

21.14

22/06/2017
C51

ENVIRONMENTAL RISK

This Clause provides a local context to Clause 13 Environmental Risks of the State Planning Policy Framework.

Overview

There are a number of environmental risks facing Wellington Shire Council which may impact on land use and development decisions. The key environmental risks are detailed in this clause and include:

- Climate change
- Fire
- Flooding
- Salinity and land degradation

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Climate Change Impacts

Climate change has the potential to significantly impact land use and development within the Shire of Wellington, in particular the coastal areas. Wellington's coastal settlements may be the subject of coastal vulnerability from changes to the climate including the possibility of sea level rise. Climate change presents several significant challenges including loss of biodiversity (particularly in coastal, alpine and fragmented landscapes), increased salinisation of wetlands (particularly the Gippsland Lakes), shoreline recession, storm surge, increased fire risk, increased frequency of drought and high temperatures.

Objective

To manage the potential impacts of climate change on the environment including in areas of coastal vulnerability.

Strategies

- Ensure land use and development planning and proposals are cognisant of possible sea level rise and its potential impacts on the Shire's coastal settlements.
- Discourage development in areas of significant coastal vulnerability.

21.14-2

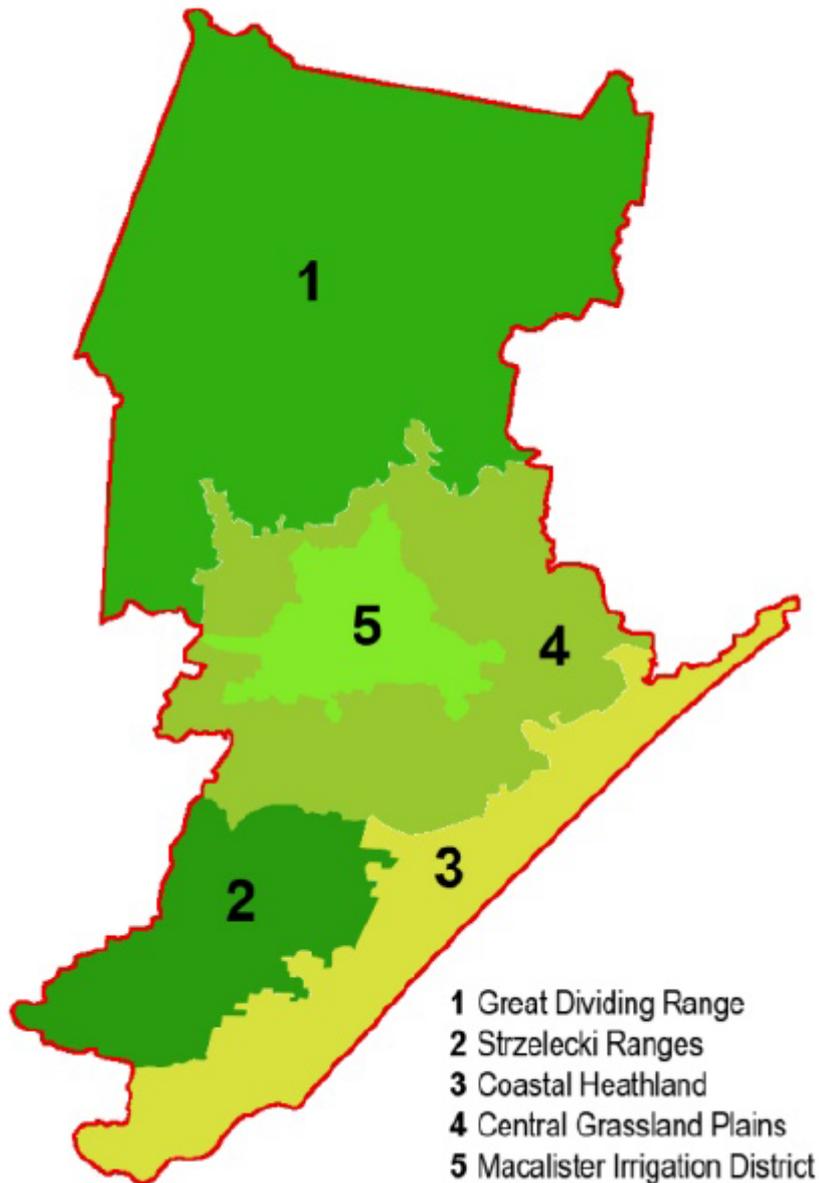
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Fire

A Municipal Fire Prevention Plan has been prepared for the municipality with the objective of creating a safer community. In addition to specifying works and responsibilities, the Plan identifies actions the community can undertake to minimise the risk and to help prepare for fire.

Additionally the municipality has identified five different fire landscapes, which are identified on the following plan.

