INDIGO SHIRE COUNCIL

Climate change adaptation action plan (2017-2021)

VAS Partnership project: Climate change adaptation action plans

Indigo Shire Council | Towong Shire Council | Wodonga Council

CONTENTS

EXECUTIVE SUMMARY

Expectations for hotter and generally drier conditions in future, with increasing frequency and intensity of extreme climatic events, have implications for the continued delivery of local government assets and services. Indigo Shire Council is already faced with heatwave, drought, fire and flood. These extremes place pressure on the achievement of strategic objectives, via a range of community, reputation, service delivery, financial and environmental consequences.

Climate change adaptation is a process of adjustment to actual or expected climate and its effects. It aims to reduce harm and vulnerability, and make use of opportunities.

The *Climate Change Adaptation Action Plans* project is combining knowledge of previous experiences with proactive planning; it is an opportunity to contribute to increasing the organisation's resilience and to be better prepared for the future. The Climate Change Adaptation Action Plan (the Adaptation Plan) includes a risk assessment, development of adaptation actions and an implementation plan to assist Council in preparing for climate change.

The Council's adaptation planning process began with a risk assessment of potential climate impacts.   Risks and opportunities were identified by Council staff through outputs from working group discussion and a scan of Council Plan content then refined using extensive staff engagement. Risks were analysed using the Council's risk management framework and follow up meetings with Council staff. Existing treatments for identified risks were then outlined and refined through further discussion. New treatments were ranked using a multi-criteria analysis before inclusion into this Adaptation Plan.

Challenges and opportunities relating to the highest rated risks for 2030 included supporting a healthy, active, safe, connected and inclusive community; and growing the tourism industry. Many adaptation actions address Council's capacity for emergency response and recovery, and adapting heritage environments to enhance connectedness and community activities. Adaptation actions also aim to refocus the tourism industry underpinning much of the economic activity in the shire towards activities which are less reliant on favourable weather conditions.

The purpose of the Adaptation Plan is to deliver adaptation actions and to build adaptive capacity within the organisation. The intent is to embed the climate change lens into Council organisational processes, and to establish a continuous improvement cycle for identifying climate risks and developing adaptation actions. As such, the adaptation process considers pathways for actions in the Adaptation Plan to be incorporated into 'business as usual'.

Adaptation actions identified in this Adaptation Plan will help to increase Council's emergency management response and recovery to bushfires and intense storms; improve staff and community working and recreation conditions; and enhance resource conservation efforts.

Adaptation is not an end in itself but rather a constantly cycling process of adapting, monitoring, reviewing and adapting further. As such this Adaptation Plan is intended as a starting point for Council to understand the process of adaptation and commence building adaptive capacity.

1   Introduction

1.1   Background

Indigo Shire is located in north east Victoria and bounded by the Murray River and the Australian Alps. It is home to more than 15,000 people with an economic base founded on agriculture, manufacturing and tourism; in particular food and wine, and cycling tourism. The Indigo Shire is rich in cultural heritage and natural resources which attract people to the area for recreation and to live.

Increasing scientific evidence of changes in global climate indicate that some degree of climate change is inevitable, and adapting to climate change will be necessary. Early planning for climate change is desirable to improve understanding of the impacts, enable responses to be developed, and allow opportunities to be identified.

Expectations for hotter and generally drier conditions in Indigo Shire, with increasing frequency and intensity of extreme climatic events, have implications for the continued delivery of local government assets and services into the future.

Indigo Shire Council already works to address environmental issues through partnerships with the Goulburn Broken Greenhouse Alliance and the Indigo Environment Advisory Committee, and has developed an Environment Strategy and Greenhouse Action Plan. Climate change risks however cut across all functional areas of local government which are now faced with the impacts of heatwave, drought, fire and flood. These extremes place pressure on the achievement of strategic objectives, via a range of financial, people and safety, environmental, governance, business continuity and reputational consequences.

Combining the lessons of previous experiences with proactively planning for a changing climate is an opportunity to contribute to increasing Indigo Shire Council's resilience and be better prepared for the future. Understanding the specific climate risks faced by the Council assists to develop and prioritise responses which become adaptation actions when implemented. In addition, the Council identified further value in embedding the adaptation plan into organisational policies, programs and plans to ensure strategic and operational decision were viewed through the climate change lens.

Managing climate change risks is an important way for Council to prepare for future impacts from climate change and ensure that Council's vision of Indigo as a great place to live, work and visit continues to be realised.

1.2   Regional and local climate projections

Climate change adaptation planning at Indigo Shire Council is underpinned by climate projections in the Murray Basin Cluster Report from CSIRO and the Australian Bureau of Meteorology's Climate Change in Australia Projections (Timbal et al. 2015). Assessing climate related risks and opportunities took into account the key messages presented in Box 1.

When considering the potential change to risks through time, the scenarios applied are: intermediate emissions scenario for the near future (2030), and high emissions scenario for late in the century (2090).

With climate change, Indigo Shire is expected to be warmer and drier in future and facing increasingly variable weather. Bushfires and storm events will be more intense and occur more frequently, increasing demand for emergency response and recovery.

> **Box 1: Key messages about the Murray Basin's future climate**
>
> CSIRO and the Bureau of Meteorology's January 2015 publications reinforce the following messages for the future of the Murray Basin region:
>
> Average temperatures will continue to increase in all seasons.
>
> There will be more hot days and warm spells, and fewer frosts
>
> Less rainfall is projected during the cool season. Rainfall may remain unchanged in the warm season.
>
> There will be increased intensity of extreme rainfall events.
>
> A harsher fire-weather climate is expected in the future.

1.3   Purpose of this plan

Council's vision of Indigo as *a great place to live, work and visit* will be challenged by the expected impacts of climate change. To assist in fulfilling Council's mission to *support and develop a sustainable, thriving and resilient community through leadership and partnerships*, Council is seeking to;

- embed the climate change lens into all operational and strategic policy and decision making;
- increase the resilience of Council's infrastructure and service delivery by building internal capacity to absorb, adapt and adjust to the expected shocks of climate change;
- promote cooperative partnerships with neighbouring Councils to facilitate adaptation

The purpose of this Adaptation Plan is to:

- identify risks to the high standard of existing Council services and infrastructure posed by climate change and develop adaptation responses;
- provide a plan which acknowledges adaptation is necessary and prepares Council to respond to the impacts of climate change;
- address the Council Plan's strategic objective "We will adapt to changing environmental conditions" by implementing practical actions which respond to identified climate risks;
- demonstrate Council's commitment to climate change adaptation and identify key concerns requiring longer term, strategic action.

1.4 Policy context

The Victorian Government is "committed to positioning Victoria as a leader in climate change, by mitigating risks, reducing emissions and adapting to the impacts of climate change" (DELWP, 2015). Two aspects of the Victorian Climate Change Act (2010) hold particular relevance:

- The Act requires the Victorian Government to develop a Climate Change Adaptation Plan every four years.

- The Act requires decision makers in government to have regard to climate change when making specified decisions under other Acts. This includes a requirement for local government to consider climate change in the development of municipal public health and wellbeing plans.

Regional guiding documents, including the *The Hume Strategy for Sustainable Communities 2010-2020* (Victorian Government, 2010) and *Hume Regional Growth Plan* (Victorian Government, 2014b) recognise the significance of climate change and importance of adaptation.

The *Hume Strategy* recognises climate change as "one of the most challenging issues facing the region" with, "social, economic and environmental impacts." The Strategy includes a key direction of "anticipating and adapting to the effects of climate change".

