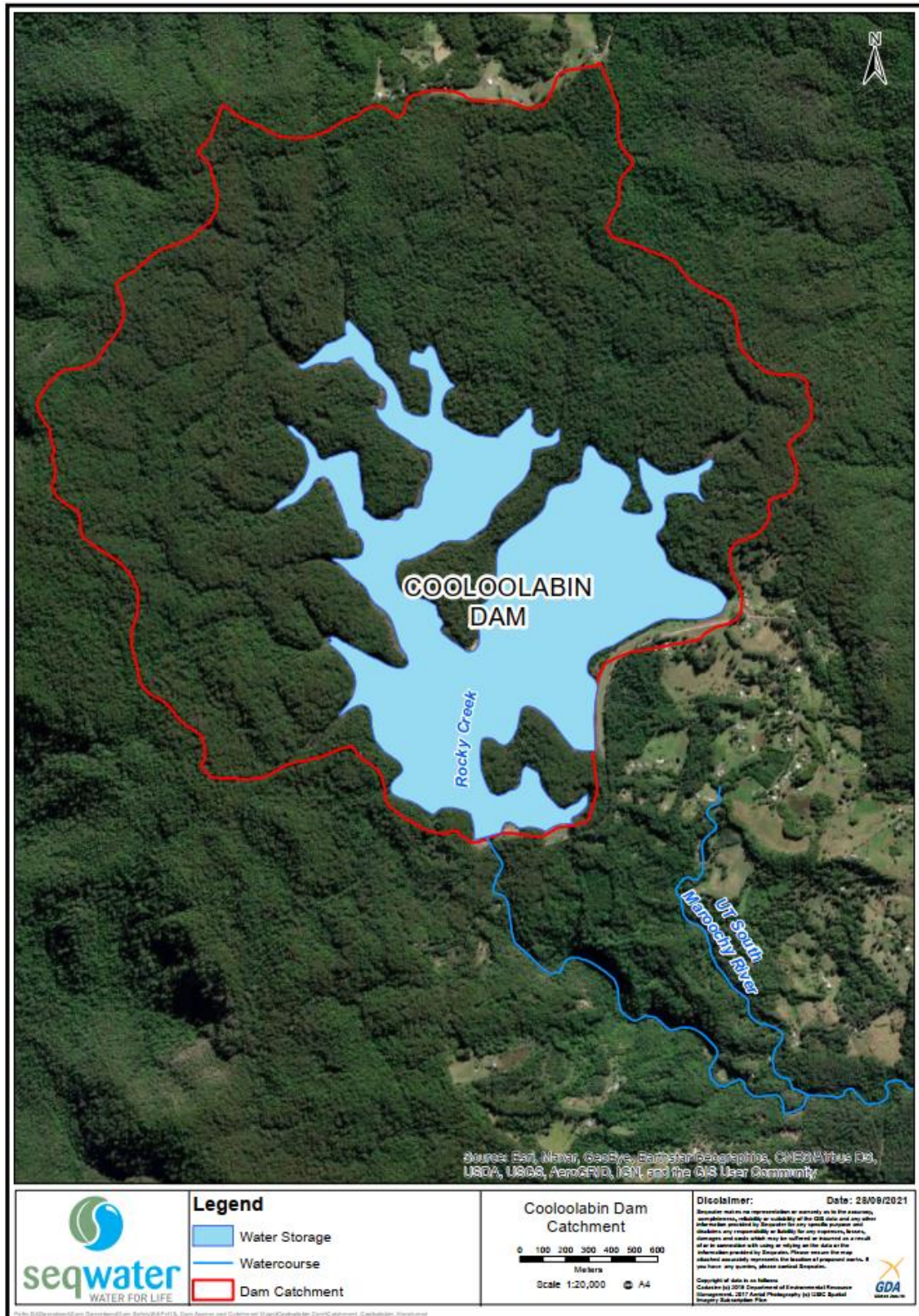
Appendix G – Area map and site access arrangements

All-weather access is available to the Dam and saddle dams via Cooloolabin Road.



