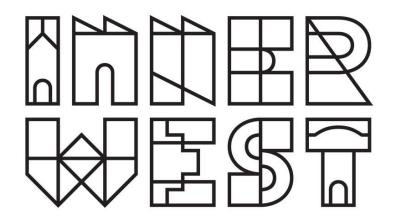
AGENDA



FLOOD MANAGEMENT ADVISORY COMMITTEE MEETING

TUESDAY 30 AUGUST 2022

2.00PM



AGENDA

1	Apol	logies
-	, .p.v.	5

- 2 Disclosures of Interest
- 3 Confirmation of Minutes

Minutes of 12 December 2019 Flood Management Advisory Committee Meeting 3

4 Matters Arising from Council's Resolution of Minutes

Late Items

Nil at time of printing.

5 Staff Reports

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	Whites Creek Flood Risk Management Plan and	
	Alexandra Canal Flood Risk Management Plan	10

- 5 Review of Terms of Reference
- 7 General Business
- 6 Close of Meeting



Minutes of Flood Management Advisory Committee Meeting held on 12 December 2019 at Ashfield Service Centre

Meeting commenced at 4.10pm

COMMITTEE REPRESENTATIVES PRESENT

Voting Members

Clr Lucille McKenna OAM Inner West Council

(Chair) Inner West Council

Lois Gray Community Representative

Tim Harnett Community Representative (4:43pm)

Alexander Bailey NSW SES – Ashfield-Leichhardt

Robert Baker NSW SES – Marrickville

Non-voting Technical Advisory Members

James Ogg Inner West Council
David Paton Inner West Council
Cathy Edwards-Davis Inner West Council

Sadeq Zaman NSW Department of Planning, Industry and Environment

David Grasby Sydney Water

Asad Suman Canterbury-Bankstown Council

Pablo Barreto Burwood Council

Klaus Neuscheler NSW SES – Marrickville

VISITORS

Erin Askew WMA Water

APOLOGIES:

Motion: McKenna / Steer

THAT apologies from the following committee members and Council officers be accepted.

Clr Colin Hesse Inner West Council

Shad Wall Community Representative Lindy Junkari Community Representative

Inner West Council Harjeet Atwall
Inner West Council Gwilym Griffiths
Inner West Council Ian McCann

Josi Hollywood NSW Department of Primary Industries Ashraf Awadalla Transport for NSW – Roads & Maritime

City of Sydney Shah Alam

Motion Carried Unanimously

TERMS OF REFERENCE

The Committee is advisory in nature and any recommendations are not binding on Council. The Committee currently has nine voting members of which six voting members were present, satisfying a quorum of 50% for the meeting.



DISCLOSURES OF INTERESTS:

Councillor McKenna declared a non-pecuniary, non-significant matter in Item 1 as her daughter owns a property within the subject catchment area. As no planning changes are being proposed as part of this report, the matter was considered sufficient.

CONFIRMATION OF MINUTES

Motion: (Gray/Bailey)

That the Minutes of the Flood Management Advisory Committee Meeting held on Thursday, 28 March 2019 be confirmed.

Motion Carried Unanimously

Questions Arising:

 CIr Steer inquired about the proposed detention basin at Petersham Park. It was confirmed that Petersham Park does not currently act as a detention basin, however its natural topography would readily allow for adaption to an above-ground basin, similar to existing basins at Marrickville Oval and Algie Park.

STAFF REPORTS

FMACC1219 Item 1 Presentation of the Final Dobroyd Canal and Hawthorne Canal Flood Risk Management Study and Plan

James Ogg and Erin Askew made a brief presentation to the Committee restating the background and context of the Dobroyd Canal and Hawthorne Canal Floodplain Risk Management Study and Plan and the results of the public exhibition of the reports.

The draft Dobroyd Canal and Hawthorne Canal Flood Risk Management Study and Plan was placed on public exhibition for a period of 5 weeks from the 22nd July 2019 to the 30th August 2019, with two community workshops held at the Ashfield Civic Centre on 13th and 14th August and two workshops held at the Yanada Room at Lewisham on 20th and 21st August.

During the exhibition period the webpage was visited 541 times and project documents were downloaded 187 times. A total of thirteen submissions were received through the Council's website. Of these submissions, only two were not supportive of the plan.

Based on the submissions received, a number of additional options, as well as combinations of options. Council has included an additional Flood Mitigation option within Old Canterbury Road. The remaining additional scenarios that did not generate a substantial benefit, were incorporated into the relevant appendices.

