



# Flooding in Agnes Water

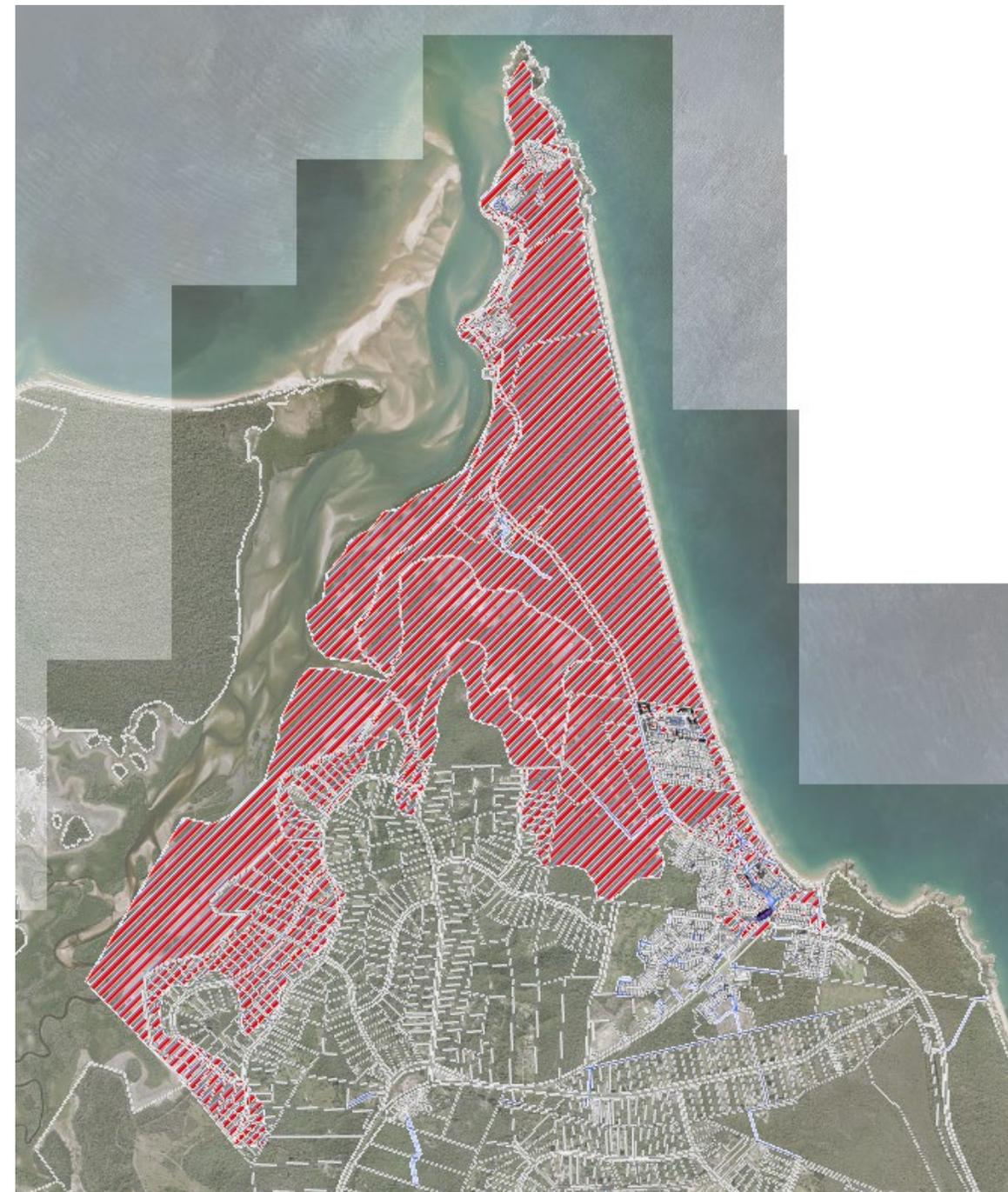
Advising of the Impacts to the Agnes Water Development Industry as a Result of Council's Policy Position Changes



# Flood Hazard Overlay – Flood Hazard Investigation Area

The purpose of the Flood hazard overlay code is to ensure that development on land subject to a defined flood event (DFE) avoids or mitigates the risk of flood hazard to protect people, property, the environment and economic activity and, to ensure development does not adversely affect other properties or the hydraulic efficiency of a waterway or floodplain.

