

**Upper South Creek Flood Study
Public Exhibition Submission**

Upper South Creek Flood Study
Public Exhibition Submission
01_Submission 1_Attachment 1

SUBMISSION FORM - Upper South Creek Flood Study Form Submission

There has been a submission of the form SUBMISSION FORM - Upper South Creek Flood Study through your Your Voice Camden website.

What is the nature of your submission?

Provide information or suggested amendments for consideration

Use this space to record your submission:

Figure 27B

In this mapping you show a PMF on Allenby Rd Rossmore at No 19 this is correct

I own the adjoining property No 29 Allenby Rd Rossmore & your mapping is incorrect

The only area that should be shaded " blue " is the street frontage as the creek opposite covers the entire street

The rear of our property is on a slight hill & all the runoff goes to No 19

We would expect council to amend this mapping to reflect the slope of the land .

We have owned the property for 21 years & have witnessed every flood event ,

The recent 3 floods in 2022 was again more proof the mapping is incorrect

Are you making a submission on behalf of a public agency, organisation or community group?

No

First Name

Last Name

Email:

Phone:

Street Address:

Postal Address:

To view all of this form's submissions, visit

https://yourvoice.camden.nsw.gov.au/index.php/dashboard/reports/forms_new/data/128

Upper South Creek Flood Study
Public Exhibition Submission
01_Submission 2_Attachment 1

SUBMISSION FORM - Upper South Creek Flood Study Form Submission

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The old maps (2019) showed overland flooding on 268 Catherine Field Rd (map5)

The new maps show no flooding on this block. Nor does the computer animation.

Nothing has changed up the hill to change the results on the block and it has flooded at least 4 times in the last year alone. I have photos and videos of recent events if anyone would like to verify,

The flooding can't just vanish because someone has obviously got the data wrong in the latest iteration

Are you making a submission on behalf of a public agency, organisation or community group?

No

First Name

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Upper South Creek Flood Study
Public Exhibition Submission
01_Submission 3_Attachment 1

Camden Council
70 Central Avenue
Oran Park NSW 2570

17/08/2022
Our Ref: 320-22

Attn: Floodplain Management Team
floodplains@camden.nsw.gov.au

Dear Sir/Madam,

Re: Feedback on draft Flood Risk Management Policy & Upper South Creek Flood Study

This letter has been prepared to address Council's request for feedback on the draft Flood Risk Management Policy (P1.0046.x) & Camden Council Public Exhibition Document 2022 – Review of Upper South Creek Flood Study (Draft Report) currently on public exhibition (from 21 July to 18 August 2022). Please refer to the below return responses from Craig & Rhodes (shown in [blue](#)) providing comment and requesting further clarification on matters related to the draft Council Policies and studies (excerpts from the Policy and study shown in *italics*).

Flood Risk Management Policy

Part 1 – Policy Introduction

3. Objective

The specific objectives of the Policy are to:

Provide a mechanism for the responsible control of development on flood prone land.

Craig & Rhodes Comment:

[Can it be clarified if this comment refers only to developable habitable land? \(i.e., residential, commercial areas, etc\). or does it also include sports fields, parks, and recreational areas? – Our assumption is that it does include these recreational areas.](#)

4. Scope

The Policy applies to flood prone land identified in Council's most up-to-date flood studies and plans including any that are not currently identified on Council's Flood Information Maps.

Craig & Rhodes Comment:

[Craig & Rhodes has recently been involved in the preparation of a now approved Water Cycle Management study completed in the Lowes Creek Maryland area. This study was undertaken during the rezoning phase of the Lowes Creek Maryland precinct. This study does not appear to have been included in the current iteration of the Upper South Creek flood model presented on exhibition, as it was prepared after 2018.](#)

[We understand by this statement that the revised Flood Risk Management Policy applies to Council's most up-to-date flood studies. Can you confirm if the Lowes Creek Maryland rezoning report/study is to be included in Council's most up-to-date flood studies and plans? And at what point will an approved study become included in Council's updated study and plans?](#)

Additionally, will the approval of a submission, like the Lowes Creek Maryland study undertaken by Craig & Rhodes be upheld and remain satisfactory to Council following the adoption of this Floodplain Risk Management Policy?

6. Definitions

Floodway areas

Craig & Rhodes Comment:

The term floodway is utilised in the FRM policy document to define where permissible development types are allowed (i.e., Item 7.3.6 Commercial and Industrial, 7.3.7 Concessional Development), however it seems the definition is quite ambiguous. The policy refers to a floodway where “significant volume of water flows during floods, often aligned with naturally defined channels”. How is this defined after the completion of land development activities that might reshape a natural floodway? Is the floodway related to the top of bank of a formed channel? Could the definition be more prescriptive to allow for more certainty on what constitutes a floodway? How is this defined when an existing floodway requires rehabilitation or reconstruction?

