

SHIRE OF CAMPASPE

**COMMUNITY EMERGENCY
RISK MANAGEMENT
STRATEGY**



Issue No: 4, November 2013

In 2001 Council, with the assistance of a diverse group of community representatives, developed a Community Emergency Risk Management strategy detailing the likelihood and consequences for the community in regard to large-scale emergencies, including transport accidents, floods, animal and human epidemics, severe storm, water pollution etc, and looking at treatment options that may decrease the risk.

Three reviews of the strategy have been completed, with input from community members and agency representatives on the MEMPC in terms of content and any additional risks that should be included.

This document reflects the document approved by the Municipal Emergency Management Planning Committee and which is recommended by the Committee for adoption by Council.

The risk assessment was undertaken in the context of situations leading to an emergency that is likely to require a multi-agency response. Likelihood has been assessed as the probability of the particular event occurring in any year and consequence has been assessed as the average consequence on a Shire-wide basis for the associated event(s).

In a reasonable number of cases, there are no practicable remaining treatment options, therefore the recommendation is to accept the residual risk with no further action required.

LIST OF AMENDMENTS

Issue No	Comments
1	First Issue. Adopted by Council 2001.
2	Second issue. Adopted by Council 15 April 2008.
3	Reissue. Adopted by Council 18 October 2011.
4	Reissue. Received and noted by Council 19 November 2013

CAMPASPE SHIRE – COMMUNITY EMERGENCY RISK REGISTER SUMMARY

ITEM	SOURCE OF RISK (HAZARD)	LIKELIHOOD RATING	CONSEQUENCE RATING	RISK RATING	RISK ASSESSMENT UPDATED
1	Drought	Possible	Moderate	High	March 2011
2	Human Pandemics	Unlikely	Major	High	March 2011
3	Human Epidemics	Possible	Moderate	High	March 2011
4	Flood	Likely	Moderate	High	March 2013
5	Transport Crashes (Road)	Likely	Moderate	High	March 2011
6	Transport Crash (Rail)	Possible	Moderate	High	March 2011
7	Transport Crash (Waterways)	Possible	Moderate	High	March 2011
8	Wildfire	Possible	Moderate	High	March 2011
9	Animal Epidemic	Possible	Minor	Moderate	March 2011
10	Structural Fire	Possible	Minor	Moderate	March 2011
11	Severe Storm	Possible	Minor	Moderate	March 2011
12	Bridge Collapse or Failure	Unlikely	Moderate	Moderate	March 2011
13	Industrial Accidents / Explosions	Unlikely	Moderate	Moderate	March 2011
14	Utility failure (gas)	Unlikely	Moderate	Moderate	March 2011
15	Water Pollution	Possible	Moderate	Moderate	March 2011
16	Utility Failure (Sewerage)	Possible	Minor	Moderate	March 2011
17	Utility Failure (Water Supply – rural areas)	Possible	Minor	Moderate	March 2011
18	Utility Failure – All Telecommunications	Possible	Minor	Moderate	September 2011
19	Terrorism	Rare	Moderate	Moderate	September 2011
20	Extreme Temperature	Likely	Insignificant	Moderate	September 2011
21	Utility Failure (Power Failure)	Unlikely	Minor	Low	March 2011
22	Earthquake	Rare	Insignificant	Low	March 2011
23	Utility Failure (Water Supply – urban areas)	Unlikely	Minor	Low	March 2011
24	Civil Disturbance / Riot	Rare	Minor	Low	September 2011
25	Air Pollution	Unlikely	Minor	Low	September 2011
26	Transport Incidents (Air)	Rare	Minor	Low	September 2011
27	Plague: Insects (Locusts)	Unlikely	Minor	Low	September 2011
28	Building Collapse	Unlikely	Minor	Low	September 2011
29	Plague: Insects (Fruit Fly)	Unlikely	Minor	Low	September 2011
30	Mine Shafts	Rare	Minor	Low	September 2011

LIKELIHOOD	
LEVEL	DESCRIPTION
A	ALMOST CERTAIN
B	LIKELY
C	POSSIBLE
D	UNLIKELY
E	RARE

CONSEQUENCE	
LEVEL	DESCRIPTION
1	INSIGNIFICANT
2	MINOR
3	MODERATE
4	MAJOR
5	CATASTROPHIC

Qualitative measures of likelihood and consequence:

LIKELIHOOD			CONSEQUENCE		
Level	Descriptor	Description	Level	Descriptor	Description
A	Almost certain	The event is expected to occur. High level of recorded incidents and/or very strong anecdotal evidence. A strong likelihood event will reoccur. Great opportunity, reason, or means to occur. May occur once every year or more.	1	Insignificant	No injuries or fatalities. Small number or nil people are displaced and only for short duration. Little or no personal support (support not \$ or material). Inconsequential or no damage. Little or no disruption to community. No measurable impact on environment. Little or no financial loss.
B	Likely	The event will probably occur. Regular recorded incidents and strong anecdotal evidence. Considerable opportunity, reason or means to occur. May occur once every five years.	2	Minor	Small number of injuries but no fatalities. First Aid treatment required. Some displacement of people (less than 24 hours). Some personal support required. Some damage. Some disruption (less than 24 hours). Small impact on environment with no lasting effects. Some financial loss.
C	Possible	The event should occur at some time. Few infrequent, random recorded incidents or little anecdotal evidence. Very few incidents in associated organisations or comparable facilities. Some opportunity, reason or means to occur. May occur once every twenty years.	3	Moderate	Medical treatment required but no fatalities. Some hospitalisation. Localised displacement of people who return within 24 hours. Personal support satisfied through local arrangements. Localised damage which is rectified by routine arrangements. Normal community functioning with some inconvenience. Some impact on environment with no long-term effect or small impact on environment with long-term effect. Significant financial loss.

LIKELIHOOD			CONSEQUENCE		
Level	Descriptor	Description	Level	Descriptor	Description
D	Unlikely	The event could occur at some time. No recorded incidents or any anecdotal evidence. No recent incidents in associated organisations or facilities. Little opportunity, reason or means to occur. May occur once every one hundred years.	4	Major	Extensive injuries, significant hospitalisation, large number displaced (more than 24 hours duration). Fatalities. External resources required for personal support. Significant damage that requires external resources. Community only partially functioning, some services unavailable. Some impact on environment with long-term effects. Significant financial loss - some financial assistance required.
E	Rare	The event may occur only in exceptional circumstances. May occur once every five hundred or more years.	5	Catastrophic	Large number of severe injuries. Extended and large numbers requiring hospitalisation. General and widespread displacement for extended duration. Significant fatalities. Extensive personal support. Extensive damage. Community unable to function without significant support. Significant impact on environment and / or permanent damage. Huge financial loss - unable to function without significant support.

Risk rating matrix

LIKELIHOOD	CONSEQUENCES				
	Insignificant	Minor	Moderate	Major	Catastrophic
	1	2	3	4	5
A (almost certain)	H	H	E	E	E
B (likely)	M	H	H	E	E
C (possible)	L	M	H	E	E
D (unlikely)	L	L	M	H	E
E (Rare)	L	L	M	H	H

(AS/NZS 4360:1995)

Legend

Level of risk

Recommended action

E = extreme risk

Detailed research and management planning required at senior levels. Action must be taken to reduce consequences or likelihood.

H = high risk

Senior management attention required, further research might be required. Some action must be taken.

M = moderate risk

Management responsibility must be specified, specific monitoring or response procedures required.

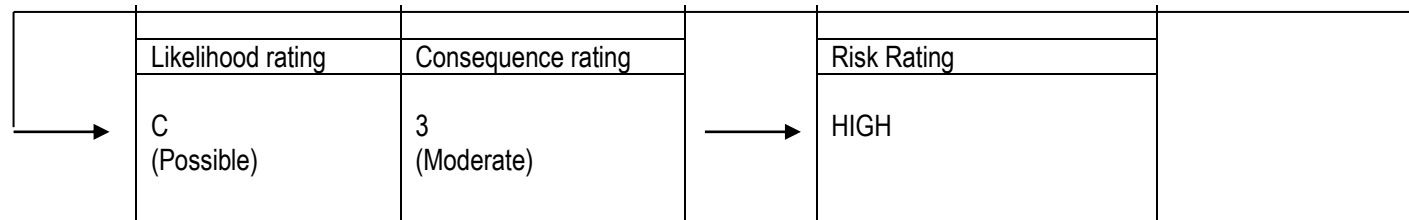
L = low risk

Managed by routine procedures.

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 1 - DROUGHT

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Drought (up to three years)	<ul style="list-style-type: none"> ➤ Recurring common occurrence ➤ Cyclical event – anecdotal evidence suggests every 20 years or so 	<p>People:</p> <ul style="list-style-type: none"> ➤ Potential for depression etc especially within the farming community <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Potential for loss of water supply, irrigation water etc <p>Environment:</p> <ul style="list-style-type: none"> ➤ Short term impact – potential fire concerns. ➤ Some loss of flora/fauna ➤ Increase in environmental flows leads to decrease in water availability to town and agriculture <p>Economic:</p> <ul style="list-style-type: none"> ➤ Government support (widespread) required. ➤ Many groups / industries / tourism / primary production affected. ➤ Flow on effect to other businesses. 	<ul style="list-style-type: none"> ➤ Unemployment benefits available ➤ Regulated water supply ➤ Landcare management systems in place ➤ Financial recovery arrangements available ➤ Welfare/Counselling and other support services available ➤ Drought relief arrangements in place at Federal and State levels ➤ Improved water management practices ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee and reviewed by MEMPC

RISK TREATMENT PLAN

ITEM 1 - DROUGHT

RISK: DROUGHT

RATING: HIGH

DATE OF RISK TREATMENT REVIEW: March 2011

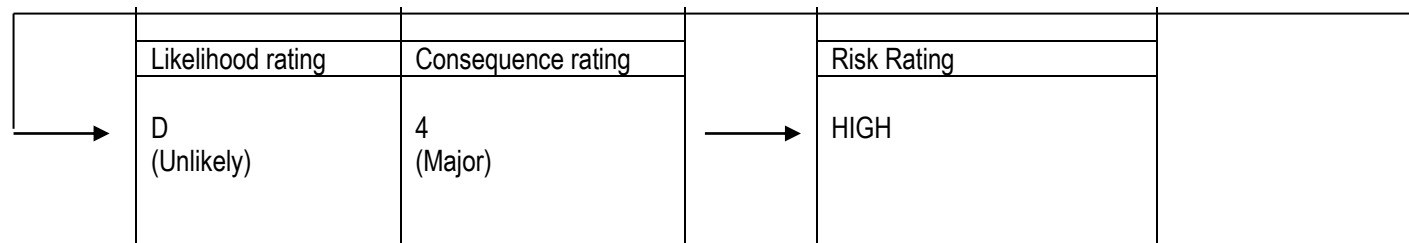
COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ General community ➤ Farm workers/families ➤ Workers in industries reliant on agriculture <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Unable to maintain gravel roads ➤ Water supply <p>Environment:</p> <ul style="list-style-type: none"> ➤ Increased salinity ➤ Poor water quality ➤ Dying trees / pasture ➤ Flora and fauna <p>Economic:</p> <ul style="list-style-type: none"> ➤ Devastation of horticultural and agricultural industries ➤ Loss of income to whole communities ➤ Flow on effect to service towns 		<p>Accept residual risk</p>		<p>High</p>

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 2 - HUMAN PANDEMICS

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Human Pandemics	<ul style="list-style-type: none"> ➤ Potential for Avian Influenza, SARS type event to occur but limited occurrences in last 100 years 	<p>People:</p> <ul style="list-style-type: none"> ➤ Death and/or serious disability ➤ Potential to affect, infect and affect large sections of the community <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Medical resources will be stretched ➤ Potential closure of significant buildings / industries / public infrastructure <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Nil <p>Economic:</p> <ul style="list-style-type: none"> ➤ Affects on labour availability for businesses and industries ➤ Effect on economic cycle - loss of productivity 	<ul style="list-style-type: none"> ➤ Vaccination program for preventable diseases ➤ Federal Government stockpile of antiviral drugs ➤ Department of Health "Influenza Pandemic Plan" ➤ Community awareness programs ➤ Council Influenza Pandemic Plan and Mass Vaccination Plan ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents ➤



