Summary of Presentation

- Floodplain Management Process
- Macquarie Rivulet
- Horsley Creek
Floodplain Risk Management Process

- NSW Flood Prone Land Policy
Data Collection
Section 2.3 Appendix E

Flood Study
Section 2.4 Appendix F

Floodplain Risk Management Study
Section 2.5 Appendix G

Floodplain Risk Management Plan
Section 2.6 and 2.7 Appendix H

Plan Implementation
Sections 2.8 and 2.9 Appendix I

Compilation of existing data and collection of additional data. Usually undertaken by consultants appointed by the council.

Defines the nature and extent of the flood problem, in technical rather than map form. Usually undertaken by consultants appointed by the council.

Determines options in consideration of social, ecological and economic factors relating to flood risk. Usually undertaken by consultants appointed by the council.

Preferred options publicly exhibited and subject to revision in light of responses. Formally approved by the council after public exhibition and any necessary revisions due to public comments.

Implementation of flood, response and property modification measures (including mitigation works, planning controls, flood warnings, flood readiness and response plans, environmental rehabilitation, ongoing data collection and monitoring) by council.

FIGURE 2.1 - The Floodplain Risk Management Process
Council’s Floodplain Management Program

- Lake Illawarra – Adopted Floodplain Risk Management Study & Plan (2012)
- Elliot Lake / Little Lake – currently preparing a Floodplain Risk Management Study & Plan
- **Horsley Creek** - currently preparing a Floodplain Risk Management Study & Plan
- **Macquarie Rivulet** – currently preparing a Flood Study
- Suburbs of Lake Illawarra, Mt Warrigal Oak Flats - currently preparing a flood study
Macquarie Rivulet Flood Study

- Established Floodplain Management Committee
- Engaged specialist flood modelling consultants WMA Water
- Newsletter and Questionnaire (Oct 2012)
Macquarie Rivulet Flood Study – Data Collection

- Rainfall records (daily read/pluvio)
- Historical flood heights and marks
- Historical photos of flooding
- Detailed creek, structures and bathymetric survey
Macquarie Rivulet Flood Study – March 2011 Photos

Calderwood Road looking north - 21 March 2011

Taylor Road looking east - 21 March 2011
Macquarie Rivulet Flood Study – March 2011 Photos

Intersection of Tongarra Road and Terry Street 21 March 2011

Tongarra Road looking east 21 March 2011
Macquarie Rivulet Flood Study – building a flood model
Macquarie Rivulet Flood Study – Calibration to March 2011 storm
Macquarie Rivulet Flood Study – Calibration to March 2011 storm
Macquarie Rivulet Flood Study – Current Status

• Calibration/Validation near complete.
• Flood Frequency Analysis near complete.
• Consultant currently assessing the suitability of using recently released Australian Rainfall & Runoff design rainfall data (2013) for design event modelling.
• Expected date of completion is to be advised, following determination and approvals for the use of AR&R2013 rainfall data.
Horsley Creek Flood Study (2011)

- Study identifies flood behaviour in the Horsley Creek catchment for design storms of varying magnitudes (from 2yr up to the PMF)
- Available to download on Council’s website
Horsley Creek Flood Study 2011

100 yr. Flood Depths
Horsley Creek - Floodplain Risk Management Study & Plan

• Validation of the existing flood model with surveyed flood marks from the March 2011 Storm.

• Structural mitigation options have been investigated.

• Consultant currently preparing draft reports for consideration by the Floodplain Management Committee with close involvement from RMS.
Further Information on Council’s Floodplain Management Program…


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