Version No. 11.2	Document No. ERP-00029	Document Owner: Seqwater	Approval Date: 26/08/2025	Document Approver: General Manager - Service Continuity & Transformation	Page: 75 of 83
----------------------------	----------------------------------	------------------------------------	-------------------------------------	--	--------------------------

Appendix H – Catchment area map

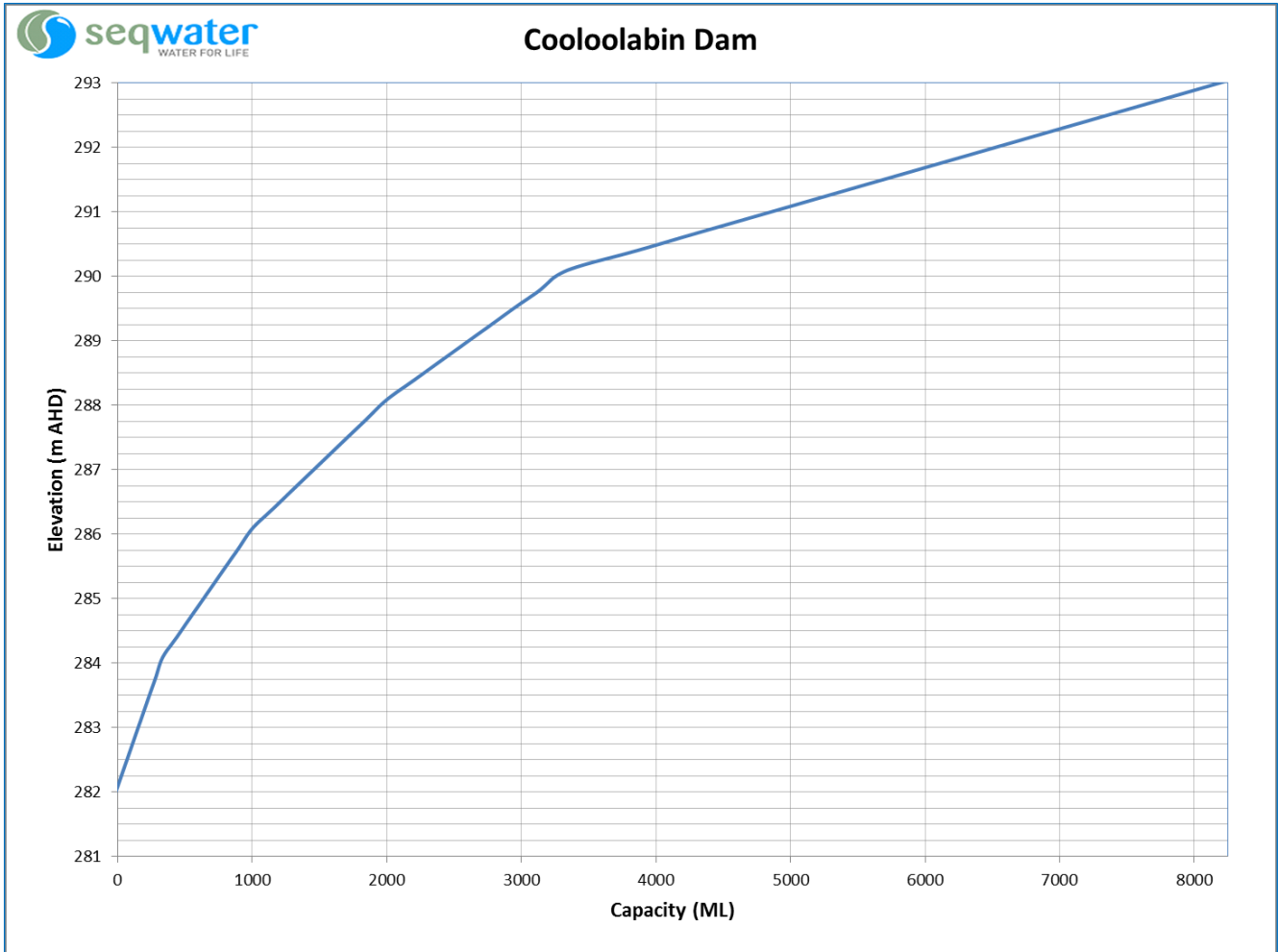


Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	76 of 83

This document is the property of Seqwater. It must not be copied or reproduced in any way whatsoever without the authority of Seqwater. This document is uncontrolled when printed. An electronic database manages and stores the controlled version.