Figure 1 – Fire landscape types in Wellington Shire



Fire Landscape Type 1: Great Dividing Range

The mountainous terrain to the north of the Shire, has been described as the Great Dividing Range (GDR) as per figure 1 above. Several vegetation types exist throughout the GDR landscape including dry sclerophyll mixed forest, wet sclerophyll forests, rainforest, alpine forests and alpine plains. The general rainfall throughout the mid to lower slopes of the GDR is around 600-800mm per annum, which leads to forest types dominated by dry sclerophyll forests. There are two townships in Wellington's portion of the GDR, Licola and Dargo. Several other Wellington townships exist in the southern foothills of the GDR that including Seaton, Glenmaggie, Coongulla and Briagolong.

Much of the GDR was burnt at some intensity in the 2002/03, 2005/06 and 2013 fires. This area is subject to the Department of Environment and Primary Industry (DEPI) Fire Operations Plan. The GDR fire landscape area has a rich fire history, and it is likely that it will be subject to fire in the future.

The dominant forest type throughout the GDR has evolved around fire, and typically has a natural fire frequency of around 5-40 year intervals. Fires in the GDR area are generally of minor to moderate intensity due to the volume of fuel available for combustion; however fires of higher intensity are not uncommon.

Fire Landscape Type 2: Strzelecki Ranges

The Strzelecki Ranges are mountainous and comprise a mosaic of native vegetation, timber plantations and agricultural land use. The Strzelecki's contain a large proportion of wet sclerophyll forests due to the higher average annual rainfall of around 1,000mm per year. Plantations throughout the area are eucalypt and pine. There are a number of settlements throughout the Strzelecki's including; Gormandale, Carrajung, Won Wron and Devon North. Settlements around the foothills of the Strzelecki's include Yarram, Rosedale, Woodside and Longford.

The southern Strzelecki Ranges were impacted by the 2009 Black Saturday fires north of Yarram and east of Callignee. The fire burnt through pine plantation, eucalypt plantation, native forest, agricultural land as well as the Devon North, Won Wron and Carrajung townships.

The Strzelecki Ranges are generally heavily forested (either native forest or plantation) with relatively high fuel loads. These fuel loads, combined with mountainous terrain, favourable climate history and weather conditions creates the potential for extremely intense fires. The wet sclerophyll native forest in the Strzeleckis has a much wider window of fire frequency than dry sclerophyll forests. Data suggests that a major fire will pass through this landscape every 20 - 400 years, and the local ecology has adapted to this scenario. The fire intensity that could be expected in these areas is very high to extreme.

Fire Landscape Type 3: Coastal Heathland

The coastal heathland of Wellington Shire exists in one form or another from Dog Island in the west through to Rotomah Island in the east. The area is dominated by the Ninety Mile Beach and three main landscapes including dry land agriculture, wetlands, tall and short heathlands. Banksia, tea tree and eucalypt dominate the area. Rainfall averages across this landscape are between 600 – 800 mm per year. Settlements in the coastal heathland are predominately a mixture of permanently occupied houses and houses owned by absentee owners in the towns of Port Albert, Robertsons Beach, Manns Beach, McLoughlins Beach, Woodside Beach, Seaspray, The Honeysuckles, Glomar Beach, Flamingo Beach, Golden/Paradise Beach, Seacombe and Loch Sport.

The coastal heathlands has a mixed fire history. There has been a mosaic of relatively small fires throughout this landscape over time, whilst some areas have not seen any fire for some time. Fires have been recorded since the early 1980s of varying intensities. The area is also managed as part of the Department of Environment and Primary Industry Fire Operations Plan area.

The coastal heathlands are extremely prone to fire and have typically evolved around a fire frequency of around 15 – 40 years. Significant fuel loads can accumulate without the presence of fire in this landscape. A continuous fuel ladder from the ground surface through to the tree canopy is not uncommon and can lead to extreme fire behaviour and intensity that may generate a severe threat to people and property within this landscape.

Fire Landscape Type 4: Central Grassland Plains

The central grassland plains and open woodland describes the relatively flat landscape that lie south of GDR; north of the Strzelecki's in the west and the coastal heathland in the east. An irrigation island known as the Macalister Irrigation District covers a substantial area in and around the Thompson River and Macalister River catchments. Natural rainfall is approximately 600 – 800mm per annum through the Central Grassland Plains. The area is dominated by dry land agriculture with remnant patches of native grasslands and woodlands. The grassland plains is predominantly covered by improved pastures, with very limited native grasslands remaining.

Small scale grassland plain fires are a regular occurrence throughout the landscape. Larger grassland fires are generally uncommon throughout this landscape, however in 2006/07 some significant areas were burnt around the Cowwarr district. Grasslands typically recover quickly, either through seed storage in the soil or re-sowing of paddocks. Native grasslands recover in a short period also through existing root stock, seed storage and seed dispersal.