*Note—The term 'defined flood event' ( DFE) is the 1% annual exceedence probability (AEP) flood event identified in a flood study adopted by Council (including an allowance for climate change) or, where there is no adopted flood study, the level mapped by the Queensland Reconstruction Authority (QRA).*



# Flood Hazard Overlay Code

## Table of Assessment

Flood hazard overlay code		
<p>Any material change of use where the development is accepted development subject to requirements under the table of assessment for the relevant zone and within the Flood Hazard Investigation Area for any of the following:</p> <ul style="list-style-type: none"> <li>a. community residence</li> <li>b. dual occupancy</li> <li>c. dwelling house</li> <li>d. low impact industry</li> <li>e. marine industry</li> <li>f. medium impact industry</li> <li>g. research and technology industry</li> <li>h. service industry</li> <li>i. transport depot</li> <li>j. warehouse.</li> </ul>	<p>No change to assessment category if complying with all accepted development subject to requirements acceptable outcomes</p>	<p>Flood hazard overlay code</p>

## Acceptable Outcome 1

Development, including intensification of an existing use, does not occur on land within a flood hazard area.

OR

A site specific flood hazard assessment demonstrates that risks associated with the development can be mitigated to an acceptable or tolerable level.

OR

If the premises is located in a Flood Hazard Investigation Area in the Flood Hazard overlay mapping, a written notice issued by Council at its sole discretion, for the purposes of this acceptable outcome, confirms that it is satisfied that the performance outcome PO1 would be achieved without the need for a site specific flood hazard assessment and/or a Registered Professional Engineer of Queensland certifying the actual level of flood risk for the site and measures required to ensure the risk associated with the development can be mitigated to an acceptable or tolerable level.

Note - In exercising its discretion, Gladstone Regional Council may, without limitation, have regard to:

- the location and characteristics of the site any existing flood studies or work being carried out in the course of undertaking flood studies which may be relevant to the site
- any work undertaken by or on behalf of Gladstone Regional Council in the course of locally verifying the extent of flood hazards which may be relevant to the site.

# Previous Policy Position



Contact Officer: Zayra Gomez  
Our Ref: EC/36/2022

19 October 2022

Mr S T Adams  
PO Box 188  
AGNES WATER QLD 4677

Dear Applicant

**EXEMPTION CERTIFICATE - APPROVAL  
PLANNING ACT 2016 546**

**EC/36/2022 EXEMPTION CERTIFICATE REQUEST - EXEMPTION FOR DWELLING WITHIN FLOOD OVERLAY  
26 ATLANTIS BOULEVARD, AGNES WATER QLD 4677  
LOT 34 SP 135449**

Reference is made to your request for an Exemption Certificate dated 8 September 2022 in relation to the abovementioned development proposal.

I wish to advise that the application was assessed under Delegated Authority on 11 October 2022 and was approved. The Exemption Certificate exempts the requirement for a Code Assessable Development Application for a Material Change of Use of the premises for a Dwelling House under Table 5.10.1 for matters pertaining to Flood Hazard Overlay. This Exemption Certificate approves only the works proposed as per following plan (attached).

Drawing Number	Revision	Description	Author	Date
WD.101	C2	Site Plan	Pandanus Building Designs	04/2022
WD.202	C2	Ground Floor Plan	Pandanus Building Designs	04/2022

Please note that this Exemption Certificate has effect for 2 years from the day the certificate is given (i.e. all development must be substantially started by 19 October 2024)

Should you have any questions or require further clarification in relation to any matters raised in the Decision Notice, please do not hesitate to contact Council's Planning Officer Zayra Gomez on 07 4970 0700.

Yours sincerely

T R MCDONALD  
A/MANAGER DEVELOPMENT SERVICES



Contact Officer: Nick Whittle  
Our Ref: EC/6/2021

22 February 2021

Buildon Building Certifications  
PO Box 59  
MIRIAM VALE QLD 4677

Dear Sir/Madam

**EXEMPTION CERTIFICATE - APPROVAL  
PLANNING ACT 2016 546**

**EC/6/2021 - EXEMPTION CERTIFICATE REQUEST  
DWELLING HOUSE - COASTAL & FLOOD HAZARD OVERLAYS  
2/12 OCEAN BEACH DRIVE, AGNES WATER QLD 4677  
LOT 2 SP 157582**

Reference is made to your request for an Exemption Certificate dated 2 February 2021 in relation to the abovementioned development proposal.

I wish to advise that the application was assessed under Delegated Authority on 22 February 2021 and was approved. The Exemption Certificate exempts the requirement for a Code Assessable Development Application for a Material Change of Use of Premises for a Dwelling House under Table 5.10.1 for matters pertaining to Coastal Hazard and Flood Hazard mapping.

