

M I T C H E L L



S H I R E C O U N C I L

SEYMOUR TOWNSHIP

&

GOULBURN RIVER ENVIRONS

FLOOD SUB-PLAN

This document has been produced as a sub plan to the Councils' Municipal Emergency Management Plan.

October 2002.

SEYMOUR TOWNSHIP & Goulburn River Environs FLOOD SUB - PLAN

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Attached:

- Flood Response Guidelines
- Flood Operations Manual
- Flood Information Providers Manual

SEYMOUR TOWNSHIP & Goulburn River Environs FLOOD SUB - PLAN

1 PART ONE - GENERAL.

1.1 Introduction.

This flood plan is a sub plan to the Mitchell Shire Councils “Seymour Municipal Emergency Management Plan” and should be read in conjunction with that Plan.

1.2 Policy Statement.

The Mitchell Shire Council acknowledges the role of the Department of Natural Resources and Environment and the Goulburn-Broken Catchment Management Authority as the management authorities for the State’s riverine assets.

Priority will be given to the protection of life, essential services, public utilities, property and personal safety within flood areas.

1.3 Aim.

The aim of this plan is to provide a framework to minimise the danger to life and the damage to property from flood emergencies in the area covered by this plan.

1.4 Objective.

To plan for the prevention of, preparedness for, response to and recovery from flood emergencies by recording agreed flood specific arrangements and identifying main roles and responsibilities associated with floods.

1.5 Catchment Map.

Refer to Appendix 1 – Goulburn River (Eildon to Seymour) Catchment Plan & Data Collection Network

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2 PART TWO - MANAGEMENT ARRANGEMENTS.

2.1 Flood Sub-Committee.

A Flood Sub-Committee will be formed from representatives from the following agencies and organisations:

- Mitchell Shire Council (Chair)
- (Municipal Emergency Resource Officer, Flood Warning Officer, Recovery Manager.)
- Victoria State Emergency Service.
- Goulburn Broken Catchment Management Authority.
- Goulburn-Murray Water.
- Victoria Police (Municipal Emergency Response Co-ordinator)
- CFA
- Other Agencies as required.

The Committee will meet at least once per year.

The MERO is responsible for calling and conducting this meeting and updating this plan.

2.2 Post Operational Debrief.

The MERO will arrange a post operations debrief of any significant flood event within the Municipality. All agencies involved will be represented.

The debrief will consider the following key areas:

- Vulnerable areas.
- Flood mitigation.
- Warnings.
- Monitoring effects and data collection.
- Command, control & co-ordination.
- Communications.
- Public information.
- Flood Sub Plan update.

Minutes of the debrief will be distributed appropriately.

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3 PART THREE - RISK / HISTORY

3.1 Flood Risk (Seymour – Refer to Flood Response Guidelines for detail)

Seymour's Goulburn River Environs commences to experiences localised flooding within the areas along the river frontage between Kings Park and the old Hume Highway at Minor Flood levels in the Goulburn River.

Also localised flooding in these areas as well as along rural roads and within rural properties may occur due to heavy rainfall throughout the year.

The upgrade of the Flood Warning System for the Goulburn River Catchment, Eildon to Seymour, reflects the community need to have a reliable and up to date flood warning system.

The floods of 1993 throughout NorthEast Victoria caused major damage to rural and residential properties, particularly along the Broken and Ovens River systems.

The Goulburn River Catchment upstream of Seymour, is approximately 8600 square kilometres and includes the river network of Sunday Creek, Whiteheads Creek, King Parrot Creek, Yea and Murrindindi Rivers, Home Creek, Acheron and Rubicon Rivers.

The headwaters of the Goulburn River combine with Delatite, Howqua, Jamieson and Big Rivers to flow into Lake Eildon

The most notable floods this century in the Goulburn River floodplain have occurred in 1916, 1917, 1934, 1952, 1973, 1974, 1975 and 1993.

The flood events of 1916 and 1917 were the largest floods in Seymour's history. The 1973 flood in Seymour was the most severe flash flood to originate from Whiteheads Creek and resulted in one person being drowned. The 1974 event was the largest flood since Lake Eildon filled and ranked the fifth largest in Seymour's history.

The flood in 1974 in Seymour was caused by storm runoff from the catchment downstream of Eildon, as virtually all of the storm runoff from the catchment upstream of Eildon was captured in the reservoir.

Lake Eildon provides significant attenuation of flows to the Goulburn River. In October 1993 the Lake reduced the peak discharge to the Goulburn River and significantly reduced the flood impact. A review of dam safety may show that the level of flood mitigation provided in September and October 1993 may not be possible in the future.

A Flood Inundation Mapping Study has been conducted within Seymour to develop "Flood Inundation Maps" as a key component of the Flood Warning System for the Seymour Township as well as providing a base mapping system for the statutory land use planning controls in the Mitchell Shire municipal planning scheme.

SEYMOUR TOWNSHIP & Goulburn River Environs FLOOD SUB - PLAN

3.2 Extent of Possible Inundation.

The map at Appendix 2 identifies the area that may be subject to inundation in a major flood representing a 1 in 100 years flood frequency.

A 1% event is simply an event that may happen in any year and there is a one in one hundred chance of it occurring.

3.2.1 Floods of 1916 and 1917

The flood in 1916 is the largest flood on record and detailed information regarding the impacts and associated costs of this event is scant. It is noted that the floods of 1916 and 1917 has resulted in the business centre of the town concentrating along Station Street rather than its original location of Emily Street.