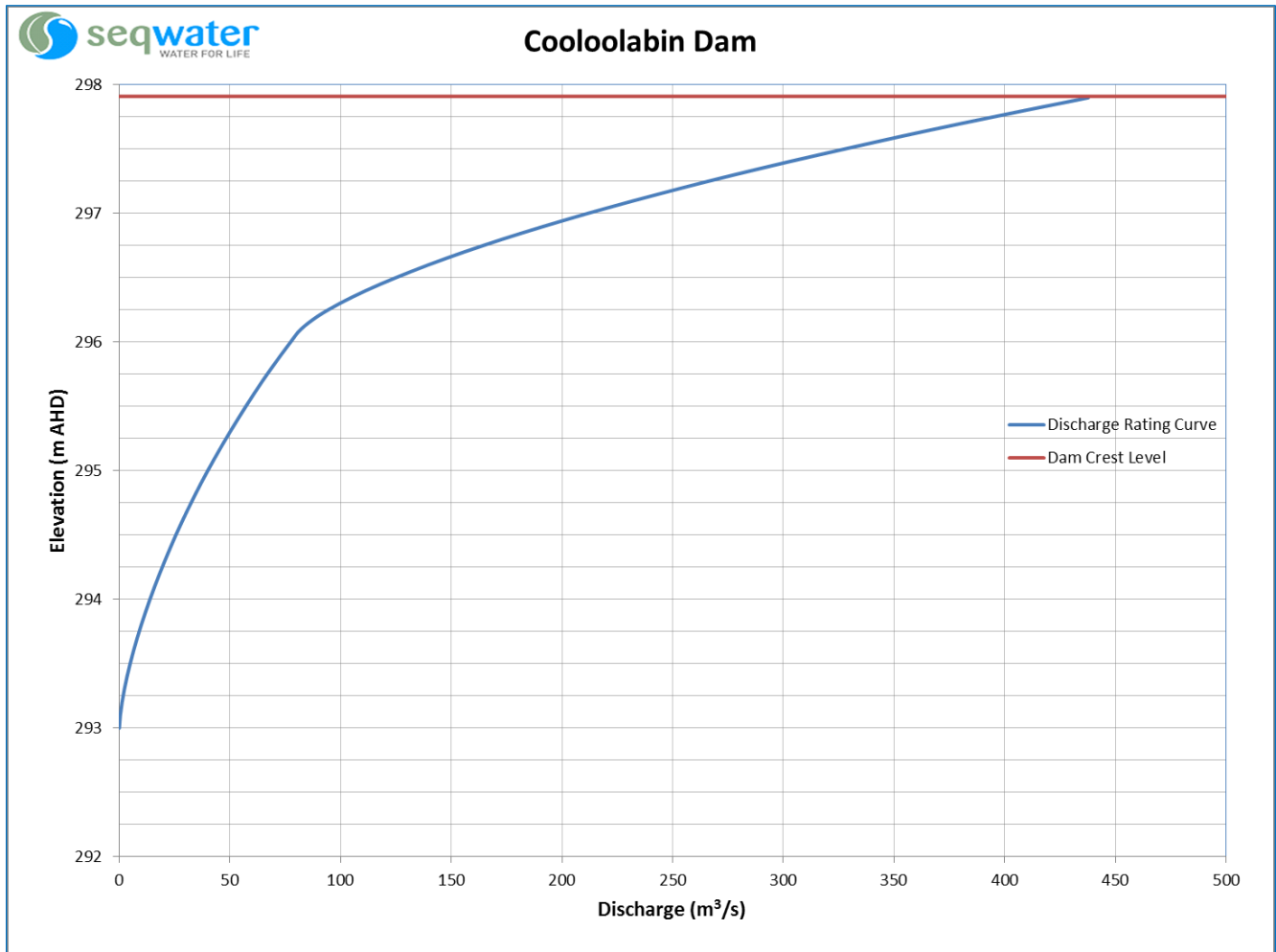
Appendix I – Storage and discharge curves

