



Ordinary Meeting of Council

SUPPLEMENTARY AGENDA

26 October 2016

Commencing at 5:30pm

**Council Chambers
10 Majara Street, Bungendore**

****On-site Inspections****

List any inspections or indicate “Nil”

S DETERMINATION REPORTS

S.1	Captains Flat Dam 6th Surveillance Report	3
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LIST OF ATTACHMENTS –

(Copies available from General Manager’s Office on request)

Open Attachments

Item S.1 Captains Flat Dam 6th Surveillance Report

*Attachment 1 Attachment - Captains Flat Dam 6th Five Yearly
Dam Surveillance Report (Under Separate Cover)*

Closed Attachments

Nil

DETERMINATION REPORTS

S.1 Captains Flat Dam 6th Surveillance Report (Ref: C16153780; Author: Tegart/Bascomb)

Summary

Deferred from previous meeting pending an on-site inspection.

Council is the owner of the Captains Flat Dam, an 820 ML on stream storage reservoir located on the Molonglo River at Captains Flat. The dam forms the principal source for the Captains Flat water supply and was constructed in 1938 by the former Lake George Mining Company. In accordance with the provisions of the Dam Safety Act 1978, the Captains Flat Dam is prescribed and as such is subject to mandatory and periodic provisions in respect of surveillance and safety.

Recommendation**That Council:**

- 1. Receive and note the report *Captains Flat Dam five yearly Surveillance Report (July 2016) – Report No. DC16071*; and**
 - 2. Authorise submission of this report to the NSW Dams Safety Committee in satisfaction of Council's obligations under the Dams Safety Act 1978.**
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Background**Captains Flat Dam five yearly Surveillance Report (6th Edition)**

According to the Dam Safety Committee (DSC) there are around 350 prescribed dams located throughout NSW. A prescribed dam is defined by schedule 1 of the Dam Safety Act 1978 with prescription being determined by an assessment against a number of risk and physical criteria.

The Captains Flat Dam is a post-tensioned concrete gravity structure 16 metres high with a crest length of 65 metres and a capacity of 820 ML.

In terms of risk rating, it has been assessed as HIGH A for Flood and HIGH C for Sunny Day Dambreak making it a prescribed dam in terms of the Act.

The DSC requires all owners of prescribed dams to prepare formal Surveillance Reports on their dams on at least a five yearly basis and further that these be submitted to the DSC as soon as reasonably practicable after its preparation.

Dam surveillance reports are specialised and correspond with 'Comprehensive' reports as described in the Australian National Committee on Large Dams (ANCOLD) *Guidelines on Dam Safety management*, August 2003. Traditionally Council has engaged the services of NSW Public Works to undertake this role on its behalf and the preparation of this report, the sixth in the series, has been prepared on this same basis. The previous report (fifth) was prepared in July 2012 and as such this revised report is due for submission to DSC by the end of this current financial year.

S.1 Captains Flat Dam 6th Surveillance Report (Ref: C16153780; Author: Tegar/Bascomb) (Continued)

In terms of recommendations, the updated report identifies the following for specific and ongoing attention:

1. Repair cracks in concrete on spillway left training wall.
2. Repair crack in concrete on the upstream crest face located at the right end of the raised crest section between the old and new concrete.
3. Transmit monitoring results and plots electronically to NSW Water Solutions Dams and Civil (within Public Works) at three monthly intervals; i.e, storage level, seepage and rainfall. NSW Water Solutions Dams and Civil should also be advised in the event of any unusual dam safety related incidents.
4. Next lift off testing/restressing of the post-tensioned cables is due to be carried out in the year 2020.
5. Provide all Council engineers and operations personnel involved in the day to day operation, maintenance and monitoring procedures at the dam with suitable training in dam surveillance techniques and ensure that their training remains current by providing refresher training every five years.
6. Continue monitoring all existing seepage areas and include concurrent recording of storage level and rainfall in routine inspections and report any unusual observations to the dam designer (Public Works, NSW Water Solutions, Dams and Civil) or any other qualified consultant for review.
7. Maintain appropriate surveillance on the movement characteristics of the dam by carrying out 'control' deformation surveys every five years in accordance with DSC letter advice to Council dated 7th September 2012 and with ANCOLD requirements.
8. Update the DSEP annually to reflect any new names and contacts or organisations and personnel to comply with the requirements of the DSC.

Items 3 through 8 are ongoing and have been included in operational and LTFP as appropriate. Items 1 and 2 will be programmed for attention during the current year and from within existing water supply operational votes.

The recommendation above is for this sixth edition report to be received and for it to be authorised for formal submission to the Dam Safety Committee in satisfaction of the Dam Safety Act 1978.

The next surveillance report will be due in 2021/22.

Dam Safety Emergency Plan (DSEP)

In addition to the five yearly surveillance reports, the DSC requires a quality controlled DSEP to be prepared for prescribed dams where persons may be at risk downstream if the dam failed. Captains Flat Dam, with its high consequence risk ratings for both flood and sunny day failure, is required to have such a DSEP.

The current DSEP was last comprehensively reviewed in July 2013 as version 3. Version 4 of this document is currently being prepared and will now be distributed to SES and DSC for their initial comment in accordance with DSC info sheet DSC2G.

S.1 Captains Flat Dam 6th Surveillance Report (Ref: C16153780; Author: Tegart/Bascomb) (Continued)

The final document is expected to be ready for distribution by the end of the year or early in 2017, depending upon the timeliness and number of any return comments.

Implications

Legal

Both documents have been prepared in accordance with Dam Safety Committee requirements and in accordance with the provisions of the Dam Safety Act 1978.

Asset

Associated with the Captains Flat Dam – a significant asset within the Palerang Water Fund.

Financial

Funding for both engagements has been provided in the adopted 2016/17 Operational Plan and Budget.

Resources (including staff)

Reports to be delivered through a combination of external consultancy and internal (staff) resources.

Conclusion

That the sixth five yearly Dam Surveillance report for Captains Flat Dam be received and authorised for submission to NSW Dam Safety Committee.

Attachments

Attachment 1 Attachment - Captains Flat Dam 6th Five Yearly Dam Surveillance Report
(Under Separate Cover)