

# Callide Dam

## Fact Sheet

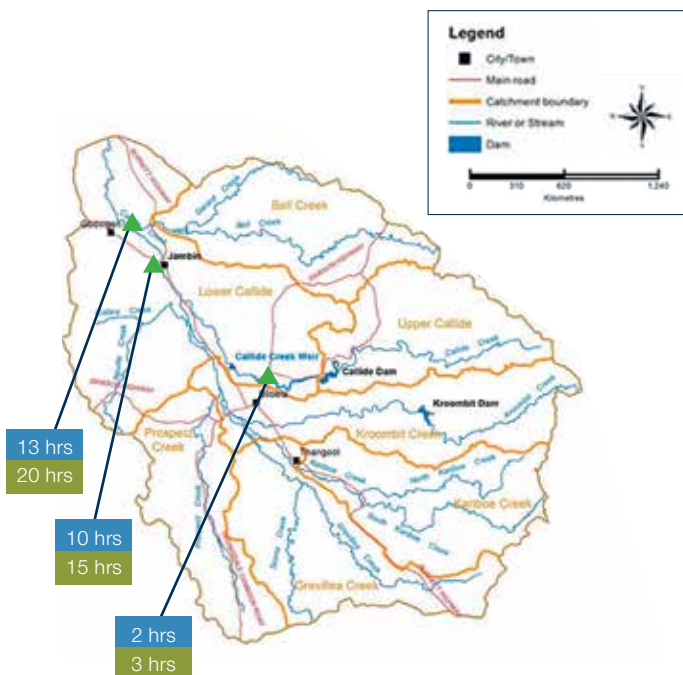
### What is the purpose of Callide Dam?

- Callide Dam is a key component of the Callide Valley Water Supply Scheme, located within the Fitzroy Basin.
- Callide Dam is a water supply dam for the Callide Power Station, Biloela township, irrigation and to supplement the downstream groundwater supplies.
- Callide Dam was not designed as a flood mitigation dam and does not include a flood mitigation compartment.
- The area downstream of Callide Dam receives flows from several major creek systems including Lower Callide, Kariboe, Prospect, Grevillea and Bell Creeks.

### What types of flows can be expected from Callide Dam?

- SunWater regularly makes water releases through the dam's outlet valve based on:
  - downstream demand for end users
  - necessity to recharge underground water supplies.
- When the dam is full, further inflows to the dam are passed through the spillway gates to protect the integrity of the dam structure.

### Callide Valley Catchment



- Minimum travel time for outflows from Callide Dam to impact properties
- Minimum travel time for peak outflows from Callide Dam to impact properties

Note: flood flows may arrive faster from other creeks. These times are for dam outflows only.

### Dam Details

#### WATERCOURSE

Callide Creek

#### UPSTREAM DAM CATCHMENT AREA

520km<sup>2</sup>

#### TOTAL CALLIDE VALLEY CATCHMENT AREA

4,650km<sup>2</sup>

#### NEAREST TOWN

Biloela

#### STORAGE CAPACITY & LEVEL AT 100%

129,040ML, 216.1m AHD

#### GATE OPERATIONS COMMENCEMENT LEVEL

215.5m AHD

#### AUTOMATIC GATE OPERATIONS LEVEL

216.259m AHD

#### OUTLET VALVE CAPACITY

7.5m<sup>3</sup>/s

### How do the gates work?

- The Callide Dam spillway gates are designed to open automatically using a float system when the water level reaches 216.259m AHD.
- The gates continue to open as the storage level continues to rise. They lower as the storage level reduces.
- The gates commence opening at 215.5m AHD by manually pumping water into the float chamber when weather conditions permit.



The gates have a series of chambers and counter weights that are influenced by the water level in the storage. When the water level rises above 216.259m AHD the gates will begin to open.