Of the challenges identified in the *Growth Plan*, "finding the most effective ways to adapt to the potential impacts of climate change" cuts across all themes. The *Growth Plan* includes a strategy to "plan for the potential impacts of, and opportunities arising from, climate change."

At a local level, the Council acknowledges the need to address climate change in the Indigo Shire Council Plan 2013-2017. Climate change is regarded as both a challenge and an opportunity which cuts across all four strategic focus areas:

- Leadership of our People and our Community
- Managing our Historical and Built Environment
- Growing our Economy
- Developing Sustainable Communities

Other local policy and planning context relevant to climate change adaptation includes the following documents: Municipal Strategic Statement, Municipal Public Health and Wellbeing Plan, Heatwave Plan, Environment Strategy, Greenhouse Action Plan and Asset Management Plans. Each of these guiding documents acknowledges climate change and the increasing nature of extreme events, and some take the additional step of putting forward various adaptation responses. These documents help set the scene for the climate risk assessment and are a reference point for existing and intended risk management controls.

1.5   Why adaptation is necessary

Climate change adaptation is a term used to describe a range of actions that can be taken to increase resilience to actual or expected climate and its effects. It aims to reduce harm and vulnerability, and make use of opportunities. Adaptation contributes to being better prepared for a future of increased heat, flood, bushfire and drought, and gradually changing temperature and rainfall averages.

Adaptation is different to mitigation. Mitigation (or greenhouse gas abatement) efforts focus on minimising the extent of climate change by reducing greenhouse gas emissions. Adaptation is a complementary area of work; it recognises that some level of climate change is still occurring, then plans and acts accordingly to adjust to changing conditions.

A particular action may have outcomes relating to both adaptation and mitigation. For example, retrofits to a community facility may concurrently:

- help keep the inside of the building cool at times of increasing heat (adaptation outcome), and
- improve energy efficiency of the building, thus contribute to reducing greenhouse gas emissions (mitigation outcome).

A number of benefits can be achieved by understanding how increasing climatic extremes impact on local government assets and services, and then responding appropriately. Key considerations contributing to the business case for adapting to climate change include:

- managing organisational climate risks
- reducing financial loss
- reducing risk to human life
- identifying opportunities
- raising awareness of climate related issues
- addressing reputational risk
- managing legal issues, and
- planning for vulnerable communities.

These considerations align closely with the consequence types included in the Indigo Shire Council's risk management framework.

2 Climate change risks

2.1 Identifying climate change risks

The aim of the risk and opportunity assessment is to understand the possible impacts of climate change on the achievement of Indigo Shire Council's organisational objectives. This assessment is intended as an information base for developing opportunities through the organisation's climate change adaptation planning process.

The assessment method is consistent with Australian Greenhouse Office guidelines (AGO 2006), Indigo Shire Council's risk management framework (Appendix 2) and in turn, with the Australian and New Zealand Standard for Risk Management (AS/NZS 4360:2004) and international standard (ISO 31000), which is "widely used in the public and private sectors to guide strategic, operational and other forms of risk management" (AGO 2006).

A risk assessment includes identification, analysis and evaluation, and is nested within an overall risk management process. Figure 1 outlines how this generic process was applied to develop an understanding of climate-related impacts on Council's assets and services. To support a positive and proactive view, and to not become unnecessarily focused on negative impacts of change, discussions referred not only to risks, but also opportunities.
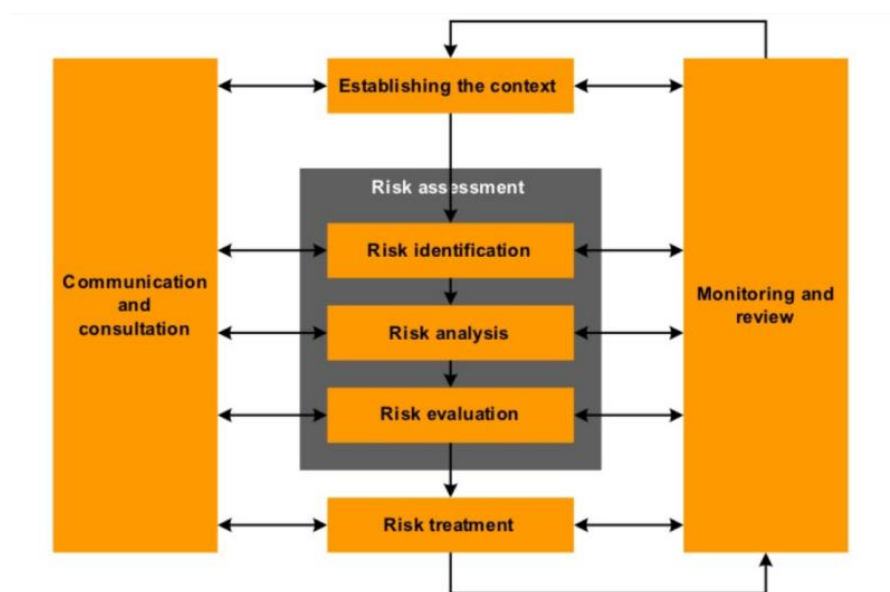

Figure 1: **Overview of a standard risk management process (ISO 31000: 2009, image from Newdick 2011)**

The main outputs from the preparatory phase included a project plan, adoption of a climate change scenario position statement and a literature review. A working group comprised of council staff from a range work areas initiated a preliminary list of risks after thinking about how expected climate extremes might affect Council. Council staff then attended drop-in sessions and follow up meetings to

• review the risk/opportunity descriptions summarised from previous discussions

• add any impacts not already considered

• identify activities/measures already in place that help respond to the risks, and

• with consideration for the effectiveness of existing measures, rate the risks and opportunities (likelihood and consequences). Figure 2 describes the process of identifying risks arising from climate change.
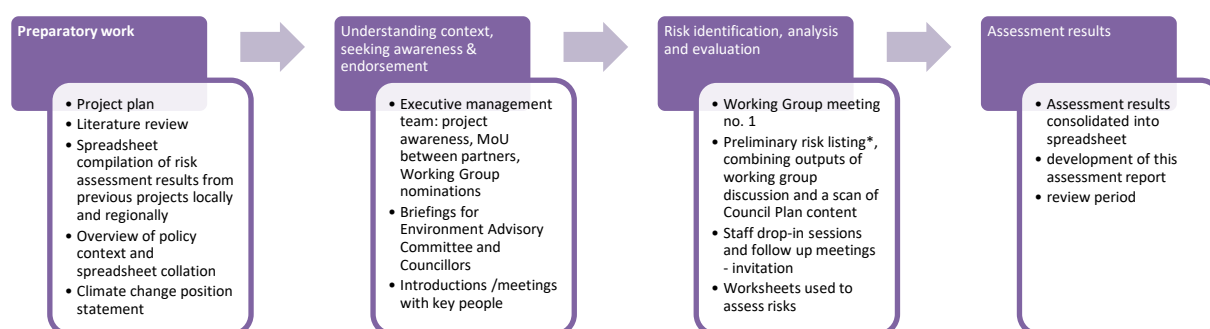
Preparatory work	Understanding context, seeking awareness & endorsement	Risk identification, analysis and evaluation	Assessment results
• Project plan • Literature review • Spreadsheet compilation of risk assessment results from previous projects locally and regionally • Overview of policy context and spreadsheet collation • Climate change position statement	• Executive management team: project awareness, MoU between partners, Working Group nominations • Briefings for Environment Advisory Committee and Councillors • Introductions /meetings with key people	• Working Group meeting no. 1 • Preliminary risk listing*, combining outputs of working group discussion and a scan of Council Plan content • Staff drop-in sessions and follow up meetings - invitation • Worksheets used to assess risks	• Assessment results consolidated into spreadsheet • development of this assessment report • review period

Figure 2: **Overview of the assessment and engagement process towards understanding the impacts of climate change at Indigo Shire Council.**

2.2   Climate change risks for Indigo

The assessment exercise resulted in 50 risks and opportunities described and evaluated with consideration of all areas of the organisation. The 50 initial risks become 'causes' of 15 'strategic risks' aligned with strategic objectives of the Council Plan covering the themes of leadership, built environment, sustainable communities and economic growth. The strategic risks of highest rating for 2030 relate to how climate change could impact on the organisation's objectives for:

• a healthy, active, safe, connected and inclusive community, and

• growing the tourism industry.