Please note that this Exemption Certificate has effect for 2 years from the day the certificate is given (i.e. all development must be substantially started by 22 February 2023). This Exemption Certificate approves only the works proposed as per following plans(attached).

Drawing Number	Revision	Description	Author	Date
01.0		Ground Floor Plan	Paul Clout Design	28/01/201
03.0		Elevations	Paul Clout Design	28/01/201
05.0		Site Plan	Paul Clout Design	28/01/201

Should you have any questions or require further clarification in relation to any matters raised in the Decision Notice, please do not hesitate to contact Council's Planning Officer Nick Whittle on (07) 4970 0700.

Yours sincerely

H A ROBERTSON  
MANAGER DEVELOPMENT SERVICES



Contact Officer: Kayal Chandrasekar  
Our Ref: EC/24/2022

23 June 2022

Tia Paton & Arthur Crump  
C/- Zone Planning Group  
PO Box 5332  
GLADSTONE QLD 4680

Dear Sir/Madam

**EXEMPTION CERTIFICATE - APPROVAL  
PLANNING ACT 2016 546**

**EC/24/2022 - EXEMPTION CERTIFICATE  
DWELLING HOUSE INCLUDING SECONDARY DWELLING  
IMPACTED BY FLOOD HAZARD OVERLAY CODE  
4/6 BEACHES VILLAGE CIRCUIT, AGNES WATER QLD 4677  
LOT 2 SP 270829**

Reference is made to your request for an Exemption Certificate dated 8 June 2022 in relation to the abovementioned development proposal.

I wish to advise that the application was assessed under Delegated Authority on 21 June 2022 and was approved. The Exemption Certificate exempts the requirement for a Code Assessable Development Application for a Material Change of Use of Premises for a Dwelling House under Table 5.10.1 for matters pertaining to the Flood Hazard Overlay Code. Based on the most recent and accurate flood information available to Council and the common material submitted, Council considers the development to be low risk. This Exemption Certificate approves only the works proposed as per following plans (attached).

Drawing Number	Revision	Description	Author	Date
D01.00	A	Site Plan	Bright Life Homes	27.5.22
D02.00	A	Floor Plan	Bright Life Homes	27.5.22
D03.00	A	Elevations	Bright Life Homes	27.5.22
D03.01	A	Elevations	Bright Life Homes	27.5.22

Please note that this Exemption Certificate has effect for 2 years from the day the certificate is given (i.e. all development must be substantially started by 23 June 2024).

Should you have any questions or require further clarification in relation to any matters raised in the Decision Notice, please do not hesitate to contact Council's Planning Officer Kayal Chandrasekar on (07) 4970 0700.

Yours sincerely

H A ROBERTSON  
MANAGER DEVELOPMENT SERVICES

# Current Policy Position

## Guidelines for Drafting a Hazard Assessment

Flood hazard assessment report

- a. A flood hazard assessment report is to be certified by a Registered Professional Engineer Queensland with demonstrated expertise in hydrology, hydraulic modelling and stormwater engineering and is to:
  - i. Be prepared in accordance with the methodology prescribed in Queensland Reconstruction Authorities publication [Planning for stronger more resilient floodplains Part 2](#).
  - ii. Include accurate hydrological and hydraulic modelling of the waterway network and assessment of existing flooding and flood levels of major water systems including accounting for climate change/variability.
  - iii. Include modelling of the 10%, 2% 1%, 0.5%, 0.2% and 0.1% AEP flood events and any other relevant AEPs based on development category and the PMF. This analysis is to include volumes, depths of flooding, and velocity.
  - iv. Include a qualitative assessment of the piped drainage and hydraulic analysis of the drainage network particularly in relation to the potential for a regional event to cause backflow flooding of the drainage network.
  - v. Address the potential impacts of climate change.

## Policy Purpose

### SC6.7 Flood hazard

#### SC6.7.1 Purpose

The purpose of this planning scheme **policy** is to:

1. Provide advice about achieving outcomes in the [Flood hazard overlay code](#).
2. Identify and provide guidance about information that may be required to support a development application where subject to the Flood hazard overlay code.
3. Identify guidelines that may be relevant to achieving outcomes in the Flood hazard overlay code.