Comments & Questions Arising:

- CIr Steer inquired about the proposed detention basin at Petersham Park. It was
 confirmed that Petersham Park does not currently act as a detention basin, however
 its natural topography would readily allow for adaption to an above-ground basin,
 similar to existing basins at Marrickville Oval and Algie Park.
- Lois Gray commented that the final report had missing/incorrect references and



incomplete sentences in some areas. These references would be reviewed and corrected before the report is presented to Council for adoption.

- It was recommended that the final response to submissions raising ongoing
 concerns emphasise the difficulty of mitigation works in an urban context and that the
 report recommendations for increased emergency response would remain a high
 priority measure regardless of any potential mitigation works that could or could not
 be achieved. These recommendations will be taken on board as responses to
 submissions are finalised and sent out.
- Noted that members from NSW SES were present at all information sessions and were able to provide direct advice to residents regarding measures they can take to improve their own flood awareness and response.
- A question was raised regarding the many responses received to the previous flood study compared to the small number received this time. It was acknowledged that Flood Studies typically receive a much larger number of responses as they often become the first time residents are advised of flood risk and often include planning changes that may impact upon the zoning or planning controls of individual lots. A Flood Risk Management Plan is the second stage of the flood management process and includes wider scale recommendations, that have less direct impact on individuals and often receive few direct submissions. The proportion of submissions is consistent with those received previously for the Marrickville Valley Flood Risk Management Plan.
- Lois Gray noted that there are a number of existing significant land uses within the catchment area (aged care services, schools) and asked how Council was managing the response plans on these sites. New developments are required to prepare a Flood Risk Management Plan as part of their Development Application and conditions are imposed requiring that these plans be kept in a common area. For existing developments, the owners/strata bodies/government departments were notified at the time of the initial Flood Study that the property had been identified as a Flood Affected Property and part of their own duty of car is to prepare suitable management plans. Council can review a process by which properties are again encouraged to develop suitable flood risk management plans.
- CIr Steer noted that Marrickville and Ashfield Councils previously partnered with Burwood in 2014 for a grant that was not received. Does Council continue to partner with adjacent Councils in shared catchments? Following the Council amalgamations the majority of the relevant flood catchments are wholly within the boundaries of Inner West Council. There are areas of Johnstons Creek and Alexandra Canal that are shared with City of Sydney, who manage the upstream portions of these catchments. Any studies undertaken in these areas will use the model outputs of these studies to maximise accuracy and consistency. There are minor areas of Council's LGA that drain towards Canterbury Bankstown Council or Canada Bay Council and Council would review any partnership in these areas at the invitation of these Councils.
- Lois Gray asked how the high priority projects across the various studies are worked into the Forward Works Program. Council has endeavoured to have a generally consistent scoring system across all Flood Risk Management Studies, although notes that each study includes some local variation of factors. This allows for a general assessment of the comparative benefit of all options, however there are also many others factors including complexity, number of agencies involved, scale, downstream impacts, equitable distribution, asset renewal schedule that contribute to a projects position within the forward works program. The purpose of the Flood Risk Management Plans is not to provide a prescriptive list or order of projects, but to advise on the viability, relative benefit, and expected cost of projects in order to



facilitate Council's ongoing planning.

RECOMMENDATION

THAT:

That the Flood Management Advisory Committee endorse the final draft Dobroyd Canal and Hawthorne Canal Flood Risk Management Study and Plan to Council for adoption, subject to:

- Issue of response letters to all written submissions
- Review of wordings, noted grammatical errors and catchment references
- Additional comments regarding importance of vulnerability education within an urban catchment.

Motion Carried Unanimously

GENERAL BUSINESS

- Council has tendered for Consultants for Flood Risk Management Studies and Plans for the Alexandra Canal and Johnstons Creek and Whites Creeks catchments and intend to commence these studies early in the new year.
- Council will invite quotes for an overland Flood Study for the Marrickville South catchment, which is the final catchment area within the LGA without a current overland flood study.

Meeting closed at 5:25pm.



Item No: FMACC0822(1) Item 1

Subject: INNER WEST COUNCIL FLOOD RESPONSE

Prepared By: James Ogg - Stormwater and Development Engineer **Authorised By:** Manod Wickramasinghe - Acting Director Infrastructure

RECOMMENDATION

That Council receive and note the report.