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RISK TREATMENT PLAN

ITEM 2 – HUMAN PANDEMICS

RISK: HUMAN PANDEMICS

RATING: HIGH

DATE OF RISK TREATMENT REVIEW: March 2011

COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

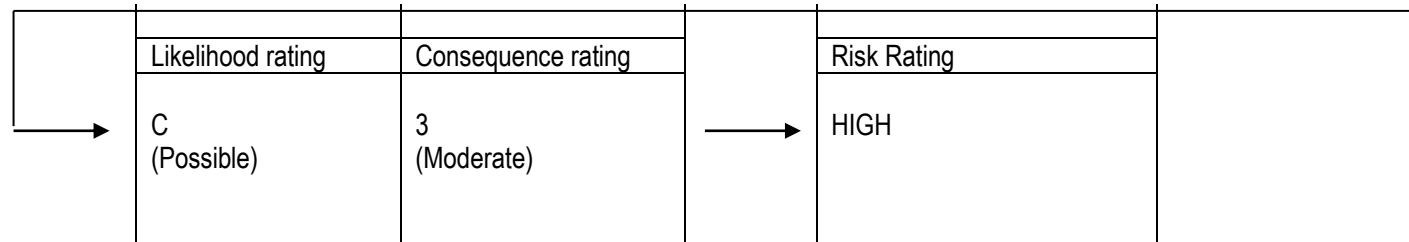
Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ All residents / visitors		Accept residual risk		High
Infrastructure: ➤ Hospitals ➤ Medical centres ➤ Public infrastructure				
Environment: ➤				
Economic: ➤ Lost productivity due to long term and possibly widespread illness ➤ Closure of public buildings and facilities ➤ Closure of schools and businesses				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 3 - HUMAN EPIDEMICS

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Human Epidemics</p>	<ul style="list-style-type: none"> ➤ Climate and nature of river country provide ideal environment for mosquito borne diseases e.g. Murray Valley Encephalitis, Ross River fever etc. November to May is danger period. 37 people affected of 35,000 (1996) ➤ Potential to be greater given warm wet season. ➤ Ample opportunity/means to occur ➤ Sporadic incidents have occurred of both confirmed and unconfirmed gastro-intestinal illness from food and water (eg salmonella, usually involving one or two people) ➤ A number of gastroenteritis outbreaks (four in past two years) in aged care / hospital setting ➤ Existence of water cooling towers and public spas at various premises in the Municipality increases the prospect of Legionnaires disease ➤ 85% of childhood immunisation coverage across the Municipality ➤ Vaccine preventable diseases, eg. Hep A, Hep B, etc ➤ Blood borne diseases eg. Aids, Hep C,D,E,F,G 	<p>People:</p> <ul style="list-style-type: none"> ➤ Illnesses, death and/or serious disability ➤ Potential to infect and affect large sections of the community <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Medical resources will be stretched ➤ Potential closure of significant buildings / industries <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Nil <p>Economic:</p> <ul style="list-style-type: none"> ➤ Possible affects on tourism and labour requirements for fruit picking in area if Arbovirus or food poisoning outbreak occurs ➤ Cost to health budgets 	<ul style="list-style-type: none"> ➤ Department of Health Arbovirus Strategy ➤ Council Arbovirus Control Program involving extensive monitoring, surveillance and treatment of effected mosquito areas ➤ Registration and monitoring of food premises including inspection and food sampling by the Shire ➤ Legislative requirements in relation to cooling towers and spas in relation to inspection and maintenance ➤ Water authorities conduct bacteriological water sampling ➤ Vaccination program for preventable diseases ➤ Reporting requirements apply to both Doctors and Pathologists regarding notifiable diseases ➤ Department of Health “Influenza Pandemic Plan” ➤ Council has ongoing immunisation plan and awareness programs ➤ Shire of Campaspe Influenza Pandemic Plan and Mass Vaccination Plan ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents

ITEM 3 - HUMAN EPIDEMICS



Date of risk review: March 2011

Compiled by: CERM Sub-Committee and reviewed by MEMPC

RISK TREATMENT PLAN

ITEM 3 - HUMAN EPIDEMICS

RISK: HUMAN EPIDEMICS

RATING: HIGH

DATE OF RISK TREATMENT REVIEW: March 2011

COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: <ul style="list-style-type: none"> ➤ Local residents ➤ Visitors to the area ➤ Aged / infirm ➤ Those who smoke and / or suffer from respiratory illness ➤ Infants ➤ Non immunised persons ➤ Diners Infrastructure: <ul style="list-style-type: none"> ➤ Hospitals 		Accept residual risk		High

ITEM 3 - HUMAN EPIDEMICS

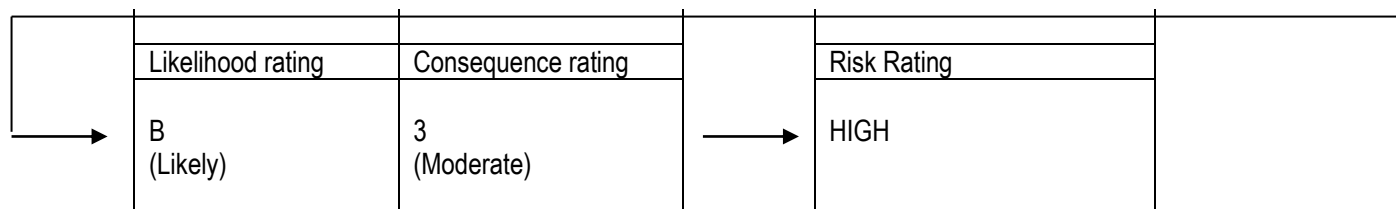
Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>Human Epidemics continued:</p> <p>Environment:</p> <ul style="list-style-type: none"> ➤ Air / water can be affected by need to spray chemicals to inhibit mosquito development <p>Economic:</p> <ul style="list-style-type: none"> ➤ Lost productivity due to long term and possibly widespread illness ➤ Closure of public buildings and facilities ➤ Closure of food premises ➤ Potential litigation ➤ Impact on fruit industry through loss of pickers 				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 4 - FLOOD

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Flood</p>	<ul style="list-style-type: none"> ➤ The Municipality has a number of rivers and streams impacting on its area including the Murray, Campaspe and Goulburn Rivers, and Corop Lakes creeks and depressions ➤ Significant flood events have occurred this century in 1916, 1917, 1956, 1973, 1974, 1975 and 1993, 2010 and 2011. ➤ Weather patterns and terrain suggest there will be further events at some time in the future ➤ Municipality relies heavily on the maintenance of the numerous levees which provide protection for houses, industry (primary and secondary), and infrastructure,. ➤ Many levees in rural areas are not adequately maintained and would not provide sufficient protection in a 1:100 year flood. Some levees have overtopped and / or failed for events of a 1 in 30 year magnitude ➤ Ample opportunity and means to occur 	<p>People:</p> <ul style="list-style-type: none"> ➤ Inundation of some houses is likely and possible relocation required ➤ Major inconvenience will occur <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Road closures will inevitably arise ➤ Water supply could be contaminated ➤ Drainage backflow into residential areas could occur <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Potential for both positive and negative consequences <p>Economic:</p> <ul style="list-style-type: none"> ➤ Primary production can be severely affected ➤ Response and recovery costs can be substantial ➤ Lost tourism ➤ Road reinstatement could be extensive, and therefore substantial costs to be met 	<ul style="list-style-type: none"> ➤ Extensive rural levee system protects vulnerable communities generally up to a level of 1 in 10 year flood ➤ Municipal Planning Scheme identifies land subject to flooding and dictates land usage accordingly ➤ River flows are effectively managed by relevant Authorities whereas super abundant floodwater largely revert to natural conditions causing widespread flooding ➤ Flood warnings are issued by the Bureau of Meteorology during relevant periods and disseminated via an extensive distribution network to vulnerable groups and stakeholders ➤ A detailed Flood Response Plan has been compiled for the Municipality and uses a system of trigger points to provide an effective response ➤ The Flood Control Agency, VICSES, is well equipped and trained to respond and is well supported by other agencies ➤ Dam Safety Emergency Plans ➤ Controls by Catchment Management Authorities ➤ Flood mitigation works undertaken in Rochester including pumps and flood gates ➤ Flood mitigation works undertaken in Echuca including levee along Campaspe River (to 100 year level without freeboard) and Murray River (to a 30 year level) ➤ Flood mitigation works undertaken in Kyabram including pumps and retardation basins ➤ Telemetry monitoring systems installed to flood pumps in Kyabram and Rochester ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents

ITEM 4 - FLOOD



Date of risk review: March 2013 Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 4 - FLOOD

RISK: FLOOD

RATING: HIGH

DATE OF RISK TREATMENT REVIEW: March 2013

COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ Residents ➤ Tourists ➤ Businesses ➤ Aged, Infirm, Sick <hr/> <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Flood Protection Systems i.e. levees ➤ Private diversions ➤ Road networks ➤ Water supply ➤ Sewerage Reticulation System and Transfer System (Pump Station) ➤ Drinking water ➤ Hospitals ➤ Residential Aged Care Facilities 	<ul style="list-style-type: none"> ➤ Provide education awareness to the community in relation to their flood risk (possibility of developing a Flood Smart program for the Shire) ➤ Undertake flood mitigation study to determine possible treatment options, particularly in Rochester ➤ Improve response arrangements, including improved warning systems 	<p>Accept residual risk</p>		<p>High</p>

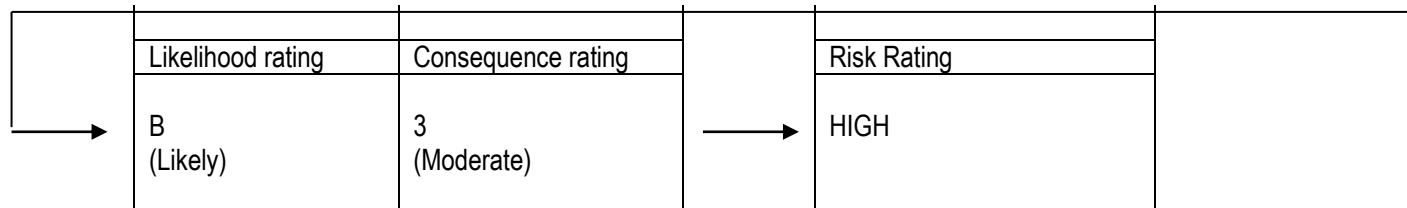
Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
Environment: Economic: ➤ Lost income ➤ Tourism ➤ Cost of response and recovery	➤ Comrie review currently underway with submission due 27/5/2011; ➤ Review being undertaken on levee maintenance, repair and responsibility.			

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 5 - TRANSPORT CRASHES (ROAD)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Transport Crashes (Road)</p>	<ul style="list-style-type: none"> ➤ History of small to medium scale crashes within the Municipality ➤ Occasional incidents have occurred in the recent past which could have resulted in much more severe circumstances ➤ Extensive road network crosses the Municipality carrying numerous vehicles, including increasingly more articulated transports and passenger coaches ➤ Size of articulated transports continues to increase ➤ There is ample opportunity for large scale crashes to occur ➤ Special events draw large numbers of vehicles, increasing the risk of crashes ➤ Density of development in dairying areas results in grid network and subsequent numbers of crossroads ➤ Movement of dairy stock across roads / highways is increasing ➤ Anecdotal evidence suggests an increase in degree of movement by road of hazardous material ➤ Large number of children are collected from various points in rural areas and travel to school by bus 	<p>People:</p> <ul style="list-style-type: none"> ➤ Possible multiple deaths and serious injury ➤ Significant trauma ➤ Potential for mass evacuations if hazardous material is involved ➤ Possible long term effects if hazardous material is involved <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Short term interruption to vehicular traffic is the most likely result ➤ Potential for overtaxing of medical services in the case of a significant event ➤ Potential for making hospital and medical facilities uninhabitable for a period of time if hazardous material is involved ➤ Potential closure of Murray River bridge at Echuca which links Victoria and NSW ➤ Potential diversion / delay of emergency services due to road closure ➤ Potential for Hazmat spillage into drainage / water systems <p>Environmental:</p> <ul style="list-style-type: none"> ➤ No likely impact unless accident involves vehicles carrying environmentally unfriendly materials. ➤ Possible restriction of movement if hazardous material is involved 	<ul style="list-style-type: none"> ➤ Stringent legislation for road usage applies and is policed strongly by VicPol and VicRoads ➤ Road systems are well maintained by both the Municipality and by VicRoads staff ➤ Public awareness programs by TAC and other interested parties help to encourage safe driving ➤ “Black spot” remediation and proactive treatments receive funding to help prevent / reduce the incidence of accidents ➤ Dangerous Goods legislation applies and is policed by Vic Workcover Authority ➤ Notification of crash data available to the Municipality from VicRoads to assist in planning ➤ Regular inspection of roads ➤ Hazmat vehicles ➤ DH has a 24 hour emergency contact for Biological and Radiation incidents ➤ CFA has 24 hour emergency contact for chemical incidents ➤ Council requires any one conducting a Special Event requiring a Council Permit (eg Southern 80 Ski Race), within the Municipality to conduct an assessment of the impact of increased vehicular traffic on major roads ➤ Provision of underpasses, including subsidy from VicRoads ➤ Intersection / black length improvements ➤ Proactive engineering treatments