Storage curve



Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	77 of 83

Discharge curve



Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	78 of 83

Appendix J – Seqwater Dam Safety management information

Dam Safety – Staff development and training

Dam Safety training for Seqwater personnel involved in the operation and maintenance of the Dam occurs through both site instruction from suitably experienced staff members and formal education. The formal education component includes Certificate Level training at TAFE as well as attendance at industry training courses such as those provided by ANCOLD and the Queensland Dam Safety Regulator.

This training ensures that dam operations personnel understand the purpose and details around the following aspects of Dam Safety Management:

- Equipment at the Dam and the location of controls, tools and keys required to properly operate and maintain the Dam;
- The use of Operation and Maintenance Manuals;
- The use of Emergency Action Plans;
- The use of Flood Mitigation Manuals (if applicable);
- The routine surveillance and dam safety inspection procedures used at the Dam; and
- The proper practices for collecting and recording dam safety instrumentation data.

Seqwater also provides appropriate in-house dam safety training. This can include presentations to the Seqwater Board as well as Seqwater's Executive and Senior leadership teams. The program also involves training of dam operations personnel to ensure that their role in the management of the dams is properly understood.

The need for operator training varies depending on the individual operator's qualifications and experience; however mandatory training requirements apply to all operations staff with responsibilities at Seqwater's gated dams. Seqwater also conducts annual flood exercises that simulate Flood Events at its gated dams, in accordance with the requirements of relevant Flood Mitigation Manuals.

Seqwater's approach to dam safety training is to develop an ongoing awareness of the need for vigilance, surveillance and maintenance in providing a successful Dam Safety Management Program. Seqwater believes that safe management of dams is a frame of mind that involves all the people concerned; from Seqwater's CEO to the dam operators responsible for day-to-day operations and maintenance at a dam site.

Dam Safety documentation

Seqwater requires the following documentation to be available for the Dam to support the Emergency Action Plan:

- Investigation, Design, and Construction documentation and if available, the Design Report. This information is collated within the Dam Data Book;
- As Constructed details including plans and drawings;
- Operation and Maintenance Manuals;
- Dam Inspection Reports;
- Dam Safety Reviews;
- Flood Mitigation Manuals (required only for gated dams);
- Flood Operations procedures.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	79 of 83

Dam Safety inspections and surveillance

Surveillance policy

Seqwater undertakes dam surveillance in accordance with the recommendations contained in the *ANCOLD Guidelines on Dam Safety Management*. This is considered best practice for the management of large dams in Australia. This relates to both routine visual inspection of the Dam and the gathering and analysis of data from dam safety instrumentation installed at the Dam. Seqwater undertakes the following inspections at the Dam on a continual basis.

Annual and five-yearly comprehensive inspections

Seqwater schedules and completes Annual and five-yearly Comprehensive inspections at the Dam in accordance with the *Dam Safety Conditions* issued by the Dam Safety Regulator. These inspections are undertaken by a suitably qualified and experienced Dam Safety Engineer. The inspections are conducted in accordance with the *Queensland Dam Safety Management Guidelines* and the *ANCOLD Guidelines on Dam Safety Management*. Copies of the inspection reports are provided to the Dam Safety Regulator for independent review once the inspections are completed.