DISCUSSION

Inner West Council has experienced a total rainfall of 1700mm up to late July 2022, which is greater than the total rainfall of both 2020 and 2021, and twice the rainfall experienced in each of 2017, 2018 and 2019. This volume of rainfall is comparable with the total yearly rainfall experienced in 1988 and 1990 – two years which experienced well publicised flooding across Sydney.

The rainfall has been delivered as either long duration events or short intense bursts, including week-long periods in February, March and July. The greatest daily rainfall observed was 170mm over two hours on 23rd February followed by 150mm over four hours on 8th March, both of which caused substantial flooding across the local government area. Smaller events were also experienced in April and July.

So far this year, Council staff have responded to over 1,074 requests relating to stormwater and flooding, with 692 of these requests directly associated with the above flood events.

Flooding Background

Flooding within Inner West Council is considered flash flooding – defined as occurring typically within 6 hours of the contributory rain – and is usually caused by sudden local or nearby heavy rainfall. The nature of the flooding results from the topography of the Council area, its heavily urbanised nature and associated history of development, as well as the overall age and capacity of the existing stormwater drainage system.

In particular, the catchment of Marrickville is unique within greater Sydney in that much of the suburb, including the industrial areas around Carrington Road and Sydney Street, are largely contained within the former Gubramorra wetland area. This large area collected the rainwater from the wider Marrickville area and the surrounding suburbs of Petersham, Stanmore, Newtown and Enmore. Prior to development, the wetland would hold water before slowly releasing into Cooks River. The overall elevation of the area means that the stormwater network – with elements owned by both Council and Sydney Water - cannot simply drain by gravity directly to the river. Instead, these systems drain stormwater from Marrickville to Sydney Water pumping stations in Sydenham Basin and two low points in Carrington Road, which hold then pump water to Cooks River at a controlled rate.

Flood Response

Under the Inner West Emergency Management Plan, NSW SES is the lead response agency, with Council acting in support undertaking actions including:

- Provision of barricades for planned road closures



- Reactive road closures and re-openings
- Provision of over 1000 sandbags to Marrickville and Ashfield-Leichhardt SES
- Proactive drain cleaning in locations of known localised flooding
- Removal of debris when floodwaters have receded
- Support for tree and branch removal
- Provision of operational call-out staff to assist the SES and NSW Police if needed after-hours

Flood Planning & Mitigation

Inner West Council continues the work commenced in 2009 by the former Ashfield, Leichhardt and Marrickville Councils in undertaking flood studies across the 15 catchments within its LGA in accordance with the NSW Flood Prone Land Policy.

To date, Council has completed 9 Flood Studies, identifying the existing flood impacts for 12 of its 15 catchments and representing approximately 90% of the Local Government Area.

During the recent flood events this year, flooding was generally experienced as localised overland flow with peak depths rising and falling quickly and some minor ponding remaining for a number of hours. More prolonged flooding was experienced within the industrial areas of Marrickville around Sydney Street and Carrington Road. This flooding was consistent with the flood modelling established by each of Council's flood studies. These studies guide the flood response strategies of Council and SES.

In addition, Council has completed four Flood Risk Management Studies & Plans (FRMSP) which outline proposed mitigations options across eight of the catchment areas.

- Eastern Channel Subcatchment Management Plan (Golder Associates, 2011)
- Marrickville Valley Flood Risk Management Study & Plan (Cardno, 2017)
- Leichhardt Flood Risk Management Study & Plan (Cardno, 2017)
- Dobroyd Canal and Hawthorne Canal Flood Risk Management Study and Plan (WMA, 2019)

These studies provide a list of mitigation works covering almost 80% of the LGA. Council is also currently undertaking Flood Risk Management Plans for Alexandra Canal and Johnstons Creek & Whites Creek, with initial community engagement to occur in August and September.

Each of the completed FRMSPs make recommendations for several structural management options, such as stormwater drainage upgrades, ranked according to cost and benefit. The estimated cost of these structural mitigation works is approximately \$260 million, with projects to the value of approximately \$83 million considered the highest priority.

The studies acknowledge wholesale upgrade of the stormwater drainage networks would not remove the risk of flooding in larger events. The focus is instead on measures to improve efficiencies and reduce flood depths in smaller events, the duration of impact, and the capacity to recover following flood events, resulting in reduced damage and costs to the community.

These FRMSPs do not provide a prescribed schedule for implementation, rather they identify mitigation measures that have merit for implementation as funding becomes available or when the opportunity arises through major development. These plans provide a sound basis from which Council can make decisions concerning the undertaking of works, planning decisions and developing response arrangements to reduce the impact of flooding.

