

Flood Emergency Response Plan St Cecilia's Catholic Primary School

Gardner Wetherill Architects

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ACKNOWLEDGEMENT OF COUNTRY

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We respect the knowledge, skills and lived experiences of Aboriginal and Torres Strait Islander Peoples, who we continue to learn from and collaborate with. We also extend our respect to all First Nations Peoples, their cultures and to their Elders, past and present.





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1 IMPORTANT: WHAT TO DO DURING A FLOOD EMERGENCY

If you are reading this report because there is an ongoing flood emergency at St Cecilia's Catholic Primary School, refer to Chapter 6 for a list of emergency triggers and response actions.

Alternatively, you can use the flood emergency response checklist provided in Appendix A. This has the same content as Chapter 6, but in the more convenient form of a checklist for use during a flood emergency.

All emergency contact details are included in Appendix D.



2 INTRODUCTION

2.1 Context and Background

St Cecilia's Catholic Primary School has submitted a development application to the Hunter and Central Coast Regional Planning Pannel to demolish existing buildings and construct a new building on the school site at 7-15 Panonia Road, Wyong (Lots 4-8 Sec. 5 in DP 4361 and Lot 22 in DP 569261). During a meeting of the Panel on 9 August 2023 it was concluded that the Panel would defer Development Approval until more comprehensive flood documentation was provided to it.

In the Record of Deferral from Hunter and Central Coast Regional Planning Pannel dated 11 August 2023, it states that a revised flood assessment report that includes a Flood Emergency Response Plan needs to be submitted to Council.

A Flood Emergency Response Plan (FERP) must therefore be prepared for the approved development. This FERP addresses the above requirement from the Planning Panel by detailing the most appropriate flood emergency management strategy for the school.

St Cecilia's Catholic Primary School is an existing development and the proposed development would not increase the maximum number of people that could be on site at any given time. As such, the proposed development would not change the number of people exposed to flood risk. This FERP is therefore a tool for reducing the existing flood risk at the site. However, the FERP cannot eliminate this risk.

The strategy was prepared with reference to the following flood data:

- Flood Information Certificate issued by Central Coast Council (15 November 2022)
- Wyong River Floodplain Risk Management Study and Plan prepared by Catchment Simulation Solutions (January 2020).

2.2 Scope of this FERP

The primary focus of this FERP is managing flood risk to life, with some measures to reduce risk to property. It does not include measures to reduce the risks of flooding to corporate property or profitability.

The report is organised in the following sections:

- Chapter 1 points the reader to the appropriate sections of this FERP for use during a flood emergency
- Chapter 2 contains:
 - a description of the context and location
 - a detailed description of the proposed development, including the relevant architectural plans and elevation drawings
 - a description of the proposed site management arrangements (school hours, operational hours, school capacity and staff)
- Chapter 3 contains a description of flood behaviour and the site affectation
- Chapter 4 reviews the available flood warnings for the area
- Chapter 5 details key emergency management considerations, including a list of features to be incorporated on the premises to mitigate flood impacts
- Chapter 6 details actions to be undertaken before, during and after a flood emergency to keep everyone safe. This includes a list of triggers, a description of the staff roles/responsibilities and an emergency checklist



- WATER TECHNOLOGY WATER, COASTAL & ENVIRONMENTAL CONSULTANTS
- Appendix A summarises the content of Chapter 6 in a checklist format for use before, during and after an actual emergency
- Appendix B provides pre-prepared emergency messages to be sent to the school community should a flood occur
- Appendix C provides a list of flood emergency items that should be kept on site
- Appendix D provides a list of emergency contact details should a flood occur
- Appendix E is the Flood Information Certificate issued by Central Coast Council.

2.3 Location and Overview

Catholic Schools Broken Bay owns and operates St Cecilia's Primary School at 7-15 Panonia Road, Wyong (Lots 4-8 Sec. 5 in DP 4361 and Lot 22 in DP 569261). The site is bounded by Wyong River to the south, Panonia Road to the north, Wyong Bowling Club to the west and an existing dwelling to the east (Figure 2-1).



Figure 2-1 Site Overview (source: amended from Six Maps, NSW Govt. Spatial Services)

The development application proposes to demolish the existing demountable Building F on the southern margin of the site and the existing Buildings A, C and I in the school's north (Figure 2-2). The plans also include the construction of a new 2-storey building in the north-eastern corner of the site (Figure 2-3).

The ground floor of the new building will consist of an undercroft interactive outdoor learning area, plant, a store room and bathrooms (Figure 2-4). It will not include any classrooms. The first floor of the new building will include 6 new classrooms, plant and bathrooms (Figure 2-5). This level will be connected to the first floor of the hall building to the south-east via stairs.







Figure 2-2 Demolition plan







Figure 2-3 Site Plan



WATER TECHNOLOGY WATER, COASTAL & ENVIRONMENTAL CONSULTANTS















2.4 Floor Levels and Access

The site can be accessed by vehicles and pedestrians via Panonia Road. Vehicles are able to park in the existing car park along the western margin of the site or access the drop-off zone along Panonia Road. The new building can be accessed from the Panonia Road footpath via the paved area to the north-east of the existing staff building (Building D), which has a minimum level of 2.97 m AHD.

The first floor of the hall building can be accessed from the first floor of the new building.

Floor levels for all buildings on site can be found in Table 2-1.

	Level (m AHD)		
Now Puilding	Ground floor	3.00	
New Building	First floor	6.40	
Building B - Hall	First floor	4.55	
Building D – Staff Building	Ground floor	3.78	
Duilding E. Librony	Ground floor	4.52	
Building E - Library	First floor	7.41	
Building F – Classrooms	Ground floor	3.32	
Building H – Classroom	Ground floor	4.22	
Minimum ground level between new building's western end and Panonia footpath		2.97	
Low Point A	Low Point A		
Low Point B		2.11	
Low Point C		1.88	
Low Point D		1.90	

 Table 2-1
 Floor levels and relevant ground levels around the site

There are several low points along local roads, the highest of which is Low Point A, which has an elevation of 2.37 m AHD (Figure 2-6). This low point is located immediately to the west of the intersection of Panonia Road and Leppington Street.

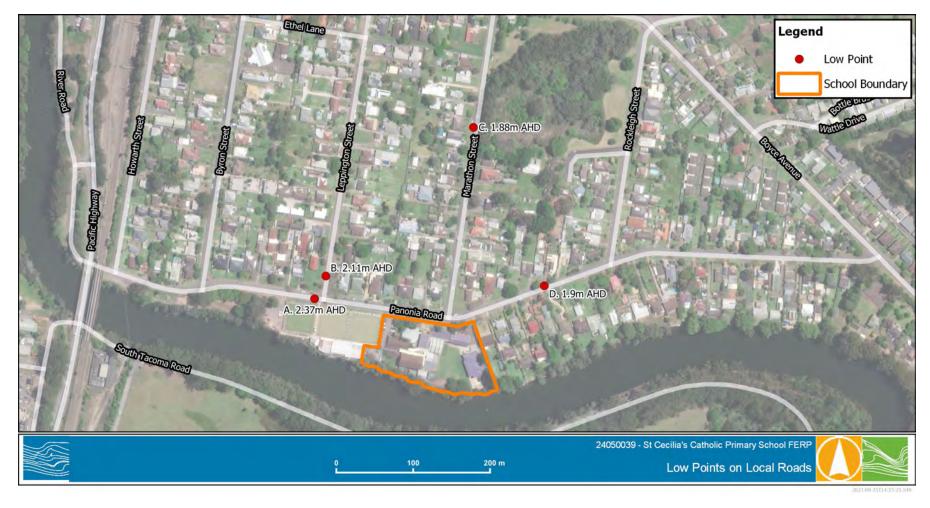
2.5 Topography

The site generally slopes downwards from west to east (Figure 2-3), with its lowest point at approximately 1 m AHD in the south-eastern corner of the school, behind the school hall (Figure 2-7). Along the southern margin of the site ground levels drop rapidly to the Wyong River. The highest level on site is 3.5 m AHD in the vicinity of the existing staff building (Building D).

The Panonia Road footpath rises slightly from 2.9 m AHD at the north-western corner of the school to 3.0 m AHD near the intersection of Panonia Road and Marathon Street before falling to 2.6 m AHD at the north-eastern corner of the site (Figure 2-7).



















2.6 Site Operations

St Cecilia's Catholic Primary School is an existing school with a school population of 308 students and 25 staff. The proposed development does not increase the number of people that may be on site at any given time (Table 2-2). During special events (e.g., Grandparents Day, school discos, etc.) there may be up to 1,000 people on site.

Similarly, the proposed development does not change the number of vehicles that could be on site at any given time, which remains at 23 (Table 2-2). Most students are dropped off and picked up by their parents or by bus. There are 5 buses that service the school of an afternoon.

Normal school hours are 8:15 am to 3:05 pm Monday through to Friday. However, the site is in operation from 7:30 am to 5:00 pm on weekdays and occasionally staff work at the school on the weekend. The school is in operation approximately 40 weeks each year.

Table 2-2	Summary	table of	site	operations
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Maximum number of people on site	333		
Maximum number of cars on site	23		
School's operating hours	7:30 am to 5:00 pm on weekdays		

The school's public address (PA) system is centrally controlled from the school office building (Building D).

The school uses the Compass app to communicate with parents/caregivers via email and SMS. This system has a 1,024 character limit.



3 FLOOD RISKS

3.1 Flood Generating Weather

Coastal areas of eastern Australia mostly receive flooding rains from so-called "east coast lows" that develop from time to time over the adjacent Tasman Sea. These are intense depressions off the coast and can produce thunderstorm activity associated with troughs.

Depressions can develop at any time of year but are most likely when sea surface temperatures are high and the air is humid. Therefore, these events usually occur in the summer months and over the first half of the year.

Flooding can also be a winter-spring phenomenon, associated with unusually frequent or active extra-tropical depressions and fronts. However, some major events have occurred in the summer half-year as systems of tropical origin extend or move south. Flooding is usually associated with southward-moving tropical systems, but in the cooler months, it may occur when well-developed cloud bands extend across the interior from the oceans north and northwest of Australia. East Coast Lows are historically prevalent in the winter months.

Rainfall patterns are also dependent on longer term weather patterns. Flooding is more prevalent in a La Niña year when rainfall is significantly greater than the mean average rainfall. Thunderstorms, which generally occur during the summer, can also result in localised flooding which could impact specifically on the site.

In summary, there are many different weather events which could cause intense rainfall in Wyong, leading to riverine flooding. There is no seasonality associated with flooding at Wyong and an event could occur at any time of day or night and on any day of the year.

3.2 Flood Probabilities

Flood probability can be expressed in more than one way. For example, a flood may be described as having a 100-year Average Recurrence Interval (ARI). This means that over many thousands of years, a flood of this magnitude would occur on average once in 100 years. This does not mean that a flood of this size only occurs once every 100 years. It is possible to have floods of this size in consecutive years or even 2 in the same year. This happened in several locations in Queensland and Victoria in 2010 and 2011.

Another way of expressing flood probability is in terms of Annual Exceedance Probability (AEP). A 100-year ARI flood has roughly a 1 in 100 AEP. That is, each year and every year it has a 1 in 100 or 1% chance of being reached or exceeded. This is perhaps a more helpful way of thinking about flood probabilities. A flood with a 1% AEP has about a 1 in 2 chance of being reached or exceeded in the average person's lifetime, the same probability of tossing a coin and getting a head. There were four floods of about this size on the Georges River between 1860 and 1889 but there has not been another since. This underlines the randomness of flood frequency.

Bigger floods can and do occur. There were several floods with greater than a 1% AEP experienced in NSW between 2020 and 2023. A flood with a 1 in 500 (0.2%) AEP has about a 1 in 6 chance of being reached or exceeded in the average person's lifetime, the same as tossing a die and getting a 6. This was about the frequency of the Lismore flood in 2022. The Eugowra flood in 2022 was larger than a 1 in 5,000 (0.02%) AEP event, which has about a 1 in 60 chance of being reached or exceeded in the average person's lifetime.

The largest flood that can occur is referred to as the Probable Maximum Flood (PMF). Although it has a very low probability of occurring in any one year (1 in 10,000 or less), events approaching a PMF have been recorded. Flooding may occur at any time of year and at any time of day.



3.3 Flooding of the Site

The site is subject to riverine flooding from the Wyong River, which flows eastwards along the site's southern boundary.

3.3.1 Flood Behaviour

A Flood Information Certificate for the site has been provided by Central Coast Council (Attachment B). The flood levels for the site have been extracted from the certificate and from the Wyong River Floodplain Risk Management Study and Plan (Catchment Simulation Solutions, 2020) and are provided in Table 3-1.

Table 3-1: Summary of flood levels at gauge 061386 and at the site

	FLOOD LEVEL (m AHD)				
Flood	Gauge 061386 (Wyong upstream of bridge)	Minimum Level on Site	Maximum Level on Site	Site Affectation	School Isolated
20% AEP	2.0	Approx. 1.9	Approx. 1.9	Flooded areas: Underneath the hall Grassed area 	Not Isolated
5% AEP	3.2	2.8	2.9	 Flooded areas: Underneath the hall Grassed area Underneath the new building Areas around Buildings E and F 	Not Isolated
1% AEP	4.0	3.2	3.4	 Whole site flooded except area around Building D Above floor flooding: Building F (up to 0.03 m deep) 	Site Isolated by High Hazard Floodwaters
PMF	6.7	4.9	4.9	 Whole site flooded Above floor flooding: Building B – Hall (up to 0.4 m) Building D – Staff (up to 1.2 m) Building E – Library ground floor (up to 0.4 m) Building F (up to 1.6 m deep) Building H (up to 0.7 m) 	Site Isolated by High Hazard Floodwaters

The area underneath the hall building and the grassed area to its west would be flooded in events as small as the 20% Annual Exceedance Probability (AEP) flood. An event of this magnitude has a 20% probability of occurring or being exceeded in any given year.



In the 5% AEP flood Building F, which contains the school canteen, may become isolated from the rest of the school buildings with a flood level of 2.8 - 2.9 m AHD, but the rest of the buildings would remain accessible. The hall building would be surrounded by floodwaters but would be accessible via the first floor of the new building.

Although flood levels in the 5% AEP flood exceed the Low Point A elevation of 2.4 m AHD, the school and Wyong Bowling Club to its west are located on a slight ridge between Panonia Road and Wyong River (i.e., the river bank). Thus, Panonia Road would not flood until flood levels to the east of the school reached approx. 2.8 m AHD. Therefore, the school would not be isolated in events up to and including the 5% AEP riverine flood (Figure 3-1).

It is noted that hydraulic hazard is a standard way to measure the threat posed by floodwaters to people and property, and it is based on the combination of maximum flood depth and velocity at any given location. Figure 3-2 shows the national flood hazard classification and the threat to life and property associated with each hazard class from H1 (minimum hazard) to H6 (maximum hazard). The minimum hydraulic hazard for a location can be identified using this classification system based on the flood depth at that location. In the 1% AEP flood the flood depth at Low Point A would be up to 0.98 m, which would have a minimum hydraulic hazard of H3 (Figure 3-2). Floodwaters of this hazard generally cause stability issues for vehicles, children and the elderly. Therefore, the school would be isolated in the 1% AEP flood.

