ITEM 3. BLACKWATTLE BAY AND JOHNSTONS CREEK CATCHMENT

AREAS FLOODPLAIN RISK MANAGEMENT STUDIES AND PLANS

- PUBLIC EXHIBITION

FILE NO: \$105738

#### **SUMMARY**

On 24 June 2013, Council approved a tender for the engagement of a contractor to prepare the Blackwattle Bay and Johnstons Creek Catchment Areas Floodplain Risk Management Studies and Plans. The draft editions of the floodplain risk management studies and plans for both the Blackwattle Bay and Johnstons Creek Catchment Areas have now been completed and endorsed by the Floodplain Risk Management Committee. This report recommends that the following six documents be placed on public exhibition for community comment:

- Blackwattle Bay Catchment Flood Study (Draft Report);
- Blackwattle Bay Catchment Floodplain Risk Management Study (Draft Report);
- Blackwattle Bay Catchment Floodplain Risk Management Plan (Draft Report);
- Johnstons Creek Catchment Flood Study (Draft Report);
- Johnstons Creek Catchment Floodplain Risk Management Study (Draft Report); and
- Johnstons Creek Catchment Floodplain Risk Management Plan (Draft Report).

The draft flood studies for both the Blackwattle Bay and Johnstons Creek Catchment Areas were completed in May 2012 as a precursor to the risk management studies and plans. The draft flood studies were made available on the City's website in late 2012 and will now be placed on formal public exhibition alongside the draft risk management studies and plans.

# **RECOMMENDATION**

It is resolved that:

- (A) Council place the draft flood study, draft floodplain risk management study and draft floodplain risk management plan for both the Johnstons Creek and Blackwattle Bay Catchment Areas, as shown in Attachments B, C, D, E, F and G to the subject report, on public exhibition for a minimum period of 28 days; and
- (B) a further report on the draft flood study, draft floodplain risk management study and draft floodplain risk management plan for both the Johnstons Creek and Blackwattle Bay Catchment Areas be presented to Council following the public exhibition process with any proposed changes.

### **ATTACHMENTS**

(Note – Hard copies of Attachments B, C, E and F will be circulated separately from the agenda paper in limited numbers. A copy will be available for inspection on Council's website and at the One Stop Shop and Neighbourhood Service Centres.)

Attachment A: Catchment Plan

Attachment B: Blackwattle Bay Catchment Flood Study (Draft Report)

Attachment C: Blackwattle Bay Catchment Floodplain Risk Management Study (Draft

Report)

Attachment D: Blackwattle Bay Catchment Floodplain Risk Management Plan (Draft

Report)

**Attachment E:** Johnstons Creek Catchment Flood Study (Draft Report)

Attachment F: Johnstons Creek Catchment Floodplain Risk Management Study (Draft

Report)

Attachment G: Johnstons Creek Catchment Floodplain Risk Management Plan (Draft

Report)

### **BACKGROUND**

- 1. The development of Floodplain Risk Management Studies and Plans for all the stormwater catchments within the City of Sydney Local Government Area (LGA) is a legislative requirement. The Long Term Financial Plan has allocated \$61.4M 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 \$25.4M of initiatives relating to this Master Plan are 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 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.
- 6. The preparation and implementation of the various Floodplain 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 (see Attachment A) in the City LGA which are:

<b>Catchment Name</b>	Area (Hectares)	Proportion of the City LGA (%)
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) Leichhardt Municipal Council;
  - (h) Councillors; and
  - (i) City staff.
- 10. The Blackwattle Bay Catchment Area (shown in Attachment A) includes the suburbs of Glebe, Chippendale, and parts of Ultimo, Darlington, Camperdown, Redfern and Surry Hills. The study area is fully within the City's Local Government Area.
- 11. The Johnstons Creek Catchment Area (shown in Attachment A) includes the suburbs of Annandale, Camperdown, Forest Lodge, Glebe and Newtown.
- 12. The draft Blackwattle Bay Catchment Flood Study and draft Johnstons Creek Catchment Flood Study were reported to the Environment Committee on 3 December 2012.
- 13. On 24 June 2013, Council approved the tender to prepare the Blackwattle Bay and Johnstons Creek Catchment Areas Floodplain Risk Management Studies and Plans.
- 14. The draft risk management studies and plans are now complete. These reports have been prepared in accordance with the NSW Floodplain Development Manual.