3.2.2 Flood of May 1974 and September 1975

The flood in 1974 occurred in May, flooding was caused by storm runoff from the catchment downstream of Eildon, since virtually all runoff from the catchment upstream of Eildon was captured in the reservoir. This flood peaked at 7.64 m (137.884 metres AHD) or 0.64 m above major flood level on the Seymour Gauge and has a flood frequency of approximately 30-year ARI.

The 1975 flood peaked at 7.12 m (137.364 metres AHD) on the Seymour Gauge and has a flood frequency of approximately 15-year ARI. This flood was 0.12 m above major flood level. Both floods were predominantly from Sunday Creek Catchment.

3.2.3 Flood of September and October 1993

In October, Town flooding was caused from Goulburn River floodwater. The river peaked around 6.66 metres (136.904 metres AHD) which was below major flood level category. The Goulburn River Caravan Park was inundated. There was disruption to traffic with some roads reduced to one lane width. The heavy rainfalls in October 1993 caused significant flooding throughout northeast Victoria. The Goulburn River peaked at 6.11 metres on October 6 which was below major flood level category at the Seymour gauge.

3.2.4 Effect of Lake Eildon

Lake Eildon provides significant attenuation of flows. In October 1993 the Lake reduced the peak discharge from 170,000 ML/d inflow to 46,630 ML/d peak outflow. This is documented in the 1993 Spring Flood Summary Report for the Department of Conservation and Environment.

During the October 1993 flood event, Lake Eildon rose 0.59 m above full supply level. A dam safety review may show that this level of surcharging inappropriate. Consequently, there would be a reduction in flood mitigation benefit if there were a flood of this magnitude in the future when the reservoir is full. Goulburn-Murray Water may be contacted for further information.

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3.3 Flood Information Cards.

The flood information cards at APPENDIX 3 will, for each gauge site, give a level for past events (where known) and a level where properties, roads etc. are known to be affected. These cards will be updated following each flood.

3.4 Flood Information Providers.

The flood information providers listed at APPENDIX 4 have volunteered to provide Council with information on floods in their area in accordance with the Flood Information Providers Manual.

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4 PART FOUR - PREVENTION.

Prevention activities take place before floods.

4.1 Main Tasks & Responsibilities

MAIN TASKS	RESPONSIBILITY	
	MUNICIPAL LEVEL	REGIONAL LEVEL
Policy & Regulations for land use/buildings	Mitchell Shire Goulburn Broken CMA	NRE DOI
Producing Flood Plans	Mitchell Shire	VICSES (Response) Dept Human Services (Recovery)
Flood Mitigation Schemes	Mitchell Shire	GB CMA
Public Education	Mitchell/ VICSES	VICSES/ GB CMA
Maintain FM radio/Faxstream/Telephone plan for Warnings	Mitchell Shire	
Developing Flood information	GB CMA	GB CMA

4.2 Flood Protection.

4.2.1 General.

The Department of Natural Resource and Environment Floodplain Management Unit is the body responsible for floodplain management at State level. The Goulburn-Broken Catchment Management Authority is the body responsible for the management of floodplains at Regional level. It is also the body responsible for planning and advising local Councils, State authorities and the community on flood planning and mitigation.

4.2.2 Dwellings.

To reduce the risk of flooding, landholders in rural areas (in accordance with the State section of the Planning Scheme) are encouraged to construct an earthen bund around their dwelling and immediate cartilage to provide flood protection at least up to the 1% flood level. If properly planned such bunds can be drained and have the drains controlled when a flood occurs. Under present planning controls, construction of earthen bunds would be defined as “works” and may require a planning permit.

For urban dwellings, individual property protection may be guided by the procedures documented in the brochure, “Flood Response Guidelines”. Brochures are available from Council Offices and VICSES Offices.

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Subject to the “Urban Floodway Zone Flood Overlay” and “Land Subject to Inundation Overlay” clauses contained in the Planning Scheme, where Goulburn Broken catchment Authority is the referral authority, planning approval for new subdivisions and dwellings (where applicable) may require any potential house sites to be above the level of the determined 1% flood level.

Where necessary, the conditions for subdivisions may include the requirement that “selected fills” be used to build up house sites. Submission of drainage plans are required for larger subdivisions and may include the construction of retarding basins.

In rural areas, where no flood studies have been carried out, assessment for the flood potential of land for subdivisions and dwellings is based on site investigation and local knowledge of Council Officers, GBCMA, the applicant, neighbours etc.

In the first instance, advice from Goulburn Broken Catchment Authority should be obtained.

Dwellings or other habitable type buildings may be permitted in designated floodway areas. Dwellings may be permitted in the flood fringe area provided the area inundated does not exceed 500mm and will not cause a danger to life or health to the occupants and that floor levels are 300mm above the 1% AEP flood contour.

Other buildings of an industrial or commercial use will be dealt with on their merits in accordance with the VPP’s Planning practice notes for flood management.

Planning approvals may be granted conditional on the provision and maintenance of a floodway or floodways. If this is the case, it is essential that floodways are not subsequently restricted or obstructed by fences, buildings, etc.

Council cannot approve a building permit if they believe there is danger to life or health of the occupants. Floor levels of residential extensions must be constructed in accordance with the GBCMA Policy and Practice Guidelines for Building Extensions to Existing Dwellings on Land Liable to Flooding.