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
		Economic: ➤ Substantial cost can occur in terms of accident compensation and response and recovery expenses ➤ Severe impact on industry / commerce if Murray River bridge closed at Echuca	ITEM 5 - TRANSPORT CRASHES (ROAD) ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 5 - TRANSPORT CRASHES (ROAD)

RISK: TRANSPORT CRASHES (ROAD)

RATING: HIGH

DATE OF RISK TREATMENT REVIEW: March 2011

COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: <ul style="list-style-type: none"> ➤ Tourists ➤ School children ➤ Elderly ➤ Pedestrians ➤ Gofer vehicles ➤ Inexperienced drivers ➤ Emergency Service, medical and hospital personnel ➤ Medical and Hospital patients ➤ General public ➤ Transport operators 		Accept residual risk		High

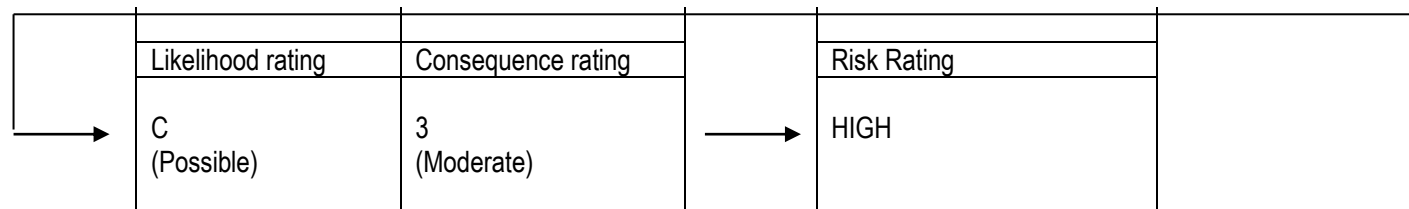
ITEM 5 - TRANSPORT CRASHES (ROAD)

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
Infrastructure: <ul style="list-style-type: none"> ➤ Bridges ➤ Power Systems ➤ Gas supply ➤ Roadways ➤ Fences ➤ Signage 				
Environment: <ul style="list-style-type: none"> ➤ Waterways ➤ Air ➤ Forestry ➤ Ground pollution 	<ul style="list-style-type: none"> ➤ Provision and training of appropriate personnel, and protection equipment. 			
Economic: <ul style="list-style-type: none"> ➤ Property replacement ➤ Increased insurance premiums ➤ Health costs ➤ TAC ➤ Downturn in tourism 				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 6 - TRANSPORT CRASH (RAIL)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Transport Crash (Rail)</p> <ul style="list-style-type: none"> ➤ Regular passenger and freight services ➤ Occasional derailments have occurred ➤ Opportunity to occur by virtue of passenger rail service ➤ Complacency of road users may have occurred with some reduction in rail services in past years 	<ul style="list-style-type: none"> ➤ Possible death and serious injury due to size and nature of rail stock <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Severe damage to rail stock and lines could generate lengthy delays to both road and rail traffic <p>Environmental:</p> <ul style="list-style-type: none"> ➤ No likely impact unless hazardous materials transported <p>Economic:</p> <ul style="list-style-type: none"> ➤ Limited direct consequence to community 	<ul style="list-style-type: none"> ➤ Extensive warning systems throughout the rail network, particularly where crosses highways and major roads ➤ Road signage and line markings on all rail crossings ➤ Australian Standards apply for level crossings ➤ VicRoads audit all crossings to meet Australian Standards ➤ Numerous road traffic education programs are undertaken by relevant agencies ➤ Rail safety and operator accreditation applies ➤ Scheduled inspections and certification of all rail, rolling stock, and bridges occurs ➤ ALCAM risk assessments undertaken and appropriate action for all rail crossings in Shire ➤ Public awareness programs to overcome complacency by motorists ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents 	



Date of risk review: March 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 6 - TRANSPORT CRASH (RAIL)

RISK: TRANSPORT CRASH (RAIL)

RATING: HIGH

DATE OF RISK TREATMENT REVIEW: March 2011

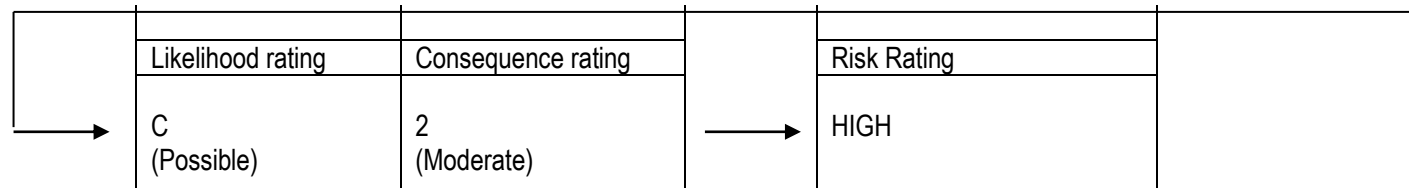
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ Train crews ➤ Motorists ➤ Emergency workers ➤ Rail staff ➤ Passengers <hr/> <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Highways and roads ➤ Rail stock and infrastructure <hr/> <p>Environment:</p> <ul style="list-style-type: none"> ➤ Localised land and air quality <hr/> <p>Economic:</p> <ul style="list-style-type: none"> ➤ Loss of capacity for freight movement (usually short term) ➤ Cost of infrastructure replacement and repair ➤ Damage to private property 		Accept residual risk		High

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 7 - TRANSPORT CRASH (WATERWAYS)

Source of Risk (Hazard)	Risk	Likelihood	Consequence	Current Controls
Transport (Waterways)	Crash	<ul style="list-style-type: none"> ➤ Regular occurrence of small scale incidents eg. speed boat incidents, with occasional death and serious injury resulting ➤ Anecdotal evidence suggests there are regular occurrences of collisions between houseboats and commercial paddlesteamers ➤ Opportunity to occur because of the extensive number of waterways and lakes within the Municipality ➤ Water sports and recreational craft eg. houseboats and paddlesteamers (size of which is increasing), are a feature of the area ➤ Special events on local waterways, eg Southern 80 Ski Race, present an opportunity for potential incidents involving high speed boats losing control and running onto banks and into large groups of spectators ➤ Submerged trees and / or logs are prevalent in the Murray River ➤ Incidents of damage to Moama and Deep Creek black water pump out stations 	<p>People:</p> <ul style="list-style-type: none"> ➤ Possible death and / or serious injury <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Potential damage to bridges and local wharves ➤ Houseboat sullage pump station ➤ Moama / Echuca water intakes ➤ Potential effect on water supply intake <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Water pollution if Echuca sullage pump station is damaged ➤ Water contamination from diesel / fuel <p>Economic:</p> <ul style="list-style-type: none"> ➤ Cost of infrastructure replacement or repair 	<ul style="list-style-type: none"> ➤ Boating regulations / licencing apply ➤ Policing conducted on Victorian inland waters on random basis by Victorian Water Police ➤ Murray River is regularly patrolled and policed by both NSW Waterways and NSW Water Police ➤ Commercial houseboats and paddlesteamers are surveyed annually for seaworthiness by Waterways Surveyors ➤ All houseboats are required by legislation to have a licensed mooring ➤ Parks Victoria check trees on the Victorian side of the Murray River which may present a potential hazard ➤ Victorian legislation requires wearing of lifejackets in certain boats ➤ NSW boaters are required to have lifejackets readily accessible ➤ Southern 80 organisers has to conduct a risk management process prior to the conduct of the event ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



RISK TREATMENT PLAN

ITEM 7 - TRANSPORT CRASH (WATERWAYS)

RISK: TRANSPORT CRASHES (WATERWAYS) RATING: HIGH

DATE OF RISK TREATMENT REVIEW: March 2011

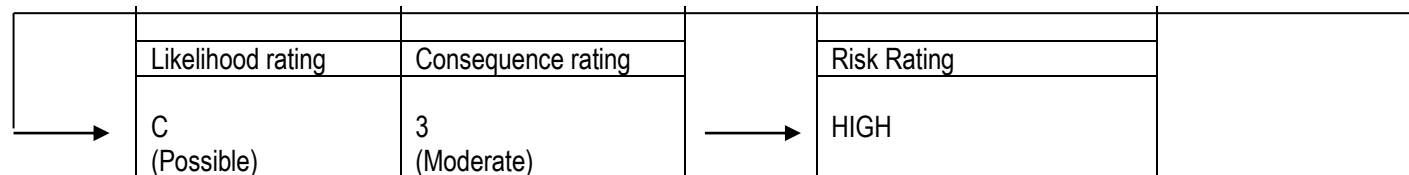
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ Spectators and participants in major events ➤ Passengers on houseboats and paddlesteamers ➤ Participants in water sport activities ➤ Anyone who takes water from the Murray River <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Water supply <p>Environment:</p> <ul style="list-style-type: none"> ➤ Water quality <p>Economic:</p>		Accept residual risk		High

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 8 - WILDFIRE

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Wildfire	<ul style="list-style-type: none"> ➤ A major portion of the Municipality comprises irrigation land, which to reduces the number of incidents compared to forest areas ➤ Extent of forest areas along and adjacent to the River, Wallenjoe Swamp, Mt Camel Range and Rushworth and northern plains presents some risk ➤ Opportunity to occur ➤ Some small scale incidents over the years. ➤ Large numbers of campers frequent the areas adjacent to the river from December to Easter, particularly during the Southern 80, long weekends, Easter etc who have campfires 	<p>People:</p> <ul style="list-style-type: none"> ➤ Possible injuries / fatalities. ➤ Loss of property, including dwellings. <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Possible affect on power supply and telecommunications networks/facilities <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Toxic fumes ➤ Dependant on the nature of the location ➤ Loss of flora/fauna ➤ Rehabilitation. <p>Economic:</p> <ul style="list-style-type: none"> ➤ Localised ➤ Cost of response ➤ Possible short term unemployment if relates to significant site ➤ Community cost ➤ Recovery cost. 	<ul style="list-style-type: none"> ➤ Fire Awareness Programs – CFA, DSE and Parks Victoria ➤ Active Fire Prevention Committee ➤ Municipal Fire Prevention Plan ➤ CFA Resources, Standing Orders and support arrangements exist and focus significantly on prevention and awareness ➤ DSE and Parks Victoria maintain Wildfire management systems that incorporate Prevention and Protection Plans and Actions ➤ Suppression Planning and Response (including early detection systems) ➤ Control burnoffs are undertaken by relevant authorities at appropriate times ➤ CFA Act and Regulations ➤ Summary Offences Act ➤ Forest Act ➤ Local laws ➤ Fire hazard inspections in urban areas ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 8 - WILDFIRE

RISK: WILDFIRE

RATING: HIGH

DATE OF RISK TREATMENT REVIEW: March 2011

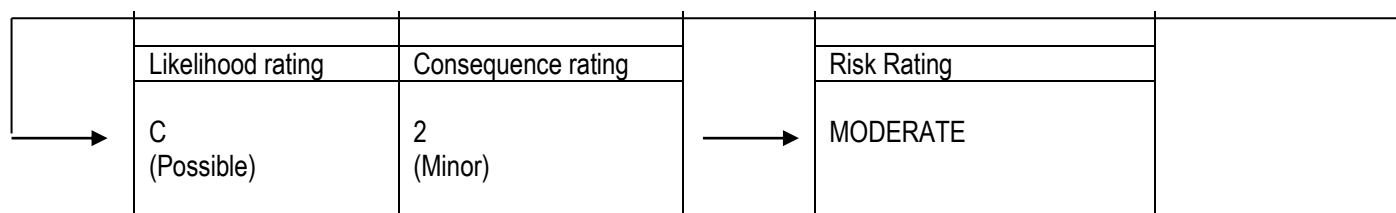
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ General community ➤ Fire fighters ➤ Adjacent landholders and occupants ➤ Campers / tourists ➤ Persons attending special events in relevant areas ➤ Aged / infirm <hr/> <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Road/rail networks ➤ Power grids <hr/> <p>Environment:</p> <ul style="list-style-type: none"> ➤ Flora/fauna ➤ Soil conservation <hr/> <p>Economic:</p> <ul style="list-style-type: none"> ➤ Lost crops ➤ Cost of response and recovery ➤ Lost tourism ➤ Property loss 		Accept residual risk		High