The challenge of grouping and organising risks into a helpful arrangement reinforced the interdependent nature of different functions of local government, and the multifaceted impacts of various climatic extremes. For example:

• The role of community facilities providing shared cool spaces in the face of increasingly hot conditions had broad significance across place-making, asset management and community well-being.

• Some impacts, such as those relating to hazardous outdoor and travel conditions, are felt across many areas of the organisation through OHS concerns for staff members (e.g. outdoor crews, library staff, community carers) and/or service disruptions (which in turn may impact on community members).

The 15 strategic risks relating to climate change were identified across the organisation with most risks relating to more than one directorate:

- Corporate and Community Services (7 risks)
- Development and Planning (10 risks)
- Infrastructure Services (11 risks)
- Executive Management (CEO Office, Organisational Development and Communications) (4 risks)

These risks are shown in figure 3 where risks are broken down into ratings across each directorate.

Figure 3: **Climate risk number and rating for each directorate.**
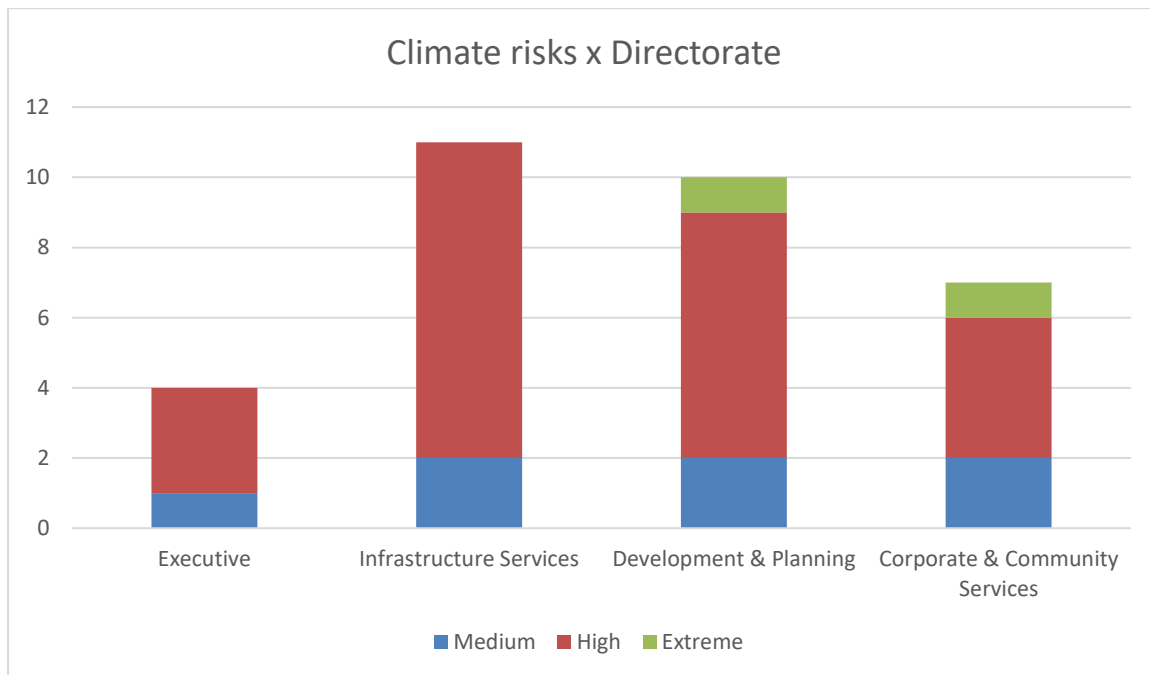
The primary climate hazards relevant to the Council were identified as:

- Bushfire
- Increasing average temperatures
- Flood (both inundation from sustained rainfall and flash flooding from intense storms)
- Storm (extreme rainfall and increased intensity of storm events especially wind)
- Heat (hot days and heatwaves)
- Drought (extended periods of decreased rainfall and increased average temperatures)

Most risks are related to a combination of these hazards which may occur separately or simultaneously, such as storms and flash flooding. A few risks were related to all hazards.

2.3 Key climate change risks for 2030

All 15 strategic risks have a rating of medium or above for 2030 hence all have been included in the adaptation planning process. Two risks have a rating of extreme for 2030 based on current climate projections.

Table 1: Climate-related strategic risks, aligned with strategic focus areas and strategic objectives of the Indigo Shire Council Plan

Strategic focus area	Strategic objectives	Risk ref.	Strategic risk	2015	2030	2090
Leadership of our People and our Community	We will conduct the business of Council sustainably, openly and efficiently	A	Increasing frequency and intensity of extreme weather events reduces the sustainability and efficiency of conducting the business of Indigo Shire Council.	medium	high	extreme
	We will continue to be financially sustainable	B	Increasing frequency and intensity of extreme weather events and increasing average temperatures reduces the financial sustainability of Indigo Shire Council.	medium	medium	high
Managing our Historical and Built Environment	We will protect the Shire's heritage and indigenous assets	C	Increasing frequency and intensity of heatwaves adversely impacts on protection of heritage assets.	high	high	extreme
	We will maintain appropriate emergency management capabilities	D	Increasing frequency, intensity and scale of extreme events (bushfire, heatwave, flood) leads to Indigo Shire Council being unable to maintain emergency management capabilities to meet demand.	medium	high	extreme
	We will maintain and enhance our parks and gardens and open spaces	E	Increasing frequency and intensity of drought, heatwave, flood, fire, and changes to average temperature and rainfall lead to parks, gardens, open spaces and natural reserves not being maintained and enhanced to desired standards.	medium	high	extreme
	We will improve the quality of the built environment, with a focus on long-term sustainability	F	Increasing frequency and intensity of damaging events compromise the quality of the built environment, disrupting long term asset management.	high	high	extreme
	We will build and maintain a network of safe roads	G	The changing dynamics of extremes in wet/dry and hot/cold climatic conditions complicates the building and maintenance of a safe road network.	high	high	extreme
	We will ensure flood management initiatives minimise the impact of flooding in the Shire	H	Increasing intensity of rainfall events reduces the effectiveness of flood management initiatives aimed at minimising the impact of flooding in the Shire, and increases demand for emergency response activities.	medium	high	high

