ITEM 2. ALEXANDRA CANAL CATCHMENT FLOODPLAIN RISK MANAGEMENT STUDY AND FLOODPLAIN RISK MANAGEMENT PLAN

FILE NO: \$091319

SUMMARY

On 21 October 2013, Council resolved that the draft Flood Study, draft Floodplain Risk Management Study and draft Floodplain Risk Management Plan for Alexandra Canal be placed on public exhibition. A further report was to be submitted to Council following the public exhibition process with any proposed changes.

The City has now prepared and implemented a Community Engagement Plan, completed the public exhibition process, addressed matters raised in the submissions received and amended the study reports as required.

This report is seeking Council's adoption of the draft Alexandra Canal Flood Study, draft Alexandra Canal Floodplain Risk Management Study and the draft Alexandra Canal Floodplain Risk Management Plan.

RECOMMENDATION

It is resolved that Council adopt the Alexandra Canal Flood Study, Alexandra Canal Floodplain Risk Management Study and Alexandra Canal Floodplain Risk Management Plan as shown at Attachments B, C and D, respectively, to the subject report.

ATTACHMENTS

(Note – Attachments B, C and D will be circulated separately from the agenda paper and to Councillors and relevant senior staff only. A copy will be available for viewing on the City's website and at the One Stop Shop and Neighbourhood Service Centres.)

Attachment A:	Catchment Plan	
Attachment B:	Alexandra Canal Flood Study, February 2014 (amended draft)	
Attachment C:	Alexandra Canal Floodplain Risk Management Study, February 2014 (amended draft)	
Attachment D:	Alexandra Canal Floodplain Risk Management Plan, February 2014 (amended draft)	

BACKGROUND

- 1. The development of Floodplain Risk Management Studies and Plans for all the stormwater catchments within the City's Local Government Area (LGA) is a legislative requirement. The City's Long Term Financial Plan has allocated \$59.5 million for drainage capacity upgrade works arising from these studies over the next 10 years.
- 2. The City has also developed and adopted a Decentralised Water Master Plan, which focuses on water re-use and water quality measures. A further \$24 million for initiatives relating to this Master Plan is expected to be allocated within the Long Term Financial Plan over the next 10 years.
- 3. The NSW Government has developed a Flood Prone Land Policy to determine if development on floodplains is appropriate and sustainable. The Policy promotes a merit based approach to balance social, economic, environmental and flood risk parameters.
- 4. The Policy states that individual councils have the primary responsibility for floodplain risk management and the NSW Government will, if required, provide technical and, in some cases, financial support.
- 5. The Floodplain Development Manual 2005, developed by the NSW Government, sets out a four stage approach:
 - (a) preparation of a Flood Study to identify the nature and extent of flooding;
 - (b) preparation of a Floodplain Risk Management Study to investigate all available flood mitigation solutions or options, in consideration of social, ecological and economic factors relating to flood risk;
 - (c) formulation of a Floodplain Risk Management Plan, including preferred solutions and/or options and formal adoption by the council; and
 - (d) implementation of the Floodplain Risk Management Plan.
- 6. The preparation and implementation of the various Floodplain Risk Management Plans are critical components in improving the way the City plans and manages flood risks, including infrastructure requirements.
- 7. There are eight drainage catchment areas (refer Attachment A) in the City's LGA which are:

Catchment Name	Area (Hectares)	Proportion of the City's Local Government Area (%)
Alexandra Canal	1,141	43
Blackwattle Bay	315	12
Centennial Park	153	6
City Area	199	7
Darling Harbour	307	12
Johnstons Creek	224	8
Rushcutters Bay	64	2
Woolloomooloo	265	10
TOTAL	2,668	100