4.3 Approved Flood Mitigation Schemes.

Where works have been undertaken as part of an approved Flood Mitigation Scheme, the authority responsible shall construct, maintain, monitor and operate the scheme. Maintenance of the approved scheme must be controlled, including the protection of floodways and overflows.

4.4 Private Levee Banks.

Where approved levees have been constructed to an approved flood level design, maintenance of the existing **approved** levees is a private matter for the owner of the levee.

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5 PART FIVE – PREPAREDNESS.

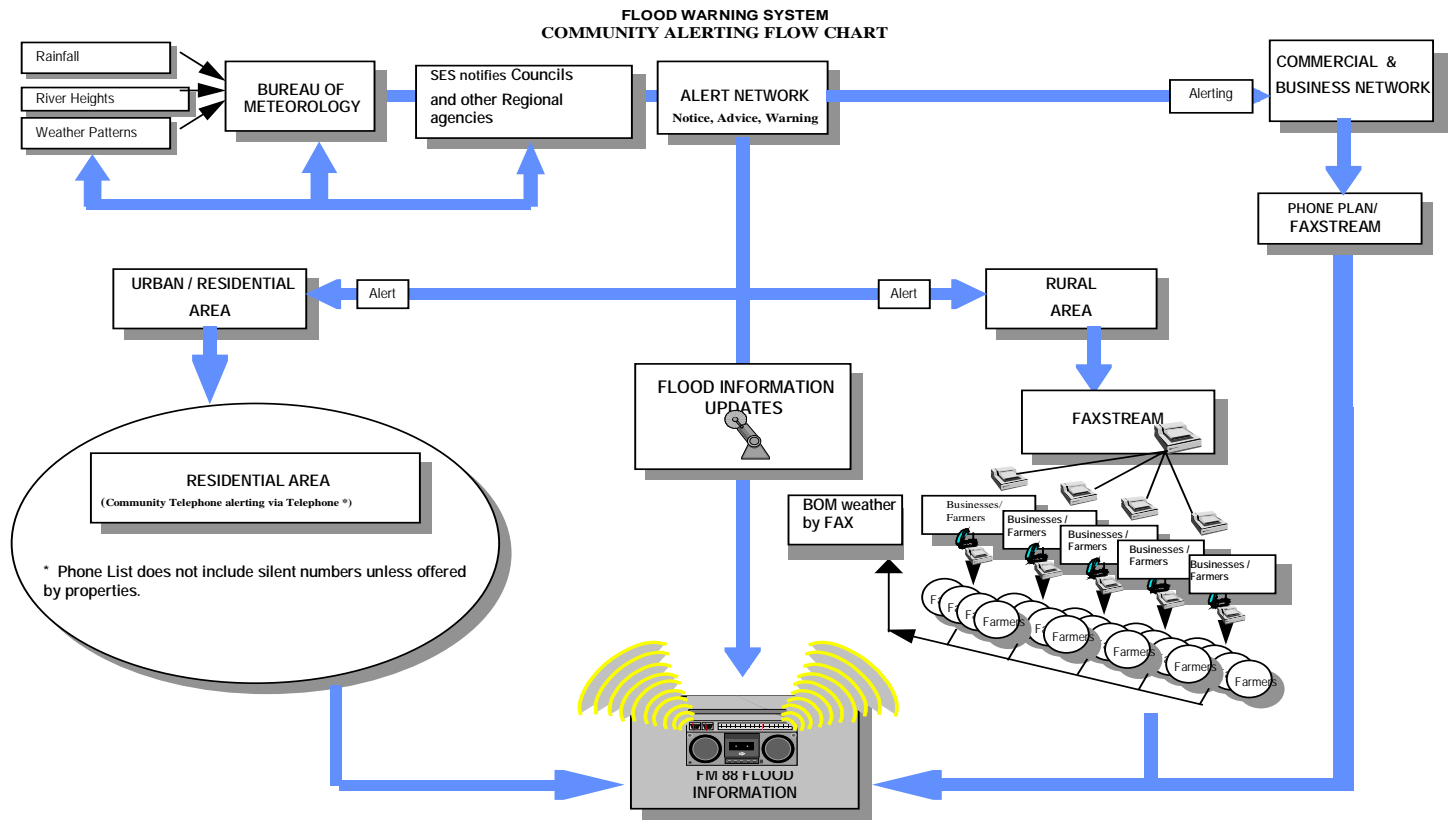
Preparedness activities take place when flooding is likely to occur.

5.1 Main Tasks & Responsibilities.

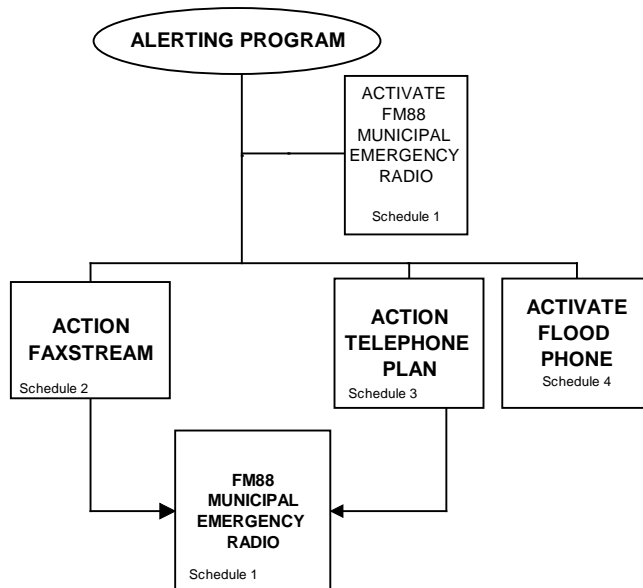
MAIN TASKS	RESPONSIBILITY	
	MUNICIPAL LEVEL	REGIONAL LEVEL
Produce Flood Forecasts and Warnings		Bureau of Meteorology
Disseminate Flood Warnings	Mitchell Shire	VICSES
Public Education	Mitchell/ VICSES	VICSES / GB CMA
Maintain FM radio/Faxstream/Telephone plan for Warnings	Mitchell Shire	