7 General Information

7.1 Section 10.7 Planning Certificates

In areas where Council holds flood related information, the Section 10.7 planning certificate shall indicate whether the land is affected by flooding and subject to flood related development controls or not, based on Council’s up-to-date flood studies and plans with additional information provided where appropriate.

Craig & Rhodes Comment:

Can Council confirm which flood level will be utilised to indicate whether the land is affected by flooding on the Section 10.7 Planning Certificates (i.e., 1% AEP flood level, 1% AEP Flood level + Freeboard, PMF flood level)?

Part 2 – Upper South Creek: Development Controls

2. Flood Mapping

Due to ongoing development in this catchment, flood behaviour will potentially be subject to changes with the development. Accordingly, flood mapping will be reviewed and updated frequently.

Based on Council’s future frequent revisions of flood studies and/or flood risk management studies and plans the flood mapping will be updated in Council’s website, following the standard floodplain risk management process including public exhibition of the revised Studies and/or Plans.

Craig & Rhodes Comment:

How often does Council intend on updating their flood model and flood mapping to incorporate proposed development changes in the catchment? Are we expecting that with each approved rezoning or DA application that utilises the USC Regional Model, a model update will be incorporated into Councils base model and shared for public use? How will Council manage the data provided to them with each development submission? Or does Council propose updates at regular intervals in the

future? What happens when the base case changes due to model updates – do existing studies need to be revisited, or will they remain approved?

2.4 Addressing Climate Change Impact

Climate change impacts have been assessed. The flood level increases at 1% AEP event are approximately 100 mm in average. It is considered that the climate change impacts of flood level increase up to 100mm at 1% AEP can be accommodated in current freeboard.

Craig & Rhodes Comment:

We request confirmation that freeboard requirements will remain as 500mm above the 1% AEP for mainstream flooding, and that there will be no further change to design requirements for climate change impacts.

Appendix 2 – Upper South Creek Development Controls

1.2.3 Structural Soundness

A structural engineering report is to be provided to ensure the structures can withstand floodwater forces including debris and buoyancy up to the 1% AEP plus freeboard or the PMF whichever is higher, where a flood refuge or evacuation access is proposed.

Craig & Rhodes Comment:

Can Council better define what constitutes a 'structure'? We assume this is predominantly referring to buildings, however it could refer to a culvert headwall?, a short concrete retaining wall? Public Art? A fence? Request to better define the term 'structure' in the policy. Additionally, could a structural design certificate with a signed statement ensuring compliance with the policy be provided in lieu of a full structural engineering report for this matter?

Item 1.2.4 – Flood Affection

- 1) *Engineering report required to certify that development will not increase flood affection elsewhere, having regard to a) loss of flood storage, b) changes in flood levels, flows and velocities upstream, downstream, and adjacent to the site, c) cumulative impact of multiple development in the vicinity, d) negligible impact to flood hazard. A flood impact and risk assessment report is to be prepared based on flood modeling, where precinct developments are proposed or where sub-divisions increase the intensity of land use in the floodplain*

Craig & Rhodes Comment:

Can Council provide acknowledgement that development that occurs in accordance with an endorsed strategy (i.e., approved Lowes Creek Maryland Precinct Water Cycle Management Strategy Report (May 2022)) requires no further assessment?

- 2) *No importation of fill within any part of 1% AEP floodplain. Floodplain filling is only permitted in the 1% AEP floodplain fringe, and flood storage with zero net filling, where flood modeling is conducted to demonstrate there is no adverse flood impacts elsewhere / off site.*

Craig & Rhodes Comment:

Within the Lowes Creek Maryland site precinct, the 1% AEP floodplain is expansive on due to large farm dams. To develop Maryland in accordance with the approved concept and currently endorsed flood modelling, filling in this 1% AEP floodplain will be required (online basins are reshaping the floodway). Can Council confirm that development that occurs in accordance with an endorsed strategy (i.e., approved Lowes Creek Maryland Precinct Water Cycle Management Strategy Report (May 2022)) requires no further assessment?

This control is also slightly ambiguous – it states no importation of fill is allowed within any part of the 1% AEP floodplain, and the next part says filling is permitted in flood plan fringe (still part of floodplain)? Please clarify.

- 4) *Removal of farm dams is only permitted where the removal does not cause adverse flood impacts off-site. Demonstration of no adverse impacts to flood levels, peak flows, flood velocity and redirection of flow is required by flood modeling.*

Craig & Rhodes Comment:

Can Council confirm that the removal of farm dams that occurs in accordance with an endorsed strategy (i.e., approved Lowes Creek Maryland Precinct Water Cycle Management Strategy Report (May 2022)) requires no further assessment?