Council aligns mitigation projects with its existing stormwater renewal program, the timing of redevelopment, and the support of NSW Government funding through the Department of Planning and Environment. One such example is the Lord Street drainage upgrade in Newtown, which is currently under design for delivery in 2023/24 and 2024/25 as a result of



recent opportunities associated with the Sydney Metro development at Sydenham and the planned renewal of the existing pipelines in this area.

Council has also provided Sydney Water with details of identified upgrades to their components of the drainage network within Whites Creek, Hawthorne Canal, White Bay and Marrickville for consideration in the development of their 2025-2030 capital works program. Council continues to advocate for these projects with both Sydney Water and the Department of Planning and Environment.

Under the NSW Flood Prone Land Policy, Council convenes a Flood Risk Advisory Committee to review flood risks, flood response, and the continued progress of Council's Flood Studies and Flood Risk Management Plans. This committee did not meet over the last three years in response to COVID restrictions; however, a renewed committee is planned to commence meeting in the second half of 2022.

ATTACHMENTS

Nil.



Item No: FMACC0822(1) Item 2

Subject: COMMUNITY ENGAGEMENT - JOHNSTONS CREEK AND WHITES CREEK

FLOOD RISK MANAGEMENT PLAN AND ALEXANDRA CANAL FLOOD

RISK MANAGEMENT PLAN

Prepared By: James Ogg - Stormwater and Development Engineer

RECOMMENDATION

THAT:

The Committee supports the commencement of Community Engagement for the Johnstons Creek and Whites Creek Flood Risk Management Plan and the Alexandra Canal Flood Risk Management Plan

DISCUSSION

Background

Inner West Council, and its predecessors, has been undertaking Flood Risk Studies across the 11 catchments within its LGA since 2009 in accordance with the NSW Flood Prone Land Policy. The policy specifies a staged approach to the floodplain management process, as identified in Figure 1 below.

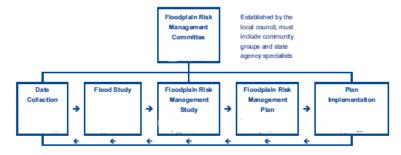


Figure 1 - Summary of the Floodplain Risk Management Process

To date, Council has completed 9 Flood Studies, identifying the existing flood impacts for 12 of its 15 catchments and representing approximately 90% of the Local Government Area.

In addition, Council has completed four Flood Risk Management Studies & Plans (FRMSP) which outline proposed mitigations options across eight of the catchment areas.

- Eastern Channel Subcatchment Management Plan (Golder Associates, 2011)
- Marrickville Valley Flood Risk Management Study & Plan (Cardno, 2017)
- Leichhardt Flood Risk Management Study & Plan (Cardno, 2017)
- Dobroyd Canal and Hawthorne Canal Flood Risk Management Study and Plan (WMA, 2019)

These studies provide a list of mitigation works covering almost 80% of the LGA.

The Flood Risk Management Studies commenced for Johnstons Creek and Whites Creek and Alexandra Canal will increase this total to 90% of the Local Government Area.

Current Study Progress



Council has engaged an external consultant Cardno to undertake both the Johnstons Creek and Whites Creek Flood Risk Management Study and the Alexandra Canal Flood Risk Management Study.

Work to date has been focused on amending existing models to the current rainfall standard (Australian Rainfall & Runoff 2019) to develop hazard mapping and identify areas where early response is required.

Proposed Community Engagement

Flood hazard management and mitigation methods are broadly categorised into three categories

- property modification (reducing the impact of flooding through a site by sensitive design)
- emergency response (modifying the behaviour of people during a flood event to reduce the consequence of a flood risk)
- flood modification measures (structural modification of flood behaviour to reduce the risk of flooding).

The proposed community engagement will seek the community's understanding and appreciation of flooding and flood risk, as well as areas of interest and appetite for the above measures.

Community engagement is expected to commence on September 12 and continue for four weeks. It will include a page on Your Say Inner West with details of flooding, allowing residents to identify areas of concern and make recommendations for further work and investigation. Further questions will ask residents to outline their own understanding and experience of flooding in the area. In addition to the online engagement, two public drop-in information sessions for members of the Whites Creek and Johnston Creek area and two targeted sessions for the Alexandra Canal – one for residential impacts, and one for the business in the area.

ATTACHMENTS

Nil.