- 8. On 4 August 2008, Council resolved to establish a Floodplain Risk Management Committee to assist the City in the development and implementation of Floodplain Risk Management Plans.
- 9. The Floodplain Risk Management Committee is comprised of representatives from:
 - (a) the community;
 - (b) NSW Office of Environment and Heritage;
 - (c) NSW State Emergency Services;
 - (d) NSW Fisheries;
 - (e) Sydney Water;
 - (f) Waterways Authority of NSW;
 - (g) Councillors; and
 - (h) City staff.
- 10. The Alexandra Canal catchment is the largest of the City's catchment areas, comprising 43 per cent of the City's LGA. The catchment area includes the suburbs of Alexandria, Rosebery, Erskineville, Beaconsfield, Zetland, Waterloo, Redfern, Newtown, Eveleigh, Surry Hills and Moore Park. It also includes major development precincts such as Green Square, Victoria Park, Lachlan, Ashmore and Epsom Park.
- 11. The Alexandra Canal catchment was determined to be the highest priority for the development of a Floodplain Risk Management Plan, as the area is mostly low lying and has a high incidence of flooding.
- 12. The Draft Alexandra Canal Flood Study was reported to the Environment and Heritage Committee on 28 February 2011.
- 13. On 12 March 2012, Council approved the tender to prepare the Alexandra Canal Floodplain Risk Management Plan.
- 14. On 21 October 2013, Council resolved that the draft Flood Study, draft Floodplain Risk Management Study and draft Floodplain Risk Management Plan for Alexandra Canal be placed on public exhibition.

Public Exhibition

- 15. A Community Engagement Plan was prepared by City staff and all public exhibition activities were conducted in accordance with this plan.
- 16. The draft Flood Study, Floodplain Risk Management Study and draft Floodplain Risk Management Plan for Alexandra Canal were placed on public exhibition from 28 October 2013 to 25 November 2013.

- 17. The draft exhibition documents were available to view throughout the public exhibition period at:
 - (a) One Stop Shop (Town Hall House);
 - (b) Redfern Neighbourhood Service Centre;
 - (c) Green Square Neighbourhood Service Centre; and
 - (d) the City's website.
- 18. Community notices were placed in The Sydney Morning Herald, Central Sydney Magazine, Inner West Courier and the Southern Courier at the commencement of the exhibition period.
- 19. A community drop in session was held from 6pm to 8pm on 20 November 2013 at Alexandria Town Hall. Staff from the City, the Office of Environment and Heritage and the consultant preparing the study were present and available to answer questions from the community.
- 20. A notification email was sent to 551 residents and a notification letter was posted to 132 residents who had previously provided contact details during past resident surveys undertaken as part of this study. The notification was sent out one week prior to the community drop in session and informed the recipients of both the exhibition and the community drop in session. Local community groups were also notified.

Community Response

- 21. One resident telephone enquiry was received prior to the community drop in session regarding proposals to upgrade the trunk drainage at the rear of properties facing Newtown Street, Alexandria. The resident was concerned about the potential for a future upgrade to impact the structural stability of their home. City staff advised that the exhibited studies and plan are a long term strategy, and that an upgrade to the trunk drainage in the location of concern was not planned for at least 10 years. The resident was satisfied with this response.
- 22. There were three attendees at the community drop in session and the following issues were raised:
 - a comment was made about historical flooding in Harcourt Parade, Rosebery and information was sought about planned measures in this area. The content of the study and plan was then reviewed. No further action was necessary;
 - (b) a general question was asked regarding development in the Alexandria area and ensuring that there were no adverse impacts arising from future development. The attendee was advised that the City's Local Environmental Plan contains provisions that ensure development does not have an adverse impact. No further action was necessary; and
 - (c) a general question was asked regarding opportunities for stormwater re-use as a flood mitigation measure. The attendee was advised that stormwater reuse facilities were considered. The quantity of water in a flood event is very high and these facilities were not effective options to mitigate major flooding. No further action was necessary.

- 23. The public exhibition page on the City's website received 170 page views.
- 24. At the closure of the exhibition period, one written submission had been received. The submission was made using the resident comment sheet provided for the community drop in session. The submission indicated general support for the study.

Sydney Water Comments

- 25. Sydney Water provided a submission on the study prior to the commencement of the exhibition period. The submission sought clarification on the proposed Sheas Creek Channel Flood Walls included in the draft Floodplain Risk Management Plan.
- 26. A meeting was held between City staff and Sydney Water on 6 November 2013 where it was agreed that additional detail regarding the scope of the project would be included in the study document. The potential funding sources for these works were noted to be the City and State Government and that responsibility for the project would rest with the City.