Apart from the area in the northwest of the site where Building B is located, the entire site is within the extent of the 1% AEP flood with a maximum flood depth of approximately 1.73 m (Figure 3-3). The southern boundary and the eastern parts of the site would have high hazard floodwaters of hazard category H3 (unsafe for vehicles, children and the elderly) or above (Figure 3-2) in an event of this magnitude. Although Building F would be the only building with above floor flooding (to a depth of approx. 0.03 m), most buildings would be isolated from one another.

In the PMF the site would be entirely flooded (Figure 3-4), with above floor flooding in all buildings except for the first floor of the new building and the first floor of the existing library.

In the 1% AEP event the school would be isolated by high hazard floodwaters on local roads, which would flood Low Point A to a depth of up to 1.0 m.

3.3.2 Flood Duration and Rate of Rise

The Wyong River Floodplain Risk Management Study and Plan (Catchment Simulation Solutions, 2020) suggests that in a flood rising as fast as the PMF the local roads could be cut within 6 hours of the start of the rainfall event. This could happen within 1 hour of the Wyong River flood level reaching 1.9 m AHD at the south-eastern corner of the site.

Panonia Road could be isolated for in excess of 34 hours in a long duration PMF. The duration of inundation for most of the school would be similar.

3.3.3 Site Flooding Probability

The school is operating approximately 5 days per week for 40 weeks of the year, which is 55% of each year. Therefore, the probability that any AEP flood event occurs while the school is in operation is about 55% of the AEP of the flood event. Therefore, there is only a 1 in 36 chance each year that a 5% AEP (1 in 20) event will occur while the school is open. The probability of a riverine flood occurring in any given year that isolates the school while it is in operation is slightly smaller than 1 in 36.

Assuming an AEP of 1 in 1,000,000 for the PMF in a catchment the size of the Wyong River catchment, there is only a 1 in 1,800,000 chance each year that a PMF will occur while the school is open.





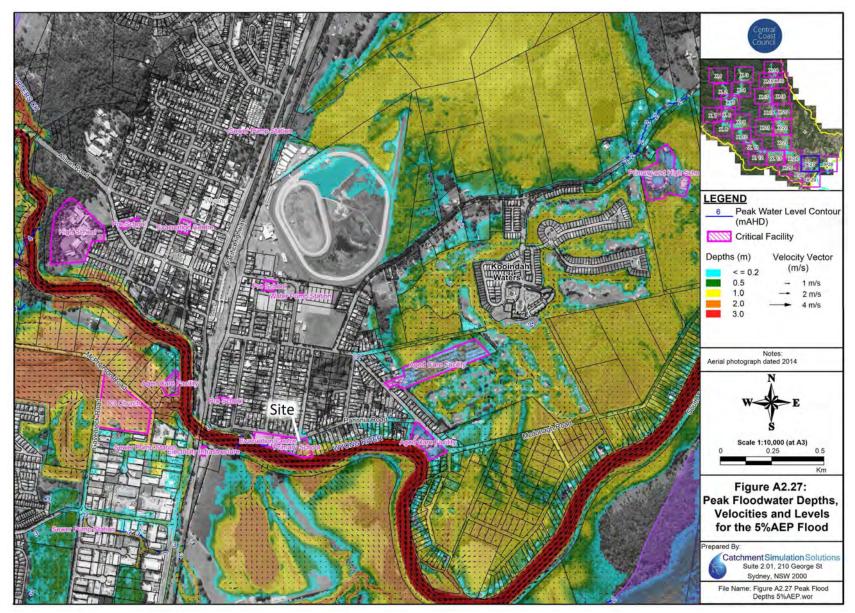


Figure 3-1: Flood depths and flow velocities in riverine 5% AEP flood



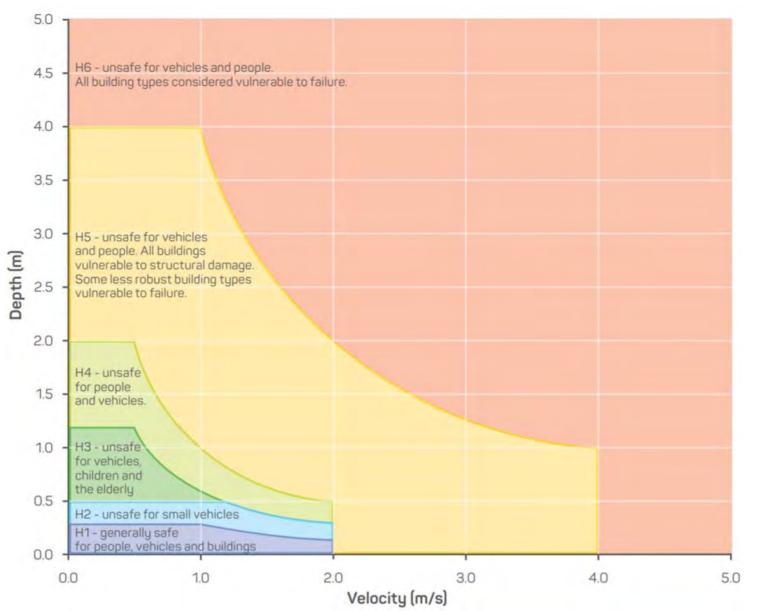


Figure 3-2: Flood hazard vulnerability curves (Smith et al., 2014)





1% AEP Flood Depth

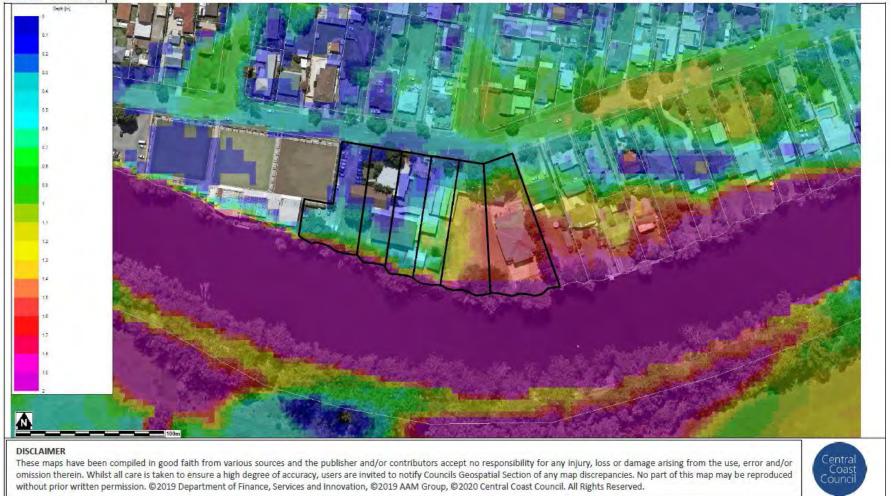


Figure 3-3: Flood depths in the riverine 1% AEP flood



PMF Flood Depth





Figure 3-4: Flood depths in the riverine PMF



4 FLOOD FORECASTS AND WARNINGS

4.1 Bureau of Meteorology (BoM)

The Bureau of Meteorology (BoM) has warning products that could provide an indication of an increased flood threat. These are summarised in Table 4-1.

BoM Product	Description	Warning lead-time	Where the product can be accessed	What to monitor for
Severe Weather Warnings	Issued for potentially hazardous or dangerous weather that is not solely related to severe thunderstorms, tropical cyclones or bushfires. The warnings describe the area under threat and the expected weather hazards. Warnings are issued with varying lead- times, depending on the weather situation. Occasionally, severe weather may occur without the relevant warning having been issued by the BoM.	1 – 24 hours	 Issued directly to the media when there is a high probability of flash flooding Can be found at: <u>http://www.bom.go</u> <u>v.au/nsw/warnings/</u> BOM Weather app 	Severe Weather Warnings with reference to intense rainfall or flooding for the <u>Central Coast</u> <u>Local Forecast Area</u>
Severe Thunderstorm Warnings	Issued for events that may produce heavy rainfall with the potential to result in flash flooding. As severe thunderstorms can develop quickly, these warnings may not provide much warning time.	As little as minutes, but generally a few hours.	 Issued directly to the media when there is a high probability of flash flooding Can be found at: <u>http://www.bom.gov.au/nsw/warnings/</u> BOM Weather app 	Severe Thunderstorm Warnings for the <u>Central Coast Local</u> <u>Forecast Area</u>
Rainfall Maps	Coarse forecast rainfall maps which can be used to estimate the amount of rain expected to fall over the next 4 days, as well as the next 24 hours.	1 – 4 days	Can be found at: <u>http://www.bom.go</u> <u>v.au/jsp/watl/rainfal</u> <u>l/pme.jsp</u>	Intense or prolonged rainfall in the Wyong area
Rainfall Forecasts	Rainfall forecasts which can be used to estimate the amount of rain expected to fall within 3-hour windows over the next 3 days.	Up to 3 days	 BOM Weather app 	Intense or prolonged rainfall in the Wyong area
Radar Service	Shows current rainfall locations and intensities. The radar station to be used for the site would be the 128 km Newcastle Radar Loop.	90 minutes (BoM Weather App only)	 Can be found at: <u>http://www.bom.g</u> <u>ov.au/products/ID</u> <u>R043.loop.shtml#</u> <u>skip</u> BOM Weather app 	Intense or prolonged rainfall in the Wyong area



BoM Product	Description	Warning lead-time	Where the product can be accessed	What to monitor for
Flood Watch	Provide early advice regarding the potential for flooding in a particular area.	24 – 96 hours	 Issued directly to the media when there is potential of flooding Can be found at: <u>http://www.bom.go</u> <u>v.au/nsw/warnings/</u> BOM Weather app 	Flood Watches with reference to the <u>Central Coast Flood</u> <u>Watch Area</u>
Flood Warning	Issued when there is greater certainty that flooding is expected. Issued for waterways that take more than 6 hours to respond to rainfall	6 hours	 Issued directly to the media when there is potential of flooding Can be found at: <u>http://www.bom.gov.au/nsw/warnings/</u> BOM Weather app 	Minor, Moderate or Major Flood Warning OR Flood Warning for a flood level > 2.7 m at Wyong (upstream of bridge)



BOM Weather and Australia's weather app Bureau of Meteorology Designed for iPad art in Weather The BOM Weather app can be set to show only the relevant warnings that apply to the area set by the user, as well as hourly rainfall forecasts. The use of this app is particularly recommended because it provides most of the available BoM data that can be used to inform the emergency plan on mobile devices, and the BoM warnings can be prioritised as push notifications.

Importantly, the BoM Severe Weather Warnings, Severe Thunderstorm Warnings, Flood Watches and Flood Warnings may occasionally be issued without necessarily being followed by the event that they are predicting, or may not be issued at all ahead of an actual thunderstorm or flood event. As such, these warnings are to be considered as an indication - not a certainty - that a flood affecting the site might occur. Similarly, the lack of such warnings does not mean that a flood event affecting the site within the following hours or days is impossible.

The BoM issues Flood Warnings when there is greater certainty that flooding is expected. Quantitative Flood Warnings are available for the Wyong River.

The closest gauge to the site for which a quantified flood forecast is provided is at the Wyong River upstream of Wyong Bridge gauge (Station 061386). The current target warning lead time is 6 hours, which is for flood levels exceeding 2.7 m AHD on the Wyong River upstream of the site. This level corresponds to the minor flood level for the gauge (Table 4-2). It is in floods of this approximate magnitude or greater that the school becomes isolated by floodwaters, so the school should have 6 hours of lead warning time before its evacuation route is cut.

Table 4-2	Flood classifications at the nearby water level gauges
-----------	--

Flood Classification	Flood Level at Gauge 061386 (Wyong Bridge) (m AHD)		
Minor	2.7		
Moderate	3.8		
Major	4.0		



River levels at the 061386 (Wyong River upstream of Wyong Bridge) gauge can be monitored here:

http://www.bom.gov.au/fwo/IDN60233/IDN60233.061386.plt.shtml

In summary, Severe Weather Warnings and Flood Watches provide anywhere between 1 hour to 4 days of warning time that flooding may occur. These types of warnings can be issued several times per year. Flood Warnings are issued when there is more certainty that riverine flooding will occur and upstream river levels can also be monitored to provide warning that flooding is moving downstream towards St Cecilia's. In addition, 6 hours of flood warning time is available for riverine flooding before flood levels downstream of Wyong Bridge reach 2.7 m AHD.

4.2 NSW State Emergency Service

The NSW State Emergency Service (SES) is also likely to issue warnings using the Australian Warning System (AWS) which is a nationally consistent, 3-tiered approach designed to provide clear warnings and lead people to take action ahead of severe weather events. The warning system comprises warning levels, action statements, hazard icons, colours and shapes. The 3 warning levels and corresponding actions are:

- Advice an incident has started. Stay up to date in case the situation changes.
 - Stay informed
 - Monitor conditions
 - Reduced threat: return with caution
- **Watch and Act** conditions are changing and you need to start taking action now.
 - Do not enter floodwater
 - Prepare to evacuate
 - Prepare to isolate
 - Avoid the area
- Emergency Warning the highest level of warning. You may be in danger and need to take action immediately.
 - Evacuate now / Evacuate before [time]
 - Shelter now
 - Move to higher ground



Hazards Near Me NSW NSW Rural Fire Service Designed for iPad #96 in Utilities

NSW SES warnings can be monitored through the <u>Hazards Near Me</u> app and it is possible to set it to receive notifications for a particular location.

4.3 Observations

It would also be possible to observe what is happening around the site and use visual cues to indicate site isolation. If floodwaters are observed breaking the riverbank in the south-eastern corner of the site (behind the hall building), there may be less than half an hour before the school becomes isolated by riverine floodwaters.



5 EMERGENCY MANAGEMENT CONSIDERATIONS

5.1 Flood Emergency Response Strategy

This Flood Emergency Response Plan recognises that protection of life is of critical and primary importance. Consistent with any emergency protocol, the protection of all lives is the first priority, the comfort of students, staff and visitors is second, and protection of site property is third.

Generally speaking, there are 2 main types of responses to a flood emergency. These are to either:

- Evacuate off-site away from the building to an area above the reach of floodwaters in the PMF. This is the NSWSES preferred response, provided that the risks of evacuating are deemed acceptable; or
- Take Shelter in Place (SIP), which is to evacuate vertically within the site to higher floor levels and wait until floodwaters have receded and the emergency has passed. SIP may be considered an alternative to evacuation only when the risks of evacuating are higher than the risks of SIP. SIP requires suitable access to a suitable shelter above the PMF level. The shelter must be protected from the weather, be structurally stable in a PMF and have sufficient floor area for all people likely to be on site at any one time. Additional requirements to increase the comfort of the people taking shelter may be needed depending on the specific circumstances.

Given that the site can be isolated and inundated for over 34 hours, **the primary flood emergency response strategy must be to evacuate before the site becomes isolated**. Specifically, the emergency response strategy can be summarised as follows:

- BoM flood warning products, the site and local roads will be monitored when flooding is possible
- The school will be closed when a Flood Watch or Flood Warning is issued
- The school will be evacuated when a Minor, Moderate or Major Flood Warning or a quantified Flood Warning for flood levels > 2.7 m AHD is issued for the Wyong River at Wyong (Upstream of Bridge) gauge
- If any students, staff or visitors remain on site when it becomes isolated by floodwaters, they will shelter on the upper floor of the new building.