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5.2 Flood Warning Chart (Full details are in the “Flood Alert Operations Procedures” guide).



5.3 Flood Alert Flowchart – Council Actions.



NOTE: Schedules 1,2,3 &4 are detailed in Flood Operations Procedures.

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HOW THE FLOOD WARNING SYSTEM WORKS.

5.4 Production of Warnings.

A rainfall and flood data collection network has been established for the Goulburn River catchment area (Eildon to Seymour). Appendix 1.

Where the Bureau of Meteorology believes weather patterns show a potential for flooding a flood advice will be issued. Where the flood data collection network shows flooding is imminent a flood warning will be issued. For the purposes of dissemination, both flood advices and flood warnings will be treated as flood warnings.

5.5 Dissemination of Warnings.

Flood warnings issued by the Bureau of Meteorology will be disseminated Regionally by VICSES to Municipalities, Regional Emergency Response Co-ordinator, local VICSES Units and other Regional Agencies.

The Municipality has the responsibility to endeavour to ALERT the appropriate properties as follows:

- Where the Bureau of Meteorology Flood Warning indicates potential flood threat to the low lying farmland and rural township areas along the Goulburn River, Mitchell Shire will endeavour to **ALERT** the community by broadcasting the Flood Warning over the Seymour FM88 Community Radio and where appropriate, Upper Goulburn Community Radio.
- Rural areas – utilising FAXSTREAM to those that have made their fax numbers available.
- Urban areas - utilising FAXSTREAM to those that have made their fax numbers available to Council and/or utilising a TELEPHONE Alerting Plan.
- Signs have been strategically placed advertising “Tourist Radio FM88”. When flood warnings are received Council will change these signs to read “Municipal Emergency Radio FM88”. When flood warnings are received Council will place warning lights on the strategically located “FM Signs” in the municipality to indicate to the community of an Emergency Event. Council will provide update information on the flood warnings for continuous transmission.
- As required, available emergency service personnel and Council staff may be asked to contact/door knock residents that may be in flood prone areas and keep them informed of the situation either verbally or via newsletter.

Refer to “FLOOD ALERT OPERATION PROCEDURES” for further details on these systems.

5.6 Ongoing Information.

Council will endeavour to keep FM88 updated with new/changed warnings and endeavour to fax these new/updated warnings to those property owners who have made their fax numbers available.

Property owners can access this information themselves through “Weather by Fax” on 1800 630 100 or “Flood Warnings by Fax” 1902 350 015. When deemed necessary, usually during a “major” flood, Council will advertise and staff a “Flood hotline” telephone number.

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5.7 Flood Warning Categories.

WHAT THE WARNING MEANS

Minor, Moderate and Major flood categories are officially determined by the community in association with the Bureau of Meteorology. When a creek or river reaches a pre-defined depth at a given stream gauge, it falls into one of these categories.

MINOR FLOODING:- Causes inconvenience. Low-lying areas adjacent to watercourses are inundated requiring removal of stock and equipment. Minor roads may be closed and low-level bridges submerged.

MODERATE FLOODING:- In addition to the above, may require the evacuation of some houses. Main traffic routes may be covered. The area of inundation is substantial in rural areas.

MAJOR FLOODING:- In addition to the above, causes inundation of extensive rural areas and appreciable urban areas. Properties and towns are likely to be isolated and major traffic routes likely to be closed. Numerous evacuations may be required.

The Bureau may use descriptions like “Higher than 1993 at the Seymour Gauge” etc. to describe the flood.

The flood heights at each of the gauges are given in metres and/or AHD (Australian Height Datum), depending upon the type of gauge installed and agreed datum for the gauge.

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5.8 Flood Gauge Heights.

The following gauge heights are indicative heights only based on local affects, site topography and only very limited observations and local knowledge. More reliable and realistic gauge heights will be developed once an event, or a number of events, have occurred.

GOULBURN RIVER

MINOR		
Goulburn River @ Lake Eildon D/S 3.0m	Goulburn River @ Trawool Gauge 4.0m	Goulburn River @ Seymour Gauge 4.0m

Flood Levels for these locations are required to be confirmed by the relevant authorities

Minor Flooding causes inconvenience. Low-lying areas next to watercourses are inundated requiring the removal of stock and equipment. Minor roads may be closed and low-level bridges submerged

MODERATE		
Goulburn River @ Lake Eildon D/S 4.0m	Goulburn River @ Trawool Gauge 5.6m	Goulburn River @ Seymour Gauge 5.2m

Flood Levels for these locations are required to be confirmed by the relevant authorities

Moderate Flooding, in addition to the above, may require the evacuation of some houses. Main traffic routes may be covered. The area of inundation is substantial in rural areas.