Dam Safety review

Seqwater schedules and completes a Dam Safety Review at the Dam in accordance with the *Dam Safety Conditions* issued by the Dam Safety Regulator. The reviews are conducted in accordance with the *Queensland Dam Safety Management Guidelines* and the *ANCOLD Guidelines on Dam Safety Management*. Copies of the Dam Safety review reports are provided to the Dam Safety Regulator.

Dam Safety routine inspection

Routine visual inspections are undertaken at the Dam to identify and report on dam safety deficiencies by visual observation. These inspections are undertaken by the staff responsible for day-to-day operations at the Dam as part of their duties. Frequency of inspection is dependent on the dam consequence category provided in the ANCOLD guidelines. Additionally, a risk assessment is undertaken by Seqwater to determine if a reduced or increased frequency of inspection is acceptable to the frequency of inspections outlined by ANCOLD. The Consequence Category of the Dam is High A. Visual inspections are undertaken a minimum of tri-weekly and may be increased when the dam is spilling.

Dam Safety instrumentation data gathering and analysis

Dam Safety instrumentation is used to monitor the structural performance of a dam. This instrumentation monitors a range of dam safety parameters that vary from dam to dam but can include rainfall, lake level, seepage, pore pressure and uplift pressure, surface movement, internal movement, and post tensioning. Frequency of data gathering is dependent on dam hazard and consequence category and is undertaken in accordance with ANCOLD guidelines.

All gathered instrumentation data is provided electronically to Seqwater's Dam Safety Team. The data is graphed and analysed by a suitable qualified Dam Safety Engineer and any anomalies are investigated by a suitably qualified Dam Safety Engineer.

Earthquake monitoring

Seqwater receives earthquake notifications in real time directly from Geoscience Australia as earthquakes are detected. The notifications provide an indication of earthquake magnitude by a number that characterises the relative size of an earthquake based on the maximum motion recorded by a seismograph. The actions undertaken by Seqwater following receipt of an earthquake notification from Geoscience Australia identifying an earthquake of greater than magnitude 3 in South East Queensland are described in Sections 5.2 and 5.3.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	80 of 83

Appendix K – Notification and management arrangements

Management structure

The management structure used by Seqwater to manage an emergency, including dam safety emergencies, is shown in Figure 2.