Strategic focus area	Strategic objectives	Risk ref.	Strategic risk	Risk ratings 2015	2030	2090
Growing our Economy *Sustainable Communities* *Growing Our Economy*	See footnote for the three relevant strategic objectives[1]	I	Increasing heat increases the demand for shared shaded/cool spaces to achieve a quality built environment, vibrant place-making, and connected, inclusive, safe and healthy communities	medium	high	high
Growing our Economy	We will focus on growing the Shire's tourism industry	J	Increasing frequency and intensity of climatic extremes lead to the objective of growing the Shire's tourism industry being unrealised.	high	extreme	extreme
	We will continue to put our customers first	K	Strain on ISC resources to respond to increasing frequency, scale and complexity of emergencies leads to service disruptions, reduced customer satisfaction and community outcry.	medium	high	extreme
Growing our Economy *Sustainable Communities*	We will advocate for our community on issues of concern to them	L	Increasing temperatures, reduced rainfall, and increases in the intensity and frequency of extreme weather events exert pressure on the viability of agricultural businesses.	low	medium	high
Developing Sustainable Communities	We will deliver high standard, respectful community services	M	Increasing climatic extremes create extra work and/or require adjustment of practices to continue to achieve high standard, respectful community services	medium	high	extreme
	We are socially inclusive and we will work with our community to lead healthy, active, safe and connected lives	N	Increasing climatic extremes (including heatwave) lead to reduced levels of health, activity, safety, connectivity and inclusiveness in the community.	high	extreme	extreme
	We will encourage sustainable land management	O	Increasing climatic extremes (and gradually changing temperature and rainfall) challenge the achievement of sustainable land management.	medium	high	extreme

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[1] We will improve the quality of the built environment, with a focus on long-term sustainability
We will adopt a place-based approach to support sustainable, appropriate development and jobs growth
We are socially inclusive and we will work with our community to lead healthy, active, safe and connected lives

2.4   Existing actions to reduce risk

Risk assessments are an embedded Council practice with many existing initiatives and actions applicable to the 15 identified climate risks. These control measures are driven by the need to:

- Manage risks to assets and property owned or managed by the Council
- Plan for, and respond to, emergency events
- Manage other strategic objectives such as community recreation and economic development

They also serve to assist Council to adapt to changing climatic conditions. Some examples of existing controls to manage climate change risks include:

- Plans for managing heatwaves, emergencies, trees, assets, roadside conservation, municipal recovery, business continuity and sustainable water use.
- Public liability insurance
- Environment strategy, greenhouse action plan
- Flood overlay and bushfire management overlay
- Policies for shade, occupational health and safety, adverse weather
- Participation in Resilient Community Facilities project

Existing controls were considered when analysing the climate change risks with further discussion regarding the effectiveness of these controls, their funding status and requirement for review. These discussions then assisted to identify the gaps in treatments which could potentially become new adaptation actions.

3　Adaptation planning

3.1　Guiding principles for adaptation action

Following completion of a climate-related risk and opportunity assessment, a framework was developed to guide the development and selection of treatments. After identifying potential treatments, treatment options were further explored to ascertain whether they would adequately treat the risk. Treatments were categorised according to their type and position on the management hierarchy. Assuming the treatment is successfully implemented, the risk level was then re-evaluated to determine the residual risk. Residual risk levels show whether the proposed treatment is effective in changing the risk level. Finally, a multi criteria analysis (MCA) was used to rate the treatment options and provide a guide to the option which reflects better adaptation practice. Once a treatment has been selected and implemented it becomes an adaptation action.

A set of principles or criteria was used to explore and rate treatment options for the multi criteria analysis (MCA). Having thought of possible ways to deal with particular risks or opportunities, a set of criteria or principles help guide towards the most appropriate treatments with which to proceed. These may be used to compare a number of options being chosen between to deal with a particular risk, or may assist with filtering and prioritising a broader range of treatments, and allocating resources to the most 'worthy' options. Criteria may be weighted according to the needs of an organisation. Treatments are scored on the criteria of:

- Priority – based on the risk assessment results
- Cost – where low cost (<$5000) will receive a higher score
- Effectiveness and flexibility – using an adaptive approach; robust and flexible options
- Opportunity – including win-wins and multiple benefits
- Implementation – funding availability, reflects stakeholder role

Each criterion is scored out of five where a treatment with a higher total score tends to reflect better adaptation practice than a treatment with a lower total score (see Appendix 3 for scoring system). Adaptation actions with a MCA score of 21 or above were identified as the priority actions for Council to undertake within two years.

3.2　Adaptation Actions

3.2.1　Adaptation actions to be completed in 2 years

A total of 29 adaptation actions met the criteria for implementation within the next two years.   The proposed actions address risks from all areas of council business. They include a range of activities which when implemented will result in improvements to emergency management and response; resource savings; and improved safety and comfort levels for council staff and community members.

3.2.2　Adaptation actions to be completed in 3-7 years

Fourteen adaptation actions have a MCA score between 16 and 20 inclusive and were identified for implementation in three to seven years. Actions in this category generally require either longer term planning for implementation or are high cost activities requiring funding provision.

3.2.3   Adaptation actions to be completed beyond 7 years

A total of six actions have a MCA score of 15 or below and are identified for implementation beyond seven years. These actions are less time critical than those which scored higher and may rely on external engagement making implementation and opportunity more challenging.

A summary of the prioritised adaptation actions by theme and timeframe is found in tables 2 to 7.

Table 2: Leadership of our People and our Community

Adaptation action	Risk ref.	Climate Hazard	Responsible Directorate	MCA
Within 2 years				
Develop a communications strategy for emergencies with clear procedures for internal and external communications.	A	Fire	Executive Management	24
Prepare a feasibility study on data back up in the event both Shire offices are compromised by an emergency.	A	Fire Storms	Corporate & Community Services	23
Develop a set of actions for backfilling, succession and support for staff positions engaged in emergency management and recovery.	A	Fire	Executive Management	23
Review and develop a new business continuity plan which clearly identifies core services and responsibilities, and key priorities for each staff role in an emergency and adverse weather events.	A	All	Corporate & Community Services	23
During annual budget preparation ensure there is sufficient reserves to fund disaster response at the lowest point in the budget and monitor monthly.	B	Fire Flood Storms	Corporate & Community Services	21
Within the next 3-7 years				
Develop a discussion paper to understand ISC insurance cover and investigate alternative providers to optimise value for money.	B	All	Corporate & Community Services	18
Investigate technology to facilitate communication which reduces the need for travel by staff in hazardous weather.	A	All	Corporate & Community Services	18
Beyond 7 years				
Commission a study of the effect of climate change impacts such as reduced snow cover on Mt. Buller gas income.	B	Heat	Infrastructure Services	12

Table 3: Managing our Historical and Built Environment

Adaptation action	Risk ref.	Climate Hazard	Responsible Directorate	MCA
Within 2 years				
Review irrigation systems (monitoring, scheduling, hardware) in parks and gardens across the Shire to understand what systems are in place and where water savings can be made.	E	Drought Heat	Infrastructure Services	24
Provide separate costs from the water bill for irrigation and public building usage for council staff.	E	Drought Heat	Corporate & Community Services	24
Investigate the use of the IDM Sustainable Infrastructure Guidelines for sustainable design and material selection and procurement.	F	Heat Flood Fire	Infrastructure Services	24
Continue to develop the Procurement Policy to include baseline monitoring, procurement objectives and indicators to measure performance, and incorporate annual review	F	All	Corporate & Community Services	24
Investigate and assess gaps in existing emergency management documents to identify missing links within and between documents, and create an overarching document or mechanism to address the gaps and co-ordinate documents.*	D	Fire Flood Storms	Infrastructure Services	23
Embed Environmental Health Officers with emergency planning and integrate into response and recovery strategies in both Indigo and Towong Shires.	D	Fire Storms	Infrastructure Services	23
Develop an internal emergency response process to define staff roles and responsibilities during an emergency, and recovery.	D	Fire	Infrastructure Services	23
Co-ordinate review of Procedure for Working in Adverse Weather Conditions by all service teams where service teams develop plans for managing staff work hours and activities on extreme to code red days, and other hazardous weather days.	D	Fire Storms	Executive Management	23
Liaise with adjacent Councils to develop a formal structure around joint and reciprocal arrangements for emergency response especially where an incident is across boundaries.	D	Fire Flood Storms	Infrastructure Services	23