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 9 - ANIMAL EPIDEMIC

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Animal Epidemic	<ul style="list-style-type: none"> ➤ Recent history of occurrences eg. Anthrax ➤ Anthrax spores remain in soil in this region for >50 years ➤ Large stock numbers entering and remaining within Municipality provide opportunity for epidemic to occur ➤ Outbreaks of Foot and Mouth disease can occur anywhere within Australia ➤ Johne's disease is widespread in the dairy industry within the Municipality ➤ Highly pathogenic avian influenza is in neighbouring countries. Migratory birds may bring highly pathogenic avian influenza to the district. 	<p>People:</p> <ul style="list-style-type: none"> ➤ Emotional stress may arise <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Nil <p>Environment:</p> <ul style="list-style-type: none"> ➤ Disposal of stock and contaminated product – some risk to air and water <p>Economic:</p> <ul style="list-style-type: none"> ➤ Huge financial impact. Cattle/dairy industry is crucial to local economy and is particularly vulnerable to disease such as Anthrax and Foot and Mouth Disease. ➤ Tourism would be devastated by a local Avian Influenza outbreak, or from movement controls. <p>Note: For consequent effects on humans, refer Human Epidemics or Human Pandemics assessment sheets</p>	<ul style="list-style-type: none"> ➤ Monitoring controls are in place – farmers, private veterinary and medical practitioners, DPI ➤ Strong powers, including quarantine controls are available under the Livestock Disease Control Act ➤ Compulsory reporting of suspect situations ➤ Federal protocols for disposal are in place ➤ Standard Operating Procedures in place for response agencies ➤ Municipal Stock Management and Disposal Plan ➤ Ausvetplan ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee and reviewed by MEMPC

RISK TREATMENT PLAN

ITEM 9 - ANIMAL EPIDEMIC

RISK: ANIMAL EPIDEMIC

RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: March 2011

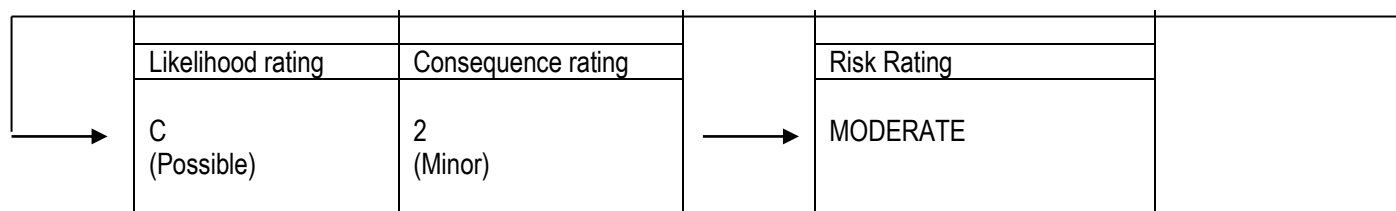
COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ Farmers ➤ Workers /visitors to properties ➤ Farm service industry employees ➤ Response staff ➤ Tourists <hr/> <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Nil obvious <hr/> <p>Environment:</p> <ul style="list-style-type: none"> ➤ Waterways and air <hr/> <p>Economic:</p> <ul style="list-style-type: none"> ➤ Farm industries ➤ Farm service industries ➤ Future trade opportunities ➤ Unemployment ➤ Tourism industries / businesses 		<p>Accept residual risk</p>		<p>Moderate</p>

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 10 - STRUCTURAL FIRE

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Structural Fire	<ul style="list-style-type: none"> ➤ Regular recorded lower scale incidents ➤ Some opportunity to occur 	<p>People:</p> <ul style="list-style-type: none"> ➤ Possible injuries / fatalities ➤ Probable displacement <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Site specific ➤ Few multi-story buildings within the municipality <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Toxic fumes ➤ Dependant on the nature of the location <p>Economic:</p> <ul style="list-style-type: none"> ➤ Localised ➤ Cost to community ➤ Cost of response ➤ Possible short and long term unemployment if relates to significant site ➤ Cost for recovery (Municipal) 	<ul style="list-style-type: none"> ➤ Building Regulations Code ➤ Essential service requirements ➤ Fire Awareness Programs – CFA ➤ Municipal Fire Prevention Plan in place ➤ CFA Resources, Standing Orders and support arrangements ➤ Suppression Planning and Response (including early detection systems) ➤ Site specific emergency management procedures at most major sites ➤ OH&S requirements



Date of risk review: March 2011

Compiled by: CERM Sub-Committee and reviewed by MEMPC

RISK TREATMENT PLAN

ITEM 10 - STRUCTURAL FIRE

RISK: STRUCTURAL FIRE

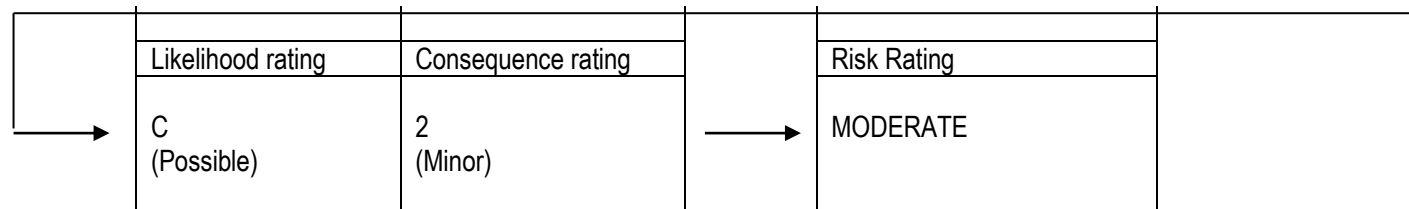
RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: March 2011

COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ General community ➤ Fire fighters ➤ Business operators ➤ Adjacent landholders and occupants ➤ Tourists ➤ Aged and Infirm <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Road/rail networks ➤ Infrastructure buildings ➤ Power grids <p>Environment:</p> <ul style="list-style-type: none"> ➤ Air pollution <p>Economic:</p> <ul style="list-style-type: none"> ➤ Cost of response and recovery ➤ Lost tourism ➤ Dependant on industry 		Accept residual risk		Moderate

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Severe Storm	<ul style="list-style-type: none"> ➤ Numerous recorded incidents of low – medium scale events across the municipality ➤ Warm/Temperate climate is conducive 	<p>People:</p> <ul style="list-style-type: none"> ➤ Possible injury or death ➤ Some localised displacement may occur <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Potential for flash flooding and failure of drainage systems ➤ Possible road closures and interruption to air services ➤ Public utilities, eg power, may fail or service be interrupted <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Potential for short term impact on trees and / or land erosion ➤ Flash flooding may result in sewer overflow <p>Economic:</p> <ul style="list-style-type: none"> ➤ Possible devastation of some primary production eg. Viticulture or industry, and substantial cost incurred to restore services 	<ul style="list-style-type: none"> ➤ Warnings issued by Bureau of Meteorology ➤ Council undertakes drainage maintenance programs ➤ VICSES, as control agency, is equipped and trained to respond to public calls for assistance. ➤ Education programs by Department Primary Industry for agriculture ➤ SES, Bureau of Meteorology brochures on staying safe during storm events ➤ SES has statewide contact number – 132 500 ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee and reviewed by MEMPC

RISK TREATMENT PLAN

ITEM 11 - SEVERE STORM

RISK: SEVERE STORM

RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: March 2011

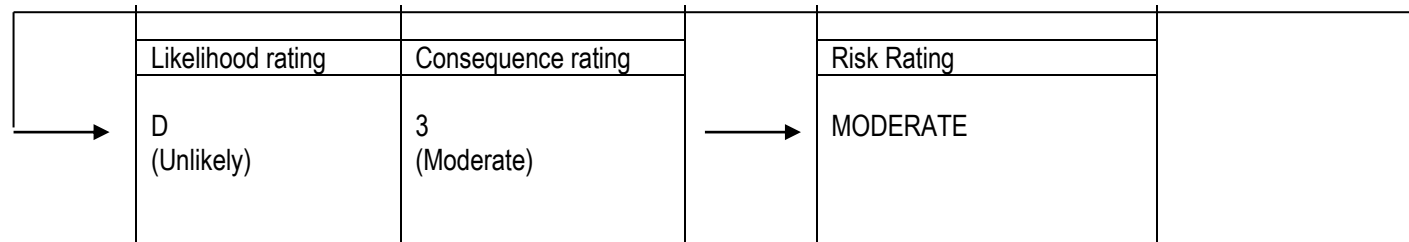
COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ General community ➤ Elderly/Infirm ➤ Primary producers ➤ Travelling public ➤ Tourists / campers <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Industry ➤ Power supply ➤ Drainage systems ➤ Telecommunications ➤ Road Network ➤ Sewerage System - Sewer Pump Stations and Waste Water Management Facility (Treatment Plant) ➤ Water Treatment Plant <p>Environment:</p> <ul style="list-style-type: none"> ➤ Flora/Fauna (minimal) <p>Economic:</p> <ul style="list-style-type: none"> ➤ Agriculture/horticulture industries ➤ Tourism 		Accept residual risk		Moderate

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 12 - BRIDGE COLLAPSE OR CLOSURE

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Bridge Collapse or Closure	<ul style="list-style-type: none"> ➤ Isolated incidences of collapse of smaller bridges have occurred in recent years ➤ Some instances of crashes leading to short term closure of major bridges have occurred ➤ Large number of bridges in Shire increases the potential to occur particularly through failure to observe load limits 	<p>People:</p> <ul style="list-style-type: none"> ➤ Possible injuries or death ➤ Major inconvenience to local communities <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Interstate transport routes could be reduced causing inconvenience, re-routing etc in relation to major bridges ➤ Essential and emergency services affected <p>Environment:</p> <ul style="list-style-type: none"> ➤ No long term impact <p>Economic:</p> <ul style="list-style-type: none"> ➤ High impact on local economy if main bridges are lost for extended periods, less so for minor bridges ➤ Significant cost of repair 	<ul style="list-style-type: none"> ➤ Report exists as to current status of bridges in the Shire and these are monitored ➤ Murray River Bridges – maintenance controls by RTA and traffic management plans and diversions are in place in case of closure ➤ Council Bridges – maintenance controls and annual inspection. Load limits apply where necessary ➤ GMW monitor and assess structures over channels and drains on a regular basis ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee and reviewed by MEMPC

ITEM 12 - BRIDGE COLLAPSE OR CLOSURE

RISK TREATMENT PLAN

RISK: BRIDGE COLLAPSE OR CLOSURE

RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: March 2011

COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ Local residents and businesses ➤ Transport operators ➤ Tourists/commuters etc ➤ Isolated persons, properties, communities and towns		Accept residual risk		Moderate
Infrastructure: ➤ Possible loss of public utilities e.g. Telstra, sewerage water mains, gas ➤ Emergency service delays ➤ Transport diversions are required				
Environment: ➤ Spills into waterways				

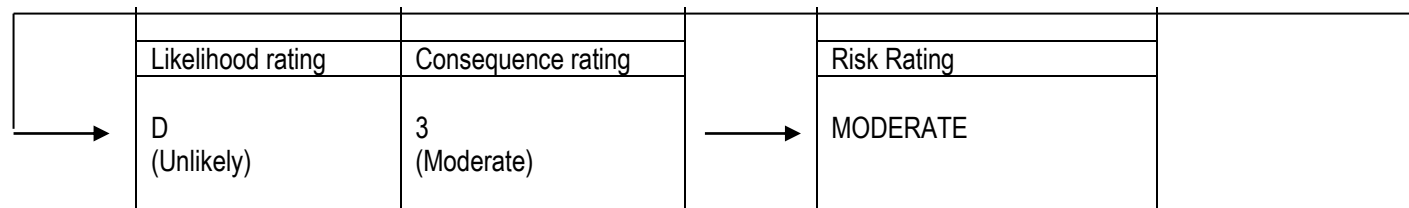
ITEM 12 - BRIDGE COLLAPSE OR CLOSURE

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
Economic: <ul style="list-style-type: none"> ➤ Isolation and reduced access for emergency services ➤ Replacement costs ➤ Cost to local community, industry and commerce 				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 13 - INDUSTRIAL ACCIDENTS / EXPLOSIONS

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Industrial Incidents / Explosions	<ul style="list-style-type: none"> ➤ Number of people killed or injured as a result of industrial incidents in recent years ➤ Large number of industrial sites, including farms, quarries, fuel depots etc in the Shire increases the potential to occur ➤ Possibility of accidental explosions low, but have occurred ➤ Potential for explosion is increased in those areas serviced by the gas distribution network ➤ Numerous silos, water towers, factories and industrial sites are located within the municipality: 	<p>People:</p> <ul style="list-style-type: none"> ➤ Possible injuries or death ➤ Lost employment ➤ Potential for displacement <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Short term closure of roads ➤ Essential services/public utilities could be disrupted ➤ Infrastructure at site damaged <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Pollutants into environment <p>Economic:</p> <ul style="list-style-type: none"> ➤ Potential to impact on local employment if large industry affected ➤ Cost of rectification 	<ul style="list-style-type: none"> ➤ OH&S legislation ➤ Dangerous Goods Legislation ➤ Inspections by Victorian WorkCover Authority ➤ Advertising campaigns for farm safety and work safety ➤ Australian Standards for equipment design and operation ➤ Codes of Practice ➤ Site specific emergency management plans ➤ Building Regulations Code ➤ Fire Awareness Programs – CFA ➤ CFA Resources, Standing Orders and support arrangements ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee and reviewed by MEMPC