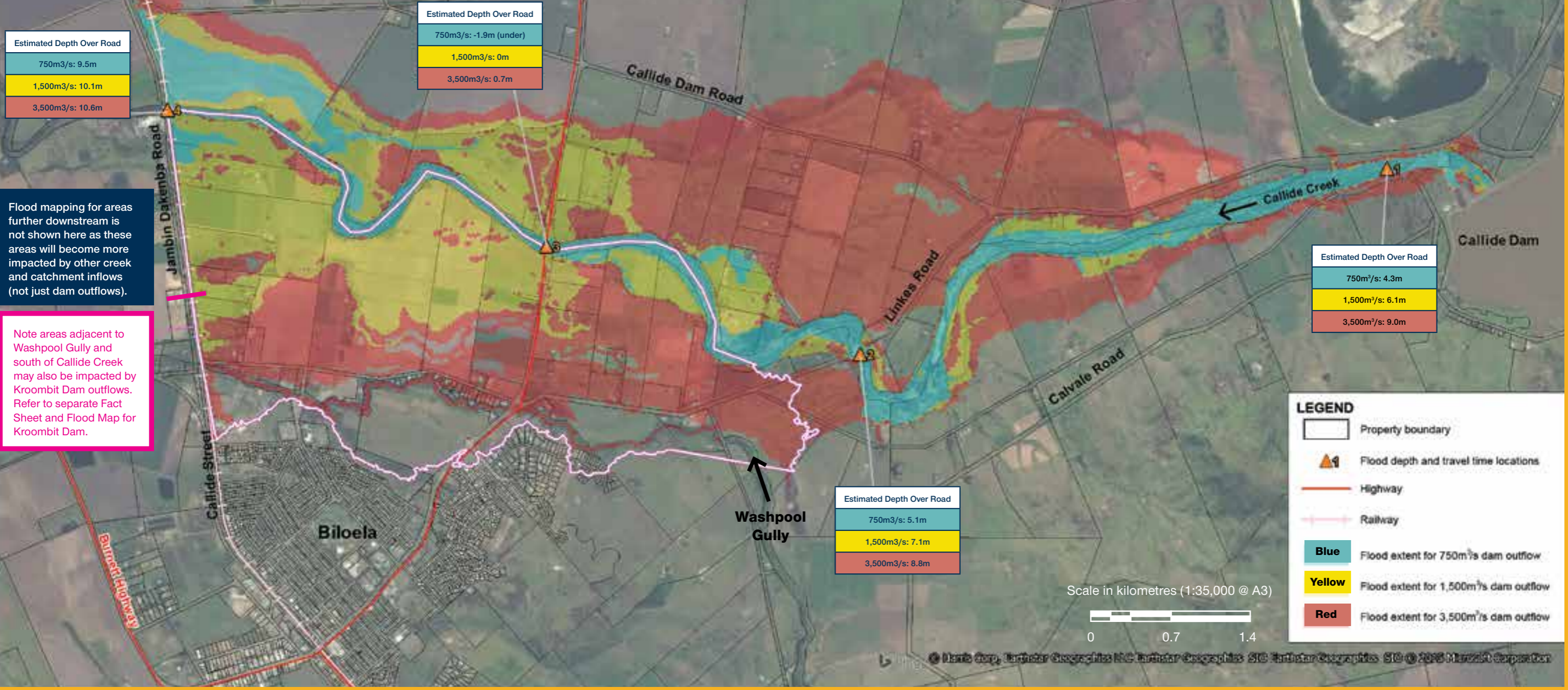
If the water level continues to rise (1), the gates will continue to progressively open (2&3) until the discharge matches inflows and the storage level stabilises. The rate of gate opening is a function of the rate of rise of the storage. The gates do not rely on any computer or electrical control equipment to function.



# Flood Impact Mapping for Outflows from Callide Dam Only

Flood extents shown are indicative only.

Location	Approx Flood Travel Times from Callide Dam
▲ 1. Callide Creek Crossing Road	0hr : 15min
▲ 2. Linkes Road	1hr : 15min
▲ 3. Dawson Highway	1hr : 45min
▲ 4. Jambin Dakenba Road	2hr : 15min



Flood mapping for areas further downstream is not shown here as these areas will become more impacted by other creek and catchment inflows (not just dam outflows).