# Impacts of this Policy Change

- Delays in approval process
- Uncertainty in what will be accepted
- Certifiers (including Council Certifier) unwilling to certify developments
- Termination of contracts
- Additional costs
- Loss of income and job security for builders due to the above
- Further pressure on an already strained housing market
- Perceived anti-development mindset in Agnes Water

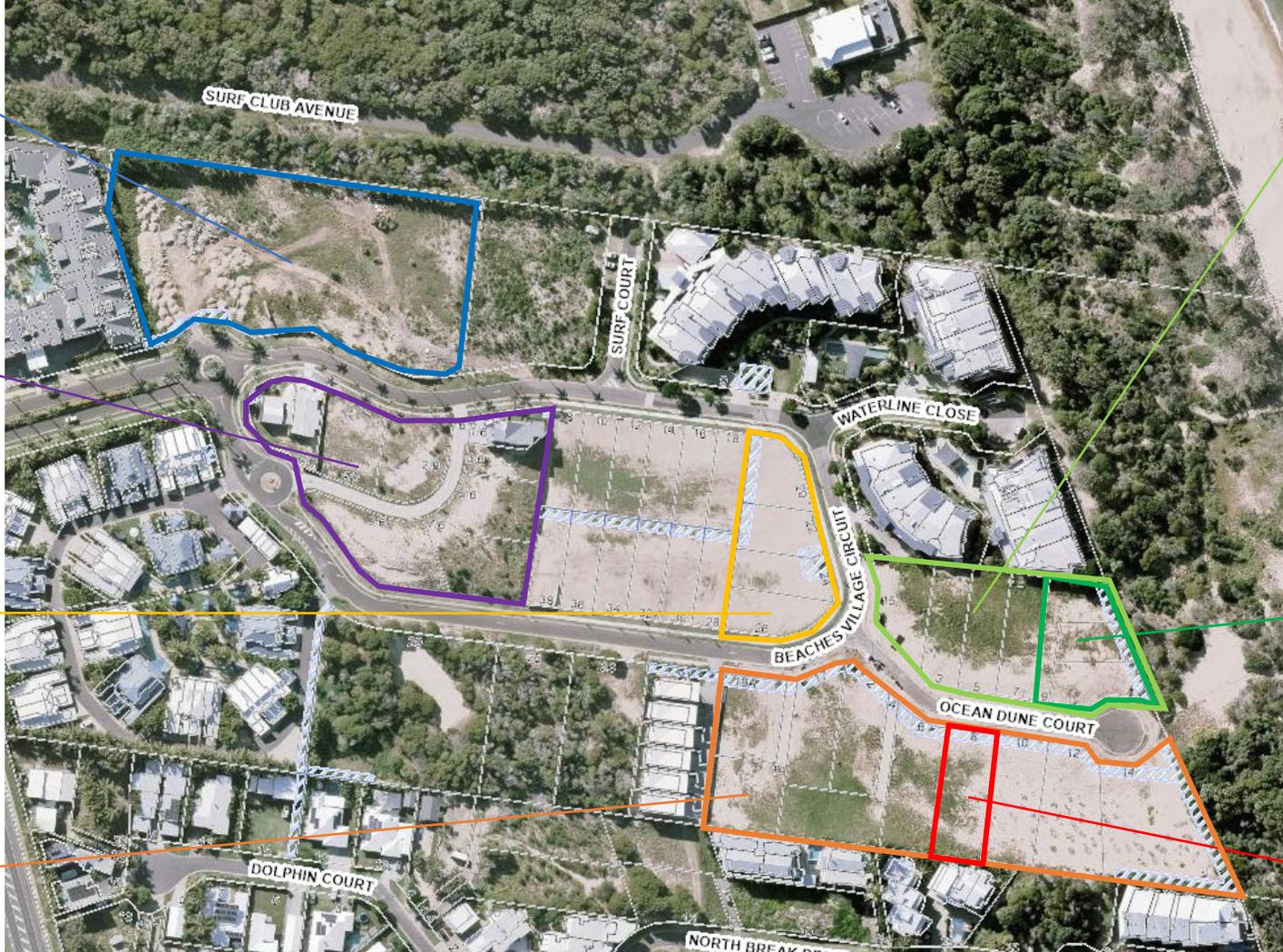
# Case Examples – Beaches Village Circuit

- DA/25/2022 – Approved 17/10/2022

- DA/49/2017 – Approved 27/10/2017 – 12 lots

- DA/42/2020 – Approved 28/21 – 4 lots

- DA/262/2016 – Approved 11/7/2017 – 11 lots



- DA/263/2016 – Approved 11 July 2017 – 6 lots

- DA/42/2021 – Approved 26/11/2021 – 3 lots

- DA/6/2023 – Approved 3/4/23 – 2 lots

# Case Examples - 2/12 Ocean Beach Drive

- Was told to lodge an Exemption Certificate, given the previous Exemption Certificate had lapsed.
- Exemption Certificate request was lodged and subsequently refused.
- Told to lodge a MCU because it's 'simple' (\$5,000+ cost exercise).
- Received an Action Notice for failure to provide a Flood Study and response to all codes.
- Engaged Biome Consulting Engineers for an additional fee of \$5,000
- Lodged material late August.
- Detailed Flood Study by qualified RPEQ Flood Engineer has been outlined as insufficient.
- Cost of construction has increased approximately \$300,000 since initial agreement was signed based on length of time taken to go through the above process.