RISK TREATMENT PLAN

ITEM 13 - INDUSTRIAL ACCIDENTS / EXPLOSIONS

RISK: INDUSTRIAL ACCIDENTS / EXPLOSIONS

RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: March 2011

COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

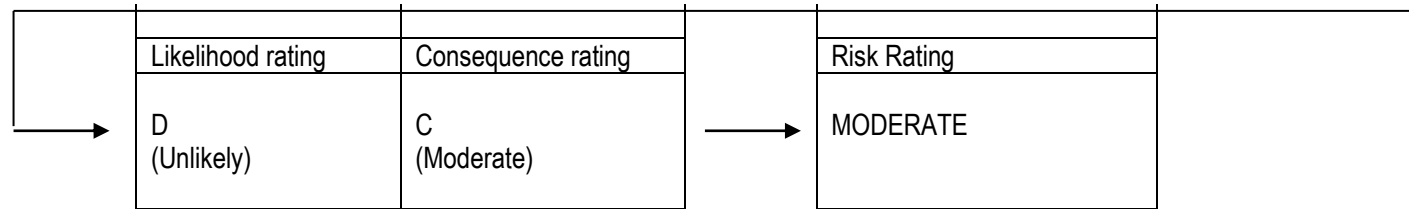
Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ Employees ➤ Tradespeople ➤ Visitors to sites ➤ Passers by ➤ Neighbouring residents		Accept residual risk		Moderate
Infrastructure: ➤ Powerlines ➤ Public utilities				
Environment: ➤ Air, water				
Economic: ➤ Lost employment ➤ Replacement Cost ➤ Lost production				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 14 - UTILITY FAILURE (GAS)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Utility failure (gas)</p>	<ul style="list-style-type: none"> ➤ Localised loss of supply, within a network. For example: <ul style="list-style-type: none"> - large volume, high pressure gas leak; - gas explosion (minor or no injuries). <p>Interruption of supply could affect several customers and specific industrial or commercial customer activities for a short period of time, usually as a result of the network being damaged by other parties. (The Echuca and Moama area has had five incidents in the previous 12 month period).</p> <ul style="list-style-type: none"> ➤ Loss of supply to the whole network. For example: <ul style="list-style-type: none"> - plant failure at the wellhead; - pipeline failure on the pipeline from Longford. <p>Interruption of supply would affect most customers and local industry for a significant period of time. The last incident of this magnitude was in 1998.</p>	<p>People:</p> <ul style="list-style-type: none"> ➤ Inconvenience due to lack of heating, hot water or cooking facilities ➤ Temporary loss of work if industry significantly affected (eg prolonged loss of supply) ➤ Production of basic food supplies may be lost <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Depending on the cause, may mean minor disruption to traffic ➤ May require excavation and short term loss of amenity while rectification works are conducted ➤ Possible damage to main gas supply line that runs alongside the Echuca Moama road bridge <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Nil obvious <p>Economic:</p> <ul style="list-style-type: none"> ➤ Potential devastating impact on both industry and commerce 	<ul style="list-style-type: none"> ➤ Effective response to restore supply by APA Group ➤ Effective emergency management processes which liaise and communicate with regional authorities, industry and consumers ➤ Gas distribution network designed and operated for high reliability and safety ➤ Annual maintenance conducted on valves and leakage surveys on all lines ➤ “Dial Before You Dig” Program ➤ Statewide Continuity Plan in place to ensure supply ➤ Victorian Gas Industry Load Curtailment Rules invoked for essential services and commercial and industrial users. (VENCorp Overseen) ➤ Contingency planning at both commercial, industrial and community levels ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents

ITEM 14 - UTILITY FAILURE (GAS)



Date of risk review: March 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 14 - UTILITY FAILURE (GAS)

RISK: UTILITY FAILURE (GAS)

RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: March 2011

COMPILED BY: CERM Sub-Committee

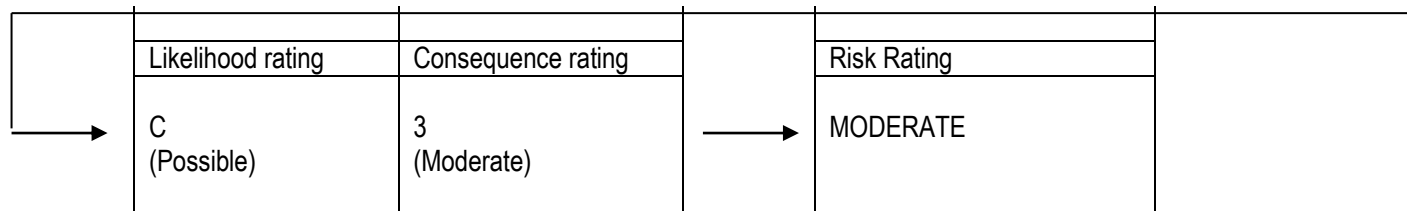
Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ General public ➤ Aged / infirm Infrastructure: ➤ If reliant on gas, can affect public facilities ➤ Hospitals ➤ Industry ➤ Emergency Services Environment: ➤ Nil Economic ➤ Businesses / industries may need to shut down ➤ Loss of employment		Accept residual risk		Moderate

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 15 - WATER POLLUTION

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Water Pollution</p>	<ul style="list-style-type: none"> ➤ Occasional recorded instances of low scale events resulting from spillages ➤ Occasional recorded instances of industrial and farm discharge into rivers, irrigation and drainage channels ➤ Extensive waterways and open channel systems throughout the Municipality increase the possibility ➤ Widespread transport of chemicals occurs in the area for industrial and primary production purposes ➤ Salt slugs do occur in the Murray River ➤ Significant algal bloom outbreaks have occurred several times in the past 10 years along the Murray River and low scale events occur on a regular basis ➤ Recreational use of rivers and lakes is high ➤ Cannot completely eliminate the possibility of sabotage 	<p>People:</p> <ul style="list-style-type: none"> ➤ Inconvenience to amenity and quality of life ➤ Potential for widespread impact and sickness, even death unless threat identified ➤ Lost access to water supply <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Possible medium term interruption to water supplies to communities ➤ Sewerage system affected <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Medium term impact on water systems and to flora and fauna <p>Economic:</p> <ul style="list-style-type: none"> ➤ Cost of rectifying situation could be extensive ➤ Crop and stock losses could occur ➤ Lost tourism ➤ Government assistance required ➤ Industry shutdown and possible loss of employment 	<ul style="list-style-type: none"> ➤ EPA Legislation and protocols for clean up and disposal in place ➤ Council planning requirements ➤ Enforcement of relevant regulations ➤ Industrial Codes of Practice apply ➤ Mineral Hazmat identification and display requirements also apply ➤ Sediment traps and drains to rivers assist in containing possible pollutants and accidental spills ➤ Water Authorities monitor Blue Green Algae and salinity levels ➤ Water testing and treatment ➤ Boating regulations ➤ Water treatment plants – Kyabram, Tongala, Corop, Stanhope, Rushworth, Colbinabbin – monitored on telemetry 24 hours per day ➤ Echuca Water Treatment Plant removes blue green algae ➤ Coliban Water has completed the preparation of Risk Management Plans for all water supply systems ➤ Rochester township is supplied with water from Waranga Channel nine months out of 12, with water from Campaspe Weir the other three months. ➤ Advised by Perserverance Exploration P/L that the mine complies to all current controls in relation to pollution ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents

ITEM 15 - WATER POLLUTION



Date of risk review: March 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 15 - WATER POLLUTION

RISK: WATER POLLUTION

RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: March 2011

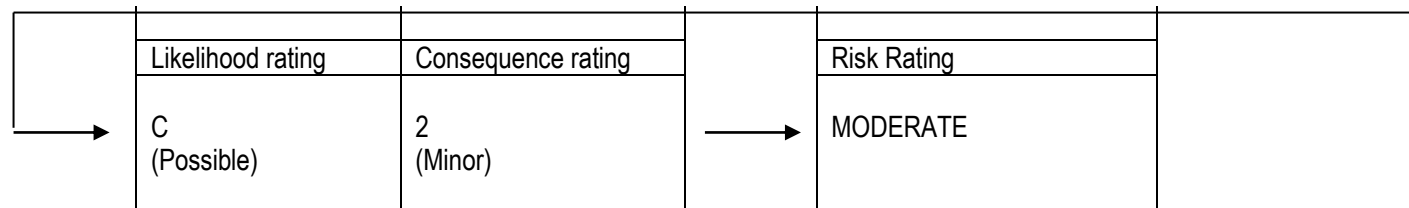
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ General community ➤ Tourists ➤ Employees ➤ Aged and infirm <hr/> <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Sewerage and water supply systems ➤ Channel systems <hr/> <p>Environment:</p> <ul style="list-style-type: none"> ➤ River and lake systems <hr/> <p>Economic:</p> <ul style="list-style-type: none"> ➤ Rectification ➤ Treatment ➤ Alternative supplies ➤ Lost tourism ➤ Industry and commerce 		Accept residual risk		Moderate

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 16 - UTILITY FAILURE (SEWERAGE)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Utility Failure (Sewerage)	<ul style="list-style-type: none"> ➤ Short term failures have occurred across the Municipality in the past, mainly due to power outages ➤ A major event occurred in 1992 and 2011 in Rochester caused by river and overland flooding ➤ Pump station failure could occur ➤ Echuca East pump station below flood level and lacks permanent protection ➤ System relies totally on consistent water supply ➤ Power failure could affect system operation ➤ Coliban systems do not have alternate power supply ➤ GWW does not have alternate power supply to SPS but has the ability to connect to mobile generator ➤ GWW is responsible for sewerage systems in: Kyabram, Tongala, Rushworth, Girgarre and Stanhope ➤ Floods can overload the system 	<p>People:</p> <ul style="list-style-type: none"> ➤ Widespread community inconvenience if a system failed <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ If sewerage overflows occurred, stormwater systems would have to be isolated ➤ Public buildings and other dwellings may be damaged as a result of spills <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Land and water contamination can occur if spill occurs ➤ Will require EPA involvement, no matter how small <p>Economic:</p> <ul style="list-style-type: none"> ➤ Substantial cost of rectification ➤ Can be large cost if spill enters waterways etc 	<ul style="list-style-type: none"> ➤ Duplicate pump sets maintained ➤ Systems monitored 24 x 7 via the SCADA system; ➤ Size and operation of treatment plants governed by EPA licence ➤ Spare capacity available in each pump station ➤ Contingency arrangements are in place for all localities and eventualities ➤ Assets are maintained in working order ➤ State Government requires KPI's be reported by Water Authorities to Water Bureau ➤ Incident reporting is required to the EPA ➤ Environmental Management Systems ➤ Australian Standards ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 16 - UTILITY FAILURE - SEWERAGE

RISK: UTILITY FAILURE - SEWERAGE

RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: March 2011

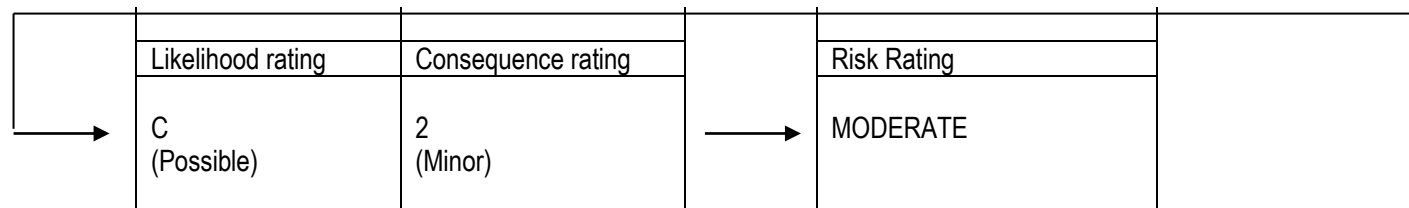
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ General community ➤ Aged/Infirm ➤ Employees ➤ Tourists		Accept residual risk		Moderate
Infrastructure: ➤ Treatment plants ➤ Reticulation systems ➤ Stormwater systems ➤ Public buildings and others ➤ Hospitals, schools, recreational facilities				
Environment: ➤ Air and land pollution ➤ Water contamination				
Economic: ➤ Cost of rectification ➤ Industry / Commerce				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 17 - UTILITY FAILURE (WATER SUPPLY - RURAL AREAS)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Utility failure (water supply – rural areas)</p>	<ul style="list-style-type: none"> ➤ Torrumbarry weir failure occurred 1995; Hume weir movement in 1996;Eppalock weir upgrade in 1999, putting irrigation supplies for the municipality at risk. ➤ Breaches of individual channels occur ➤ Possibility of sabotage can never be completely eliminated ➤ Water pollution from a variety of opportunities, eg blue green algae, farm disposal etc, flood, chemical spill is always a possibility ➤ A large percentage of the population of the Municipality is serviced by a system of G-MW channels which have the potential to be breached 	<p>People:</p> <ul style="list-style-type: none"> ➤ Farm and urban consumers generally through loss of supply ➤ Potential risk to community health <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Interruption to supply ➤ Fire protection effected ➤ Recreation facilities closed ➤ Sewerage systems lost <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Industry – disposal of by-products and raw product - potential for land and water contamination <p>Economic:</p> <ul style="list-style-type: none"> ➤ Delivery of water to those severely effected ➤ Businesses and industry 	<ul style="list-style-type: none"> ➤ Assets are maintained in working order ➤ Capital replacement programs are on-going ➤ Goulburn Murray Water has detailed Contingency Plans for alternate supply, including notification to “at risk” parties ➤ GMW’s “Waterwatch” Program ➤ State Government requires KPI’s to be reported by Water Authorities to Water Bureau ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents ➤ Dam Safety Emergency Plans are in place and exercised