Note areas adjacent to Washpool Gully and south of Callide Creek may also be impacted by Kroombit Dam outflows. Refer to separate Fact Sheet and Flood Map for Kroombit Dam.

**Note:**

1. Areas further downstream will progressively become more impacted by other rainfall and inflows that occur downstream of the dam (not shown here).
2. Areas adjacent to Washpool Gully may also be impacted by flows from Kroombit Creek and Kroombit Dam outflows. Refer to separate Fact Sheet and Flood Map for Kroombit Dam.
3. Flood Travel Times are indicative times for flow to reach the downstream locations as shown, following outflow from the dam. The time for peak flows to occur will typically take longer following commencement of dam outflows.
4. Depth at locations as shown as indicative depths over (or under) existing road crossings.
5. Maximum historical dam outflow is approximately 3,500 m<sup>3</sup>/s, which excludes Washpool Gully flows (refer Note 2). Higher dam outflows than this are possible.



# SunWater Flood Warning Communications About Dam Outflows

**Please note that this information is complementary to the Banana Shire Council (BSC) and the Local Disaster Management Group's (LDMG) multi-channel notifications and warnings.**

Example Situation	SunWater actions	Where you can find information from SunWater	Typical messages from SunWater
<b>PREPAREDNESS</b> <i>High rainfall event possible, no certainty but possibility of dam outflow.</i>	<ul style="list-style-type: none"> <li>Regular updated dam levels available on website</li> <li>Notify BSC of current dam level</li> <li>Provide general community update regarding dam levels</li> </ul>	<ul style="list-style-type: none"> <li>Sunwater Facebook Page</li> <li>Twitter @SunWaterLimited</li> <li>SunWater Website</li> <li>SunWater App</li> </ul>	<ul style="list-style-type: none"> <li>To BCS:                             <ul style="list-style-type: none"> <li>current dam level</li> </ul> </li> <li>To general Callide Valley Community:                             <ul style="list-style-type: none"> <li>reference to BOM forecast</li> <li>current dam level</li> </ul> </li> </ul>
<b>DAM OUTFLOWS POSSIBLE OR EXPECTED &amp; FLOODING POSSIBLE</b> <i>Due to high rainfall forecast or in progress.</i>	<ul style="list-style-type: none"> <li>Notify LDMG &amp; Police</li> <li>Notify registered EAP downstream residents (near dam)</li> <li>Issue general community update</li> </ul>	<ul style="list-style-type: none"> <li>SMS (registered EAP downstream residents near dam)</li> <li>Sunwater Facebook Page</li> <li>Twitter @SunWaterLimited</li> <li>SunWater Website</li> <li>Radio Stations</li> <li>(SunWater will provide information to the following stations)                             <ul style="list-style-type: none"> <li>ABC (837 AM)</li> <li>ABC (94.9 FM)</li> <li>Breeze (89.7 FM)</li> <li>FRESH (91.9 FM)</li> <li>REBEL (88.9 FM)</li> <li>ZINC (927 AM)</li> </ul> </li> <li>SunWater App</li> </ul>	<ul style="list-style-type: none"> <li>To BSC, LDMG &amp; Police:                             <ul style="list-style-type: none"> <li>current dam level &amp; if levels are increasing</li> </ul> </li> <li>To general Callide Valley Community &amp; registered EAP downstream residents (near dam):                             <ul style="list-style-type: none"> <li>possible or expected dam outflows &amp; potential for flooding</li> <li>review your emergency plan</li> </ul> </li> </ul>