The following sections describe in more detail the analysis that was undertaken to inform the identification of the proposed emergency response strategy.

5.2 Evacuation Capability Assessment

The first step to developing a flood emergency response strategy is to assess whether a safe evacuation of the site can be achieved under all circumstances. Namely, evacuation to a location outside the floodplain must be possible in the worst-case scenario of a flood rising as fast as the PMF, when the site is at full capacity. If evacuation is possible in the worst-case scenario, it is possible in all scenarios. This is the reason why the PMF is adopted as the industry-standard event when considering risk to life and flood emergency response.

A quantified flood warning of 2.7 m AHD or greater at Wyong Bridge on the Wyong River would provide approximately **6 hours of lead warning time** before the site becomes isolated by riverine flooding. Such a warning has a 5-20% probability of being triggered in any given year.

5.2.1 Assembly Point and Evacuation Route

The Wyong River Floodplain Risk Management Study and Plan (Catchment Simulation Solutions, 2020) identifies St Cecilia's Catholic Primary School as a potential evacuation centre. However, the school would be an inappropriate evacuation centre in the event of flooding due to the frequency with which the site can be inundated or isolated by floodwaters. The closest evacuation centre to the school that is above the PMF is Club Wyong on Margaret Street. This would be the most appropriate location for site occupants to evacuate to if required. It is 1.5 km from the school.



The safest evacuation route would be to exit the site and head westwards on Panonia Road before turning right onto Byron Street, left onto Warner Avenue and right onto Howarth Street. From there evacuees would need to cross the railway bridge, turn right onto the Pacific Highway and left onto Anzac Avenue to arrive at Club Wyong. This evacuation route has a low point (Low Point A) of 2.37 m AHD at the intersection of Panonia Road and Leppington Street (Figure 5-1), although this low point would not flood until flood levels at the south-eastern corner of the school reached approx. 2.75 m AHD.

5.2.2 Pedestrian Evacuation

The estimated time necessary to safely evacuate the site on foot is 1 hour and 55 minutes.

At a very slow walking pace of 2 km/hr it would take 45 minutes to walk the 1.5 km from the school to Club Wyong. Most people would only take half that time to walk the distance.

Ten minutes should be allowed for school management/administration to disseminate the evacuation order to the school occupants.

For residential developments one hour of "warning acceptance factor" should be added to the time required to evacuate to account for residents to make a decision to evacuate after an evacuation order has been communicated to them. An additional hour of "warning lag factor" should be added to account for residents to gather their belongings and leave the site. The school is not a residential development and therefore the warning acceptance and warning lag factors can be reduced to 30 minutes each. Therefore, **pedestrian evacuation to Club Wyong would require 1 hour and 55 minutes**.

If evacuation is triggered by a classified or minor flood warning issued by the BoM, site occupants would have 6 hours to evacuate to above the PMF. This is over 4 hours in excess of the time required to evacuate by foot. However, if evacuation is instead triggered by the observation of floodwaters overtopping the river bank behind the hall there may be less than half an hour available for site occupants to evacuate. This is almost 1.5 hours less than the time required. Therefore, if a Flood Warning is not issued before floodwaters impact the site there may not be sufficient time for pedestrian evacuation.

Not all floods will rise as quickly as a PMF. For example, the design 1% AEP flood would take 3 hrs to rise from the riverbank to isolate the site.

5.2.3 Vehicular Evacuation

The estimated time necessary to safely evacuate the club by vehicle is 3 hours and 8 minutes.

This is calculated using the NSWSES Timeline Evacuation Model (Opper et al., 2009), which requires that the calculated evacuation time includes:

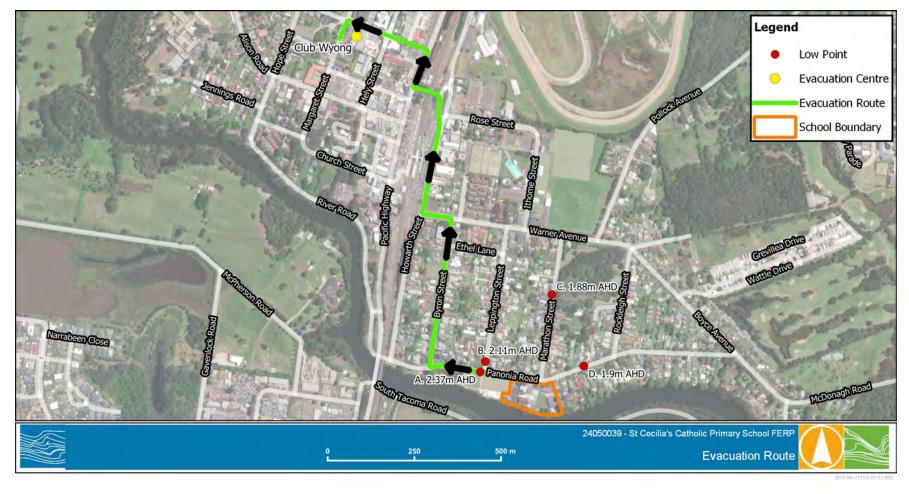
- One hour of "warning acceptance factor" (time required for residents to make a decision to evacuate after an evacuation order has been communicated to them)
- One hour of "warning lag factor" (time required for residents to gather their belongings and leave)
- A standard vehicular evacuation rate of 600 cars per lane per hour
- One hour of Traffic Safety Factor (to account for delays due to road congestion and accidents).

In addition, 10 minutes should be allowed for school management/administration to disseminate the evacuation order to students, staff and visitors.

As the school will have no residential uses and site occupants are likely to have easily portable belongings with them, the warning acceptance and warning lag factors can be reduced to 30 minutes each.











The closest land above the PMF level is along Byron Street 100 m to the north of the intersection with Panonia Road. To reach this location from the school site occupants should head west onto Panonia Road before turning right onto Byron Street.

A maximum of 23 cars could be parked in the on-site carpark at any given time. This analysis conservatively assumes that each of the 308 students is picked up by a parent/caregiver in a separate vehicle. Therefore, there could be up to 331 vehicles evacuating from the school westward along Panonia Road, which has a single westbound lane.

In addition, the Wyong Bowling Club next door could have approximately 25 vehicles on site at any given time and there are approximately 130 dwellings in the area that may also need to evacuate westward along Panonia Road in the event of flooding. According to the 2021 census data there are on average 1.7 vehicles per dwelling in Wyong. This corresponds to 221 vehicles from the residences that may need to evacuate along the same route.

This means that, at the time evacuation is triggered at the site, there could be up to approximately 575 vehicles evacuating along Panonia Road, which has a single westbound lane, onto Byron Street. At a rate of 600 cars per lane per hour, it would take approximately 58 minutes for 575 vehicles to evacuate out of the floodplain.

The time required to evacuate can be calculated as follows:

Time required = Message Dissemination Time + Warning Acceptance Factor + Warning Lag Factor + Traffic Safety Factor + Vehicular Evacuation Time

 $Time \ required = 10 \min + 30 \min + 30 \min + 1 hr + 58 \min$

Time required = 3 hr and 8 min

Therefore, the minimum time required to evacuate all vehicles off site would be **3 hours and 8 minutes**. This is 2 hours and 52 minutes less than the time available if evacuation is triggered by a riverine flood warning. However, if evacuation is instead triggered by the observation of floodwaters behind the school hall there may only be 0.5 hour available for evacuation. In this case, the time required to evacuate by vehicle would be almost 2.5 hours in excess of the time available.

During special events there may be a greater number of vehicles that would need to evacuate along Panonia Road, which would further increase the time required to evacuate.

Not all floods will rise as quickly as a PMF. For example, the design 1% AEP flood would take 3 hrs to rise from the riverbank to isolate the site.

5.3 Shelter in Place Capability Assessment

Shelter in Place (SIP) is a flood emergency response strategy that may be adopted when there is an appropriate refuge on site above the PMF level. The NSW Department of Planning and Environment (DPE) has released a draft shelter-in-place guideline (2022), which suggests that SIP can be the most appropriate flood emergency response strategy when off-site evacuation cannot be achieved and where flooding can occur with little notice. Given that 6 hours of lead warning time is available before the school is isolated by floodwaters, in most instances sufficient warning of potential flooding would be available to fully evacuate the site.

The draft guideline recommends SIP can be used if the duration of flood inundation is less than 6 hours. The school may be isolated for in excess of 34 hours. Therefore, sheltering in place would not be appropriate as a primary flood emergency response strategy for the site. However, it may be considered as a secondary strategy.



The upper floor of the new building will have a floor level of 6.40 m AHD, which is 1.46 m AHD above the PMF level. Anybody who had failed to evacuate prior to the site becoming isolated by floodwaters would therefore be able to shelter on this upper floor.

The 6 classrooms on the upper floor of the new building have a combined floor area of approximately 540 m². This corresponds to an average space of 1.6 m² per person (assuming a maximum of 333 people could be on site during normal school operation). This is less than the guidelines on emergency shelters provided by the Australian Red Cross (2012), which require a minimum space of 5 m² per person for *temporary* shelters. Temporary shelters are defined as those providing safe respite for in excess of 18 hours. Therefore, the upper floor of the new building is not an ideal flood refuge for the entire school population given the potential duration of inundation (over 34 hours).

However, the Red Cross Guidelines apply to emergency shelters which people are directed to evacuate to out of the floodplain and are part of a response of first resort whereas the space above the PMF in the new buildings is a refuge of last resort should evacuation from the floodplain fail. The inclusion of this raised area above the PMF level reduces the flood risk to life of the existing school. It provides a location where site occupants can shelter from flooding if necessary, however uncomfortably. The upper floor also includes a sheltered veranda with a floor area of 250 m², which could improve the comfort of anyone sheltering in this refuge. In addition, 90% of the school population is of primary school age and would not require the same amount of floor area as adults.

There are 9 toilets located on the upper floor, which equates to an average of one toilet for 37 people. This is consistent with the guidelines from the Australian Red Cross that recommend one toilet catering for 50 people (2012).

During a special event there may be up to 1,000 people on site at any given time. This corresponds to an average space of 0.54 m² per person if site occupants needed to shelter on the upper floor of the new building, and one toilet for 111 people. While these conditions would not be comfortable, the upper floor of the new building reduces the existing flood risk to life at the school. It should also be noted that most special events would be held outdoors and therefore would likely be cancelled by the school if rain were forecast. Thus, it is unlikely that 1,000 people would be on site during conditions that would lead to a flood.

A crucial requirement for any flood refuge is that it is structurally stable in a Probable Maximum Flood. In the PMF, floodwaters in the vicinity of the new building would have a hydraulic hazard of up to H5. As per Figure 3-2, most buildings require a specific design to be able to remain stable in H5 floodwaters. Therefore, a requirement of the Flood Emergency Response Plan will be that the Client obtains a certificate from a qualified structural engineer stating that the upper floor of the new building has been designed and built to safely withstand the forces of floodwater, debris and buoyancy of the riverine PMF.

Given that the canteen, which is in Building F, is the first building on site to be isolated by floodwaters, there is unlikely to be time for site occupants to transfer snacks and drinks from the canteen to the upper floor of the new building in preparation for a potential refuge stay. Therefore, a storage of water bottles and non-perishable food will be kept on the upper floor of the new building and canteen stock will be rotated through this area. In addition, a first aid kit and a list of emergency contact details will be kept on the upper floor of the new building.

5.4 Flood Emergency Response Triggers

As discussed in Section 4.1, Severe Weather Warnings can provide 1 - 24 hours of lead warning time that flooding is possible, while Severe Thunderstorm Warnings may provide less warning time. These warning products provide an indication that flooding is possible, but do not provide any certainty that flooding will occur. They should therefore be used to trigger precautionary actions, such as increasing the frequency with which the BoM Weather App and the NSW Hazards Near Me App are checked and notifying staff that flooding is possible.



Flood Watches can provide 24 – 96 hours of notice and indicate that flooding is possible, while general Flood Warnings do not provide a specific minimum lead warning time but are issued when there is greater certainty that flooding will occur. Therefore, if a Flood Watch or any Flood Warning for the Wyong River at Wyong is issued before school drop-off has started the school should be closed.

A Minor Flood Warning or a quantified flood warning for a flood level > 2.7 m at Wyong Bridge would provide a minimum of 6 hours of warning time before the site becomes isolated by riverine flooding, which is 4 hours in excess of the time required to evacuate the site on foot. Therefore, if a Minor, Moderate or Major Flood Warning or a quantified flood warning for a flood level > 2.7 m for the Wyong River at Wyong Bridge is issued by the BoM while the school is in operation the school should be closed and parents/caregivers notified to pick up their children immediately. If anybody remains on site after 3 hours, all remaining site occupants should evacuate immediately to Club Wyong. The 3 hours of wait time and 2 hours of evacuation time would take 1 hour less than the minimum time available before the school becomes isolated by flooding.

If floodwaters are observed in the seating area behind the hall with the planter boxes and sandpit there may be one hour before the site becomes isolated by flooding on local roads. Therefore, if floodwaters are observed in this location it should trigger immediate evacuation, which should cease once the evacuation route has been cut by flooding. Once floodwaters cut the evacuation route on Panonia Road west of the site all remaining site occupants must shelter on the upper floor of the new building.

ВоМ	NSWSES	On site	Actions to be taken
BoM issues a Severe	NSW SES issues a Watch and Act for the Wyong River	Intense rainfall is observed on site	Notify staff that flooding is possible
Weather Warning with chance of flooding for the Central Coast Local			While the school is open, every 4 hours visually monitor floodwaters at:
Forecast Area			The seating area behind the hall with the planter boxes and sandpit
OR BoM issues a Severe			The intersection of Panonia Rd and Leppington St
Thunderstorm Warning for the Central Coast Local Forecast Area			Monitor BoM and Hazards Near Me apps every 4 hours.
BoM issues a Flood Watch			Cancel any scheduled special events
for the Central Coast Flood Watch Area			If school drop-off has not started:
OR			Close the school
BoM issues any Flood			If there are students at school:
Warning for Wyong River			Notify staff that flooding is possible
at Wyong Bridge			Every 2 hours visually monitor floodwaters at:
			The seating area behind the hall with the planter boxes and sandpit
			The intersection of Panonia Rd and Leppington St
			Monitor BoM and Hazards Near Me apps every 2 hours.