1D/2D Upper South Creek Regional Flood Model and User Guide

Note For the above controls 1 to 4, it is required to use Council's 1D/2D Upper South Creek Regional Flood Model and User Guide prepared as part of Council's up-to-date flood studies / plans. The Regional Flood Model and User Guide are to be provided by Council.

Craig & Rhodes Comment:

Can Council confirm that the 1D/2D Upper South Creek Regional Flood Model and User Guide will be freely available for use? What are the requirements to obtain the modelling files? Will there be a requirement to sign a user agreement? What cost will there be to obtain the model? Will data submitted to Council for assessment be made available to other parties?

Camden Council Public Exhibition Document 2022 – Review of Upper South Creek (USC) Flood Study (Draft Report)

2.3 Precinct Development

The Lowes Creek and Maryland (Part Precinct) are in the planning phase

Craig & Rhodes Comment:

It is noted in the exhibited documentation that the Lowes Creek and Maryland (Part Precinct) were in the planning phase at the time the USC Flood Study was commenced. This appears to be the reasoning the endorsed Lowes Creek Maryland Water Cycle Management Strategy Addendum results

(Craig & Rhodes/Storm, 2022) have not been adopted in the study. Can Council provide acknowledgement that development that occurs in accordance with an endorsed strategy (i.e., approved Lowes Creek Maryland Precinct Water Cycle Management Strategy Report (May 2022)) requires no further assessment?

3.1.3 Other Studies

A number of other hydrologic and water cycle management studies were reviewed that relate to the planned development of specific precincts

Craig & Rhodes Comment:

It is noted in the exhibited documentation that the Lowes Creek Maryland Water Cycle Management Strategy Addendum study (Craig & Rhodes/Storm, 2022) was not included in the exhibited study. Can Council provide acknowledgement that development that occurs in accordance with an endorsed strategy such as the Lowes Creek Maryland study requires no further assessment?

We trust the above responses and requests for clarification address Camden Council's will be reviewed by Council in relation to the exhibited documents. Please contact me directly if you have any questions in relation to the above.

Yours faithfully,

Engineering Manager
BEng (Hons) Dip Eng Prac MIEAust CPEng NER

Craig & Rhodes Pty Ltd



Upper South Creek Flood Study
Public Exhibition Submission
01_Submission 4_Attachment 1

19 August 2022

The General Manager
Camden Council
70 Central Avenue
Oran Park, NSW 2570

By email: mail@camden.nsw.gov.au
floodplains@camden.nsw.gov.au

Att: Floodplain Management Team

Re: Floodplain Risk Management Plans & Policy

Dear Team Member,

Thank you for the opportunity to provide comments on the updated Flood Risk Management studies and Policy. This submission is made by Maryland Estate Developments on behalf of Maryland Pastoral Partnership, the owners of the Maryland site. The Maryland site is located within the [owes Creek Maryland Precinct.

Our key concern is that these documents do not reference/recognise the Council approved [owes Creek Maryland Precinct Watercycle Management Strategy Report (Addendum) prepared by Storm/Craig & Rhodes. Without this, it could be interpreted that there is a requirement to submit further strategy assessments. This would undermine the significant collaboration and agreement that has already been undertaken with Council on this issue.

As a result, we request that the Flood Risk Management studies, particularly the Upper South Creek Flood Study, and Policy is changed to reference/recognise the approved [owes Creek Maryland Precinct Watercycle Management Strategy Report (Addendum) prepared by Storm/Craig & Rhodes.

Background

The [owes Creek Maryland Precinct was rezoned in July 2021 and is located within the Upper South Creek Flood Study area. Supporting documentation for the rezoning included a Water Cycle Management Plan for the [owes Creek Maryland Precinct dated 26 September 2018 undertaken by Cardno. Following discussions with Council on this document, it was agreed to model and submit an addendum report incorporating the user guidelines into the Upper South Creek model contained by Council. This was undertaken by Storm/Craig & Rhodes and resulted in Council approving the [owes Creek Maryland Precinct Water Cycle Management Strategy Report (Addendum). Due to the detailed input and outcomes from this modelling exercise, it is our understanding that it was agreed with Council that no further

strategy assessment is required. Further, that the minor design flood events not covered in the Addendum could be dealt with at DA stage.

Flood Risk Management Policy P1.0046.x

The comment "Councils most up-to-date flood studies and plans" is made several times throughout the Policy. This includes approved strategies such as the [owes Creek Maryland Precinct Water Cycle Management Strategy Report (Addendum). As a result, this report and others should be referenced/recognised in the Policy or at a minimum a date provided so it is clear what reports are included in "Councils most up-to-date flood studies and plans".

Part 1 Section 7.1 provides details on Section 10.7 Planning Certificates, however, it does not provide any guidance on the flood level required on land before it appears on a planning certificate. We request that Council confirm this level.