# SERVICES

BIOME Consulting is committed to providing outstanding water and environmental services for residential housing, commercial, industrial, and public infrastructure projects. Our team of scientists and engineers are dedicated to finding the most practical, innovative and cost effective solutions to suit our clients' needs. We pride ourselves on identifying environmental and engineering constraints early in the regulatory process, resulting in the timely provision of appropriate design options to maximise opportunities.

## WATER

**Our range of water engineering services include:**

- Stormwater Management
- Water Sensitive Urban Design
- Hydraulic Impact Assessment
- Erosion and Sediment Control
- Water Resource Management
- Effluent Capability Assessment
- Water Quality

[More Info](#)

## ENVIRONMENT

**Our range of environmental services include:**

- Ecological Assessment
- Coastal Zone Management
- Open Space Planning
- Fauna and Flora Surveys
- Environmental Constraints Analysis
- Covenant Management
- Recreational Space Planning
- Environmental Impact Statements

[More Info](#)

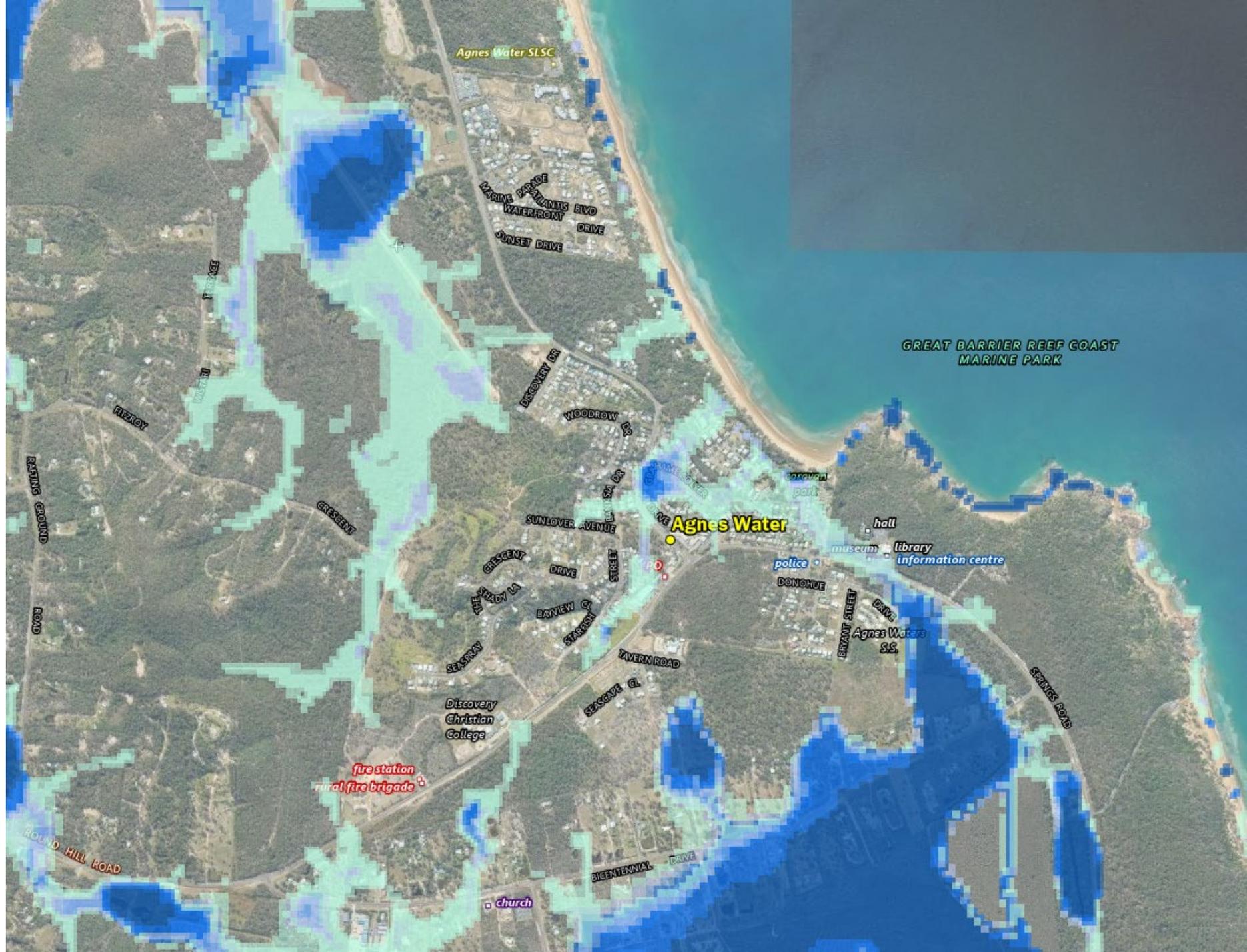
# Alternative Solutions



**Option 1 - Council Undertake the Flood Studies**

# Option 2 – Use the QRA Mapping

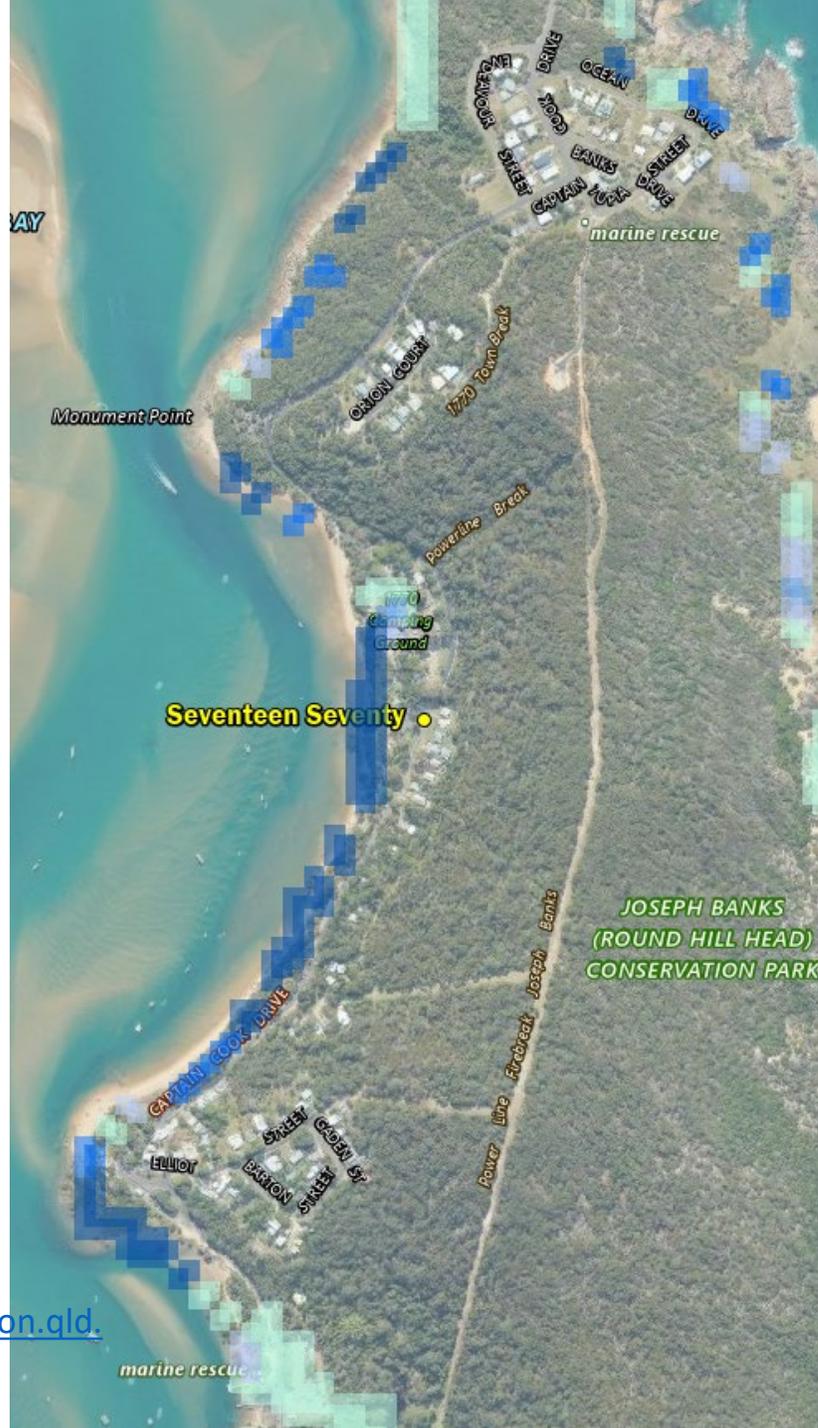
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Link to QRA mapping:  
<https://floodcheck.information.qld.gov.au/>