Table 5-1 Triggers for actions





ВоМ	NSWSES	On site	Actions to be taken
BoM issues a Minor, Moderate or Major Flood Warning for Wyong River at Wyong Bridge OR BoM issues a quantified Flood Warning for a flood level > 2.7 m at Wyong River at Wyong Bridge	NSW SES issues an Emergency Warning: Evacuate before [time]		 If the site is occupied: PA announcement to tell site occupants: Flooding may impact the school and so the school is closing for the day. Parents/caregivers will be asked to pick up their children Assemble on the upper floor of the new building Notify parents/caregivers that the school is closing due to probable flooding and to pick up their children immediately Appropriate student/staff ratios to be maintained until all students have been picked up by their parents/caregivers Monitor the Hazards Near Me app for NSW SES warning messages every 30 minutes Every 30 minutes visually monitor floodwaters at: The seating area behind the hall with the planter boxes and sandpit The intersection of Panonia Rd and Leppington St
 3 hours after the BoM issues: A Minor, Moderate or Major Flood Warning for Wyong River at Wyong Bridge OR BoM issues a quantified Flood Warning for a flood level > 2.7 m at Wyong River at Wyong Bridge. 	NSW SES issues an Emergency Warning: Evacuate now	Floodwaters are observed in the seating area behind the hall with the planter boxes and sandpit	 All remaining site occupants are to evacuate immediately to Club Wyong PA announcement to tell site occupants: Everyone remaining on site must evacuate immediately to Club Wyong Notify parents/caregivers of any remaining students that all remaining site occupants are evacuating to Club Wyong and students can be picked up from there
		Floodwaters cut the evacuation route on Panonia Road west of the site	 All remaining site occupants are to shelter in place on the upper floor of the new building PA announcement to tell site occupants: It is no longer safe to leave the site Head immediately to the upper floor of the new building Notify parents/caregivers of any remaining students on site that their child/ren are sheltering on site above the reach of floodwaters



5.5 Flood Risk Management Features

The following features integrated into the design, construction and operation of the stadium minimise the risk to life from flooding:

- The upper level of the new building is above the reach of flooding in events up to and including the PMF
- The upper floor of the new building will be designed by a structural engineer to withstand the forces of floodwater, debris and buoyancy of the riverine PMF
- The Chief Flood Warden will have access at all times to a laptop/tablet/smartphone with 4g/5g internet access and at least 48 hours of battery capacity
- A public address (PA) system audible in all parts of the site during heavy rain will be maintained for use in communicating flood emergency messages to school occupants
- Flood Wardens will have smartphones or other portable methods of communicating with each other (e.g. radio) and with the Chief Flood Warden. These systems will have a minimum of 12 hours battery capacity
- Flood Wardens will be subscribed to the BoM Weather App and the NSW Hazards Near Me App
- There will be at least one Flood Warden on site whenever the school is occupied (by students, staff or any other site occupants)
- Flood signage is to be displayed throughout the school and carpark. The signage will indicate:
 - Area subject to flooding
 - Do not walk or drive through floodwaters of any depth
 - The evacuation route to Club Wyong.
- The following are to be kept on the upper floor of the new building above the PMF level:
 - A first aid kit,
 - A portable radio with spare batteries for listening to information on local radio stations,
 - Torches with spare batteries,
 - Food/snacks and drinks (canteen stock is to be rotated through this area).
- The Compass messaging app will be used to communicate with parents and carers about flooding and emergency response arrangements.



6 FLOOD EMERGENCY RESPONSE PLAN (FERP)

6.1 Priorities

This FERP recognises that protection of life is of critical and primary importance. This FERP is principally concerned with the safety and comfort of all occupants on site. All flood emergency responses recommended in this FERP are to recognise the primacy of life and wellbeing over protection of property.

Nonetheless, it is recommended that the school site management and staff take all necessary measures outside of this FERP to manage the risks which flooding poses to the site and its property.

The FERP sets emergency management prevention, preparedness and response measures that are relevant to a flood emergency. It does not cover broader emergency management guidance for any other type of hazard that could affect the site.

6.2 Roles and Responsibilities

6.2.1 NSW State Emergency Services (NSWSES)

The NSWSES is the lead combat agency for flooding in NSW. It can command resources from other government organisations including local councils, Transport for NSW and the Police to assist in flood operations under its command.

Under the State Emergency and Rescue Management Act, 1989, the NSWSES has the power to direct any citizen or organisation to take actions in response to flooding. This includes the power to order evacuations.

Any flood response directive issued by the NSWSES or by delegated authority to others acting on its behalf must be followed by site management and staff. This includes any order to evacuate the site or not evacuate the site, irrespective of what decisions have been made by management in accordance with this FERP.

6.2.2 School Management

The School Board will be responsible for ensuring that:

- all flood management measures are consistent with this report including continuation of building design features to mitigate flood risks
- the Principal and Deputy Principal are made aware of the FERP
- the public address system within the school is kept in working order
- the public address system is tested at least annually to ensure it is operational at all times
- flood signage is visible and legible
- evacuation drills are performed every year
- the FERP is reviewed every 5 years, or following a flood
- the FERP is kept up to date
- Flood Wardens are appointed from among the staff and are given flood risk management responsibilities and have sufficient training to implement this FERP
- the Principal, Deputy Principal and Flood Wardens are subscribed to the BoM Weather App and Hazards Near Me App to automatically receive weather and flood alerts and warnings
- there is an adequately trained Flood Warden on site whenever the site is occupied
- support the Principal and Flood Wardens in their duties



- ensure the Compass messaging app is maintained for access by the Principal, Deputy Principal and by any Flood Wardens delegated the duty of messaging parents/caregivers
- messages are sent to parents via the Compass messaging app in the event of a flood should the school be unable to send these messages (see Appendix B for messages)
- all staff are given induction and training into their flood emergency response responsibilities
- post-flood site clean-up and recovery
- there are sufficient financial, human and other resources to maintain and implement the FERP.

6.2.3 Principal / Chief Flood Warden

The School Principal will be the Chief Flood Warden and is responsible for:

- being familiar with all flood emergency management procedures set out in this document and with BoM warnings, rainfall and river level data
- ensuring that all staff are aware of the flood emergency response procedures set out in the FERP
- ensuring that all Flood Wardens are aware of the flood emergency response procedures set out in Section 5 and Appendix A of this FERP
- ensuring that all Flood Wardens know how to monitor severe weather warnings, flood warnings and external water levels
- organising training for themselves and Flood Wardens in the implementation of the flood emergency management procedures set out in Section 5 and Appendix A of this FERP
- subscribing themselves and Flood Wardens to the BOM Weather App and to the Hazards Near Me App to receive severe weather warnings direct to their mobile devices
- ensuring the Compass messaging app is maintained for access by the Chief Flood Warden or delegate
- supplying and maintaining all of the equipment necessary to implement the FERP
- ensuring an annual audit is undertaken of the resources necessary to implement the FERP
- organising the testing and maintenance of the public address system
- ensuring that flood signage is visible and legible
- ensuring evacuation drills are performed every year
- keeping a fully charged and functional mobile phone/laptop/tablet with 4G/5G internet access and at least 48 hours of battery charge on site at all times
- maintaining a register of emergency contact details for the parents and caregivers of all students and for staff
- ensuring there is an adequately trained Flood Warden on site whenever the site is occupied
- monitoring weather forecasts and flood warnings through the Bureau of Meteorology website
- keeping a soft and hard copy of the FERP on site and readily accessible to the Flood Wardens at all times
- implementing this FERP in the event of a flood or delegating that task to an on-duty Flood Warden
- directing other staff to implement various aspects of this FERP, as required
- post-flood site clean-up and recovery
- liaising with emergency service organisations and other external stakeholders, as required
- organising a review of the FERP every 5 years or following a flood which triggers an evacuation or sheltering in place
- reporting annually, and as requested, to school management on implementation and maintenance of the FERP.



The Principal may delegate the above tasks to others but bears ultimate responsibility for their implementation. If the Principal is not present on site the Deputy Principal will take on the responsibilities of the Chief Flood Warden.

6.2.4 Flood Wardens

Flood Wardens should be selected from among the school staff. If expedient, Fire Wardens should also be appointed as Flood Wardens. All Flood Wardens will be responsible for:

- ensuring that they are aware of the flood emergency response procedures set out in this FERP
- ensuring they know how to monitor severe weather warnings, flood warnings and external water levels
- ensuring a soft and hard copy of the FERP is on site and to report absences to the Principal
- implementing the procedures in this FERP during and after a flood.

Flood Wardens may delegate any of the actions set out in this FERP that need to be taken during or after a flood but bear ultimate responsibility for their implementation.

6.2.5 Staff, Students and Visitors

Staff, students and visitors are to follow the directions of the Flood Wardens during a flood emergency.

6.2.6 Parents and Caregivers

Parents and caregivers will be responsible for providing the school with their most up to date contact details and following directions issued by the school.

6.3 What to do Before, During and After a Flood

Management actions which are applicable to the entire site are included in the following sections. **Appendix A summarises all of the following actions as a check list to be used before, during and after a flood**. Appendix B contains pre-prepared messages for communicating with the school community during a flood and Appendix C lists items which should always be kept on site in case of flood. Appendix D provides an emergency contact list to be completed and kept updated by the Principal.

The flood emergency response operations are divided into four phases:

- Prevent this applies at all times
- Prepare this occurs when flooding of the site may be about to happen
- Respond this occurs when a flood of the site is ongoing
- Recover this occurs after a flood event.

6.3.1 Prevent: Before a Flood

TRIGGER FOR ACTION — Always

ACTIONS:

- School management will ensure there are sufficient financial, human and other resources to maintain and implement the FERP
- School management and the Principal will ensure that flood signage is visible and legible
- School management and the Principal will ensure evacuation drills are performed every year
- School management and the Principal will review the FERP every 5 years or following a flood



- WATER TECHNOLOGY WATER, COASTAL & ENVIRONMENTAL CONSULTANTS
- School management will ensure an annual audit is undertaken of the resources necessary to implement the FERP
- School management will support the Principal and Flood Wardens in their duties
- School management will ensure that all flood management measures are consistent with this report including continuation of building design features to mitigate flood risks
- School management and the Principal will ensure all staff are made aware of the FERP
- The Principal will ensure all staff will be made aware of the possibility of flooding and the procedures to be followed if a flood were to occur. This will be done during staff inductions
- The Principal and all Flood Wardens will become familiar with this FERP and learn how to monitor severe weather warnings, flood warnings, rainfall forecasts and external water levels
- The Principal will subscribe themselves and Flood Wardens to the BoM Weather App and the Hazards Near Me App so that they receive BOM severe weather and flood warnings direct to their mobile phone
- School management and the Principal will ensure the Compass messaging app is maintained for access by both the Chief Flood Warden (or delegate)
- The Principal will supply and maintain all of the equipment necessary to implement the FERP
- School management and the Principal will ensure that the public address system throughout the school is kept in working order and is tested at least annually
- The Principal will keep a fully charged and functional mobile phone/laptop/tablet with 4G/5G internet access and at least 48 hours of battery charge on site at all times
- The Principal will ensure the following are to be kept on the upper floor of the new building:
 - A first aid kit,
 - A portable radio with spare batteries for listening to information on local radio stations,
 - Torches with spare batteries,
 - Food/snacks and drinks (canteen stock is to be rotated through this area).
- The Principal will maintain a register of emergency contact details for all parents and care-givers and for all staff and will regularly provide school management with an up-to-date copy
- All parents and care-givers will provide the Principal or delegate with their most up-to-date contact details
- The Principal will ensure that all staff understand their responsibilities in the event of a flood
- All staff, students and guests will follow the advice of school management, the Principal or Flood Wardens
- Staff will report any concerns to the Principal, Flood Wardens or school management
- The Principal will maintain a list of emergency contacts which will include emergency services and utility providers. These details and other necessary contact details are provided in Appendix D
- The Principal will ensure this FERP and the list of parent and care-giver contacts details will be kept on site in electronic and hard copy at all times
- The Principal or delegate will monitor weather forecasts and warnings each morning
- The Principal will initiate flood emergency procedures within site when required
- The Principal or delegate will notify staff, students, parents and care-givers when the school has been closed due to flooding
- School management and the Principal will ensure there is a trained acting Flood Warden on site whenever the site is occupied.



6.3.2 Prepare: When a Flood is Possible

TRIGGER FOR ACTION:

BoM issues a Severe Weather Warning with chance of flooding for the Central Coast Local Forecast Area

OR

BoM issues a Severe Thunderstorm Warning for the Central Coast Local Forecast Area

OR

NSW SES issues a Watch and Act for flooding of the Wyong River

OR

Intense rainfall is observed

ACTIONS:

- The Principal will notify staff that flooding is possible
- While the school is open, every **4 hours** the Principal or delegate will visually monitor floodwaters at:
 - The seating area behind the hall with the planter boxes and sandpit
 - The intersection of Panonia Rd and Leppington St.
- The Principal or delegate will monitor the BoM Weather and Hazards Near Me apps every 4 hours

TRIGGER FOR ACTION:

BoM issues a Flood Watch for the Central Coast Flood Watch Area

OR

BoM issues any Flood Warning for Wyong River at Wyong Bridge

ACTIONS:

- The Principal will cancel any scheduled special events
- If school drop-off has not started:
 - School management and the Principal will close the school
 - The Principal or delegate will post on the school's website and social media pages that the school will be closed until further notice as flooding is possible
 - The Principal or delegate will notify parents and caregivers via the Compass messaging app that the school will be closed until further notice as flooding is possible
 - The Principal or delegate will notify parents, caregivers, staff and students via email that the school will be closed until further notice as flooding is possible.
- If there are students or staff already at school:
 - The Principal will notify staff that flooding is possible
 - Every **2 hours** the Principal or delegate will visually monitor floodwaters at:
 - The seating area behind the hall with the planter boxes and sandpit
 - The intersection of Panonia Rd and Leppington St.



The Principal or delegate will monitor the BoM Weather and Hazards Near Me apps every **2 hours**.

6.3.3 Respond: During a Flood

TRIGGER FOR ACTION:

BoM issues a Minor, Moderate or Major Flood Warning for Wyong River at Wyong Bridge

OR

BoM issues a quantified Flood Warning for a flood level > 2.7 m at Wyong River at Wyong Bridge

OR

NSW SES issues an Emergency Warning: Evacuate before [time]

ACTIONS:

At drop off time:

- The Principal or delegate will announce over the public address system that the school will be closing until further notice due to probable flooding. Anyone on the school grounds should make their way to the upper floor of the new building immediately.
- All students, staff and visitors already on site will assemble on the upper floor of the new building
- The Principal or delegate will message all staff, students, parents and care-givers to inform them that the school will be closing until further notice and that any parents or care-givers who have dropped off their children at school should return and pick them up. Staff who are not yet at school should not come in to work (see Appendix B for messages)
- At least 2 Flood Wardens or delegates will be placed on duty along the Panonia Road footpath to inform any families dropping off students that the school is closed until further notice due to the possibility of flooding and that students cannot be dropped off today. Students who walk or ride to school or who arrive by bus will be sent straight to the upper floor of the new building to await pick-up. The Flood Wardens will also organise parents and care-givers as they arrive to pick up their children.
- Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up
- The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone
- The nominated person responsible for forecast and observation will continue to monitor the Hazards Near Me app every **30 minutes** for warning messages issued by the NSW SES
- Every **30 minutes** the Principal or delegate will visually monitor floodwaters at:
 - The seating area behind the hall with the planter boxes and sandpit
 - The intersection of Panonia Rd and Leppington St.
- A Flood Warden or delegate will securely lock any bikes of students who rode to school
- The parents or care-givers of any students who have not been picked up after an hour should be contacted via phone call
- The Principal and enough staff to maintain required staff-student ratios will remain on the upper floor of the new building until all students have been picked up
- Once all students have left, the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members.