Date of risk review: March 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 17 - UTILITY FAILURE (WATER SUPPLY - RURAL AREAS)

RISK: UTILITY FAILURE (WATER SUPPLY – RURAL AREAS) : RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: March 2011

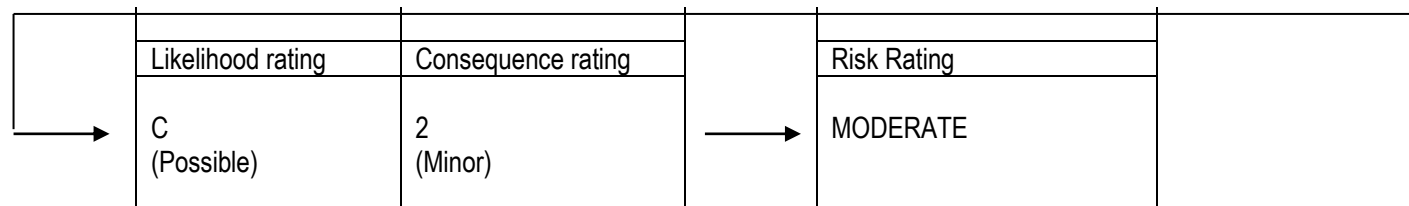
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ General community ➤ Industry and commerce ➤ Primary producers ➤ Tourists <hr/> <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Water treatment and sewerage systems ➤ Reticulation systems ➤ Fire services ➤ Hospitals ➤ Schools <hr/> <p>Environment:</p> <ul style="list-style-type: none"> ➤ Short term air pollution from sewerage pump stations <hr/> <p>Economic:</p> <ul style="list-style-type: none"> ➤ Rectification costs ➤ Impact on industry and commerce 		Accept residual risk		Moderate

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 18 - UTILITY FAILURE - ALL TELECOMMUNICATIONS

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Utility Failure -All telecommunications for >6 hours</p>	<ul style="list-style-type: none"> ➤ No recent total outages in this Municipality ➤ Storm damage (e.g. lightning strikes, and human error (e.g. underground cable damage) can occur at any time. ➤ Large events or emergencies can also result in congestion of the network can result in system failure ➤ Public switched telephone network in the municipality relies solely on the Telstra network, with the exception of some Optic Fibre cable to service the mobile network (held by Optus) ➤ Ample opportunity and means to occur ➤ Past outages elsewhere have occurred due to software failure 	<p>People:</p> <ul style="list-style-type: none"> ➤ Unable to contact emergency services for assistance by telephone ➤ Disruption to business/commerce ➤ Inconvenience to individuals <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Telecommunication facilities damaged <p>Environment:</p> <ul style="list-style-type: none"> ➤ No direct impact <p>Economic:</p> <ul style="list-style-type: none"> ➤ Significant impact if outage is protracted including financial transactions and security ➤ Potential for some loss to business and commerce 	<ul style="list-style-type: none"> ➤ National Network Management Centre monitors alarms to alert technicians re outages and congestion ➤ Two systems - mobile and fixed line ➤ Fault reporting centre also monitors reports of outages ➤ Trained Telstra technicians are located within the region to provide restoration within a reasonable period including diversity routing ➤ State Mobile Radio and satellite telephones provide a capability for some emergency response agencies and are not reliant on the telephone network. ➤ Diversity routing currently in place for the whole Municipality, but has limited capacity. ➤ All exchanges in the Municipality have battery back-up. Echuca has back-up generator ➤ Most agencies have their own communication systems ➤ Dial Before You Dig ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: September 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 18 - UTILITY FAILURE – ALL TELECOMMUNICATIONS

RISK: UTILITY FAILURE - ALL TELECOMMUNICATIONS

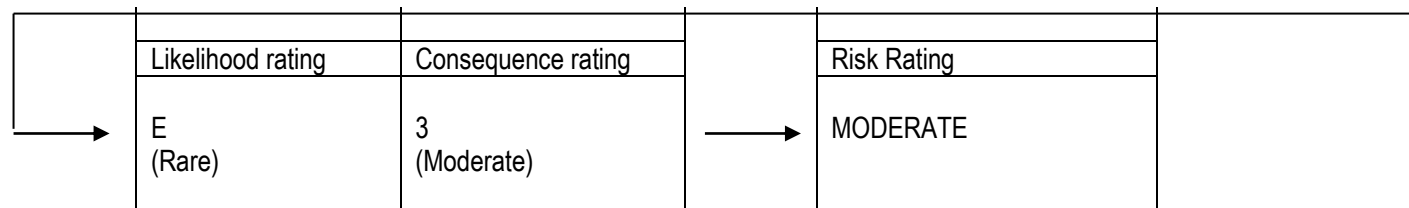
RISK RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: September 2011

COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People</p> <ul style="list-style-type: none"> ➤ General community ➤ Aged and disabled ➤ Remote Communities <p>Infrastructure</p> <ul style="list-style-type: none"> ➤ Emergency Services ➤ Government organisations/services ➤ Public utilities ➤ Medical services <p>Environment</p> <ul style="list-style-type: none"> ➤ Waterways <p>Economic</p> <ul style="list-style-type: none"> ➤ Interruption to industry and commerce ➤ Financial Institutions including EFT and Security 		<p>Accept residual risk</p>		<p>Moderate</p>

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Terrorism	<ul style="list-style-type: none"> ➤ Limited history in Australia ➤ Possibility exists because personal and political grievances arise from time to time ➤ Contamination of medication and food items has occurred in Australia ➤ Sarim gas caused stock deaths in Western Australia prior to terrorist action involving Sarim in Japan ➤ Threats have been made against Australia and its people 	<p>People:</p> <ul style="list-style-type: none"> ➤ Multiple death and/or serious injury ➤ Long term effects – stress disorders, medical conditions <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Damage or destruction of various infrastructures such as power, water etc ➤ If hazardous material involved, could make medical and hospital facilities uninhabitable for a period of time <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Depends on nature of terrorist activity <p>Economic:</p> <ul style="list-style-type: none"> ➤ Could be substantial and Government support may be required 	<ul style="list-style-type: none"> ➤ VicPol and national agencies have Counter Terrorist Intelligence Sections in place ➤ Victoria Police has Operating Procedures in place to handle actions resulting from terrorism ➤ Local police resources can be supplemented very quickly ➤ CFA, Hospital and emergency services aware of Chemical, Biological and Radiological (CBR) contamination and education programs ➤ Regular updates given to Police by Counter Intelligence Unit ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: September 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 19 - TERRORISM

RISK: TERRORISM

RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: September 2011

COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ General community ➤ Government, Education and Industry representatives / employees <hr/> <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Schools, public buildings and utilities <hr/> <p>Environment:</p> <ul style="list-style-type: none"> ➤ Dependent on nature of terrorism 		Accept residual risk		Moderate

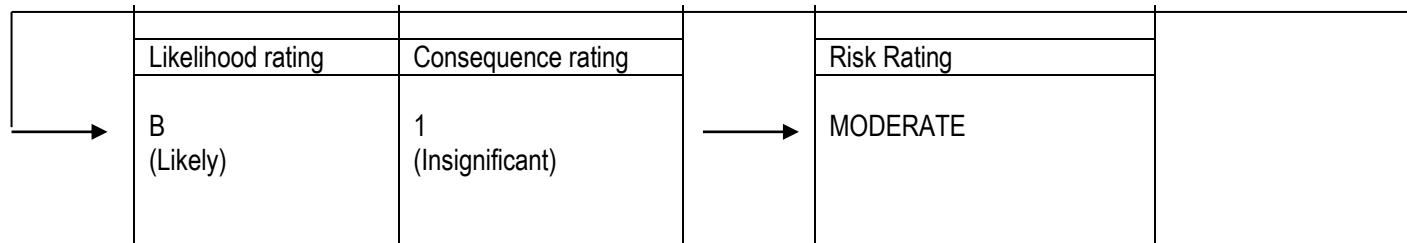
ITEM 19 - TERRORISM

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>Economic:</p> <ul style="list-style-type: none"> ➤ Cost of infrastructure or environmental replacement / repair ➤ Tourism ➤ Businesses / industries that are targeted 				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 20 – EXTREME TEMPERATURE

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Extreme Temperature (3 days of >42 degrees or <0 degrees celcius)</p>	<ul style="list-style-type: none"> ➤ Potential for high temperatures over consecutive days. ➤ Potential for freezing temperatures over consecutive days. 	<p>People:</p> <ul style="list-style-type: none"> ➤ Associated illnesses affecting vulnerable groups ➤ Hospital admissions <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Some utility failure <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Nil <p>Economic:</p> <ul style="list-style-type: none"> ➤ 	<ul style="list-style-type: none"> ➤ Extreme Temperature Plan for managing vulnerable people



Date of risk review: September 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 20 – EXTREME TEMPERATURE

RISK: EXTREME TEMPERATURE

RATING: MODERATE

DATE OF RISK TREATMENT REVIEW: September 2011

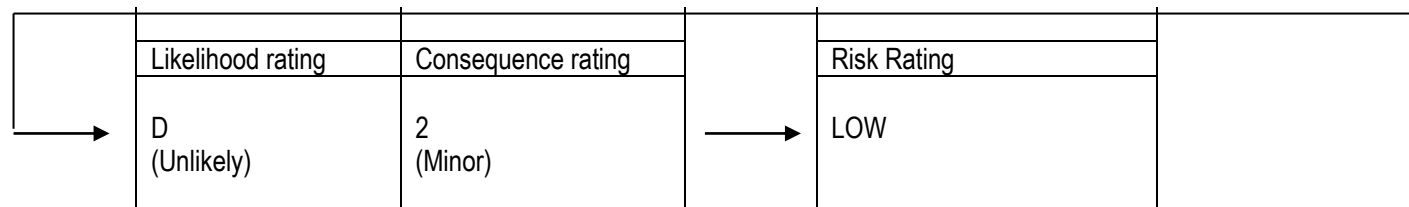
COMPILED BY: MEMPC

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ Elderly, very young, low socio-economic status		Accept residual risk		Moderate
Infrastructure: ➤ Hospitals ➤ Medical centres ➤ Public venues ➤ Utilities				
Environment: ➤				
Economic: ➤				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 21 - UTILITY FAILURE (POWER SUPPLY)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Utility Failure (Power supply)</p>	<ul style="list-style-type: none"> ➤ History of occasional localised failure due to lightning strikes and/or vehicle accidents ➤ Widespread and protracted outages are rarely experienced 	<p>People:</p> <ul style="list-style-type: none"> ➤ Business, household and personal dependence may result in severe inconvenience <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Potential for impact on water supplies, traffic management, communications, health and other services due to extensive reliance on power <p>Environmental:</p> <ul style="list-style-type: none"> ➤ No direct consequences <p>Economic:</p> <ul style="list-style-type: none"> ➤ Potential for loss to local economy, particularly both primary and secondary industry and commerce, particularly if event is protracted ➤ Tourism could be affected 	<ul style="list-style-type: none"> ➤ Distribution is provided through privatised organisation known as PowerCor. ➤ Distribution lines emanate from zone substations which have contingency arrangements by way of alternative lines ➤ The Torrumbarry, Patho, Gunbower area receives distribution via a single line with no alternative contingency available in case of failure. ➤ Maintenance of distribution systems is regularly undertaken by PowerCor ➤ Most reliant organisations (including the municipality) have contingencies in place such as alternative power generators etc. ➤ Council maintains a register of clients of aged and disability services who are at risk of utility failure ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee and reviewed by MEMPC

RISK TREATMENT PLAN

ITEM 21 - UTILITY FAILURE (POWER SUPPLY)

RISK: UTILITY FAILURE (POWER SUPPLY)