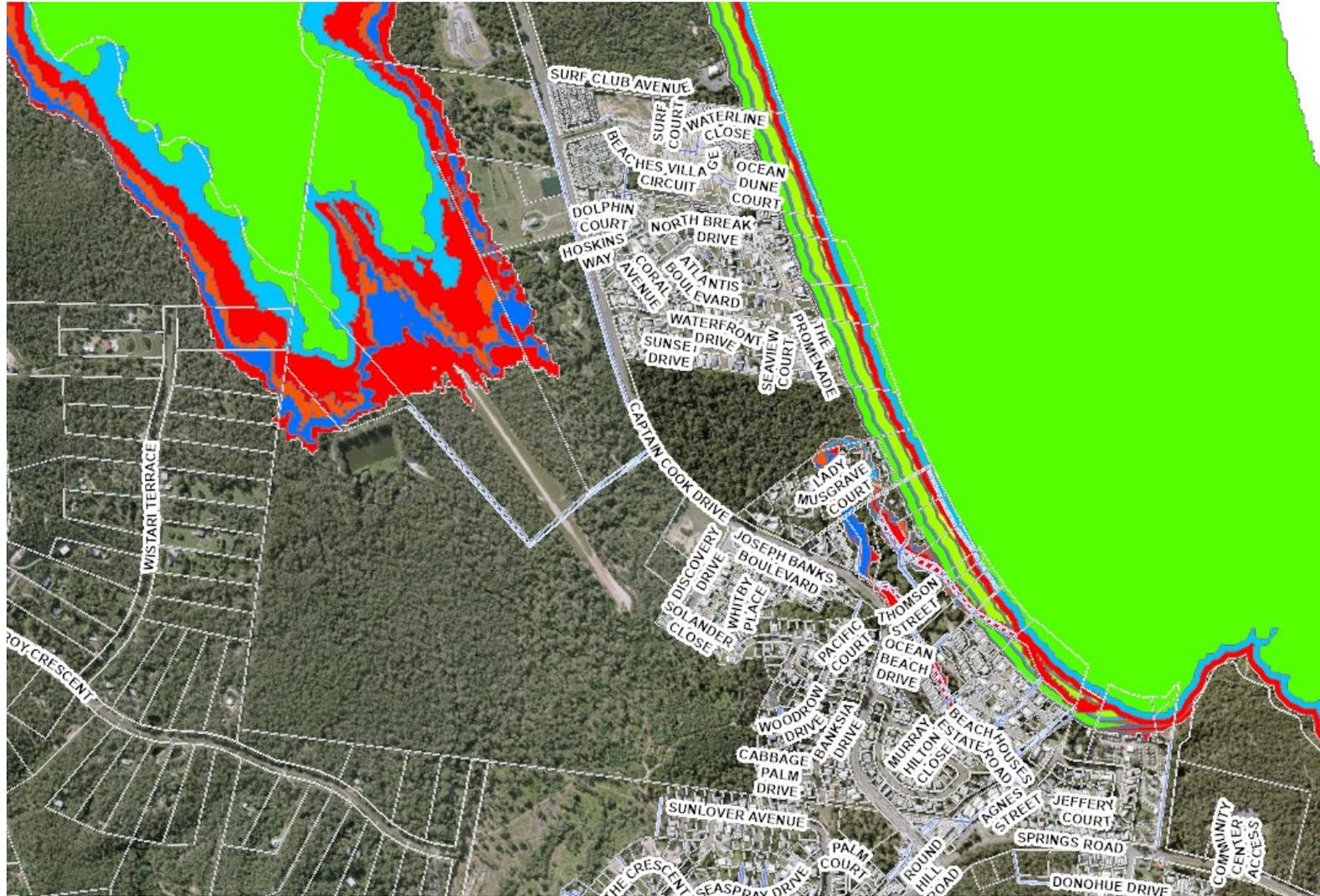
# QRA Mapping

Note—The term 'defined flood event' ( DFE) is the 1% annual exceedence probability (AEP) flood event identified in a flood study adopted by Council (including an allowance for climate change) or, where there is no adopted flood study, the level mapped by the Queensland Reconstruction Authority (QRA).



Link to QRA mapping:  
<https://floodcheck.information.qld.gov.au/>

# Coastal Inundation & Erosion



# Option 3 - RPEQ Engineer Certification

Note—AS/NZ ISO 31000:2009 Risk management – Principles and guidelines provides guidance on identifying and managing risks. [Table 8.2.7.3.3](#)—Table to acceptable outcomes sets out the criteria for establishing the level of flood hazard. A Registered Professional Engineer of Queensland with expertise in undertaking risk and flood analysis is to certify the actual level of flood risk for the site and measures required to ensure the risk associated with the development can be mitigated to an acceptable or tolerable level.