MAJOR		
Goulburn River @ Lake Eildon D/S 5.0m	Goulburn River @ Trawool Gauge 7.5m	Goulburn River @ Seymour Gauge 7.00m

Flood Levels for these locations are required to be confirmed by the relevant authorities

Major Flooding, in addition to the above, causes inundation of extensive rural areas and appreciable urban areas. Properties and towns are likely to be isolated and major traffic routes likely to be closed. Numerous evacuations may be required

SUNDAY CREEK:

MINOR Sunday Creek @ Tallarook Gauge 3.0m	MODERATE Sunday Creek @ Tallarook Gauge 3.5m	MAJOR Sunday Creek @ Tallarook Gauge 4.0m
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Flood Levels for these locations are required to be confirmed by the relevant authorities

SEYMOUR TOWNSHIP & Goulburn River Environs FLOOD SUB - PLAN

6 PART SIX - RESPONSE.

Response activities take place during flood events. They are primarily to save life and/or lessen the effects of flooding.

6.1 Main Tasks & Responsibilities.

MAIN TASKS	RESPONSIBILITY	
	MUNICIPAL LEVEL	REGIONAL LEVEL
Erect barriers, signs, close roads and highways	Mitchell Vic Roads	Vic Roads
Evacuation	Police in consultation with Control Agency (VICSES) and Mitchell Shire	Police
Managing Welfare Centres	Mitchell Shire	VICSES
Rescue	Police & VICSES	Police & VICSES
Advice on drainage and pumping	Mitchell Shire	Goulburn-Murray Water
General assistance to Public eg Sandbagging, lifting furniture, safe areas, etc. (Subject to available resources)	VICSES local units and Mitchell Shire	VICSES
Media Releases	VICSES Police Mitchell Shire	VICSES Police

6.2 Control Agency.

The Victoria State Emergency Service (VICSES) is the designated control agency (per the Emergency Management Act – Victoria) for response to floods within the State. VICSES will control all flood response activities within the Mitchell Shire.

6.3 Liaison.

VICSES, Municipal Emergency Response Co-ordinator and the Municipal Emergency Resources Officer will meet at designated times during the flood events to discuss the ramifications of warnings and to plan appropriate actions.

6.4 Municipal Emergency Co-ordination Centre.

At the request of the Municipal Emergency Resources Officer, VICSES Controller or the Municipal Emergency Response Co-ordinator the Municipal Emergency Co-ordination Centre will be opened.

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6.5 Support Agencies.

The primary support agencies for flood events will be the Mitchell Shire, Victoria Police, Bureau of Meteorology, Goulburn Broken Catchment Management Authority and the Country Fire Authority, however, all agencies named in the Municipal Emergency Management Plan may be asked to provide assistance.

To ensure effective control can be maintained, agencies directly supporting with response to floods must advise VICSES of all relative intelligence information, all requests for assistance received direct by them and accept the overall direction of VICSES.

6.6 Evacuation.

VICSES, Police and the Municipal Emergency Resources Officer will identify the need to evacuate any residents in flood threatened areas. Victoria Police and VICSES will implement the evacuations, assisted by other agencies on an event by event basis. This does not preclude people self-evacuating from flood threatened areas.

Council will manage welfare centres on a Municipal basis, supported by VICSES.

Caravan parks are particularly vulnerable to flooding. Council should nominate suitable alternative sites to locate caravan park residents, taking into account security, toilets, showers, electricity needs etc.

One of the major problems faced with caravan parks is the difficulty of notifying owners of the need to move caravans when they do not live on-site. During the 1993 floods, a number of caravan owners who had on-site vans, resided in Melbourne or elsewhere. Owners should be compelled to provide Caravan Park Managers with up-to-date contact numbers and authorisation to move caravans at cost, if time permits, following evacuation of residents.

6.7 Levees.

Levees will only be raised by sandbagging or earthworks with the approval of the responsible authority (owner and/or managing authority) and then only after careful consideration and consultation with Control Agency (VICSES).

Levee banks, by definition, interrupt the natural flow of water. During flood periods, any person or organisation strengthening or raising any levee other than those approved under formal mitigation schemes, could be legally liable.

As stated in previous Flood Sub Plans “..Should any person in a downstream or adjacent area, consider that the works undertaken, directed water on to their assets by containing the water from its natural flow or increased levels of water downstream or to cause or increase flooding, those persons responsible for carrying out the works could be liable for the costs of damages to crops, assets or even loss of life.”

Levee banks can create additional afflux and therefore cause further flooding to upstream properties. Constricting the flow path can also reduce floodplain storage and in doing so increase and accelerate flows to areas downstream. Consequently, those persons responsible for carrying out any unauthorised works could be held liable for the costs of damages to crops, assets or even loss of life.

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7 PART SEVEN - RECOVERY.

Recovery activities commence when people, property or the community are affected by flooding.

7.1 Main Tasks & Responsibilities.

MAIN TASKS	RESPONSIBILITY	
	MUNICIPAL LEVEL	REGIONAL LEVEL
Temporary Accommodation	Mitchell Shire	Dept Human Services
Emergency Grants	Dept Human Services	Dept Human Services
Establish “One Stop Shop” for recovery information and services	Mitchell Shire	Dept Human Services

7.2 General Recovery Matters.

In general, the recovery arrangements detailed in the Municipal Emergency Management Plan will be applied to flood events.