Use the register of significant trees and avenues in the Shire to prioritise management practices which will maintain and enhance tree health.	C	Drought Heat	Infrastructure services	22
Review water use in public toilets and other public buildings and install water saving measures where required.	E	Drought	Infrastructure Services	21
Explore mechanisms which enforce compliance of caravan parks with Council leases to implement upgrades to emergency management plans.	D	Fire Flood Storms	Infrastructure Services	21
Within the next 3-7 years				
Review Australian Rainfall and Runoff methodology for drainage design to ensure climate change is considered.	H	Storms Flood	Infrastructure Services	20
Incorporate climate change considerations into the design process for capital works.	F	All	Infrastructure Services	20
Include a requirement that climate change has been considered in the project at design sign off stage.	F	All	Infrastructure Services	20
In the Asset Management Policy include a requirement to ensure asset replacements are designed for current and future needs, rather than 'like for like' replacement, to consider the effects of climate change	G	Fire Storms Flood	Infrastructure Services	16
Use tools from the Resilient Community Buildings project to assess heritage buildings for community use.	C	Heat	Infrastructure Services	16
Review heritage building roof capacity for water removal and redesign where required to cope with intense rainfall.	C	Storms	Infrastructure Services	15
Beyond 7 years				
Investigate social studies about the value of having water in lakes during drought for community wellbeing and use the results to inform future water management.	E	Drought Heat	Infrastructure Services	16
Investigate the impact of increased heat and sunlight on the oxidisation process of bitumen to implement future changes to road maintenance schedules.	G	Heat	Infrastructure Services	15
Assess impact of changing rainfall on Land Capability Analysis (LCA) of sites for septic design.	H	Flood Storms	Development and Planning	15

Table 4: Managing our Historical and Built Environment/Growing our Economy/Developing Sustainable Communities

Adaptation action	Risk ref.	Climate Hazard	Responsible Directorate	MCA
Within 2 years				
Include climate change considerations in planning for Person Centred Care model.	I	Fire Heat Storms	Development and Planning	23
Update Shade Policy to include whole town shading plans which encourage activity, engage the community, and influence project design brief.	I	Heat	Development and Planning	21
Within 3-7 years				
Identify other areas in the Indigo Shire where the principles of placemaking (comfort and safety) could be applied for desired community outcomes.	I	All	Development and Planning	20

Table 5: Growing our Economy

Adaptation action	Risk ref.	Climate Hazard	Responsible Directorate	MCA
Within 2 years				
Review and collate information on disaster recovery in the Indigo Valley to develop a model for future community recovery plans.	K	Fire Flood Storms	Development & Planning	23
Develop a template to communicate changes in staff roles and personnel internally and to the community during emergencies and recovery.	K	All	Executive Management	23
Rewrite the tourism strategy to consider climate change impacts and risks, and include options with greater climate resilience.	J	All	Corporate & Community Services	22
Review tourism strategy pillars (food and wine, cycling, active with nature, heritage) to identify climate change vulnerability.	J	All	Corporate & Community Services	22
Within the next 3-7 years				
Identify events/activities which could occur in cooler months or indoors - as winters become warmer could exploit for outdoor activity.	J	All	Corporate & Community Services	20
Work with adjacent Councils to lobby State government for a regional recovery officer to co-ordinate and manage disaster response across Councils.	K	All	Development & Planning	17

Beyond 7 years				
Explore options for indoor event space for 2000-3000 people.	J	All	Corporate & Community Services	12

Table 6: Growing our Economy/Developing Sustainable Communities

Adaptation action	Risk ref.	Climate Hazard	Responsible Directorate	MCA
Within 3-7 years				
Investigate use of Climate Smart Agriculture software to identify future potential agricultural industries and infrastructure to support it.	L	Drought Heat	Development and Planning	19

Table 7: Developing Sustainable Communities

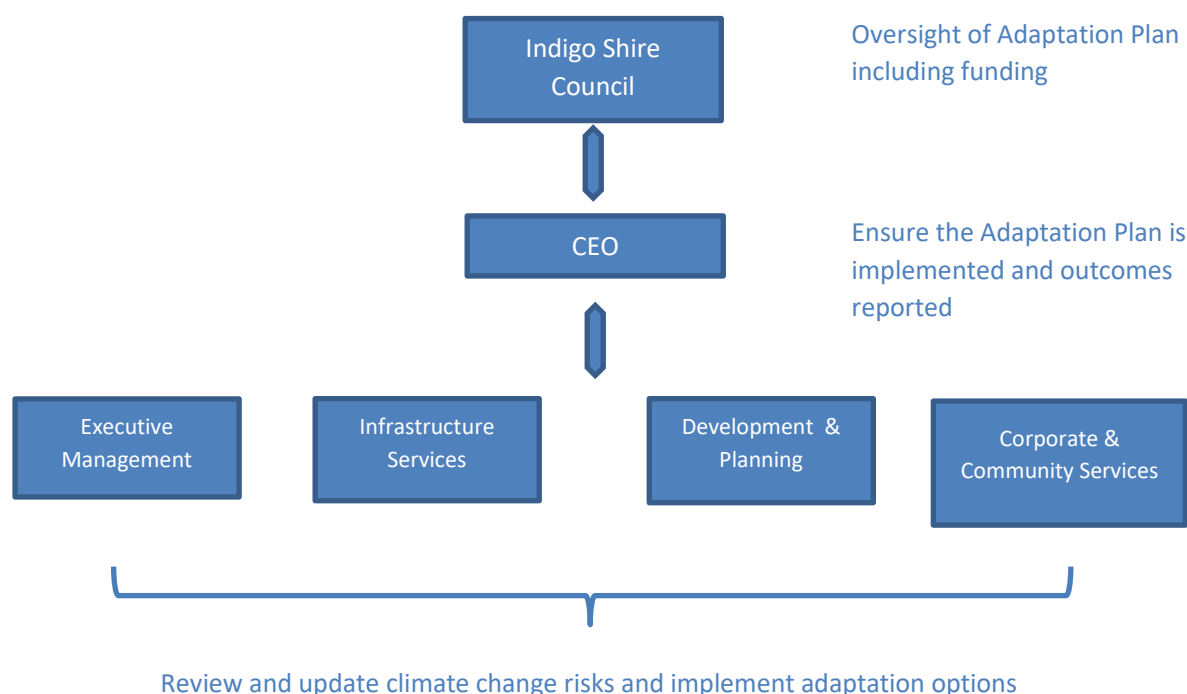| Adaptation action	Risk ref.	Climate Hazard	Responsible Directorate	MCA
Within 2 years				
Review recreation strategy to consider climate change impacts and link to other relevant management plans such as Parks and Gardens.	N	Heat	Development and Planning	23
Use tools from the Resilient Community Buildings project to assess recreation and leisure facilities.	N	All	Development and Planning	23
Develop a Positive Ageing Strategy which considers impacts of climate change on isolation of elderly people.	N	Heat	Development and Planning	22
Review tree management plan to include tree replacement and selection with regard to climate change.	O	Heat Drought Storms	Infrastructure Services	22
Develop an annual survey of weed types to identify changing spectrum as weeds move into new habitats, and to enable modification of control programs.	O	Heat Drought	Infrastructure Services	22
Ensure new Domestic Wastewater Management Plan considers the impact of climate change.	O	All	Development and Planning	21
Within the next 3-7 years				
Review Working in Adverse Weather Conditions Procedure to include consideration of the vulnerability weighting between staff and clients in extreme weather.	M	Fire Heat Flood Storms	Development and Planning	20
Review 'exemptions for native vegetation removal ' section of the planning scheme with regard to climate change impacts and determine extent of erosion of environmental protections.	O	Fire Storms	Development and Planning	18

3.3   Resourcing

This plan is a long term strategy outlining how Council will adapt to the changing climate and better prepare for the future. Resourcing for the Adaptation Plan will be assisted by the introduction of Council's *Climate Change Policy*. The policy acts as a driver for implementation of the Adaptation Plan which will be embedded into Council documents such as team Service Plans and the Council Plan. The Adaptation Plan recognises that demands on Council services may change as a result of climate change and will be used to inform future budgetary decisions.

