ITEM 6. THE CITY AREA CATCHMENT AND DARLING HARBOUR CATCHMENT AREA FLOOD STUDIES

FILE NO: S103099

SUMMARY

The development of Floodplain Risk Management Studies and Plans for all the stormwater catchments within the City's Local Government Area (LGA) is required by legislation.

On 25 February 2013, Council approved the tender for Flood Studies for the City Area Catchment and Darling Harbour Catchment Area, which comprise 19 per cent of the City's LGA. The final draft reports for these Flood Studies are now complete.

In keeping with the NSW Government Floodplain Development Manual 2005, the City is now required to proceed to the next stage of the Floodplain Management process, which is to develop comprehensive Floodplain Risk Management Studies and Plans.

RECOMMENDATION

It is resolved that Council note that:

(A) the draft City Area Catchment Flood Study, as shown in Attachment B to the subject report, has been completed;

(B) the draft Darling Harbour Catchment Area Flood Study, as shown in Attachment C to the subject report, has been completed;

(C) the information from the draft City Area Catchment Flood Study and draft Darling Harbour Catchment Area Flood Study will be made available to the community; and

(D) the City will now proceed to the next stage of the Floodplain Risk Management process, which is the development of comprehensive Floodplain Risk Management Studies and Floodplain Risk Management Plans for the City Area Catchment and Darling Harbour Catchment Area.

ATTACHMENTS

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

Attachment A: Catchment Plan

Attachment B: City Area Catchment Flood Study (Final Draft Report)

Attachment C: Darling Harbour Catchment Area Flood Study (Final Draft Report)

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 required by legislation. The 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 NSW Government has developed a Flood Prone Land Policy (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.

3. 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.

4. The Floodplain Development Manual 2005, developed by the NSW Government, sets out a four stage approach as follows:

   (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.

5. 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.

6. On 4 August 2008, Council resolved to establish a Floodplain Risk Management Committee to assist the City in the development and implementation of Floodplain Management Plans.

7. 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.

8. There are eight catchment areas (shown in Attachment A) in the City's LGA, all of which require the preparation of a Flood Study, Floodplain Risk Management Study and Floodplain Risk Management Plan.

9. The eight catchment areas 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**

10. The Flood Study, Floodplain Risk Management Study and Floodplain Risk Management Plan for the Alexandra Canal Catchment Area are complete. On 17 March 2014, these documents were formally adopted by Council.

11. Draft flood studies for the Blackwattle Bay and Johnstons Creek Catchment Areas are also complete. In July 2013, preparation of the associated Floodplain Risk Management Studies and Plans commenced.

12. Draft flood studies for the Centennial Park, Rushcutters Bay and Woolloomooloo Catchment Areas are complete. The contract to prepare the associated Floodplain Risk Management Studies and Plans was awarded in March 2014.

13. Draft flood studies for the City Area Catchment and Darling Harbour Catchment Area have been prepared and are the subject of this report.

City Area Catchment

14. The City Area Catchment includes the suburbs of Millers Point, Dawes Point, The Rocks, Barangaroo and parts of Sydney. The study area is fully within the City's LGA and under the control of the City of Sydney. The total catchment area is about 199 hectares. The catchment drains into the Sydney Harbour at various locations, with the majority of the catchment discharging to Sydney Cove through Sydney Water's main trunk drainage system.

Darling Harbour Catchment Area

15. The Darling Harbour Catchment Area includes the inner-city suburbs of Haymarket, Surry Hills and part of Pyrmont, Ultimo and Sydney. The study area is fully within the City's LGA and under the control of the City of Sydney. The total catchment area is about 307 hectares. The catchment drains into Sydney Harbour at various locations with the majority of the catchment discharging to Darling Harbour via Sydney Water's trunk drainage system.

Key Objectives

16. The key objectives of the Flood Studies were to:

    (a) review previous studies and available data;

    (b) collect historical flood information from various sources, including directly from the community;

    (c) develop hydrologic and hydraulic models for estimating flows in the catchment areas for use in the Floodplain Risk Management Study and Floodplain Risk Management Plan;

    (d) define the flood behaviour in the catchment areas;

    (e) investigate potential flood impacts resulting from climate change; and

    (f) prepare maps to show the nature and extent of flooding.

KEY IMPLICATIONS

17. The draft City Area Catchment Flood Study and draft Darling Harbour Catchment Area Flood Study have identified a number of flooding problems, including ponding areas, trapped low points, flood corridors and regions of high hazard flows.

18. The next stage of the floodplain management process will involve a comprehensive assessment of the risks associated with the Flood Studies' findings and the development of Floodplain Risk Management Studies and Floodplain Risk Management Plans for these catchment areas.

BUDGET IMPLICATIONS

19. There are sufficient funds allocated within the current operating budget for commencing the Floodplain Risk Management Studies and Plans in the 2013/14 financial year.

20. Additional funding for the subsequent year of the project program has been included in the draft 2014-2015 operating budget.

RELEVANT LEGISLATION

21. Section 733 of the Local Government Act 1993 – "Exemption from liability-flood liable land and land in coastal zone" applies if the City follows the Floodplain Risk Management process as outlined in the Floodplain Development Manual 2005.

22. Environmental Planning and Assessment Act 1979 – land use planning and management of flood prone lands through Local Environmental Plan provisions rests with councils.

PUBLIC CONSULTATION

23. The City's Floodplain Risk Management Committee steers the preparation of the Flood Studies. During the study period, the Committee considered three-monthly progress reports. Members of the Committee were given the opportunity to review the draft Flood Study reports and provide comments.

24. In May 2013, the City posted a brochure and questionnaire to all property owners in both catchments. The community was informed of the City's intentions to undertake a flood study for the catchment, community input was sought, and an opportunity was provided for interested community members to be placed on a mailing list for future flood related matters.

25. Copies of the draft Flood Studies will be made available on the City's website.

26. Further community consultation will be undertaken as part of the development of Floodplain Risk Management Studies and Draft Floodplain Risk Management Plans.

27. When the draft editions of the Flood Studies, Floodplain Risk Management Studies and Floodplain Risk Management Plans are all complete, they will be reported to Council along with a recommendation for public exhibition.

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