# **KEY IMPLICATIONS**

- 15. The draft Blackwattle Bay Catchment Flood Study and the draft Johnstons Creek Catchment Flood Study have both identified a number of flooding problems, including ponding areas, trapped low points, flood corridors and regions of high hazard.
- 16. The draft Blackwattle Bay Catchment Floodplain Risk Management Study and draft Johnstons Creek Catchment Floodplain Risk Management Study have assessed a variety of potential measures to address flooding problems identified by the flood studies. Measures were assessed in accordance with floodplain risk management quidelines set out in the NSW Floodplain Development Manual.

17. The draft Blackwattle Bay Catchment Floodplain Risk Management Plan and draft Johnstons Creek Catchment Floodplain Risk Management Plan recommend a comprehensive suite of flood management measures for further consideration and implementation.

### **BUDGET IMPLICATIONS**

18. The cost of implementing the Floodplain Risk Management Plans 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**

- 19. 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.
- 20. Environmental Planning and Assessment Act 1979 land use planning and management of flood prone lands through Local Environmental Plan provisions rest with councils.

### **PUBLIC CONSULTATION**

- 21. The City's Floodplain Risk Management Committee steers the development of the Floodplain Management Plans. During the study period, the Committee:
  - (a) received several progress reports regarding the development of the studies and plans;
  - (b) received several presentations regarding the preparation of the studies and plans; and
  - (c) was provided an opportunity to review and comment on initial draft editions of the studies and plans.
- 22. A community brochure and survey was undertaken for both study areas during the preparation of the flood studies in June 2011. Around 14,400 and 6,500 surveys were distributed to the residents within the Blackwattle Bay Catchment and Johnstons Creek Catchment study areas respectively. The surveys were also made available online through the City's website. The City received 122 responses from Blackwattle Bay Catchment and 59 responses from Johnstons Creek catchment. As requested, residents responded with their experience of flood, difficulty with property access and, in 18 instances, reported that their safety had been threatened.
- 23. Following completion of the draft flood studies in 2012, the Floodplain Risk Management Committee determined that the public exhibition of these documents should coincide with the public exhibition of the subsequent floodplain risk management studies and plans. The flood studies were made available to the public on the City's website in December 2012.

- 24. An additional community brochure and survey was distributed to 8,045 properties within Blackwattle Bay catchment and 2,933 properties within Johnstons Creek catchment in 2013 as part of the Floodplain Risk Management Studies. On-line versions of the surveys were also included on Council's website. The Floodplain Risk Management Study survey targeted all property owners and residents at risk of flooding. This survey built on the previous consultation and sought additional community input on preferred management measures. The City received 311 responses from Blackwattle Bay Catchment and 151 responses from Johnstons Creek Catchment. The responses largely supported a preference for stormwater harvesting, drainage network upgrades, improved flood flow paths, strategic planning and flood-related development controls. These preferences were considered in preparing the floodplain risk management study and formulating a plan for both study areas.
- 25. A workshop was also conducted with representatives from Sydney Water, NSW Office of Environment and Heritage, and NSW State Emergency Services in December 2013. A variety of risk management measures and their preliminary assessment outcomes were presented in the workshop and feedback was sought from the participants.
- 26. A community information session was held in Peace Park, Chippendale in March 2014. Preferred management measures for both catchments were presented on a series of posters. Hand-out questionnaires were also provided so that community members could rate their preference for various flood mitigation measures. Thirty-eight responses were received, and this assisted in prioritising the measures that have been recommended.
- 27. This report recommends that the draft flood studies, draft floodplain risk management studies and draft floodplain risk management plans for both the Blackwattle Bay Catchment and Johnstons Creek Catchment be placed on public exhibition for a minimum of 28 days.
- 28. A community engagement plan will be prepared prior to the public exhibition of the six reports.

# **GARRY HARDING**

**Director City Operations** 

George Angelis, Manager City Infrastructure and Traffic Operations Shah Alam, Senior Project Engineer – Water Assets