4 Implementation, monitoring and review

Assessing the progress of adaptation allows Council to understand the effectiveness and direction of the Adaptation Plan, and to determine how well it has been implemented. The adaptation actions developed in response to identified risks from climate change are the best available with current knowledge and technology. As new knowledge and technology becomes available, some actions may be redundant before being implemented. This illustrates the need for a continuous improvement cycle for identifying and delivering adaptation actions which become embedded in business as usual practices.

As this is Council's first Adaptation Plan the intent is to improve understanding of climate risks and integrate the adaptation actions into existing documents and practices. The risks posed by climate change have been identified across all work areas of Council highlighting the need to work cooperatively to manage these risks.   Figure 4 outlines the governance structure for the adaptation plan.

Figure 4: **Summary of roles and responsibilities within council for the Climate Change Adaptation Plan**

Indigo Shire Council	Oversight of Adaptation Plan including funding
CEO	Ensure the Adaptation Plan is implemented and outcomes reported

Executive Management — Infrastructure Services — Development & Planning — Corporate & Community Services

Review and update climate change risks and implement adaptation options

4.1 Monitoring and evaluation

Monitoring and evaluation (M&E) of climate change adaptation is a critical component of the adaptation planning cycle. Embedding a monitoring and evaluation (M&E) process into Council procedures assists to establish continuous improvement and understanding of adaptation. It allows review of the success of a particular adaptation, and should work to strengthen future adaptations.

Planned adaptation processes can be categorised as either building adaptive capacity or delivering adaptation actions. This describes building organisational capacity to respond effectively to climate change or enabling practical actions to be implemented. The purpose of M&E is summarised below:

	Building Adaptive Capacity	Delivering Adaptation Actions
What is being monitored and evaluated?	Determining how well consideration of climate change risks and responses have been integrated into council decision making and organisational processes.	Determining how well the Adaptation Action Plan has been implemented and led to organisational action.

Review of this Adaptation Plan will focus on both building adaptive capacity and monitoring the implementation of a bundle of adaptation actions included in the Adaptation Plan.

4.2 Delivering adaptation actions

The risks identified in this Adaptation Plan will be managed through the Council's newly developed risk management system. The Climate Change Risk: '*Council fails to recognise and adapt to the changing climate*' appears on the organisational risk register which is reviewed annually and reported on quarterly to the Executive Management Team. A key treatment for this risk is implementation of the Adaptation Plan.

Strategic risks identified in this plan will be addressed through the organisation's Service Plans. These risks and linked actions will be assigned to the most appropriate work team and will be reviewed and reported on every 12 months through the service plan reporting structure (see Appendix 5). Service plan reports feed into directorate reports presented at executive level.

The Director of Infrastructure Services has overall responsibility for the Climate Change Risk and will report progress on implementing the Adaptation Plan to executive level annually. The Adaptation Plan will be reviewed and updated every 5 years to ensure Council's adaptation responses remain valid and relevant to local priorities and climatic conditions.

4.3 Building adaptive capacity

Organisational adaptation to climate change incorporates some or all of the following strategies; moderating potential damages, taking advantage of opportunities, and coping with the consequences. The Adaptation Plan plays a role in delivering these strategies by identifying the risks and opportunities of climate change impacts, and developing actions to moderate potential harm.

Building adaptive capacity within an organisation relates to the ability to embed considerations about climate change risks and impacts into business as usual structures. From the Adaptation Plan perspective this will be achieved when risks and actions from outside the plan are developed within normal organisational processes. Developing specific adaptation objectives and using indicators to monitor performance will enable Council to assess how normal organisational processes are changing to accommodate considerations of climate change. This work is outside the scope of the Adaptation Plan however could be developed into a separate project at a later date.

4.4   Adaptation indicators

Measuring performance against a baseline is commonly used when monitoring adaptation progress although establishing the baseline is challenging given the constantly changing nature of the subject of evaluation. However, providing the baseline remains flexible, it enables the use of indicators to monitor processes or outcomes.

Effective indicators need to show long term trends of the impact of climate change on key service areas. They need to be measureable, and specific to Council's operations, and should not replicate work done by other agencies.

Developing indicators is outside the scope of this Adaptation Plan but is an area which should be considered when reviewing the Adaptation Plan. Indicators could be developed around key risk themes to assist Council in tracking the impacts of climate change and the Council's resilience to these impacts.

5   Conclusion

This Adaptation Plan has been developed in response to a recognition that despite efforts to mitigate climate change some form of adaptation is inevitable. The plan has identified risks to the continued delivery of services and protection of assets from future climate impacts, and developed responses to address these risks. These responses become adaptation actions when implemented and will help to increase Council's resilience and be better prepared for the future. Adaptation actions identified in this plan will help to increase Council's emergency management response and recovery to bushfires and intense storms; improve staff and community working and recreation conditions; and enhance resource conservation efforts.

Climate change risks will change over time in response to further climate change, and some adaptation actions will be made redundant before being implemented by new knowledge or technologies. A process of regularly monitoring the plan, and developing indicators, will ensure that Councils adaptation responses to climate change remain effective and relevant.   Adaptation is not an end in itself but rather a constantly cycling process of adapting, monitoring, reviewing and adapting further. As such this Adaptation Plan is intended as a starting point for Council to understand the process of adaptation and commence building adaptive capacity.

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Appendix 1:   Project Methodology

The *Climate Change Adaptation Action Plans* project is being delivered in partnership between Indigo Shire Council (lead organisation), Towong Shire Council and the Wodonga Council. The project is funded with the support of the Victorian Government under the Victorian Adaptation and Sustainability Partnership. While project resources are shared, individual outputs are being developed for each of the three councils.

The project is developing a *Climate Change Adaptation Action Plan* for each partner council by:

- systematically assessing the impacts of climate change on the achievement of local government objectives developing and prioritising responses to risks and opportunities for inclusion in an adaptation plan
- testing a selection of actions (outcomes shared across the partner organisations), and
- embedding the respective adaptation plans into organisational policies and plans (undertaken within each partner organisation).