7.3 One Stop Shop.

Where considered necessary, Council will establish a “one stop shop” for people affected by the flooding to obtain information and assistance in some or all of the following areas:

- Insurance.
- Financial grants.
- Personal needs.
- Clean up information.
- Advice on structural damage.
- Counselling.
- Flood Information updates.

**SEYMOUR TOWNSHIP & Goulburn River Environs
FLOOD SUB - PLAN**

8 PART EIGHT – APPENDICES.

8.1 APPENDIX 1: Goulburn River (Eildon to Seymour) Catchment Plan & Data Collection Network

The Bureau of Meteorology Data Collection Network Plan to be inserted.

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8.2 APPENDIX 1A: Flood Affected Area Plan for Goulburn River Environs

Insert Plan from NRE Flood Data Transfer project.

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8.3 APPENDIX 2: Flood Affected Area Plan for Seymour Township

**Insert Flood Inundation Mapping Plans
of
Seymour Township**

Commencing at 6.30m at Goulburn River Gauge

SEYMOUR TOWNSHIP & Goulburn River Environs FLOOD SUB - PLAN

8.4 APPENDIX 3: Flood Information Cards

8.4.1 Goulburn River at Seymour

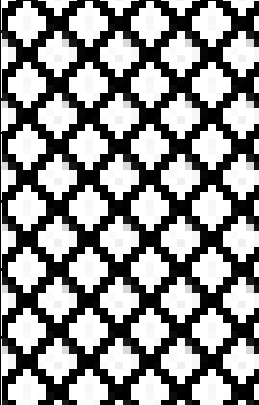
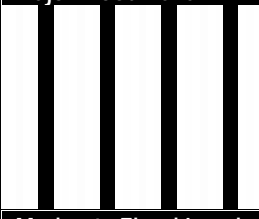
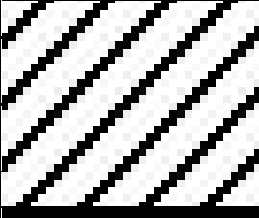
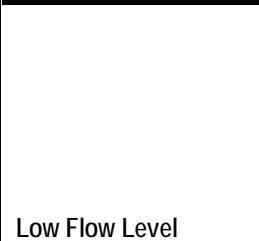
8.5 Flood Information Card – Goulburn River at Seymour

FLOOD LEVELS	M	KEY TRIGGERS	ACTION
Major Flood Level	7.0 m	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;"><i>At the completion of the installation and commissioning of the Data Collection Network, local datum levels for minor, moderate and major flood levels may be established, taking into consideration Flood</i></p> </div> <p>North Seymour Residential & Commercial area flooding. Emily St Area houses isolated and surrounding area inundated. School Bus routes commence closure on Goulburn river frontage Rising river floods Tierney, High, Wallis sts. and Winery Area Stormwater backup flow to Emily St. Kings Park Flooding (1993) Sunday creek flows causes rapid river rise.</p>	<p>Mitchell Shire to Action Flood Alert Process FM88 when river rising to this level – 6.3m (Flood Study)</p>
Moderate Flood Level	5.2 m		
Minor Flood Level	4.00m	<p>Goulburn Caravan Park commences flooding. Flood warning linked to Ghin Ghin gauge.</p>	<p>Mitchell Shire to advise Goulburn Caravan Park when river rising to this level – 4.00m</p>
Low Flow Level	0.2m		
<p>Gauge Zero AHD = x? metres AHD (To be determined by data collection network installation)</p>			

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8.4 APPENDIX 3: Flood Information Cards (contd.)

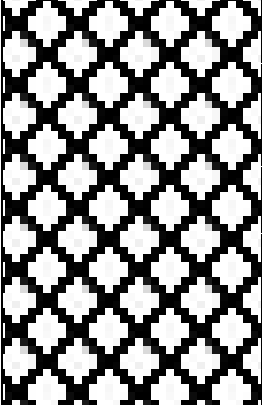
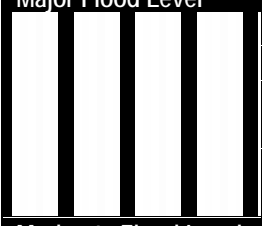
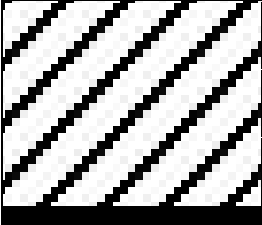
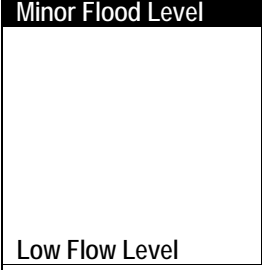
8.5.1 Goulburn River at Trawool

FLOOD LEVELS	M	KEY TRIGGERS	ACTION
		<div style="border: 1px solid black; padding: 10px; margin: 0 auto; width: 80%;"> <p><i>At the completion of the installation and commissioning of the Data Collection Network, local datum levels for minor, moderate and major flood levels may be established, taking into consideration Flood Information Provider data and any future flood events.</i></p> </div>	
Major Flood Level	7.5		
			
Moderate Flood Level	5.6		
			
Minor Flood Level	4.00		
			
Low Flow Level	0.2m		
Gauge Zero AHD = x? metres AHD (to be determined by data collection network installation)			