During school hours before 1:00 pm:

- The Principal or delegate will announce over the public address system that the school will be closing until further notice due to probable flooding. Anyone on the school grounds should make their way to the upper floor of the new building immediately.
- All students, staff and visitors already on site will assemble on the upper floor of the new building
- The Principal or delegate will message all staff, students, parents and care-givers to inform them that the school will be closing until further notice and that parents or care-givers should pick up their children immediately (see Appendix B for messages)
- The Principal or delegate will contact the bus companies servicing the school (see Appendix E for contact details) to inform them that the school is closed due to expected flooding and that students will not need to be picked up from the school this afternoon
- At least 2 Flood Wardens or delegates will be placed on duty along the Panonia Road footpath to organise parents and care-givers as they arrive to pick up their children
- Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up
- The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone
- The nominated person responsible for forecast and observation will continue to monitor the Hazards Near Me app every **30 minutes** for warning messages issued by the NSW SES
- Every **30 minutes** the Principal or delegate will visually monitor floodwaters at:
 - The seating area behind the hall with the planter boxes and sandpit
 - The intersection of Panonia Rd and Leppington St.
- A Flood Warden or delegate will securely lock any bikes of students who rode to school
- The parents or care-givers of any students who have not been picked up after an hour should be contacted via phone call
- The Principal and enough staff to maintain required staff-student ratios will remain on the upper floor of the new building until all students have been picked up
- Once all students have left, the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members.

During school hours after 1:00 pm:

- The Principal or delegate will announce over the public address system that the school will be closing until further notice due to probable flooding. Anyone on the school grounds should make their way to the upper floor of the new building immediately.
- All students, staff and visitors already on site will assemble on the upper floor of the new building
- The Principal or delegate will message all staff, students, parents and care-givers to inform them that the school will be closing until further notice. Any students that take the bus home will make their way home at the end of the day as they normally would. All other students will need to be picked up at 3:05 pm by a parent/caregiver (see Appendix B for messages)
- At least 2 Flood Wardens or delegates will be placed on duty along the Panonia Road footpath to organise parents and care-givers as they arrive to pick up their children
- At 3:05 pm students taking the bus home will have their names checked off as they get on the bus



- WATER TECHNOLOGY WATER. COASTAL & ENVIRONMENTAL CONSULTANTS
- At 3:05 pm students being picked up will have their names checked off before leaving with their parent/caregiver
- The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone
- The nominated person responsible for forecast and observation will continue to monitor the Hazards Near Me app every **30 minutes** for warning messages issued by the NSW SES
- Every **30 minutes** the Principal or delegate will visually monitor floodwaters at:
 - The seating area behind the hall with the planter boxes and sandpit
 - The intersection of Panonia Rd and Leppington St.
- The parents or care-givers of any students who have not been picked up by 3:30 should be contacted via phone call
- The Principal and enough staff to maintain required staff-student ratios will remain on site until all students have been picked up
- Once all students have left, the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members.

During school operational hours after 3:05 pm:

- The Principal or delegate will announce over the public address system that the school will be closing until further notice due to probable flooding. Anyone on the school grounds should make their way to the upper floor of the new building immediately.
- All students, staff and visitors already on site will assemble on the upper floor of the new building
- If there are any students still on site their parents or care-givers will be contacted by phone to pick them up immediately
- Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up
- The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone
- The nominated person responsible for forecast and observation will continue to monitor the Hazards Near Me app every 30 minutes for warning messages issued by the NSW SES
- Every **30 minutes** the Principal or delegate will visually monitor floodwaters at:
 - The seating area behind the hall with the planter boxes and sandpit
 - The intersection of Panonia Rd and Leppington St.
- The parents or care-givers of any students who have not been picked up after an hour should be contacted via phone call
- The Principal and enough staff to maintain required staff-student ratios will remain on site until all students have been picked up
- Once all students have left, the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members.

TRIGGER FOR ACTION:

3 hours after the BoM issues one of the following warnings that is still active:



• a Minor, Moderate or Major Flood Warning for Wyong River at Wyong Bridge

OR

• BoM issues a quantified Flood Warning for a flood level > 2.7 m at Wyong River at Wyong Bridge

OR

NSW SES issues an Emergency Warning: Evacuate now

OR

Floodwaters are observed in the seating area behind the hall with the planter boxes and sandpit

ACTIONS:

- The Principal or delegate will announce over the public address system that everybody remaining on site must evacuate immediately to Club Wyong due to probable flooding. Anyone on the school grounds should assemble between the office building (Building D) and the new building before evacuating off site
- The Principal or delegate will message all staff, students, parents and care-givers to inform them that all remaining site occupants are evacuating to Club Wyong. Any students that have not already been picked up will need to be picked up from there (see Appendix B for messages)
- All students, staff and visitors still on site will assemble on the pavement between the office building (Building D) and the new building before commencing evacuation
- Flood Wardens and teachers will escort students along the evacuation route to Club Wyong
- Once at Club Wyong the Principal or delegate will message all staff, students, parents and care-givers to inform them that all remaining site occupants have evacuated to Club Wyong. Any students that have not already been picked up will need to be picked up from there (see Appendix B for messages)
- Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up
- The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone
- The parents or care-givers of any students who have not been picked up after an hour should be contacted via phone call
- The Principal and enough staff to maintain required staff-student ratios will remain on site until all students have been picked up
- Once all students have left, the Principal or delegate will send everyone home who is remaining.

TRIGGER FOR ACTION:

Floodwaters cut the evacuation route on Panonia Road west of the site

ACTIONS:

- Evacuation is to cease immediately
- The Principal or delegate will announce over the public address system that anyone still on the school grounds is to immediately make their way to the hall
- The Principal or delegate will message all staff, students, parents and care-givers to inform them that the school will be closed until further notice and that due to flooding of local roads it is not safe for parents and care-givers to access the school. Students are safe at school sheltering above the level of even the highest flood (see Appendix B for messages)



 All remaining site occupants are to remain on the upper floor of the new building until emergency services issue the all-clear.

6.3.4 Recover: After a Flood

TRIGGER FOR ACTION:

Emergency Services give the all-clear

ACTIONS:

- If the shelter in place strategy was activated:
 - The Principal or delegate will notify parents/carers and off-site staff via the Compass messaging appp that the flood threat has passed but that local roads may be still affected by flooding or debris and they must not drive or walk through floodwaters. If their children are on site they will be cared for until they can be collected.
 - Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up
 - The Principal or delegate will send staff home as permitted under required staff-student ratios
 - The parents or care-givers of any students who have not been picked up after an hour should be contacted again via phone call
 - The Principal and enough staff to maintain required staff-student ratios will remain on the upper level of the new building until all students have been picked up
 - Once all students have been picked up the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members
- A hazard assessment will be undertaken by the Principal and school maintenance person for the cleanup. Safe work methods statements will be prepared and personal protective equipment supplied consistent with the known hazards which can be associated with floods:
 - Slips, trips and falls,
 - Sharp debris,
 - Venomous animals,
 - Contaminated water and sediments.
- Following the re-commencement of school activities, a de-brief will be held with key management staff and may involve NSW SES flood personnel/volunteers. The flood event and response, including the use of this FERP and any emergency procedures will be reviewed
- Changes may be made to this FERP and the requirements for future emergency response should the review identify any improvements which may be made
- Plumbing and gas to be checked by licensed plumber and defects rectified
- Electrical to be checked by licensed electrician and defects rectified
- If the flood was large enough to inundate the ground floors of the buildings or if there is any concern regarding the structural integrity of the school buildings they should be assessed for structural damage by an engineer before students and staff are permitted to return to the site.





7 REFERENCES

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APPENDIX A FLOOD EMERGENCY RESPONSE PLAN (FERP) ACTION CHECKLIST







Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		School management will ensure there are sufficient financial, human and other resources to maintain and implement the FERP	School Management	
		School management and the Principal will ensure that flood signage is visible and legible	School Management / Principal	
		School management and the Principal will ensure evacuation drills are performed every year	School Management / Principal	
		School management and the Principal will review the FERP every 5 years or following a flood	School Management / Principal	
		School management will ensure an annual audit is undertaken of the resources necessary to implement the FERP	School Management	
		School management will support the Principal and Flood Wardens in their duties	School Management	
Before a flood	Always	School management will ensure that all flood management measures are consistent with this report including continuation of building design features to mitigate flood risks	School Management	
		School management and the Principal will ensure all staff are made aware of the FERP	School Management / Principal	
		The Principal will ensure all staff will be made aware of the possibility of flooding and the procedures to be followed if a flood were to occur. This will be done during staff inductions	Principal	
		The Principal and all Flood Wardens will become familiar with this FERP and learn how to monitor severe weather warnings, flood warnings, rainfall forecasts and external water levels	Principal / Flood Wardens	
		The Principal will subscribe themselves and Flood Wardens to the BoM Weather App and the Hazards Near Me App so that they receive BOM severe weather and flood warnings direct to their mobile phone	Principal	



Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		School management and the Principal will ensure the Compass messaging app is maintained for access by both the Chief Flood Warden (or delegate)	School Management / Principal	
		The Principal will supply and maintain all of the equipment necessary to implement the FERP	Principal	
		School management and the Principal will ensure that the public address system throughout the school is kept in working order and is tested at least annually	School Management / Principal	
		The Principal will keep a fully charged and functional mobile phone/laptop/tablet with 4G/5G internet access and at least 48 hours of battery charge on site at all times	Principal	
		The Principal will ensure the following are to be kept on the upper floor of the new building:	Principal	
		A first aid kit,		
		 A portable radio with spare batteries for listening to information on local radio stations, 		
		 Torches with spare batteries, 		
		Food/snacks and drinks (canteen stock is to be rotated through this area).		
		The Principal will maintain a register of emergency contact details for all parents and care-givers and for all staff and will regularly provide school management with an up-to- date copy	Principal	
		All parents and care-givers will provide the Principal or delegate with their most up-to-date contact details	Parents / Care-givers	
		The Principal will ensure that all staff understand their responsibilities in the event of a flood	Principal	
		All staff, students and guests will follow the advice of school management, the Principal or Flood Wardens	Staff / Students / Guests	
		Staff will report any concerns to the Principal, Flood Wardens or school management	Staff	
		The Principal will maintain a list of emergency contacts which will include emergency services and utility providers. These details and other necessary contact details are provided in Appendix D	Principal	



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Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		The Principal will ensure this FERP and the list of parent and care-giver contacts details will be kept on site in electronic and hard copy at all times	Principal	
		The Principal or delegate will monitor weather forecasts and warnings each morning	Principal / Delegate	
		The Principal will initiate flood emergency procedures within site when required	Principal	
		The Principal or delegate will notify staff, students, parents and care-givers when the school has been closed due to flooding	Principal / Delegate	
		School management and the Principal will ensure there is a trained acting Flood Warden on site whenever the site is occupied	School Management / Principal	
	BoM issues a Severe	The Principal will notify staff that flooding is possible	Principal	
	Weather Warning with chance of flooding for the	While the school is open, every 4 hours the Principal or delegate will visually monitor floodwaters at:	Principal / Delegate	
	flooding for the Central Coast Local Forecast Area	The seating area behind the hall with the planter boxes and sandpit		
	OR	The intersection of Panonia Rd and Leppington St.		
When a flood is	BoM issues a Severe Thunderstorm Warning for the Central Coast Local	The Principal or delegate will monitor the BoM Weather and Hazards Near Me apps every 4 hours	Principal / Delegate	
possible	Forecast Area OR			
	NSW SES issues a Watch and Act for flooding of the Wyong River			
	OR			
	Intense rainfall is observed			



Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		The Principal will cancel any scheduled special events	Principal	
		If school drop-off has not started:		
		School management and the Principal will close the school	School Management / Principal	
		The Principal or delegate will post on the school's website and social media pages that the school will be closed until further notice as flooding is possible	Principal / Delegate	
	BoM issues a Flood Watch for the Central Coast Flood Watch Area	The Principal or delegate will notify parents and caregivers via the Compass messaging app that the school will be closed until further notice as flooding is possible	Principal / Delegate	
	OR BoM issues any	The Principal or delegate will notify parents, caregivers, staff and students via email that the school will be closed until further notice as flooding is possible.	Principal / Delegate	
	Flood Warning for	If there are students or staff already at school:	Principal	
	Wyong River at Wyong Bridge	The Principal will notify staff that flooding is possible		
		Every 2 hours the Principal or delegate will visually monitor floodwaters at:	Principal / Delegate	
		The seating area behind the hall with the planter boxes and sandpit		
		The intersection of Panonia Rd and Leppington St.		
		The Principal or delegate will monitor the BoM Weather and Hazards Near Me apps every 2 hours .	Principal / Delegate	
		At drop off time:		
During a flood		The Principal or delegate will announce over the public address system that the school will be closing until further notice due to probable flooding. Anyone on the school grounds should make their way to the upper floor of the new building immediately	Principal / Delegate	
		All students, staff and visitors already on site will assemble on the upper floor of the new building	Students / Staff / Visitors	



Stage	Trigger for Action	Action	Who is Responsible	What is Needed
	BoM issues a quantified Flood Warning for a flood level > 2.7 m at Wyong River at Wyong Bridge	The Principal or delegate will message all staff, students, parents and care-givers to inform them that the school will be closing until further notice and that any parents or care- givers who have dropped off their children at school should return and pick them up. Staff who are not yet at school should not come in to work (see Appendix B for messages)	Principal / Delegate	
	OR NSW SES issues an Emergency Warning: Evacuate before [time]	At least 2 Flood Wardens or delegates will be placed on duty along the Panonia Road footpath to inform any families dropping off students that the school is closed until further notice due to the possibility of flooding and that students cannot be dropped off today. Students who walk or ride to school or who arrive by bus will be sent straight to the upper floor of the new building to await pick-up. The Flood Wardens will also organise parents and care-givers as they arrive to pick up their children.	Flood Wardens	
		Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up	Teachers	
		The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone	Principal / Delegate	
		The nominated person responsible for forecast and observation will continue to monitor the Hazards Near Me app every 30 minutes for warning messages issued by the NSW SES	Principal / Delegate	
		Every 30 minutes the Principal or delegate will visually monitor floodwaters at:	Principal / Delegate	
		The seating area behind the hall with the planter boxes and sandpit		
		The intersection of Panonia Rd and Leppington St.		
		A Flood Warden or delegate will securely lock any bikes of students who rode to school	Flood Warden / Delegate	
		The parents or care-givers of any students who have not been picked up after an hour should be contacted via phone call	Flood Wardens / Delegate	



Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		The Principal and enough staff to maintain required staff- student ratios will remain on the upper floor of the new building until all students have been picked up	Principal	
		Once all students have left, the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members.	Principal / Delegate	
		During school hours before 1:00 pm:		
		The Principal or delegate will announce over the public address system that the school will be closing until further notice due to probable flooding. Anyone on the school grounds should make their way to the upper floor of the new building immediately.	Principal / Delegate	
		All students, staff and visitors already on site will assemble on the upper floor of the new building	Students / Staff / Visitors	
		The Principal or delegate will message all staff, students, parents and care-givers to inform them that the school will be closing until further notice and that parents or care- givers should pick up their children immediately (see Appendix B for messages)	Principal / Delegate	
		The Principal or delegate will contact the bus companies servicing the school (see Appendix E for contact details) to inform them that the school is closed due to expected flooding and that students will not need to be picked up from the school this afternoon	Principal / Delegate	
		At least 2 Flood Wardens or delegates will be placed on duty along the Panonia Road footpath to organise parents and care-givers as they arrive to pick up their children	Flood Wardens / Delegate	
		Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up	Teachers	
		The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone	Principal / Delegate	