RATING: LOW

DATE OF RISK TREATMENT REVIEW: March 2011

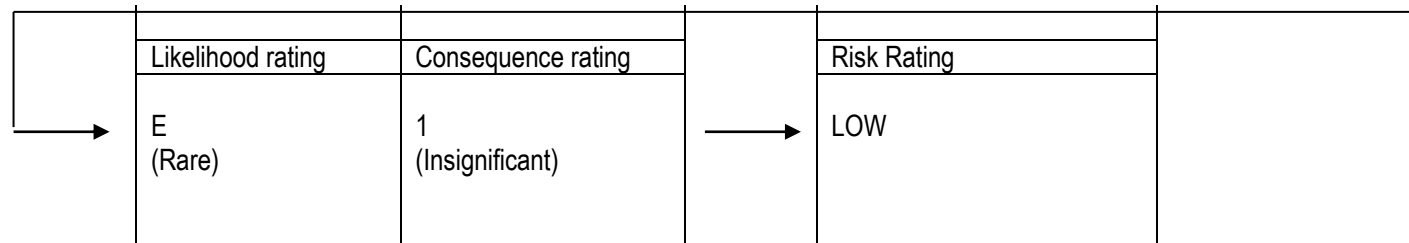
COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ Householders ➤ Aged/Infirm ➤ Business/Industry ➤ Dairy farmers <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Hospitals ➤ Water supply ➤ Sewerage ➤ Public facilities reliant on electricity ➤ Meals on wheels ➤ Aged Care Facilities ➤ Traffic Control (traffic lights) ➤ Electricity transmission and generation are possible contributors to future power failures <p>Environment:</p> <ul style="list-style-type: none"> ➤ Waste Water Overflows <p>Economic:</p> <ul style="list-style-type: none"> ➤ Lost tourism ➤ Lost production/wages ➤ Cost of recovery ➤ Huge Impact on dairy industry 		Accept residual risk		Low

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 22 - EARTHQUAKE

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Earthquake (3.5 magnitude or less)</p>	<ul style="list-style-type: none"> ➤ No recorded events and no anecdotal evidence ➤ Continue community education programs in relation to emergencies ➤ 41 events in 50 years 	<p>People:</p> <ul style="list-style-type: none"> ➤ Unlikely to be any injuries ➤ Able to function normally <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ No building / structural damage ➤ No damage to roads, bridges, water and infrastructure ➤ No power and communications disrupted <p>Environmental:</p> <ul style="list-style-type: none"> ➤ No disruption to water supply to irrigation areas <p>Economic:</p> <ul style="list-style-type: none"> ➤ No financial losses will almost certainly occur 	<ul style="list-style-type: none"> ➤ Building Codes to minimise risk of structural collapse ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: March 2011

Compiled by: CERM Sub-Committee and reviewed by MEMPC

RISK TREATMENT PLAN

ITEM 22 - EARTHQUAKE

RISK: EARTHQUAKE

RATING: LOW

DATE OF RISK TREATMENT REVIEW: March 2011

COMPILED BY: CERM Sub-Committee and reviewed by MEMPC

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ Entire community		Accept residual risk		Low
Infrastructure: ➤ All				
Environment: ➤ All elements				
Economic: ➤ Possibility of requirement for total reconstruction				

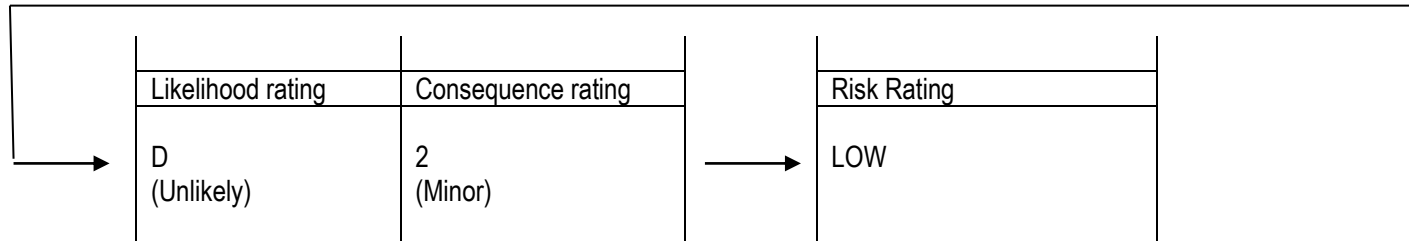
RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 23 - UTILITY FAILURE (WATER SUPPLY - URBAN AREAS)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Utility failure (water supply – urban areas)</p>	<ul style="list-style-type: none"> ➤ Main failures can occur naturally or by contractor damage at any time ➤ Water treatment plants are monitored 24 hours per day via the SCADA system. Failures are usually only in processing. Interruptions not noticed by public ➤ Potential for major failure of treatment facility or pump station ➤ Possibility of sabotage can never be completely eliminated ➤ Water pollution from a variety of opportunities, eg blue green algae, farm disposal etc, flood, chemical spill is a possibility ➤ A large percentage of the population of the Municipality is serviced by a system of GMW channels which have the potential to be breached ➤ GVW is responsible for the water treatment plants (wtp) in: Kyabram, Tongala, Rushworth, Girgarre, Stanohpe, Colbinabbin - not a full wtp system and Corop - not wtp system ➤ GVW indicated the only wtp with a standby generator is Kyabram - the rest have the connections for the Corporation's mobile generator 	<p>People:</p> <ul style="list-style-type: none"> ➤ Consumers generally through loss of supply ➤ Infirm and elderly ➤ People with special requirements ➤ Potential risk to community health <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Interruption to supply ➤ Fire protection effected ➤ Recreation facilities closed ➤ Sewerage systems lost <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Industry – disposal of by-products and raw product - potential for land and water contamination <p>Economic:</p> <ul style="list-style-type: none"> ➤ Delivery of water to those severely effected ➤ Businesses and industry 	<ul style="list-style-type: none"> ➤ Clear water storage holds sufficient to get through any pump failure period ➤ Duplicate pump sets are available ➤ Assets are maintained in working order ➤ Some redundancy exists in the treatment process ➤ Restoration from most incidents will occur within 2 – 5 hours. ➤ Capital replacement programs are on-going ➤ Both Water Authorities have detailed Contingency Plans for alternate supply, including notification to “at risk” parties ➤ GVW’s “Waterwatch” Awareness Program ➤ State Government requires KPI’s to be reported by Water Authorities to Water Bureau ➤ Echuca Water Treatment Plant has diesel pump that can supply water from on site storage to tower ➤ Coliban Water can truck water to smaller towns if required ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 23 - UTILITY FAILURE (WATER SUPPLY - URBAN AREAS)



Date of risk review: March 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 23 - UTILITY FAILURE (WATER SUPPLY - URBAN AREAS)

RISK: UTILITY FAILURE (WATER SUPPLY – URBAN AREAS) RATING: LOW

DATE OF RISK TREATMENT REVIEW: March 2011

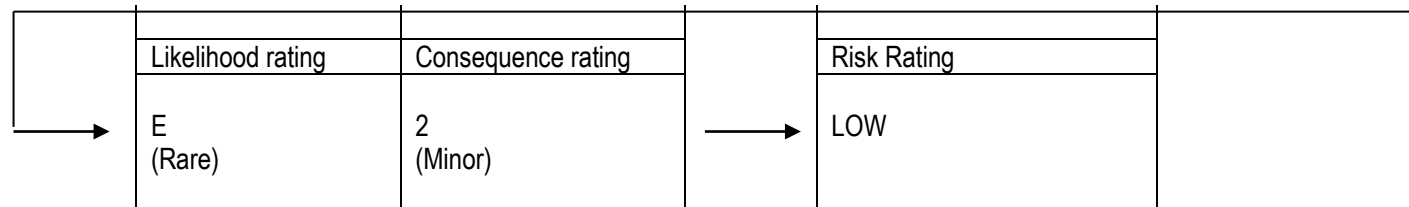
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ General community ➤ Industry and commerce ➤ Primary producers ➤ Tourists ➤ Aged, sick, infirm <hr/> <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Water treatment and sewerage systems ➤ Reticulation systems ➤ Fire services ➤ Hospitals ➤ Schools <hr/> <p>Environment:</p> <ul style="list-style-type: none"> ➤ Short term air pollution from sewerage pump stations <hr/> <p>Economic:</p> <ul style="list-style-type: none"> ➤ Rectification costs ➤ Impact on industry and commerce 		Accept residual risk		Low

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 24 - CIVIL DISTURBANCE / RIOT

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Civil disturbance / riot	<ul style="list-style-type: none"> ➤ Large gatherings of people do occur in the municipality for local events. This increases the possibility, particularly where widespread alcohol consumption is involved ➤ Serious ethnic divisions have not been evident ➤ Any industrial disputation is usually very small scale 	<p>People:</p> <ul style="list-style-type: none"> ➤ Potential for injury <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Possible damage to property may occur and could involve short term infrastructure interference <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Nil <p>Economic:</p> <ul style="list-style-type: none"> ➤ Adverse publicity could affect tourism ➤ Nil substantial impact 	<ul style="list-style-type: none"> ➤ Liquor Licensing and other permit requirements facilitate the monitoring and prediction of potential problems. ➤ Event planning and risk assessment is undertaken and operation orders prepared for all major events ➤ Adequate local police resources are available and can be supplemented from other areas within the Police Department. Resource back up can be obtained reasonably quickly from neighbouring areas ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: September 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 24 - CIVIL DISTURBANCE / RIOT

RISK: CIVIL DISTURBANCE / RIOT

RATING: LOW

DATE OF RISK TREATMENT REVIEW: September 2011

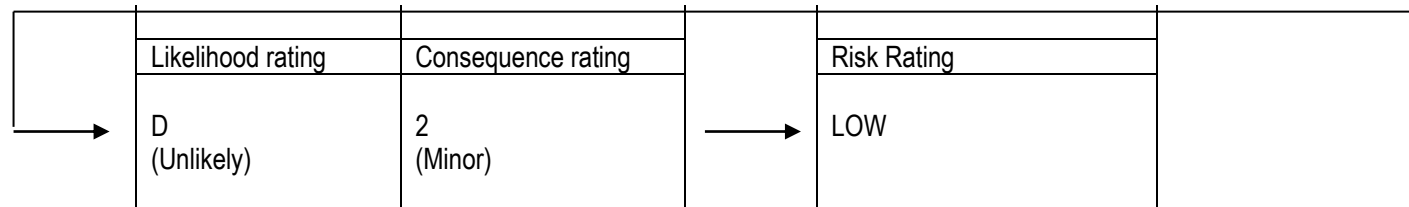
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ General community ➤ Police and emergency workers ➤ Event spectators / participants		Accept residual risk	Victoria Police	Low
Infrastructure: ➤ Could occur but depends on location				
Environment:				
Economic impact: ➤ Damage to property – Municipal, private				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 25 - AIR POLLUTION

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Air Pollution</p>	<ul style="list-style-type: none"> ➤ Isolated, smaller incidents have occurred ➤ High degree of toxic chemical transportation occurs, as does extensive use of chemical spraying for primary production and viticulture purposes ➤ Chlorine and ammonia are widely used in e.g. water treatment and wineries ➤ Contamination from bush fire and industrial fire can occur 	<p>People:</p> <ul style="list-style-type: none"> ➤ Illness (including bronchial problems), possible evacuation / displacement and isolated possibility of death <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Minimal possibility of road and airport closures <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Short term impact only <p>Economic:</p> <ul style="list-style-type: none"> ➤ Possible industry shut down – short term impact only. 	<ul style="list-style-type: none"> ➤ Department of Sustainability and Environment policies ➤ EPA / CFA (response agencies) are trained and equipped ➤ Australian Dangerous Goods Act provisions apply ➤ Fire permit conditions can be applied ➤ EPA approvals are required for certain industries and activities ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: September 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 25 - AIR POLLUTION

RISK: AIR POLLUTION

RATING: LOW

DATE OF RISK TREATMENT REVIEW: September 2011

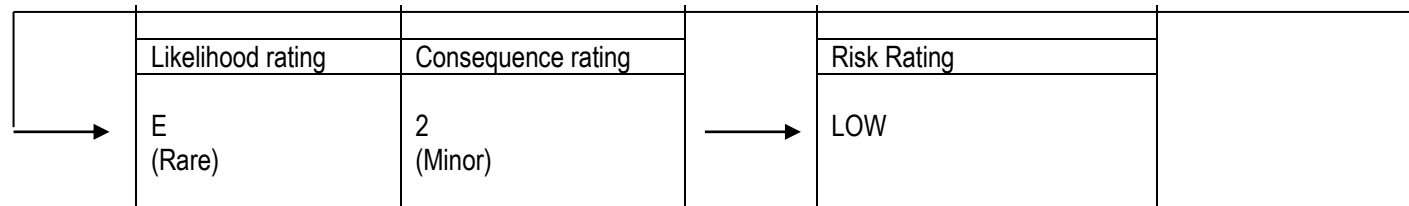
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ General community ➤ Neighbours ➤ Workers at relevant sites ➤ Passers by ➤ Sick/aged/infirm ➤ persons with bronchial illnesses <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Nil <p>Environment:</p> <ul style="list-style-type: none"> ➤ Native flora and fauna – depending on type of pollution <p>Economic:</p> <ul style="list-style-type: none"> ➤ Lost business income to companies affected 		Accept residual risk		Low