# Option 3 - RPEQ Engineer Certification



Glenn Ainsworth <info@baxengineering.com.au>

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## RE: Flood Hazard Overlay Agnes Water - Engineered Flood Level - 8 Ocean Dune Ct, Agnes Water

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Glenn Ainsworth <info@baxengineering.com.au>

Draft To: Tegan McDonald <Tegan.McDonald@gladstone.qld.gov.au>

Cc: Jonny <jonny@smpplumbing.com.au>, Helen Robertson <Helen.Robertson@gladstone.qld.gov.au>, Candace Canniffe <Candace.Canniffe@gladstone.qld.gov.au>, "Planning (Mailbox)" <planning@gladstone.qld.gov.au>

Mon, Sep 4, 2023 at 4:47 PM

Hi Tegan,

Thanks for the email.

I am still confused on how it has been determined that the Performance Outcome PO1 of the Flood Hazard Overlay has not been achieved?

The site elevation means there is no risk to people, property or the environment from flood hazard impacts and the site use will not intensify to a level that will put people, property or the environment at an intolerable risk.

I agree the preparation of a Flood Hazard Assessment Report is outlined, but it is just one of several acceptable outcome examples. I note the acceptable outcomes also show that the PO is met if:

*If the premises is located in a Flood Hazard Investigation Area in the Flood Hazard overlay mapping, a written notice issued by Council at its sole discretion, for the purposes of this acceptable outcome, confirms that it is satisfied that the performance outcome PO1 would be achieved without the need for a site specific flood hazard assessment **and/or** a Registered Professional Engineer of Queensland certifying the actual level of flood risk for the site and measures required to ensure the risk associated with the development can be mitigated to an acceptable or tolerable level.*

It states that a site specific flood hazard assessment is not needed should an RPEQ certify the actual level of flood risk for the site is at an acceptable or tolerable level. We have done this and I do not take on the risk of someone's property flooding very lightly.

As you know, in a performance based planning scheme the acceptable outcomes are only examples of how the performance outcomes can be achieved. It is pretty clear without making the property owners prepare a \$20K flood study that the performance outcome can be met. Any flooding modelling we would do would show exactly what the flood mapping and storm inundation already does on your website....give or take 50-100mm.

If there is still apprehension for properties in this area where inundation of the site is not an issue but access and evacuation could be then why not request a flood management report that would outline procedures to take if the surroundings were to be inundated? The management report would outline evacuation procedures etc. I have screenshot below the usual items covered in such a report:



Our reference: C6441 (pf)  
5<sup>th</sup> September 2023

Gladstone Regional Council  
101 Goondoon St, Gladstone  
Central QLD 4680

Attention: Ms. Tegan McDonald

Dear Ma'am,

RE: PROPOSED RESIDENTIAL DWELLING  
AT 36 BEACHES VILLAGE CIRCUIT, AGNES WATERS  
COUNCIL REFERENCE BRA/111/2023  
RESPONSE TO BUILDING APPLICATION CONDITIONS

Walsh Consulting Engineers have been engaged to provide a response to Gladstone Regional Council's Advisory Note, dated 6<sup>th</sup> July 2023, for the building application over Lot 15 on SP336736.

The likely maximum flood level in this coastal community is the Theoretical Maximum Storm Tide (TMST) which is a combination of the Highest Astronomical Tide (HAT) and a peak potential storm surge induced by cyclonic conditions.

The HAT at Gladstone Harbour is 4.8m AHD and the closest reliably recorded maximum storm surge at Mackay in 2018 was 3.7m. The TMST at Gladstone would therefore be 8.5m AHD, given that Agnes Waters is south of both Gladstone and Mackay adoption of this level would be conservative.

The subject property at Beaches Village Circuit with a minimum level of 13.5m AHD will therefore not be inundated by the TMST.

There is also no concern posed by the waterway to the west which discharges at the inlet at 1770 because the invert of this system adjacent to the subject property is 2m AHD and the low point of the ridge between the waterway and the subject property is 9m AHD so even in the unlikely event that the storm surge extends up the waterway the subject property would not be inundated.

Even if the highest predicted level of sea level change of 900mm is adopted the property will still be safe. As a RPEQ I would have no hesitation in providing a flood free certification for this property.

Please contact the undersigned at our Maroochydore office if additional information is required.

Yours faithfully

Justin Walsh (RPEQ 4665)  
for WALSH CONSULTING ENGINEERS