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Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		The nominated person responsible for forecast and observation will continue to monitor the Hazards Near Me app every 30 minutes for warning messages issued by the NSW SES	Flood Warden / Delegate	
		Every 30 minutes the Principal or delegate will visually monitor floodwaters at:	Principal / Delegate	
		The seating area behind the hall with the planter boxes and sandpit		
		The intersection of Panonia Rd and Leppington St.		
		A Flood Warden or delegate will securely lock any bikes of students who rode to school	Flood Warden / Delegate	
		The parents or care-givers of any students who have not been picked up after an hour should be contacted via phone call	Parents / Care-givers	
		The Principal and enough staff to maintain required staff- student ratios will remain on the upper floor of the new building until all students have been picked up	Principal	
		Once all students have left, the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members.	Principal / Delegate	
		During school hours after 1:00 pm:		
		The Principal or delegate will announce over the public address system that the school will be closing until further notice due to probable flooding. Anyone on the school grounds should make their way to the upper floor of the new building immediately.	Principal / Delegate	
		All students, staff and visitors already on site will assemble on the upper floor of the new building	Students / Staff / Visitors	
		The Principal or delegate will message all staff, students, parents and care-givers to inform them that the school will be closing until further notice. Any students that take the bus home will make their way home at the end of the day as they normally would. All other students will need to be picked up at 3:05 pm by a parent/caregiver (see Appendix B for messages)	Principal / Delegate	



Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		At least 2 Flood Wardens or delegates will be placed on duty along the Panonia Road footpath to organise parents and care-givers as they arrive to pick up their children	Flood Wardens / Delegates	
		At 3:05 pm students taking the bus home will have their names checked off as they get on the bus	Flood Wardens / Teachers	
		At 3:05 pm students being picked up will have their names checked off before leaving with their parent/caregiver	Flood Wardens / Teachers	
		The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone	Principal / Delegate	
		The nominated person responsible for forecast and observation will continue to monitor the Hazards Near Me app every 30 minutes for warning messages issued by the NSW SES	Flood Warden / Delegate	
		Every 30 minutes the Principal or delegate will visually monitor floodwaters at:	Principal / Delegate	
		The seating area behind the hall with the planter boxes and sandpit		
		The intersection of Panonia Rd and Leppington St.		
		The parents or care-givers of any students who have not been picked up by 3:30 should be contacted via phone call	Parents / Care-givers	
		The Principal and enough staff to maintain required staff- student ratios will remain on site until all students have been picked up	Principal	
		Once all students have left, the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members.	Principal / Delegate	
		During school operational hours after 3:05 pm:		
		The Principal or delegate will announce over the public address system that the school will be closing until further notice due to probable flooding. Anyone on the school grounds should make their way to the upper floor of the new building immediately	Principal / Delegate	



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Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		All students, staff and visitors already on site will assemble on the upper floor of the new building	Students / Staff / Visitors	
		If there are any students still on site their parents or care- givers will be contacted by phone to pick them up immediately	Principal / Delegate	
		Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up	Teachers	
		The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone	Principal / Delegate	
		The nominated person responsible for forecast and observation will continue to monitor the Hazards Near Me app every 30 minutes for warning messages issued by the NSW SES	Flood Warden / Delegate	
		Every 30 minutes the Principal or delegate will visually monitor floodwaters at:	Principal / Delegate	
		The seating area behind the hall with the planter boxes and sandpit		
		The intersection of Panonia Rd and Leppington St.		
		The parents or care-givers of any students who have not been picked up after an hour should be contacted via phone call	Parents / Care-givers	
		The Principal and enough staff to maintain required staff- student ratios will remain on site until all students have been picked up	Principal	
		Once all students have left, the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members.	Principal / Delegate	
	3 hours after the BoM issues one of the following	The Principal or delegate will announce over the public address system that everybody remaining on site must evacuate immediately to Club Wyong due to probable flooding. Anyone on the school grounds should assemble between the office building (Building D) and the new building before evacuating off site	Principal / Delegate	



Stage	Trigger for Action	Action	Who is Responsible	What is Needed
	warnings that is still active: • a Minor, Moderate or	The Principal or delegate will message all staff, students, parents and care-givers to inform them that all remaining site occupants are evacuating to Club Wyong. Any students that have not already been picked up will need to be picked up from there (see Appendix B for messages)	Principal / Delegate	
	Major Flood Warning for Wyong River at Wyong Bridge	All students, staff and visitors still on site will assemble on the pavement between the office building (Building D) and the new building before commencing evacuation	Students / Staff / Visitors	
	OR	Flood Wardens and teachers will escort students along the evacuation route to Club Wyong	Flood Wardens / Teachers	
	 BoM issues a quantified Flood Warning for a flood level > 2.7 m at 	Once at Club Wyong the Principal or delegate will message all staff, students, parents and care-givers to inform them that all remaining site occupants have evacuated to Club Wyong. Any students that have not already been picked up will need to be picked up from there (see Appendix B for messages)	Principal / Delegate	
	Wyong River at Wyong Bridge OR	Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up	Teachers	
	NSW SES issues an Emergency	The Principal or delegate will send staff home as permitted under required staff-student ratios, starting with staff whose route home is particularly flood prone	Principal / Delegate	
	Warning: Evacuate now OR	The parents or care-givers of any students who have not been picked up after an hour should be contacted via phone call	Parents / Care-givers	
	Floodwaters are observed in the	The Principal and enough staff to maintain required staff- student ratios will remain on site until all students have been picked up	Principal	
	seating area behind the hall with the planter boxes and sandpit	Once all students have left, the Principal or delegate will send everyone home who is remaining.	Principal / Delegate	
	Floodwaters cut the	Evacuation is to cease immediately	Principal / Delegate	
	evacuation route on Panonia Road west of the site	The Principal or delegate will announce over the public address system that anyone still on the school grounds is to immediately make their way to the hall	Principal / Delegate	



Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		The Principal or delegate will message all staff, students, parents and care-givers to inform them that the school will be closed until further notice and that due to flooding of local roads it is not safe for parents and care-givers to access the school. Students are safe at school sheltering above the level of even the highest flood (see Appendix B for messages)	Principal / Delegate	
		All remaining site occupants are to remain on the upper floor of the new building until emergency services issue the all-clear.	Site Occupants	
		If the shelter in place strategy was activated:		
		The Principal or delegate will notify parents/carers and off- site staff via the Compass messaging app that the flood threat has passed but that local roads may be still affected by flooding or debris and they must not drive or walk through floodwaters. If their children are on site they will be cared for until they can be collected	Principal / Delegate	
		Teachers will check off the names of students and escort them to their parents' or care-givers' vehicle when they arrive for pick-up	Teachers	
After a flood	Emergency Services give the all-clear	The Principal or delegate will send staff home as permitted under required staff-student ratios	Principal / Delegate	
		The parents or care-givers of any students who have not been picked up after an hour should be contacted again via phone call	Parents / Care-givers	
		The Principal and enough staff to maintain required staff- student ratios will remain on the upper level of the new building until all students have been picked up	Principal	
		Once all students have been picked up the Principal or delegate will send everyone home who is remaining. If any do not have their own vehicle on site, carpooling should be organised with other staff members	Principal / Delegate	



Stage	Trigger for Action	Action	Who is Responsible	What is Needed
		A hazard assessment will be undertaken by the Principal and school maintenance person for the clean-up. Safe work methods statements will be prepared and personal protective equipment supplied consistent with the known hazards which can be associated with floods:	Principal / School Maintenance	
		 Slips, trips and falls, 		
		Sharp debris,		
		Venomous animals,		
		Contaminated water and sediments.		
		Following the re-commencement of school activities, a de- brief will be held with key management staff and may involve NSW SES flood personnel/volunteers. The flood event and response, including the use of this FERP and any emergency procedures will be reviewed	Principal / School Management	
		Changes may be made to this FERP and the requirements for future emergency response should the review identify any improvements which may be made	Principal / School Management	
		Plumbing and gas to be checked by licensed plumber and defects rectified	School Management	
		Electrical to be checked by licensed electrician and defects rectified	School Management	
		If the flood was large enough to inundate the ground floors of the buildings or if there is any concern regarding the structural integrity of the school buildings they should be assessed for structural damage by an engineer before students and staff are permitted to return to the site	School Management	





APPENDIX B FLOOD EMERGENCY MESSAGES





General flood information permanently on the website:

Like many schools St Cecilia's Catholic Primary School can be impacted by flooding and can have access cut when local roads and the school grounds flood. Flooding from Wyong River can cut Panonia Road, Marathon Street and other access routes to the school. Such flooding could last for more than a day.

St Cecilia's Catholic Primary School has a comprehensive emergency response plan to deal with all possible emergency situations including flooding. The plan is designed to ensure that anyone in the school is safe from flooding even in the most extreme flood.

If flooding is expected we will implement our flood emergency response plan to ensure the safety of everyone. If there are students already at the school we will initially advise parents/caregivers to pick up their children. However, if flooding looks as though it may flood the school or local roads, all students, staff and visitors will evacuate to the evacuation centre at Club Wyong and parents/caregivers will be advised that they can pick up their children from there. In the unlikely event that flooding occurs before the school is able to fully evacuate, students and staff will be able to shelter from flooding in the school buildings above the level of the largest possible flood until it is safe for parents/caregivers to access the site.

Text messages, emails and social media will be used to keep parents/caregivers up to date with the situation. Please do not try and ring the school as we will not be able to answer all of the calls while caring for the students. Please do not drive or walk through floodwater to try and reach the school. We will care for your children until it is safe for you to arrive and pick them up.



Situation	Email to staff, students, parents and care-givers	Website	SMS	Facebook/Social Media	Telephone call - Parents	SMS - Staff	Phone line (answering machine/when on hold)
The school is closed due to flooding outside of operational hours	Dear Families, Due to the possibility of flooding St Cecilia's Catholic Primary School will be closed [today/tomorrow]. We will inform you when the school reopens. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters.	Due to the possibility of flooding St Cecilia's Catholic Primary School will be closed [today/tomorrow]. We will inform you when the school reopens. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters. For more information about the flood risk at our school click here.	Due to the possibility of flooding St Ceilia's will be closed [today/tomorrow]. Please go to our website www.scwdbb.catholic. edu.au/ for more details	Due to the possibility of flooding St Cecilia's Catholic Primary School will be closed [today/tomorrow]. We will keep our community informed about when the school will reopen. We hope that everyone is able to stay safe and dry and look forward to seeing you all when the school reopens. Please go to our website www.scwdbb.catholic. edu.au [provide link here] for more details on temporary arrangements.	Hi [name], This is [name] from St Cecilia's Catholic Primary School, I am calling to check that you received the text message we sent regarding the school's closure for [today/tomorrow] due to flooding? When will you be open again? We will notify you once the risk of flooding has passed. Hopefully we will be able to reopen tomorrow, but this will depend on the weather over the next 24 hours. Please check email or our website for further information.	Due to the possibility of flooding St Cecilia's will be closed [today/tomorrow]. We will inform you when the school reopens.	St Cecilia's Catholic Primary School is currently closed due to the possibility of flooding. We cannot answer your phone call immediately. Please check email or the school's website for further information.



Situation	Email to staff, students, parents and care-givers	Website	SMS	Facebook/Social Media	Telephone call - Parents	SMS - Staff	Phone line (answering machine/when on hold)
The school is closed due to flooding at drop off time	Dear Families, Due to flooding St Cecilia's Catholic Primary School will be closed today. We will inform you when the school reopens. All students who are already here are safe and above the level of even the largest floods. Any students who have already been dropped off at school should be picked up by their parents/care- givers immediately. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters.	Due to flooding St Cecilia's Catholic Primary School will be closed today. We will inform you when the school reopens. All students who are already here are safe and above the level of even the largest floods. Any students who have already been dropped off at school should be picked up by their parents or care-givers parents/caregivers immediately. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters. For more information about the flood risk at our school click here.	Due to probable flooding St Cecilia's will be closed today. Please go to our website www.scwdbb.catholi c.edu.au for more details.	Due to flooding St Cecilia's Catholic Primary School will be closed today. We will keep our community informed about when the school will reopen. All students who are already here are safe and above the level of even the largest floods. Any students who have already been dropped off at school should be picked up by their parents or care- givers immediately. If you are unable to pick up your child please contact the school. We hope that everyone is able to stay safe and dry and look forward to seeing you all when the school reopens. Please go to our website www.scwdbb.catholi c.edu.au for more details on temporary arrangements.	Hi [name], This is [name] from St Cecilia's Catholic Primary School, I am calling to check that you received the text message we sent regarding the school's closure for today due to flooding? [If children not dropped off yet] This means that at the moment it's not safe to come to the school and drop off your child. We will notify you once the risk of flooding has passed. Hopefully we will be able to reopen tomorrow, but this will depend on the weather over the next 24 hours. [If children already dropped off] This means that you should arrange to pick up your child from school immediately. All students who are already here are safe and above the level of even the largest floods, but they need to go home. Please go to our website www.scwdbb.catholic.edu. au for updates and more details on temporary arrangements.	Due to flooding St Cecilia's will be closed today. We will inform you when the school reopens.	St Cecilia's Catholic Primary School is currently closed due to flooding. We cannot answer your phone call immediately. Please check email or the school's website for further information.



Situation	Email to staff, students, parents and care-givers	Website	SMS	Facebook/Social Media	Telephone call - Parents	SMS - Staff	Phone line (answering machine/when on hold)
The school is closed due to flooding during school hours before 1:00 pm	 Dear Families, Due to flooding St Cecilia's Catholic Primary School will be closing today and may not open tomorrow. We will inform you when the school reopens. All students here are safe and able to shelter above the level of even the largest floods. All students should be picked up by their parents/care-givers immediately. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters. 	Due to flooding St Cecilia's Catholic Primary School will be closing today and may not open tomorrow. We will inform you when the school reopens. All students here are safe and able to shelter above the level of even the largest floods. All students should be picked up by their parents/care- givers immediately. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters. For more information about the flood risk at our school click here.	Due to flooding St Cecilia's is closing for today. Please pick up your child immediately. Please go to our website www.scwdbb.c atholic.edu.au for more details.	Due to flooding St Cecilia's Catholic Primary School will be closing today. We will keep our community informed about when the school will reopen. All students here are safe and able to shelter above the level of even the largest floods. All students should be picked up by their parents/care- givers immediately. If you are unable to pick up your child please contact the school. We hope that everyone is able to stay safe and dry and look forward to seeing you all when the school reopens. Please go to our website www.scwdbb.catholic .edu.au for more details on temporary arrangements.	Hi [name], This is [name] from St Cecilia's Catholic Primary School, I am calling to check that you received the text message we sent regarding the school's closure for today due to flooding? This means that you will need to pick your child up immediately from school. All students here are safe and able to shelter above the level of even the largest floods, but students need to be picked up immediately. Please go to our website www.scwdbb.cath olic.edu.au for updates and more details on temporary arrangements.	Due to flooding St Cecilia's will be closing today. Please don't come to work until the school reopens.	St Cecilia's Catholic Primary School is currently closed due to flooding. We cannot answer your phone call immediately. Please check email or the school's website for further information.