In Part 1 Section 7.3.6 and 7.3.7 the Policy refers to mapped floodways. The approved [owes Creek Maryland Precinct Water Cycle Management Strategy Report (Addendum) alters this mapping. Without referencing/recognising this, the Policy will prevent the development of rezoned land. The Policy should account for changes in floodways mapped due to the approved Addendum.

Part 2 Section 2.4 refers to "Addressing Climate Change Impacts". We request that Council confirm that no design changes are required to approved strategies.

Appendix 2 Upper South Creek Development Controls - Item 1.2.4 & 1.2.5 sets out the following development controls:

- an engineering report or flood impact and risk assessment report is required to certify that development will not increase flood affectation elsewhere and show compliance with the [ocal Flood Plan or SES flood emergency management for the area.
- no importation of fill is permissible within any part of 1% AEP floodplain
- the removal of farm dams is not permissible without demonstrating no adverse impacts to flooding

Without referencing/recognising the approved [owes Creek Maryland Precinct Water Cycle Management Strategy Report (Addendum), the Policy requires:

- further strategy assessment on our land,
- prevents the importation of fill required to develop our land in accordance with the rezoning
- prevents the removal of farm dams on our site unless further assessments are undertaken.

The approved Addendum has addressed these issues. The Policy should reference/recognise this Addendum to prevent the above requirements and acknowledge our understanding of the agreement with Council that no further strategy assessment is required.

Review of the Upper South Creek Flooding Study in the Context of Ongoing Development (Draft Report)

It is recognised that the Flooding Study needs to establish a baseline and according to the study this is site topography in the study area as at November 2018. As a result, no other Flooding Study approved by Council since this date has been referenced in this document. This includes the approved Lowes Creek Maryland Precinct Water Cycle Management Strategy Report (Addendum) prepared by Storm/Craig & Rhodes. It is critical that the Upper South Creek Flooding Study references/recognises this Addendum as it validates it and gives it status within Council. Further, this provides a cross-reference for the Policy to define the statement "up-to-date flood studies and plans".

Should you require clarification on any of the above or further information, please do not hesitate to contact the undersigned.

Yours sincerely

Maryland Estate Developments
Senior Development Manager

Upper South Creek Flood Study
Public Exhibition Submission

01_Submission 5_Attachment 1

22nd August 2022

The General Manager
Camden Council
PO Box 183
Camden NSW 2570

By email: mail@camden.nsw.gov.au
floodplains@camden.nsw.gov.au

RE: FLOODPLAIN RISK MANAGEMENT PLANS & POLICY

This cover letter has been prepared to accompany the submission appended to this letter as prepared by the Maryland Estate Developments.

Given the collaborative precinct wide work was done for the Lowes Creek Maryland Precinct, Vitocco Enterprises supports the submission made by Maryland Estate Developments.

We look forward to engaging with Council further on this policy should it be required.

Yours sincerely,

Senior Development Manager

Annexure A:



Vitocco

PO Box 228
Narellan NSW 2567 Australia
P + 61 2 4774 8875

17 August 2022

The General Manager
Camden Council
70 Central Avenue
Oran Park, NSW 2570

By email: mail@camden.nsw.gov.au
floodplains@camden.nsw.gov.au

Att: Floodplain Management Team

Re: Floodplain Risk Management Plans & Policy

Dear Team Member,

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strategy assessment is required. Further, that the minor design flood events not covered in the Addendum could be dealt with at DA stage.

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Yours sincerely

Maryland Estate Developments

Senior Development Manager

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What is the nature of your submission?

Provide information or suggested amendments for consideration.

Use this space to record your submission:

The feedback offered here is relative the two (2) animations as shown i.e. those for (1) Catherine Field & Deepfield Roads + (2) Bringelly Rd including Allenby / Barry Ave.

These animations seem to grossly underestimate the number of points at which road flooding occurs, the water levels, rate of water flow and the actual properties as impacted based on the most recent 2 major weather events. If understood correctly the report as adopted is from 2019 and the event's I refer to are those of past 6-12 months. Other than those 2 events having very high sustained rainfall levels, what I suspect the past report and modelling Does Not allow for is the significant increased flood impact as generated by the number of properties / homes as developed in these areas over the past 3 years and thus the resultant storm water discharge these generate. Further, as Council also gets notice of any forward development plans for existing and / or new properties (large commercial, schools & homes), these should then likewise be factored into any new modelling developed to reflect true and full impact of those additional developments.

Above in mind, I trust any flood planning and water management systems allow for full and complete assessment of "worst case flooding scenarios" ensuring major access roads remain accessible and homes are not inundated.

Are you making a submission on behalf of a public agency, organisation or community group?

No

First Name

Last Name

Email:

Phone:

Street Address:

Postal Address:

To view all of this form's submissions, visit

https://yourvoice.camden.nsw.gov.au/index.php/dashboard/reports/forms_new/data/128