SEYMOUR TOWNSHIP & Goulburn River Environs FLOOD SUB - PLAN

8.4 APPENDIX 3: Flood Information Cards (contd.)

8.5.2 Sunday Creek at Tallarook

FLOOD LEVELS	M	KEY TRIGGERS	ACTION
		<div style="border: 1px solid black; padding: 10px; margin: 0 auto; width: 80%;"> <p><i>At the completion of the installation and commissioning of the Data Collection Network, local datum levels for minor, moderate and major flood levels may be established, taking into consideration Flood Information Provider data and any future flood events.</i></p> </div>	
Major Flood Level	4.0m		
			
Moderate Flood Level	3.5m		
			
Minor Flood Level	3.0m		
			
Low Flow Level	0.2m		
Gauge Zero AHD = x? metres AHD (to be determined by data collection network installation)			

SEYMOUR TOWNSHIP & Goulburn River Environs FLOOD SUB - PLAN

8.6 APPENDIX 4: Flood Information Providers – Goulburn River Catchment (Eildon to Seymour).

LOCATION:	NAME:	PHONE	EMAIL:	FAX:
THORNTON CARAVAN PARK THORNTON 3712 VIC	LORRAINE LILLEY	5773 2305		5773 2305
RUBICON FARM 1123 TAGGERTY RD THORNTON 3712 VIC	PAUL GILMORE	5773 2200		
"FOGGY HOLLOW" 260 HALLS FLAT RD PO Box 163 ALEXANDRA 3712 VIC	MARK LEWIS	5772 2068 0418576768		5772 2068
ALEXANDRA CFA 39 BON ST. ALEXANDRA 3712	PETER RICE GROUP OFFICER CFA	5772 1606 041733048 0	Peter@yccs.com.au	
BREAKAWAY TWIN RIVERS CARAVAN PARK BREAKAWAY RD, ACHERON	CRAIG GLOURY	5772 1735		5772 1748
MOLESWORTH CARAVAN PARKING SERVICES MOLESWORTH 3718 VIC	JOHN SHAW	5797 6278		---
"NARDARK" MOLESWORTH 3718 VIC	JOHN WATERHOUSE	5797 6320	Jdwspouty@bigpond.com.au	5797 6353
MRS JOYCE RISHWORTH	BUXTON	5774.7576	Robin.rishworth@yccs.com.au	
YEA FAMILY CARAVAN PARK MILLER ST YEA 3717 VIC	JOHN NORMAN	5797 2972	John@ancc.com.au	5797 2052
NASHES ROAD YEA 3717 VIC	DON LAWSON	5797 8383		
SEYMOUR TOWNSHIP 25 ANGLESEY ST SEYMOUR 3661 VIC	KELVIN BARNBROOK	5799 0043		5799 0017
SEYMOUR TOWNSHIP ELIZA ST SEYMOUR 3661 VIC	MARGOT GREEN	5792 1745		

ORGANISATION:	LOCATION	NAME:	PHONE:	EMAIL:	FAX:
VIC SES	BENALLA	JAMES GUSTUS	57626253	jamesg@ses.vic.gov.au	5762 6257
MITCHELL SHIRE	BROADFORD	GREG SCOTT	57346200	Gregs@mitchell.vic.gov.au	5734 6222
MURRINDINDI SHIRE	ALEXANDRA	IAN ELLETT	57720333	Murrindindindi@mynet.com.au	5772 2291
GBCMA	SHEPPARTON	GUY TIERNEY	5822 2288	Guyt@gbcma.vic.gov.au	5831 6254
MELBOURNE TER	MELBOURNE	GEOFF CRAPPER	9235 2186	Geoff.crapper@melbwater.com.au	9421 0156
G-MW	TATURA	BILL VINEY	5833 5487	Billv@g-mwater.com.au	5833 5509
NRE	EAST MELB.	IAN GAUNTLET	9412 4073	Ian.gauntlet@nre.vic.gov.au	9412 4810

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8.7 APPENDIX 5: Flood Operations Checklist.

<u>Information Systems:</u>	Answering machine, brochures, newsletters. Phone lines - 24 hour Fax machines, mobile phones. One-stop shop, Local area flood bulletins.
<u>Reconnaissance:</u>	Levees, bridges, roads, properties.
<u>Warnings:</u>	Dissemination - locally. FM 88 Recording and Updates.
<u>Emergency Operations Centre:</u>	Location, security, liaison personnel. Whiteboards, local maps, inundation maps. Phone, fax, radio. Log forms, Request for Assistance, Offers of Assistance. Tea, coffee, meals. Emergency power. Staff families.
<u>Road Closures:</u>	Signage, barricades, warning lights, diversions. Notification to Emergency Services/ to Public./ Media.
<u>Asset Protection:</u>	Essential Services, Council Assets
<u>Sand / Sandbags:</u>	Municipal policy. Municipal Stock.
<u>Municipal Evacuation / Relief Centres:</u>	Feeding, registration, needs, personnel. Relocation, bedding. Reunion, return, recovery.
<u>Livestock:</u>	Feeding, registration, needs, personnel. Feed, milking, transport.
<u>Fuel Arrangements:</u>	Safe and secure supply.
<u>Caravan Parks:</u>	Notify.
<u>Hospitals:</u>	Notify.
<u>Aged Homes:</u>	Notify.
<u>Transient Population:</u>	Inform.
<u>Disabled:</u>	Notify.