Situation	Email to staff, students, parents and care-givers	Website	SMS	Facebook/Social Media	Telephone call - Parents	SMS - Staff	Phone line (answering machine/w hen on hold)
The school is closed due to flooding during school hours after 1:00 pm	Dear Families, Due to flooding St Cecilia's Catholic Primary School will be closing T 3:05 PM today and may not open tomorrow. We will inform you when the school reopens. All students here are safe and able to shelter above the level of even the largest floods. Any students who usually take the bus home will make their usual way home at the end of the school day. All other students will need to be picked up by a parent/care-giver at 3:05 pm. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters.	Due to flooding St Cecilia's Catholic Primary School will be closing at 3:05 pm this afternoon. We will inform you when the school reopens. All students here are safe and able to shelter above the level of even the largest floods. Any students who usually take the bus home will make their usual way home at the end of the school day. All other students will need to be picked up by a parent/care-giver at 3:05 pm. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters. For more information about the flood risk at our school click here.	Due to flooding St Cecilia's is closing. Please pick up your child at 3:05 pm unless they take the bus. Go to our website www.scwdbb.c atholic.edu.au for details.	Due to flooding St Cecilia's Catholic Primary School will be closing at 3:05 pm this afternoon. We will inform you when the school reopens. All students here are safe and able to shelter above the level of even the largest floods. ny students who usually take the bus home will make their usual way home at the end of the school day. All other students will need to be picked up by a parent/care- giver at 3:05 pm. If you are unable to pick up your child please contact the school. We hope that everyone is able to stay safe and dry and look forward to seeing you all when the school reopens. Please go to our website www.scwdbb.catholic .edu.au for more details on temporary arrangements.	 Hi [name], This is [name] from St Cecilia's Catholic Primary School, I am calling to check that you received the text message we sent regarding the school's closure for today due to flooding? [If children usually take the bus home] This means that your child will come home as per normal at the end of the school day. We will notify you once the risk of flooding has passed. Hopefully we will be able to reopen tomorrow, but this will depend on the weather over the next 24 hours. [otherwise] This means that you should arrange to pick up your child from school at 3:05 pm. All students here are safe and above the level of even the largest floods, but they need to be picked up by a parent/care-giver at the end of the normal school day. Please go to our website www.scwdbb.catholic.edu.au for updates and more details on temporary arrangements. 	Due to flooding St Cecilia's will be closing today. Please don't come to work until the school reopens.	St Cecilia's Catholic Primary School is currently closed due to flooding. We cannot answer your phone call immediately . Please check email or the school's website for further information.



Situation	Email to staff, students, parents and care-givers	Website	SMS	Facebook/Social Media	Telephone call - Parents	SMS - Staff	Phone line (answering machine/ when on hold)
The school is closed due to flooding during school operational hours after 3:05 pm	Dear Families, Due to flooding St Cecilia's Catholic Primary School will be closing this afternoon. We will inform you when the school reopens. All students here are safe and above the level of even the largest floods. Any students who are still at school will need to be picked up by a parent/care-giver immediately. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters.	Due to flooding St Cecilia's Catholic Primary School will be closing this afternoon. We will inform you when the school reopens. All students here are safe and above the level of even the largest floods. Any students who are still at school will need to be picked up by a parent/care-giver immediately. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters. For more information about the flood risk at our school click here.	Due to flooding St Cecilia's is closing this afternoon. Please pick up your child/ren immediately. Go to our website www.scwdb b.catholic.ed u.au for more details	Due to flooding St Cecilia's Catholic Primary School will be closing this afternoon. We will keep our community informed about when the school will reopen. All students here are safe and above the level of even the largest floods. Any students who are still at school will need to be picked up by a parent/care-giver immediately. If you are unable to pick up your child please contact the school. We hope that everyone is able to stay safe and dry and look forward to seeing you all when the school reopens. Please go to our website www.scwdbb.catholic.edu.au for more details on temporary arrangements.	Hi [name], This is [name] from St Cecilia's Catholic Primary School, I am calling to check that you received the text message we sent regarding the school's closure this afternoon due to flooding? <i>When will you be open again?</i> We will notify you once the risk of flooding has passed. Hopefully we will be able to reopen tomorrow, but this will depend on the weather over the next 24 hours. Please check email or our website for further information. <i>[if child is still at school]</i> This means that you will need to pick up your child from school immediately. All students here are safe and above the level of even the largest floods, but they need to be picked up by a parent/care-giver immediately.	Due to flooding St Cecilia's will be closing this afternoon. We will inform you when the school reopens.	St Cecilia's Catholic Primary School is currently closed due to flooding. We cannot answer your phone call immediately . Please check email or the school's website for further information.



Situation	Email to staff, students, parents and care-givers	Website	SMS	Facebook/Social Media	Telephone call - Parents	SMS - Staff	Phone line (answering machine/ when on hold)
When evacuation of the school has been activated	 Dear Families, Due to flooding St Cecilia's Catholic Primary School will be evacuating to Club Wyong immediately. We will inform you when students and staff have arrived at the evacuation centre. All students who have not yet been picked up are safe and making their way to Club Wyong, above the reach of even the largest floods. Parents/care-givers should pick up their children from Club Wyong. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters. 	Due to flooding St Cecilia's Catholic Primary School will be evacuating to Club Wyong immediately. We will inform you when students and staff have arrived at the evacuation centre. All students who have not yet been picked up are safe and making their way to Club Wyong, above the reach of even the largest floods. Parents/care-givers should pick up their children from Club Wyong. If you are unable to pick up your child please contact the school. We hope that you are able to stay safe and dry and look forward to seeing you all when the school reopens. Remember that it's never safe to drive or walk through floodwaters. For more information about the flood risk at our school click here.	Due to flooding St Cecilia's is evacuating. Please pick up your child/ren from Club Wyong. Go to our website www.scwdbb .catholic.edu. au for more details	Due to flooding St Cecilia's Catholic Primary School will be evacuating to Club Wyong immediately. We will keep our community informed when students and staff have arrived at the evacuation centre. All students who have not yet been picked up are safe and making their way to Club Wyong, above the reach of even the largest floods. Parents/care-givers should pick up their children from Club Wyong. If you are unable to pick up your child please contact the school. We hope that everyone is able to stay safe and dry and look forward to seeing you all when the school reopens. Please go to our website www.scwdbb.catholic.edu.au for more details on temporary arrangements.	Hi [name], This is [name] from St Cecilia's Catholic Primary School, I am calling to check that you received the text message we sent regarding the school's evacuation due to flooding? <i>When will you be open</i> <i>again?</i> We will notify you once the risk of flooding has passed. Hopefully we will be able to reopen tomorrow, but this will depend on the weather over the next 24 hours. Please check email or our website for further information. <i>[if child has not yet been</i> <i>picked up]</i> This means that you will need to pick up your child from Club Wyong immediately. All students there are safe and above the level of even the largest floods, but they need to be picked up by a parent/care- giver immediately.		St Cecilia's Catholic Primary School is currently closed due to the possibility of flooding. We cannot answer your phone call immediately. Please check email or the school's website for further information.



Situation	Email to staff, students, parents and care-givers	Website	SMS	Facebook/Social Media	Telephone call - Parents	SMS - Staff	Phone line (answering machine/ when on hold)
When the Shelter in Place strategy has been activated	 Dear Families, St Cecilia's Catholic Primary School is currently experiencing flooding. This has temporarily cut access to our school and it is not safe to try and reach the school at present. Due to the worsening of flooding in the area, pick-up of students is no longer safe and must be delayed. We will advise when it is safe to access the school again. All children who are here are safe and are sheltering above the level of even the largest possible flood. Parents/caregivers should check their emails and texts regularly for updates regarding collecting children. Remember that it's never safe to drive or walk through floodwaters. 	St Cecilia's Catholic Primary School is currently experiencing flooding. This has temporarily cut access to our school and it is not safe to try and reach the school at present. Due to the worsening of flooding in the area, pick-up of students is no longer safe and must be delayed. We will advise when it is safe to access the school again. All children who are here are safe and are sheltering above the level of even the largest possible flood. Parents/caregivers should check their emails and texts regularly for updates regarding collecting children. Remember that it's never safe to drive or walk through floodwaters. For more information about the flood risk at our school click here.	Flooding has isolated St Cecilia's. All students are safe at school but access roads are not. Do not pick up students. Go to www.scwd bb.catholic. edu.au for details	St Cecilia's Catholic Primary School is currently experiencing flooding. This has temporarily cut access to our school and it is not safe to try and reach the school at present. Due to the worsening of flooding in the area, pick-up of students is no longer safe and must be delayed. Parents and care-givers should wait until we advise that it is safe to access the school again All children who are here are safe and are sheltering above the level of even the largest possible flood. Please go to our website www.scwdbb. catholic.edu.au for more details on temporary arrangements.	 Hi [name], This is [name] from St Cecilia's Catholic Primary School, I am calling to check that you received the text message we sent regarding the school being currently inaccessible due to flooding? This means that at the moment it's not safe to come to the school. The students are all safe and sheltering above the level of even the largest possible flood. Please keep an eye on your texts, emails and our website for updates <i>When will I be able to pick up my child</i>? We expect that flood waters will be gone in the next few hours, and you will be able to pick your child up then. We will send out a SMS and email notification when it is safe to collect your child. Because of the flooding we understand that you may have some trouble with traffic and if you can not get here right away we understand. We want all our parents and care-givers to drive safely and know that we will look after the students until you can be here. We have enough food and drink for the children. <i>I can walk to the school, is it ok to pick my child up now?</i> Please stay safe at home for the duration of the flooding. It is not safe to walk through floodwaters if you can avoid it due to the water often having sewage and other contamination in it. Your child is safe here with us, and we will look after them until it is safe for you to come. 	Due to flooding St Cecilia's is currently closed. We will inform you when the school reopens.	St Cecilia's Catholic Primary School is currently closed due to intense rain and flooding. We cannot answer your phone call immediately. Please check email or the school's website for further information.



Situation	Email to staff, students, parents and care-givers	Website	SMS	Facebook/Social Media	Telephone call - Parents	SMS - Staff	Phone line (answering machine/ when on hold)
If the Shelter in Place Strategy was activated - when flooding has receded around the school and it is safe to pick up children	Dear Families, It is now safe to access St Cecilia's Catholic Primary School to pick up your children. We are all safe and looking forward to seeing you soon. Remember that it's never safe to drive through floodwaters, and if localised flooding or traffic congestion on your route is preventing you from collecting your child please let us know via text or email. We will be staying until all children are collected. Please drive safely and we will see you all soon.	It is now safe to access St Cecilia's Catholic Primary School to pick up your children. We are all safe and looking forward to seeing you soon. Parents/caregivers should refer to text and email notifications for more information. Remember that it's never safe to drive through floodwaters, and if localised flooding or traffic congestion on your route is preventing your child please let us know via text or email. We will be staying until all children are collected. Please drive safely and we will see you all soon.	It is now safe to access St Cecilia's to pick up your children. If flooding or traffic is preventing you from collecting your child please let us know. [parents who do not respond should be followed up with a telephone call]	It is now safe to access St Cecilia's Catholic Primary School to pick up your children. We are all safe and looking forward to seeing you soon. Parents/caregivers should refer to text and email notifications for more information. Remember that it's never safe to drive through floodwaters, and if localised flooding or traffic congestion on your route is preventing your child please let us know via text or email. We will be staying until all children are collected. Please drive safely and we will see you all soon.	Hi [name], This is [name] from St Cecilia's Catholic Primary School, I am calling to check that you received the text message we sent regarding the flooding being over? [provide relevant information regarding the collection of children] i.e. Yes, that means you can collect your children now		





APPENDIX C FLOOD EMERGENCY ITEMS





Item	Date Checked
Fully charged mobile phone, tablet or laptop with 4G/5G internet access capabilities and at least 48 hours of independent power supply (battery capacity or portable power bank)	
Soft copies of up-to-date staff and parent/carer contact lists	
Flood Emergency Kit - a plastic container clearly marked including:	
Printed copy of the latest version of this FERP	
 Battery operated torches with in-date batteries in each and a set of in- date spare batteries for each 	
 A battery-operated portable radio to listen to ABC radio (702 AM) for flood and other warning broadcasts. This must have in-date batteries and a set of in-date spare batteries 	
First aid kit	





APPENDIX D FLOOD EMERGENCY CONTACT LIST





Name	Organisation	Role	Contact Details
		Principal	
		Vice Principal	
		Flood Warden	
		Flood Warden (as required)	
	Emergency Services	Fire/ ambulance/ police	000
	State Emergency Service	SES Local Controller	132 500
	Central Coast Council	Customer Service Centre	02 4306 7900
	Wyong Public Hospital	Medical	02 4394 8000
		Bus Services	
		Electricity Supplier	
		Gas Supplier	
		Water and Sewage Supplier	
		Telecommunications	
		Waste Collection	
		Water Pumping Services	

This list is to be completed and kept updated by the school at all times once operational.





APPENDIX E FLOOD INFORMATION CERTIFICATE





Property Address:	7-15 Panonia Rd, WYONG
Lot /DP:	6/DP4361
Date Prepared:	15 November 2022
Source of information:	Wyong River Floodplain Risk Management Study and Plan, 2020

This Flood Certificate provides advice furnished in good faith by the council relating to the likelihood of the land identified above being flooded and to the nature or extent of any such flooding ("flood risk").

Flood level and flood planning advice is provided in the tables below and as maps in the Appendix. This advice regarding flood risk has been derived from the flood study listed above. Should you have any enquiries concerning this certificate, please do not hesitate to contact Andrew Dewar on 1300 463 954 during the hours of 8.00am to 4.15pm Monday to Friday

Flood Level Information Table

Flood Event	Minimum Level (m AHD)	Maximum Level (m AHD)
PMF	4.92	4.94
1% AEP	3.23	3.34
5% AEP	2.79	2.86

Planning Information Table

Flood Control Lot	\boxtimes
Minimum Habitable Floor Level	3.84m AHD
Complying Development: Flood Exclusionary Categories	
(a) Flood Storage Area	\boxtimes
(b) Floodway Area	\boxtimes
(c) Flow Path	
(d) High Hazard Area (H3, H4, H5, H6 Hazard	\boxtimes
Categorisation)	
(e) High Risk Area	





Minimum Habitable Floor Level in the Planning Information Table above is also known as the Flood Planning Level. It is derived from the maximum 1% AEP Flood Level plus 0.5m freeboard and an allowance for sea level rise if applicable. For large lots the maximum 1% AEP flood level may vary across the lot; as such the Minimum Habitable Floor Level would vary at different locations on the lot, which may result in a lower Minimum Habitable Floor Level than the one quoted in the Planning Information Table. Note that Minimum Habitable Floor Levels are based on a flood size that has a 1% chance each year of either being reached or exceeded. Larger floods still have a small chance of occurring. For this reason, Council <u>recommends</u> that property owners consider the merits of choosing a floor level above the minimum floor level if practical to do so.