Figure 5:   **Outline of the Climate Change Adaptation Action Plans Project**

Project phase	Project planning	Assess risks & opportunities	Develop adaptation plans	Develop climate change policy	Implement, embed & review
Activities/ outputs	• Project plan	• Working Group/staff input into the organisation's **climate change Risk & Opportunity Assessment** • Literature review of existing risk assessments • Understanding organisational risk frameworks • Adopting a climate change scenario position statement • Developing guidance for climate change adaptation action development & selection	• Review of key Council strategic & policy documents • Working Group/staff input into developing responses to identified risks • Develop Climate Change Adaptation Action Plan template	• Developing monitoring and evaluation tool • Developing **Climate Change Policy** for adoption by Council • Finalise Climate Change Adaptation Action Plan	• Council endorsement of *Climate Change Adaptation Action Plan* • Final project evaluation & reporting • Piloting/testing of selected actions • Knowledge sharing plan • Implementation plans (for schedule of doc reviews)
Timeline	**Aug 2014**				**Mar 2017**

Appendix 2:   Risk Matrix

		CONSEQUENCE				
		INSIGNIFICANT (1)	**MINOR (2)**	**MODERATE(3)**	**MAJOR (4)**	**CATASTROPHIC (5)**
	Strategy & Service Delivery	Negligible effect on business processes and service delivery.	Some less critical strategic objectives will not be achieved in the period outlined in the Council Plan.	Some key strategic objectives will not be achieved in the period outlined in the Council Plan.	The majority of strategic objectives will not be achieved in the period outlined in the Corporate Plan.	No Council Plan strategic objectives will be achieved. Very high risk of State Government intervention
			Some minor interruptions (< 3 days) to the operations or service delivery	Interruptions occur to some critical functions of up to 5 days.	Critical services and operations cannot be delivered for a period of greater than 1 week.	Widespread and long term degradation of critical operations and services
	Financial	Up to $10k financial loss Or 1% of service expense budget	Between $10K and $150K Or 2.5% of service expense budget	Between $150K up to $500K Or 5% of service expense budget	Between $500K and $1M Or 10% of service expense budget	Greater than $1M Or 25% of service expense budget
	People & Safety	Some isolated staff dissatisfaction	General staff morale problems and increase in turnover.	Widespread staff morale problems and high turnover including key organisation roles.	High turnover of experienced/key staff; Council not perceived as employer of choice.	Key positions unable to be filled.
		Short term reversible injury which requires no first aid.	Reversible injury or disability which requires first aid intervention.	Serious reversible injury or disability requiring ongoing medical treatment or hospitalisation and/or lost time.	Single fatality and/or multiple irreversible disabilities.	Multiples fatalities and significant irreversible disabilities
	Reputation / Credibility	No impact to reputation or brand name, e.g. customer complaint, resolved in day-to-day management.	Minor local community concern manageable through good public relations.	Moderate customer sensitivity and damage to brand impacting noticeably on business activities and profitability.	State media and public concern / exposure with adverse attention and long-term loss of support from Indigo Shire residents.	Loss of State Government support with scathing criticism and removal of the Council.
						National media exposure.
	Environment	Negligible effect on biological or physical environment.	Minor short term environmental damage which does not result in long term impact to ecosystem.	Moderate impact on the environment; no long term or irreversible damage.	Severe, long term or widespread resulting in impairment of the ecosystem and requiring significant remedial action	Widespread and irreversible environmental damage
	Governance / Compliance	Negligible regulatory breaches that are detected early and rectified, does not require reporting. Insignificant legal issues or non-compliance.	Minor regulatory or contract breaches with potential minor fines which does not require reporting to regulators.	Regulatory or contract breaches causing investigation / report to authority and prosecution and moderate fines.	Major regulatory or contract breaches and litigation.	Regulatory or contract breaches causing very serious litigation, including major class action.
						Significant prosecution / fines for Indigo Shire's Councillor's / Managers

Guidance

- *Use this matrix for all risk management (this includes decision-making at all levels, projects and planning activities)*
- *For further guidance or assistance with your risk management activities, please contact the Risk Advisor or the Coordinator Governance & Risk*
- *More information on how to perform a Risk Assessment may be found in the Risk Management Framework (available from the Governance & Risk Team)*

When considering risks, here are some idea's to get your started:

- *Financial losses*
- *Breaches of legislation/regulations*
- *Damage to the environment*
- *Reduction in service quality or loss of a service*
- *Damage to Council assets or private property*
- *Inefficiencies and/or wasted resources*
- *Litigation*
- *Loss of reputation / Community dissatisfaction*
- *Inability to attract/retain qualified staff*

LIKELIHOOD	Timeframes & Corporate Memory			RISK RATING				
	Time frame	Has it happened at ISC in the last 5 years?	Has it happened at other organisations in the last 5 years?					
ALMOST CERTAIN (5)	The event has occurred or is expected to occur multiple times per year	Regularly	Regularly or MULTIPLE times at other organisations	MEDIUM	HIGH	HIGH	EXTREME	EXTREME
LIKELY (4)	The event may probably occur once every year.	Several times	Once at MULTIPLE organisations	MEDIUM	MEDIUM	HIGH	HIGH	EXTREME
POSSIBLE (3)	The event may occur once every 3 years.	A few times	MULTIPLE times at ONE other organisation	LOW	MEDIUM	MEDIUM	HIGH	EXTREME
UNLIKELY (2)	The event may occur once in 10 years.	Once	ONCE at ONE other organisation	LOW	LOW	MEDIUM	HIGH	HIGH
RARE (1)	The event may only occur once in 10 years or greater	Never	Never	LOW	LOW	LOW	MEDIUM	HIGH

RISK RATING	WHAT TO DO?		WHO TO CONSULT?			
			TEAM	MANAGER	DIRECTOR	CEO
EXTREME	Requires immediate treatment to reduce risk level with regular review and reporting to EMT. Risks at this level are reported to the Audit Committee and Council				x	x
HIGH	Risk needs to be addressed to ensure that the risk is adequately mitigated. Risk may be tolerable if the likelihood of the event is Rare or Unlikely and no further treatments can reduce the risk further. Report to Audit Committee.				x	x
MEDIUM	Further treatments should be introduced to reduce risk where cost-effective.			x		
LOW	Should be managed within routine operations and procedures to retain current risk levels.		x	x		

For EMT Reports, Council Reports & Service Plans

Report EXTREME and HIGH risks only

Appendix 3: Multi Criteria Analysis

When applying this to the worksheet, score each proposed treatment against each of the criteria (priority, cost, effectiveness & flexibility, opportunity, implementation) from 1 to 5, where 5 is a very favourable and 1 is very unfavourable.

Table 8: Criteria to assist selection of treatments

Criterion	Key considerations	Guidance for scoring	1	2	3	4	5
Priority	•Focus on priority climate change issues, as identified in the risk assessment •Generally high/extreme first to deal with appropriate resource allocation	Score priority according to the 2030 rating of the risks that the action is responding to	The risk isn't significant enough to make it onto the org's risk rating matrix	Addresses a low risk	Addresses a medium risk	Addresses a high risk	Addresses an extreme risk
Cost	Economic, environmental & social costs Capital & ongoing costs	Consider financial and in-kind value	Over $5.0M	$1.0M to $5.0M	$50,000 to $1.0M	$5,000 to $50,000	<$5000
Effectiveness & Flexibility	Reliability of assumptions that underpin the action. Robust & flexible Meeting objectives	Make a qualitative judgement along this scale	Rigid, potentially maladaptive				Highly flexible approach Responsive to new information
Opportunity	Includes win-wins, multiple/ancillary benefits Integrates with broader organisational risk management	Make a qualitative judgement along this scale	Limited opportunity No additional benefits				Integrates well with other efforts A good fit with org. timing and processes
Implementation	Funding sources Legitimacy: politically feasible, community acceptance	Make a qualitative judgement along this scale	No clear role for local govt. No funding source				Fits clearly in local govt. role Easy to implement