SEYMOUR TOWNSHIP & Goulburn River Environs FLOOD SUB - PLAN

8.6 APPENDIX 5: Flood Operations Checklist (contd.)

<u>Tourists, Campers:</u>	Notify.
<u>Schools:</u>	Notify.
<u>Essential Commodities:</u>	Food, water, power, gas, sewerage.
<u>Equipment:</u>	Loaders, trucks.
<u>Public Education:</u>	Self-protection - consider ethnic groups. Listen to/read daily warnings. Sand bagging education.
<u>Education Program:</u>	Publish/Distribute Shires Flood Strategy / Sand Bag Policy. Caravan Park Flood Procedures. Inundation Maps Prepared. Support Agency Training Media Releases. / Bulletins / Ethnic Groups. Media Interviews. Inter-Agency Liaison. Pre-Flood Briefings. Issue/Disseminate "Flood Response Guidelines" brochure /Awareness Material. Training Outdoor Staff Sandbagging Techniques (briefing on flood). Address to Community Groups & Schools. Public Meetings, Pre-Flood Public Meetings, Post-Flood

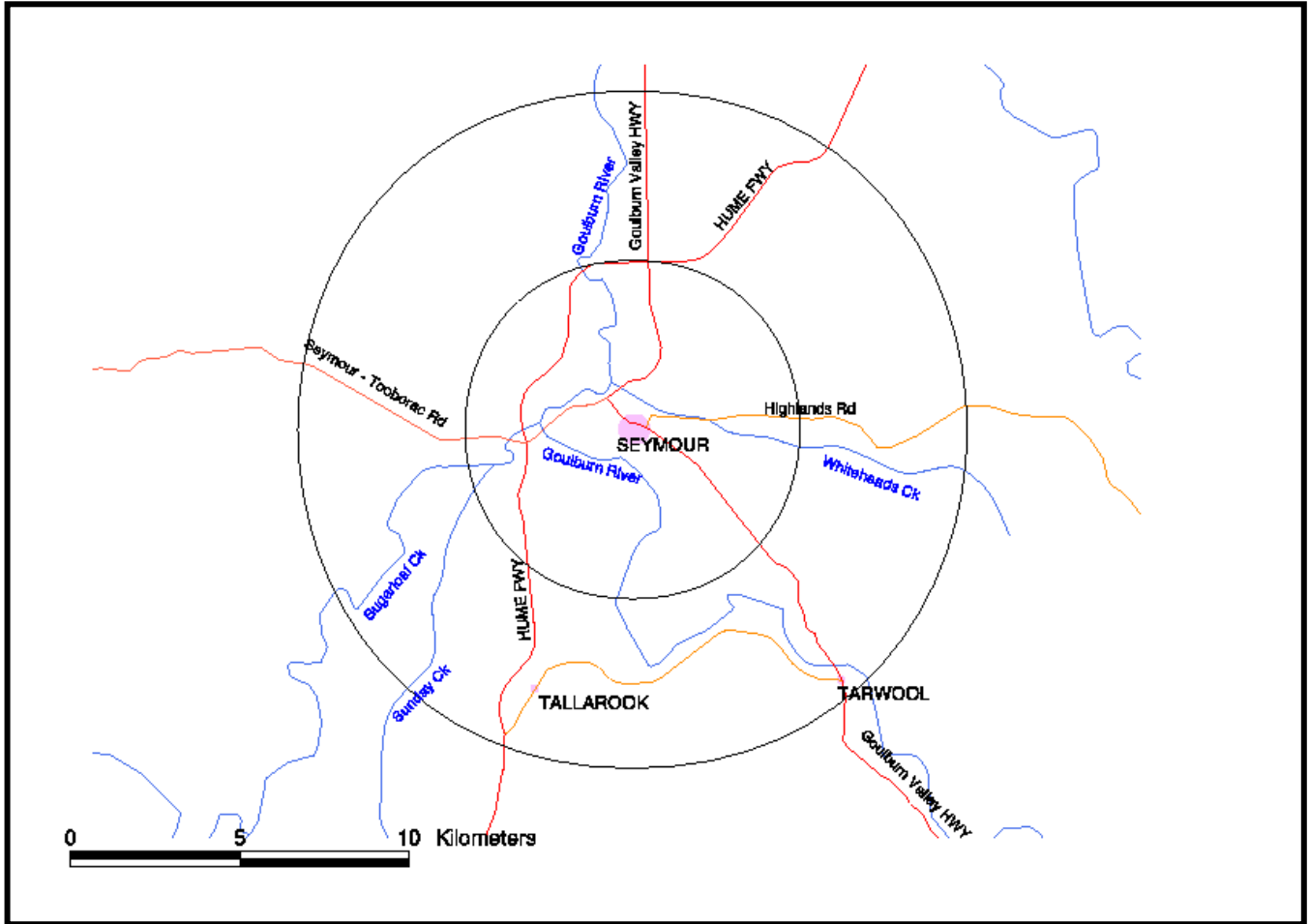
**SEYMOUR TOWNSHIP & Goulburn River Environs
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8.8 APPENDIX 6: Mitchell Shire Business Unit Emergency Management Agreement

MITCHELL SHIRE TO ATTACH.

SEYMOUR TOWNSHIP & Goulburn River Environs FLOOD SUB - PLAN

8.9 APPENDIX 7: FM88 Transmission Area – Seymour



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8.10 APPENDIX 8: Data Collection Network Catchment Map