<b>DAM OUTFLOWS UNDERWAY &amp; FLOODING POSSIBLE</b> <i>Due to high rainfall underway across catchment.</i>	<ul style="list-style-type: none"> <li>Notify LDMG &amp; Police</li> <li>Notify registered EAP downstream residents (near dam) of gate operation &amp; that outflows have commenced</li> <li>Issue general community update</li> </ul>		<ul style="list-style-type: none"> <li>To BSC, LDMG &amp; Police:                             <ul style="list-style-type: none"> <li>current dam level</li> <li>dam outflows have commenced</li> </ul> </li> <li>To general Callide Valley Community &amp; registered EAP downstream residents (near dam):                             <ul style="list-style-type: none"> <li>dam outflows have commenced</li> <li>review/enact your emergency plan/know when to evacuate</li> </ul> </li> </ul>
<b>FLOODING OCCURRING OR LIKELY NEAR DAM</b> <i>In blue, yellow &amp;/or red flood zone. (Refer map on centre page)</i>	<ul style="list-style-type: none"> <li>Notify LDMG &amp; Police</li> <li>Notify registered EAP downstream residents (near dam) of gate operation &amp; flooding is expected in blue, yellow and/or red zone or greater</li> <li>Issue general community update</li> </ul>		<ul style="list-style-type: none"> <li>To BSC, LDMG &amp; Police:                             <ul style="list-style-type: none"> <li>dam outflows are occurring (including rate)</li> <li>downstream flooding in blue, yellow &amp;/or red zone or greater is expected</li> </ul> </li> <li>To general Callide Valley Community &amp; registered EAP downstream residents (near dam):                             <ul style="list-style-type: none"> <li>dam outflows are occurring</li> <li>floodings in blue, yellow &amp;/or red zone or greater is expected</li> <li>recommended action required</li> </ul> </li> </ul>
<b>OTHER DAM INCIDENTS</b> <i>E.g. major earthquake.</i>	<ul style="list-style-type: none"> <li>Liaise with State Disaster Coordination Centre to issue community-wide advice via state's emergency alert system</li> </ul>		<ul style="list-style-type: none"> <li>Description of situation at dam</li> <li>Enact your emergency plan/move to higher ground</li> </ul>
<b>DAM GATES CLOSED</b> <i>Flooding may still be underway downstream and across the catchment.</i>	<ul style="list-style-type: none"> <li>Notify registered EAP downstream residents (near dam) of closure of gates</li> <li>Issue general community update as required</li> </ul>		<ul style="list-style-type: none"> <li>To BSC, LDMG &amp; Police:                             <ul style="list-style-type: none"> <li>current dam level</li> <li>monitor dam levels on SunWater website</li> </ul> </li> <li>To general Callide Valley Community &amp; registered EAP downstream residents (near dam):                             <ul style="list-style-type: none"> <li>dam gates are closed &amp; outflows have ceased</li> <li>further updates will be provided if gates are likely to reopen</li> </ul> </li> </ul>
<b>Other sources of information</b>			
Banana Shire Council website	<a href="http://www.banana.qld.gov.au">www.banana.qld.gov.au</a>		
Banana Shire Disaster Management Information Facebook Page	<a href="https://www.facebook.com/Banana-Shire-Disaster-Management-Information-182147428505827">www.facebook.com/Banana-Shire-Disaster-Management-Information-182147428505827</a>		
Bureau of Meteorology	<a href="http://www.bom.gov.au">www.bom.gov.au</a>		
ABC	<a href="http://www.abc.net.au/local">www.abc.net.au/local</a>		
SES Domestic & Business Disaster Plans	<a href="http://www.emergency.qld.gov.au/ses">www.emergency.qld.gov.au/ses</a>		
QFES	<a href="http://www.getready.qld.gov.au">www.getready.qld.gov.au</a>		
Ergon Energy	<a href="http://www.ergonenergy.com.au">www.ergonenergy.com.au</a>		
Queensland Government Disasters & Alerts	<a href="http://www.qldalert.com">www.qldalert.com</a>		



## Contact Details

To enquire about Callide Dam, please phone 13 15 89 or email us via the website: [www.sunwater.com.au/home/contactus](http://www.sunwater.com.au/home/contactus)

To view Callide Dam storage levels via the website: [www.sunwater.com.au/home/water-storage-levels/callide-dam](http://www.sunwater.com.au/home/water-storage-levels/callide-dam)