Grasslands can present various risks to settlements and dwellings either through fires transitioning from the forest into forest/grassland interface or a grassland fire becoming established independently. Grassland fires spread relatively quickly and can vary in intensity depending on fuel load throughout the landscape. Grassland fires only pose a significant threat to the perimeter, of around 100 metres, of any town or settlement. Settlements and towns in this fire landscape area include Yarram, Heyfield, Sale, Maffra, Briagolong, Boisdale, Rosedale, Stratford, Longford, Woodside, Alberton and Tarraville.

Fire Landscape Type 5: Macalister Irrigation District

Significant areas of floodplain in and around the Thomson River and the Macalister River are known as the 'Macalister Irrigation District.' These areas access irrigation water from Lake Glenmaggie and Cowwarr Weir and the area is gazetted as a declared water catchment by Southern Rural Water.

There has been very little fire through the Macalister Irrigation District over time, with only some small scale fires in existing reserves and roadsides. Some 'stubble' fires have been deliberately lit as a part of on farm management and have required the assistance of the fire services, however, they have been relatively easy to contain.

The majority of the towns and settlements within the Macalister Irrigation District interface with non irrigated grasslands, therefore these localities are represented two landscape fire types. Towns such as Briagolong, Boisdale, Maffra, Heyfield and Sale all interface both the Macalister Irrigation District and non-irrigated grasslands. The perimeters of those towns, to a depth of around 100 metres, are likely to be subject to grassland fire threat. The interior of these towns would have little exposure to grass fires.

Objective

To protect the community from natural hazards such as fire.

Strategies

- Ensure that new land use or development, particularly within the identified fire landscapes does not increase the level of fire risk and includes adequate fire protection measures.
- Ensure appropriate buffers are applied between new urban settlement and bushland to mitigate the risk of fire.
- Require dwellings in rural areas to be sited to minimise fire risk and minimise the need for removal of native vegetation.
- Discourage residential development and associated uses in areas which are in areas that are subject to high fire risk.
- Recognise the five fire landscapes and their implication on land use and development and the risk of fire.

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Flooding

Flooding is another recognised environmental risk. Detailed flood mapping has been carried out by the catchment management authority identifying land subject to flooding.

Objective

To protect the community from the natural hazard of flooding.

Strategies

- Restrict development on flood plains and land liable to inundation.
- Discourage residential development and associated uses in areas that are subject to flooding.

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Salinity and land degradation can create issues for the viability of agriculture as well as reduce the quality of the environment.

Objective 1

To protect groundwater quality and aquifer recharge areas, particularly from the impacts of urban run-off.

Strategy

- Encourage the revegetation of riparian buffers along waterways, gullies, ridge-lines, property boundaries and recharge areas.

Objective 2

To achieve integrated catchment management that addresses salinity, erosion, sedimentation, water quality, biodiversity and native vegetation retention.

Strategy

- Locate and design activities such as abattoirs and intensive animal husbandry to minimise environmental damage and loss of amenity to surrounding areas taking into account matters such as effluent control, odour, noise, soil compaction, erosion and protection of water quality.

Objective 3

To achieve responsible land management in areas of soil erosion and salinity.

Strategy

- Encourage agroforestry, particularly in areas of low agricultural value and environmental degradation.

Implementation

These strategies for environmental risks will be implemented by:

Using zones, overlays, policy and the exercise of discretion

- Applying appropriate zones and overlays
- Applying the *Special Water Supply Catchment Areas* policy at Clause 22.01
- Applying the *Rural* policy at Clause 22.02
- Implement any relevant coastal action plan
- Use County Fire Authority guidelines on subdivision, group accommodation, and recreation accommodation in assessing whether a development proposal adequately addresses fire safety issues.
- Apply the following standards for use, development and subdivision in areas subject to fire risk:
 - Buildings, public open space and roads are to be sited, designed and constructed to minimise the impact of emergency conditions arising from fire.
 - Development associated with residential and public use is to incorporate fire prevention measures in accordance with relevant fire prevention guidelines.
 - Access, fencing, and location of dams are to maximise fire fighting potential and minimise interference with fire fighting measures.
 - Plantations are to be designed to minimise the risk of fire.

WELLINGTON PLANNING SCHEME

- The modification of fuel levels to suitably minimise fire risk.

Undertaking further strategic work

- Actively support and contribute to completing the remaining Maffra related stages of the Flood Data Transfer Project with a view to amending the Wellington Planning Scheme to reflect these changes.
- Actively support the proposed West Gippsland Catchment Management Authority flood monitoring program for the Yarram district with a view to amending the Wellington Planning Scheme to reflect relevant findings.
- Prepare an overlay identifying land subject to salinity.
- Investigate options to address landslip.
- Develop a policy to promote water sensitive urban design in the Shire in relation to urban run-off.

Other actions

- Implement the Municipal Fire Prevention Plan.
- Implement the Municipal Domestic Wastewater Management Plan.
- Council/EPA to identify further candidate sites for the Environmental Audit Overlay.
- Use Integrated Catchment Management Plans, Salinity Action Plans, and Whole Farm Plans to promote responsible resource management in rural areas.