Finalisation of Study Documents

- 27. Subsequent to the public exhibition, the draft Alexandra Canal Floodplain Risk Management Study and draft Alexandra Canal Floodplain Risk Management Plan were amended as follows:
 - (a) details of the public exhibition process were added; and
 - (b) changes agreed with Sydney Water were incorporated.
- 28. The Floodplain Risk Management Committee was informed about the public exhibition process and proposed amendments. The Committee supported the adoption of the study documents.
- 29. All amendments to the study documents were circulated to members of the City's Floodplain Risk Management Committee for review and comment.

KEY IMPLICATIONS

- 30. Once the Floodplain Risk Management Study and the Floodplain Risk Management Plan have been adopted by Council, the recommendations will be incorporated into a future amendment to the City Plan, and flood planning provisions added to the Local Environmental Plan and Development Control Plan.
- 31. The current Section 149 Certificate for all properties covered by the Sydney Local Environment Plan 2012 contains the following clause:

"The development on this land or part of this land is subject to flood related development controls refer to Clause 7.15 of Sydney Local Environment Plan 2012 and Section 3.7 of Sydney Development Control Plan 2012."

32. This clause will be updated once the Floodplain Risk Management Plan has been adopted by Council and the recommended planning controls implemented. The update will result in a number of properties having flood related development controls lifted.

- 33. The Floodplain Risk Management Study and the Floodplain Risk Management Plan will also allow the City to develop future works programs to address floodplain management in the catchment. Once adopted, the City will be in a position to seek grant funding for the significant infrastructure required by the Floodplain Risk Management Plan.
- 34. Subsequent to the implementation of the infrastructure within the Floodplain Risk Management Plan, further properties may then have the flood control message on the Section 149 Certificate removed.
- 35. The modelling information developed as part of these studies will be available to the public. This model will result in improved consistency for future engineering assessments undertaken to determine the impacts to the floodplain resulting from development.

BUDGET IMPLICATIONS

36. The cost of implementing the Flood Risk Management Plan will be funded by allocations made within the City's Long Term Financial Plan, State and Federal Government Grants and contributions from developers.

RELEVANT LEGISLATION

- 37. Section 733 of Local Government Act 1993 "Exemption from flood liability-flood liable land and land in coastal zone" applies if the City follows the Floodplain Risk Management process.
- 38. Environmental Planning and Assessment Act 1979 land use planning and management of flood prone lands through Local Environment Plan provisions rests with councils.

PUBLIC CONSULTATION

- 39. The City's Floodplain Risk Management Committee steers the preparation of the Flood Studies. During the study period, the Committee:
 - (a) received several progress reports regarding the development of the study and plan;
 - (b) was invited to participate in a workshop regarding risks within the catchment;
 - (c) received several presentations regarding the preparation of the study and plan; and
 - (d) was provided an opportunity to review and comment on several editions of both the study and plan.
- 40. A community brochure and survey was distributed to over 7,000 properties as part of the Flood Study in 2009. The survey was also advertised in local newspapers and on-line through the City's website. The Flood Study survey targeted residents in or near areas that may have experienced flooding at some time in the past and sought information on past flooding experience. A total of 219 responses were received. As requested, residents reported experiencing flood damage, difficulty with property access and, in six instances, reported that their safety had been threatened.

- 41. Following completion of the Draft Flood Study in 2011, the Floodplain Risk Management Committee determined that the public exhibition of this document should coincide with the public exhibition of the subsequent Floodplain Risk Management Study and Plan. The Flood Study was made available to the public on the City's website in February 2011.
- 42. An additional community brochure and survey was distributed to 5,893 properties in 2013 as part of the Floodplain Risk Management Study. An on-line version of the survey was also included on the City's website. The Floodplain Risk Management Study survey targeted all property owners and residents at risk of flooding.
- 43. This survey built on the previous consultation and sought additional community input on preferred management approaches. A total of 461 responses were received. The responses largely supported a preference for drainage network upgrades, improved flood flow paths, strategic planning and flood related development controls. The actions proposed within the Floodplain Risk Management Plan were then formulated in keeping with these preferences.
- 44. The draft Alexandra Canal Flood Study, draft Alexandra Canal Floodplain Risk Management Study and draft Alexandra Canal Floodplain Risk Management Plan were placed on public exhibition as detailed earlier in this report.

GARRY HARDING

Director City Operations

Andrew Christie, Acting Manager City Infrastructure and Traffic Operations Terry Kefalianos, Principal Engineer – Water Assets