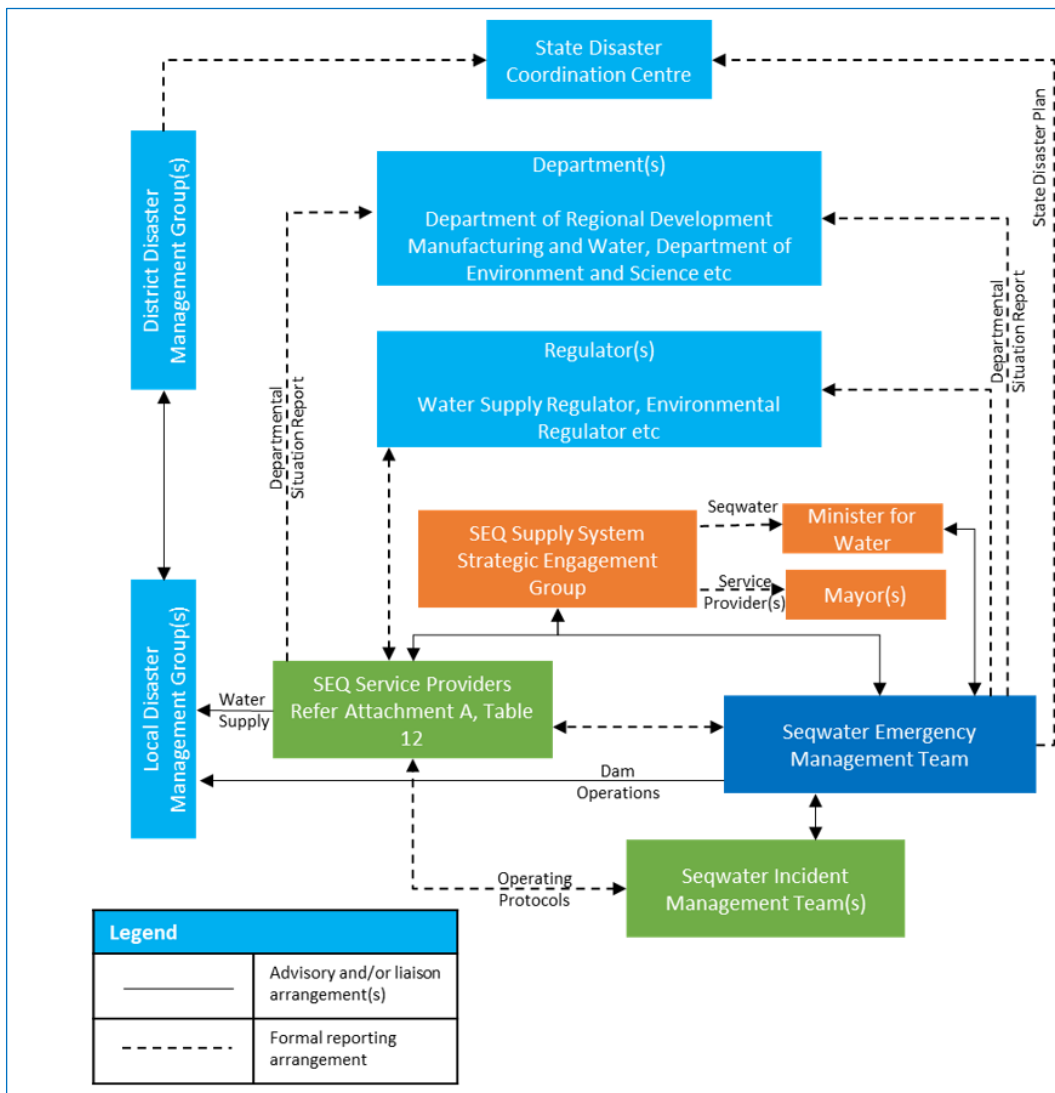


Figure 2: Emergency Communication Pathway²

² This figure is taken from the Bulk Authority Emergency Management Manual (MAN-00276). The Department of Regional Development, Manufacturing and Water is now the Department of Local Government, Water and Volunteers. The Department of Environment and Science is now the Department of Environment, Tourism, Science and Innovation.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	81 of 83

Roles for Dam Safety incidents and emergencies

When a potential dam hazard is initially identified by a Seqwater staff member it is immediately reported to Seqwater's Duty Emergency Advisor via Seqwater's 24/7 Incident and Emergency Hotline by phoning [REDACTED]

If the incident or emergency is a terrorist act, the Terrorism contacts in Appendix A should be contacted first. In this situation, Queensland Police Service will be the leading response agency with Seqwater providing input as required.

Once a potential dam hazard is reported and verified, an Incident Management Team Leader is appointed by the Duty Emergency Advisor using the appropriate roster. Prior to the incident Management Team Leader being appointed, normal operational arrangements apply to the management of the site. A Duty Manager will be appointed from the Incident Roster when the incident is reported if judged necessary by the Incident Management Team Leader.

Further details of the requirements of these roles are outline in the table below.

Table 15: Incident management roles

Role	Requirements
Duty Manager	<ul style="list-style-type: none"> • Suitably experienced Senior Seqwater Manager • Takes responsibility for overall management of Seqwater's response to the emergency, including: <ul style="list-style-type: none"> ○ Directing the actions to be undertaken by Seqwater at the Dam; ○ Determining the EAP Activation Level; and ○ Providing suitable notifications to stakeholder agencies and the public.
Incident Management Team Leader	<ul style="list-style-type: none"> • Experienced Dam Safety Engineer • Manages on-site response • Provides advice to Duty Manager in relation to: <ul style="list-style-type: none"> ○ Appropriate frequency of site inspection; ○ Requirement to mobilise an operator to site for continuous monitoring; ○ Actions required on site to ensure public safety; ○ Physical intervention actions to ensure the structural safety of the Dam; ○ Escalation of the EAP Activation Level; ○ Likelihood of dam failure leading to release of water and consequent increased hazard to people downstream.