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 26 - TRANSPORT INCIDENTS (AIR)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Transport Incidents (Air)	<ul style="list-style-type: none"> ➤ A recorded fatality through a recreational aircraft crash ➤ One licensed aerodrome and two unlicensed landing strips within the Municipality ➤ Some private landing strips ➤ Several major flight paths cross the Municipality ➤ Crop dusting is a frequent activity in the area ➤ Ultra lights are manufactured in the area ➤ Air shows in the Municipality ➤ People fly in to Elmore Field Days site annually ➤ Only planes less than 5,700 kilograms can land at Echuca, without a special concession ➤ Proximity to landfill may increase bird hazard at Echuca 	<p>People:</p> <ul style="list-style-type: none"> ➤ Injuries/fatalities could occur <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Possible damage to runways ➤ Damage to powerlines ➤ Landing flight path over residential areas increases likely damage/injury <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Pollution could occur because of aviation fuel leakage ➤ Fire could damage flora ➤ Pollution of waterways ➤ Chemical sprays <p>Economic:</p> <ul style="list-style-type: none"> ➤ Depending on location and extent 	<ul style="list-style-type: none"> ➤ Civil Aviation Safety Authority controls ➤ An Aerodrome Emergency Plan has been developed ➤ Daily inspections of airport infrastructure at Echuca ➤ Non-directional beacon is in place ➤ Landing Lights are in existence at Echuca ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: September 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 26 - TRANSPORT INCIDENTS (AIR)

RISK: TRANSPORT INCIDENTS (AIR)

RATING: LOW

DATE OF RISK TREATMENT REVIEW: September 2011

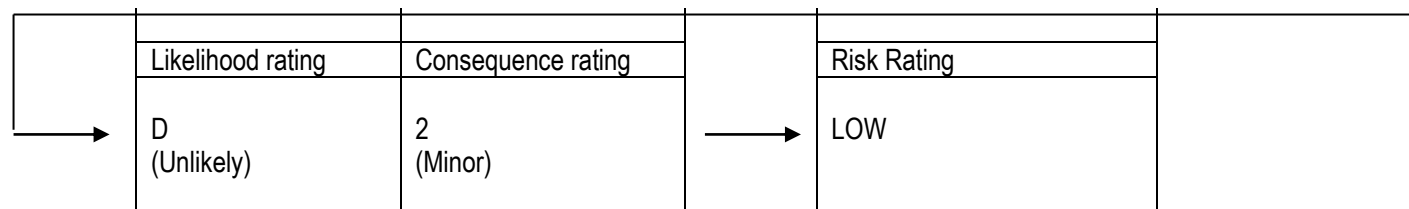
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
<p>People:</p> <ul style="list-style-type: none"> ➤ Air passengers / staff ➤ Residents / industries near aerodromes ➤ Families / friends of air passengers ➤ Emergency service personnel <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Aerodrome runway and facilities ➤ Dependent on location of incident <p>Environment:</p> <ul style="list-style-type: none"> ➤ Possible spill into drain and into river from fuel <p>Economic:</p> <ul style="list-style-type: none"> ➤ Replacement of infrastructure ➤ Replacement / repair to residences / businesses 		Accept residual risk		Low

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 27 - PLAGUE: INSECTS (LOCUSTS)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Plague: Insects (Locusts)</p>	<ul style="list-style-type: none"> ➤ Plague conditions occur occasionally. ➤ The nature of agricultural pursuits in the municipality make it vulnerable to locust plagues. ➤ Restrictions on the use of insecticides may occur in the future and limit the response options. ➤ Declining rural population decreases the likelihood of hoppers being detected in time to spray them. 	<p>People:</p> <ul style="list-style-type: none"> ➤ A major plague would affect some rural industries, including the service industries. ➤ Locusts could be a nuisance to road users <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Nil. <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Short-term erosion and vegetation damage. Nil long term effects. <p>Economic:</p> <ul style="list-style-type: none"> ➤ Minor 	<ul style="list-style-type: none"> ➤ A national monitoring, reporting and response system is in place; the Australian Plague Locust Commission. ➤ The Department of Primary Industries is the response agency in Victoria. ➤ The preferred option is to spray locusts at the hopper stage before they take to the air. ➤ Current insecticides are effective and are able to be used in the pastoral environments where locusts are most likely to occur. ➤ Landholders have the responsibility to decide when to spray and bear any spraying costs. ➤ Control of hoppers on roadsides would be the responsibility of the shire ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: September 2011

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RISK TREATMENT PLAN

ITEM 27 - PLAGUE: INSECTS (LOCUSTS)

RISK: PLAGUE: INSECTS (LOCUSTS)

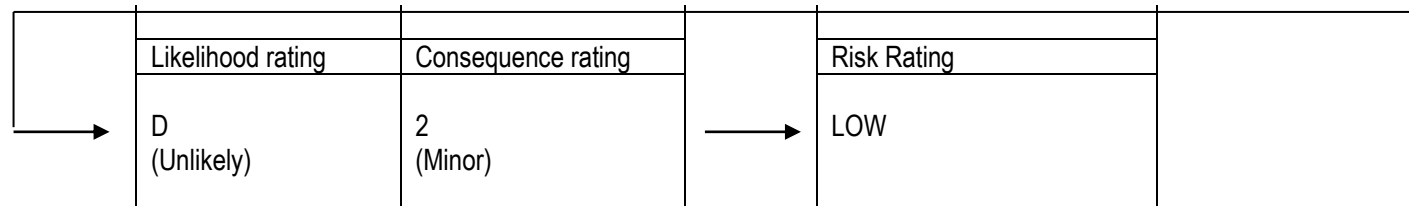
RATING: LOW

DATE OF RISK TREATMENT REVIEW: September 2011

COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ Farmers ➤ Environment Managers Infrastructure: ➤ Limited Environment: ➤ Crops ➤ Natural environment Economic: ➤ Predominantly farmers		Accept residual risk		Low

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Building Collapse</p>	<ul style="list-style-type: none"> ➤ No known significant events within the Shire ➤ 	<p>People:</p> <ul style="list-style-type: none"> ➤ Possible injuries / fatalities could occur <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Minimal impact on other infrastructure ➤ Only limited multi-story buildings in the municipality <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Some damage could occur depending on building contents <p>Economic:</p> <ul style="list-style-type: none"> ➤ Localised effect ➤ If water towers, sewage treatment plant, telecommunications facility, could have an effect on community through lack of services ➤ Cost of reinstatement 	<ul style="list-style-type: none"> ➤ Building Codes ➤ Design Codes ➤ Australian Standards ➤ Planning Scheme ➤ OH&S Regulations ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: September 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 28 - BUILDING COLLAPSE

RISK: BUILDING COLLAPSE

RATING: LOW

DATE OF RISK TREATMENT REVIEW: September 2011

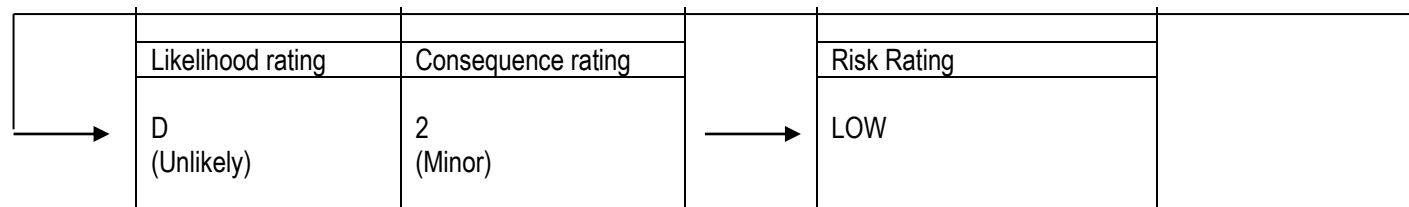
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ Employees ➤ Tradespeople ➤ Visitors to sites ➤ Passers by ➤ Neighbours		Accept residual risk		Low
Infrastructure: ➤ Water supply ➤ Sewerage ➤ Natural gas ➤ Powerlines ➤ Short term road closure ➤ Telecommunications				
Environment: ➤ Nil				
Economic: ➤ Lost employment ➤ Replacement Cost ➤ Lost production				

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 29 - PLAGUE: INSECTS (FRUIT FLY)

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
<p>Plague: Insects (Fruit Fly)</p>	<ul style="list-style-type: none"> ➤ Small outbreaks have occurred in surrounding districts in most years recently ➤ The Shire's development as a tourist destination will increase the probability of further outbreaks ➤ A major invasion is always possible. ➤ Abandoned orchards increase the risk 	<p>People:</p> <ul style="list-style-type: none"> ➤ Growers of fresh fruit could suffer losses and consequently be stressed ➤ For most people, limited effect <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Nil. <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Nil. <p>Economic:</p> <ul style="list-style-type: none"> ➤ Effect on fresh fruit and tomato industries in Campaspe Shire . 	<ul style="list-style-type: none"> ➤ DPI has trapping sites in the Shire and monitors for fruit flies. ➤ Protocols are in-place for rapid response to detections with the objective of eradication. ➤ Disposal bins for fruit are provided at strategic locations ➤ Legislative controls in relation to movement of fruit are in place ➤ Control available through spraying ➤ Memorandum of Understanding with ABC Radio and emergency services to broadcast relevant information in relation to incidents



Date of risk review: September 2011

Compiled by: CERM Sub-Committee

RISK TREATMENT PLAN

ITEM 29 - PLAGUE: INSECTS (FRUIT FLY)

RISK: PLAGUE: INSECTS (FRUIT FLY)

RATING: LOW

DATE OF RISK TREATMENT REVIEW: September 2011

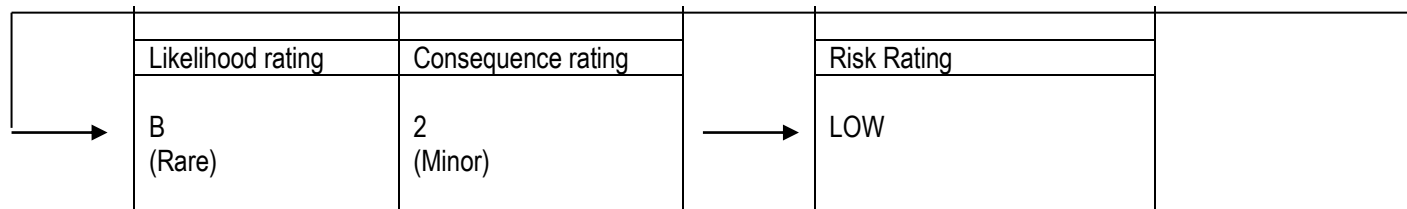
COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ Fruit growers ➤ Employees ➤ Fruit service industry Infrastructure: Environment: Economic: ➤ Fruit growers and fresh fruit markets		Accept residual risk		Low

RISK REGISTER FOR CAMPASPE SHIRE COUNCIL:

ITEM 30 - MINE SHAFTS

Source of Risk (Hazard)	Likelihood	Consequence	Current Controls
Mine Shafts	<ul style="list-style-type: none"> ➤ Isolated events have occurred in the past where individuals have fallen down old mine shafts ➤ Many old mine shafts in the Rushworth forest area 	<p>People:</p> <ul style="list-style-type: none"> ➤ Possible injuries / fatalities could occur <p>Infrastructure:</p> <ul style="list-style-type: none"> ➤ Nil. <p>Environmental:</p> <ul style="list-style-type: none"> ➤ Nil. <p>Economic:</p> <ul style="list-style-type: none"> ➤ Nil. 	<ul style="list-style-type: none"> ➤ Generally old mines are capped ➤ Existence of CFA District 2 - Oscar 1 Mine Rescue Team ➤ Police Search & Rescue Squad ➤ Parks Victoria / DSE have fenced identified deep mineshafts in high risk areas



Date of risk review: September 2011

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RISK TREATMENT PLAN

ITEM 30 - MINE SHAFTS

RISK: MINE SHAFTS

RATING: LOW

DATE OF RISK TREATMENT REVIEW: September 2011

COMPILED BY: CERM Sub-Committee

Vulnerable Elements	Additional Treatment Options	Actions to achieve treatment options	Mechanism for Monitoring Outcome	Risk rating after treatment (where possible)
People: ➤ Individuals ➤ Groups		Accept residual risk		Low
Infrastructure: Nil				
Environment: Nil				
Economic: Nil				