Flood Mapping related to this address is included in the <u>Appendix</u>. On the Environmental Layers you can choose to view 1% AEP (1 in 100y) flood extents, as well as Flood Precincts, which are referred to in the Development Control Plan.

https://maps.centralcoast.nsw.gov.au/public/

Development Controls set appropriate floor levels, construction materials, pedestrian and vehicular access, car parking and impacts on surrounding property for a proposed development; either complying development (fast tracked - see below) or a DA. Council's development controls vary depending on the location:

- Former Gosford: LEP 2014 Clauses 5.21 & 7.3, DCP 2013 Chapter 6.7
- Former Wyong: LEP 2013 Clauses 5.21 & 7.3, DCP 2013 Chapter 3.3

https://www.centralcoast.nsw.gov.au/plan-and-build/planning-controls-and-guidelines

Complying Development is a fast-track approval process for straightforward residential, commercial and industrial development (e.g. Granny Flats). From 1 July 2021, all Complying Development Certificate (CDC) applications must be lodged through the online NSW Planning Portal. If the application meets specific criteria it can be determined by a registered certifier. Under Clause 3A.38 of the Codes SEPP 2008 Development must not be carried out on any part of a *flood control lot* that is considered to be in one of the following exclusionary categories: (a) flood storage area, (b) floodway area, (c) flow path, (d) high hazard area, (e) high risk area. Complying Development may be allowable at this address if none of the five flood exclusionary categories in the Planning Information Table above are marked "Yes".

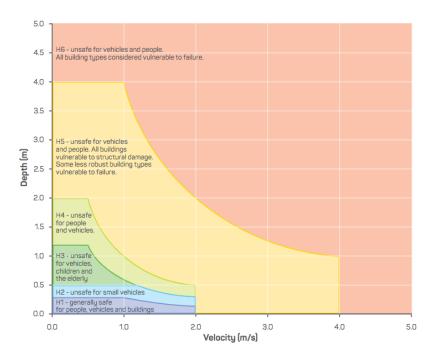
https://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Planning-Approval-Pathways/Complying-development

Flood Hazard: Flooding has the potential to cause loss: loss of life, injury or economic loss. The degree of hazard varies with the severity of flooding and is affected by flood behaviour (extent, depth, velocity, isolation, rate of rise of floodwaters, duration), topography and emergency management.

Council classifies flood hazard using thresholds related to the stability of people as they walk or drive through flood waters, or shelter in a building during a flood. This method classifies hazard on a spectrum of H1 to H6 as described by the hazard vulnerability curves below. For further information refer to: Flood Hazard: Guideline 7.3, Australian Institute for Disaster Resilience 2017 <u>https://knowledge.aidr.org.au/media/3518/adr-guideline-7-3.pdf</u>







Source – Australian Institute for Disaster Resilience 2017. Hydraulic Hazard: refer also to Australian Rainfall and Runoff Section 7.2.7 General Flood Hazard Curves (Figure 6.7.9) <u>http://book.arr.org.au.s3-website-ap-southeast-2.amazonaws.com/</u>

Disclaimers

- a. This certificate is based on Council's relevant flood study, which covers a large area and utilises *airborne laser scanning* ground level data. Flood depths as shown on the maps at specific locations may not accurately account for localised changes in ground topography; the accuracy of flood depth information at a specific location may be improved by taking the flood level and subtracting the accurate ground level at a particular location, which could be established by a Registered Surveyor.
- b. Without limiting s.733 of the *Local Government Act* 1993, Council expressly disclaims all and any liability and responsibility in respect of loss, damage or injury to person or property arising from anything done or omitted to be done by any person in reliance, whether wholly or in part, upon any part of this information. Any person having regard to the information contained in this document is encouraged to seek, at their discretion, all other sources of information on the subject matter as they consider appropriate, which may include local knowledge and/or professional advice.
- c. Council does not, and cannot, warrant that it will, in its capacity as a consent authority under the *Environmental Planning and Assessment Act 1979*, grant consent to a DA that seeks to erect or use dwellings or other structures on the above property that conform with the levels set out in the above information. Council assesses DAs based on merit, which must consider various development controls as set out in the LEP and DCP. For any development proposal on a *Flood Control Lot* Council recommends the applicant to engage the services of a professional engineer who specialises in Flood Risk Management.





Glossary

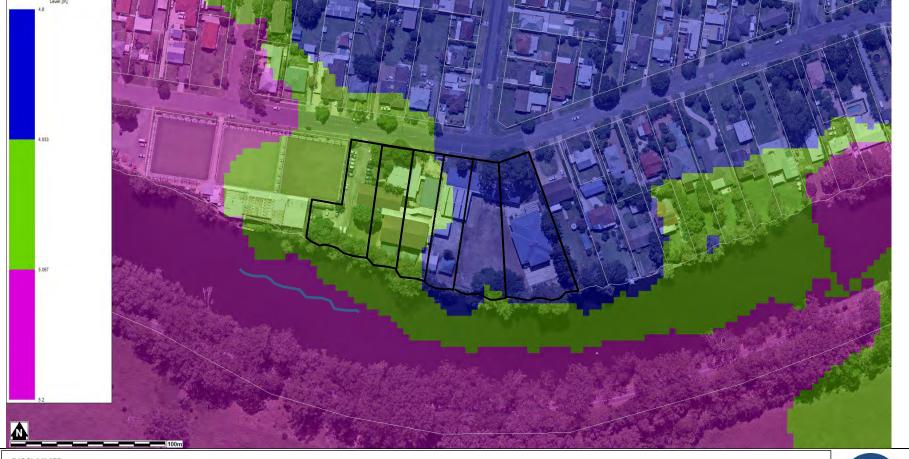
AEP	Annual Exceedance Probability: The probability of a flood event of a given size occurring in any one year, usually expressed as a percentage. For example, the 1% AEP flood has a 1% probability of occurring in any given year. This flood is sometimes referred to as 1 in 100, 100yr ARI or Q100
AHD	Australian Height Datum is the reference level for defining ground levels in Australia. The level of 0.0m AHD is approximately mean sea level.
Airborne Laser	A ground level measurement system in which a laser is emitted from an instrument
Scanning	in an aircraft and directed to the ground in a scanning pattern
DA	Development Application
DCP	Development Control Plan
Flood Control Lot	A land parcel that is subject to flood related development controls
Flood Hazard	Flooding which has the potential to cause loss: loss of life, injury or economic loss. The degree of hazard varies with the severity of flooding and is affected by flood behaviour (extent, depth, velocity, isolation, rate of rise of floodwaters, duration), topography and emergency management.
Flood Storage Area	Areas that are important for the temporary storage of floodwaters during the passage of flood.
Floodway Area	Those areas where a significant volume of water flows during floods.
Flow Path	Those areas where a flow path is identified in the relevant flood study, generally associated with velocities greater than 1 metre per second in the 1% AEP flood.
Freeboard	A factor of safety used in relation to the setting of floor levels. The typical freeboard set by the NSW Government is 0.5m, unless Council can demonstrate a different freeboard can apply as defined in an adopted Floodplain Risk Management Plan.
Ground Levels	Highest and lowest ground levels on the property, predominately based on ground level information databases created by <i>Airborne Laser Scanning</i> . A Registered Surveyor can confirm exact ground levels.
High Hazard Area	Those areas where flooding has the potential to be unsafe or cause damage. Council considers those areas that are Hazard Category H3 or above in a 1% AEP flood to be high hazard. Refer to Section on Flood Hazard below.
High Risk Area	Those areas of high flood risk as identified in a flood study or Floodplain Risk Management Plan.
LEP	Local Environment Plan
PMF	The <i>Probable Maximum Flood</i> is an extreme flood deemed to be the largest flood that could conceivably occur at a specific location. It is generally not physically or economically possible to provide complete protection against this flood event but should be considered for emergency response. The PMF defines the extent of flood prone land (i.e. the floodplain).





Central Coast Council

PMF Flood Extents



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PMF Flood Depth



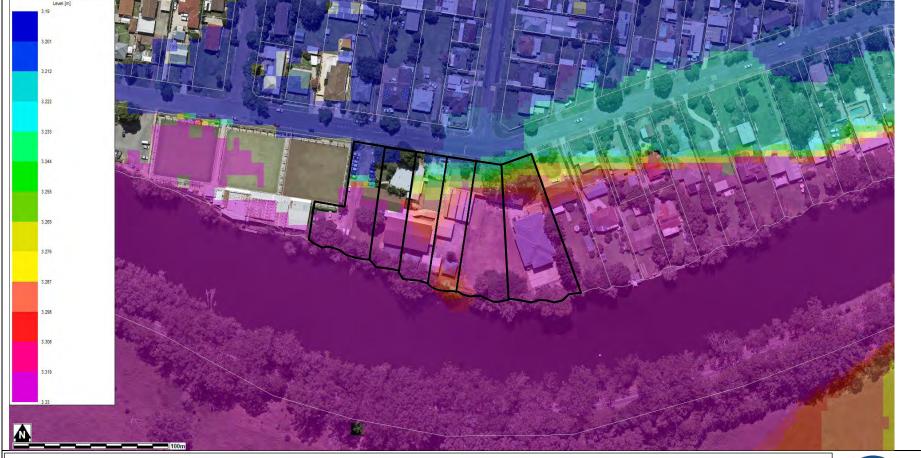
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1% AEP Flood Extents



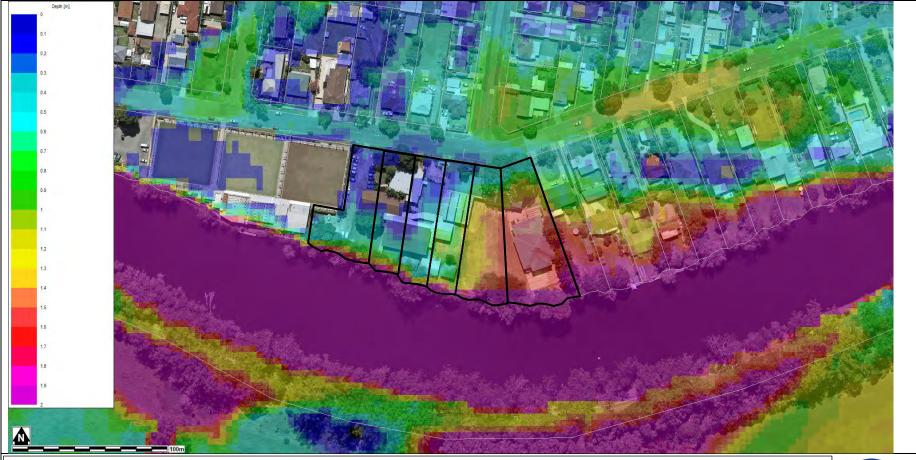
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1% AEP Flood Depth



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5% AEP Flood Extents



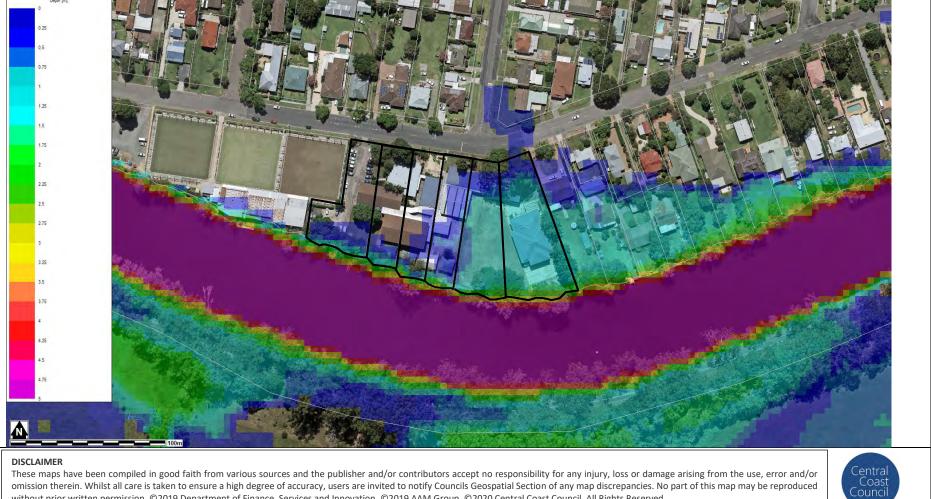
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5% AEP Flood Depths

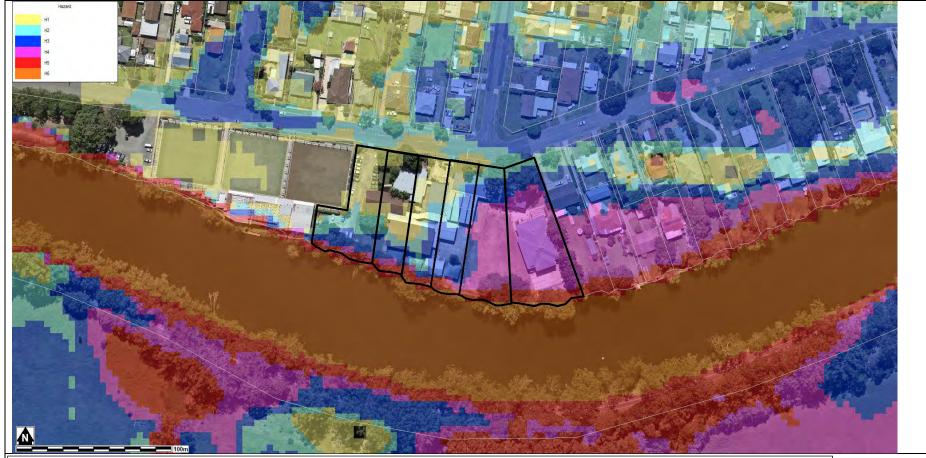


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1% AEP Hazard Categorisation



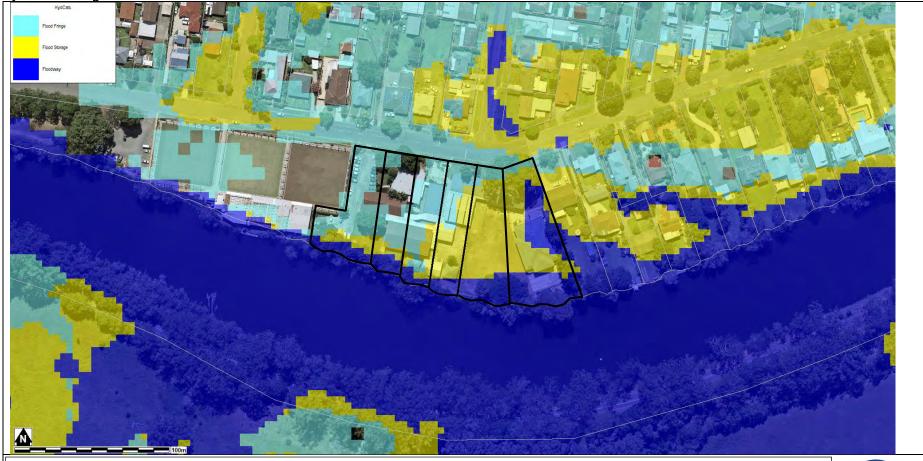
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Hydraulic Categorisation



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