If the Incident Management Team is formed prior to the appointment of a Duty Manager, the Incident Management Team Leader will undertake the role of a Duty Manager until a Duty Manager is appointed. During a dam safety incident or emergency, the Incident Management Team Leader and Duty Manager can be contacted by phoning [REDACTED]

Roles for Seqwater Dam Release Notification service

Rainfall events can cause outflows at the Dam and trigger notification of potential dam hazards. Similar outflow events and corresponding notifications (refer Section 5.4) occur frequently at multiple Seqwater dams at once. In this context, dam hazard notifications while at Alert status are generally routine, are not an incident for Seqwater's Emergency Response Plan and rarely impact on public safety.

The roles to perform the routine (non-incident) dam outflow notifications for this EAP are as follows:

- Seqwater's Duty Communications Advisor: responsible for issuing the public notifications in accordance with Seqwater's *Dam Release and Spilling Communication Procedure*; and
- Seqwater's Duty Senior Flood Operations Engineer: responsible for providing technical advice in relation to any notifications required.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	82 of 83

The Duty Senior Flood Operations Engineer is responsible for monitoring dam outflows and lake levels and escalating response in accordance with Section 5.1 if necessary.

Seqwater Dam Release Notification service

Seqwater provides a free Dam Release Notification service to residents living downstream of dams and for any other interested parties. This free notification service provides subscribers with notifications by their choice of email, SMS to mobile phones, or recorded messages to telephone landlines. These notifications are issued to inform the subscriber that an outflow from the Dam has commenced or is about to commence; outflows have reached a level where they may pose a hazard to the safety of persons or property downstream of the Dam (referred to as downstream release hazard); and when the Bureau commences issuing relevant flood warnings for the watercourse downstream of the Dam.

Seqwater has widely promoted and continues to promote the Dam Release Notification Service. Ahead of each wet season, Seqwater undertakes communication (via social media and Seqwater's website) about its Dam Release Notification Service. Details of this service are available on Seqwater's website – www.seqwater.com.au

It is important to understand that Dam Release Notifications from Seqwater are advice of the outflows from the Dam. There may be other sources of water contributing to flooding in waterways and floodplains downstream of the Dam. It is also important to be aware that these notifications are not indicating that there is a definite downstream release hazard, but rather that the Dam is overflowing and operating normally and that safety hazards downstream of the Dam are possible due to Dam outflows.

Dam Release Notifications do not provide information on river levels, or predictions about areas that may be inundated by flood waters in a flood event. Subscribers to the service should consider information available from other sources, which may include:

- Details of road closures, inundation flood mapping and information regarding and evacuation arrangements, from Local Councils and Disaster Management Groups.
- Information on river levels and flooding from the Bureau. Seqwater issues a notification to subscribers when the Bureau commences issuing relevant flood warnings for the watercourse downstream of the Dam. Seqwater does not issue further Dam Release Notifications while the Bureau are issuing flood warnings in the same area. The reasons for this are:
 - The Bureau is the lead agency for the provision of flood warning information to the public. Flood warning information issued by other agencies that can be seen to be in competition with flood warning information issued by the Bureau has the potential to create public confusion during an emergency event.
 - Flooding downstream of the Dam will be caused by a combination of dam outflows and flow contributions from other sources. These flow contributions from other sources are not assessed or estimated by Seqwater. Therefore, the Bureau are better placed than Seqwater to advise the public on flooding downstream of the Dam once the Bureau commence issuing flood warnings.
- Emergency services warnings, including information from Queensland Police Service, and the Queensland Fire Department.

Version No.	Document No.	Document Owner:	Approval Date:	Document Approver:	Page:
11.2	ERP-00029	Seqwater	26/08/2025	General Manager - Service Continuity & Transformation	83 of 83