Appendix 4: Participation

Directorate	Department	Staff members
Executive		Gerry Smith, Narelle Edwards
	Organisational Development	Andrew Cudars Dalene Voigt
	Communications	Roberta Baker
Corporate & Community Services		Greg Pinkerton
	Finance	Phil Garoni
	IT	Jason Musil
	Corporate Services	Di Hempel
	Governance & Council Planning	Cassie Douglas* Will Gwosdz* Annabel Harding
	Tourism & Community Services	Margaret Deslandes Wendy Kerr Janine Rolles Clayton Neil Robert Dickie
Development & Planning		Mark Florence*, Jessica Johnston
	Planning & Statutory Services	Travis Basham Nadia Corsini* Anton Maas Nicholas McDonald Ian Scholes Kim Warne Kirsten Molyneaux
	Community Planning & Development	Kyleigh Andrews* Kate Biglin Anthony Maclean* Susan Reid Annette Walton Lorraine Lucas
Infrastructure Services		Ian Ellett

	Municipal Operations	John Boal
		Murray Butler
		Adele Earl
		Mark Greene*
		James Harrison
		David McIntosh
		Ron Sneddon
		Dan Wilkinson
	Capital Projects	Brad Dinsdale
		Ray Henderson
		Paul McLachlan*
		Don Pope
	Assets & Property	Robert Uebergang
		Tim Clarke
		Brett Direen
	Natural Resource Management	Helen Jones
		Jenny Pena*
	Bourke Museum	Patrick Watt
	Buller Gas	Jim Redmond

*denotes members of the Project Working Group

Appendix 5:   Implementation Plan

Table 10:   Adaptation actions to be implemented by Executive (Organisational Development and Communications)

Adaptation action	Risk ref.	Document SP=Service Plan
Within 2 years		
Develop a communications strategy for emergencies with clear procedures for internal and external communications.	A	SP-Communication
Develop a set of actions for backfilling, succession and support for staff positions engaged in emergency management and recovery.	A	SP-Organisational Development
Co-ordinate review of Procedure for Working in Adverse Weather Conditions by all service teams where service teams develop plans for managing staff work hours and activities on extreme to code red days, and other hazardous weather days.	D	SP-Organisational Development
Develop a template to communicate changes in staff roles and personnel internally and to the community during emergencies and recovery.	K	SP-Communication
Within 3-7 years		
Nil		

Table 11:   Actions to be implemented by Infrastructure Services Directorate

Adaptation action	Risk ref.	Document
Within 2 years		
Review irrigation systems (monitoring, scheduling, hardware) in parks and gardens across the Shire to understand what systems are in place and where water savings can be made.	E	SP-Parks and Gardens
Investigate the use of the IDM Sustainable Infrastructure Guidelines for sustainable design and material selection and procurement.	F	SP-Development Engineering
Investigate and assess gaps in existing emergency management documents to identify missing links within and between documents, and create an overarching document or mechanism to address the gaps and co-ordinate documents.*	D	SP-Emergency Management
Embed Environmental Health Officers into emergency planning and integrate into response and recovery strategies in both Indigo and Towong Shires.	D	SP-Emergency Management
Develop an internal emergency response strategy to define staff roles and responsibilities during an emergency, and recovery.	D	SP-Emergency Management
Liaise with adjacent Councils to explore joint and reciprocal arrangements for emergency response especially where an incident is across boundaries.	D	SP-Emergency Management
Review tree management plan to include tree replacement and selection with regard to climate change.	O	SP-Parks and Gardens

Develop an annual assessment of weed types to identify changing spectrum as weeds move into new habitats, and to enable modification of control programs.	O	SP-Natural Resource Management
Use the register of significant trees and avenues in the Shire to prioritise management practices which will maintain and enhance tree health.	C	SP-Trees
Review water use in public toilets and other public buildings and install water saving measures where required.	E	SP-Buildings and Property
Explore mechanisms which enforce compliance of caravan parks with Council leases to implement upgrades to emergency management plans.	D	SP-Buildings and Property
Within the next 3-7 years		
Review Australian Rainfall and Runoff methodology for drainage design to ensure climate change is considered.	H	SP-Stormwater Drainage
Incorporate climate change considerations into the design process for capital works.	F	SP-Capital Works
Include a requirement that climate change has been considered in the project at design sign off stage.	F	SP-Development Engineering
In the Asset Management Policy include a requirement to ensure asset replacements are designed for current and future needs, rather than 'like for like' replacement, to consider the effects of climate change	G	SP-Asset Management
Use tools from the Resilient Community Buildings project to assess heritage buildings for community use.	C	SP-Asset Management
Review heritage building roof capacity for water removal and redesign where required to cope with intense rainfall.	C	SP-Buildings and Property

*Until investigations commence, the type of co-ordinating document is unknown but it may be a policy which is required.

Table 12:   Adaptation actions to be implemented by Development and Planning Directorate

Adaptation action	Risk ref.	Document
Within 2 years		
Update Shade Policy to include whole town shading plans which encourage activity, engage the community, and influence project design brief.	I	SP-Community Development
Review and collate information on disaster recovery in the Indigo Valley to develop a model for future community recovery plans.	K	SP-Bushfire Recovery Co-ordinator
Ensure new Domestic Wastewater Management Plan considers the impact of climate change.	O	SP-Environment Health Service
Review recreation strategy to consider climate change impacts and link to other relevant management plans such as Parks and Gardens.	N	SP-Recreation Planning and Swimming Pools
Use tools from the Resilient Community Facilities project to assess recreation and leisure facilities.	N	SP-Recreation Planning and Swimming Pools
Develop a Positive Ageing Strategy which considers impacts of climate change on isolation of elderly people.	N	SP-Community Development

Within 3-7 years		
Identify other areas in the Indigo Shire where the principles of placemaking (comfort and safety) could be applied for desired community outcomes.	I	SP-Community Development
Work with adjacent Councils to lobby State government for a regional recovery officer to co-ordinate and manage disaster response across Councils.	K	SP-Community Development
Investigate use of Climate Smart Agriculture software to identify future potential agricultural industries and infrastructure to support it.	L	SP-Economic Development
Review 'exemptions for native vegetation removal ' section of the planning scheme with regard to climate change impacts and determine extent of erosion of environmental protections.	O	SP-Planning

Table 13: Adaptation actions to be implemented by Corporate and Community Services Directorate

Adaptation action	Risk ref.	Document
Within 2 years		
Prepare a feasibility study on data back up in the event both Shire offices are compromised by an emergency.	A	SP-Information Technology
During annual budget preparation ensure there is sufficient reserves to fund disaster response at the lowest point in the budget and monitor monthly.	B	SP-Finance Services
Review and develop a new business continuity plan which clearly identifies core services and responsibilities, and key priorities for each staff role in an emergency and adverse weather events.	A	SP-Finance Services
Provide separate costs from the water bill for irrigation and public building usage for council staff.	E	SP-Finance Services
Continue to develop the Procurement Policy to include baseline monitoring, procurement objectives and indicators to measure performance, and incorporate annual review	F	SP-Finance Services
Include climate change considerations in planning for Person Centred Care model.	I	SP-Home and Community Care
Rewrite the tourism strategy to consider climate change impacts and risks, and include options with greater climate resilience.	J	SP-Tourism
Review tourism strategy pillars (food and wine, cycling, active with nature, heritage) to identify climate change vulnerability.	J	SP-Tourism
Within 3-7 years		
Develop a discussion paper to understand ISC insurance cover and investigate alternative providers to optimise value for money.	B	SP-Risk Management
Identify events/activities which could occur in cooler months or indoors - as winters become warmer could exploit for outdoor activity.	J	SP-Tourism
Review Working in Adverse Weather Conditions Procedure to include consideration of the vulnerability weighting between staff and clients in extreme weather.	M	SP-Home and Community Care
Investigate technology to facilitate communication which reduces the need for travel by staff in hazardous weather.	A	SP-Information Technology