



**DISTRICT COUNCIL
OF CLEVE**

***BUSHFIRE PREVENTION
PLAN***

AMENDMENTS.....	2
1. INTRODUCTION	5
2. AIMS	5
3. OBJECTIVES	5
4. DESCRIPTION OF THE AREA	6
4.1 DISTRICT AND COMMUNITY ASSETS	6
4.2 LAND USE	6
4.3 LAND TENURE	7
4.4 TOPOGRAPHY	7
4.5 CLIMATE	7
4.5.1 RAINFALL	7
4.5.2 TEMPERATURE	7
4.5.3 WINDS	7
4.5.4 LIGHTNING OCCURRENCE	8
4.5.5 DAYS OF EXTREME FIRE DANGER	8
4.5.6 ACCESS AND WATER SUPPLIES	8
4.6 INFRASTRUCTURE	8
5. THE FIRE PROBLEM	9
5.1 FIRE HISTORY	9
5.2 FIRE CAUSE STATISTICS	9
5.3 FIRE HAZARD	9
5.3.1 HAZARD MANAGEMENT	10
5.4 FIRE RISK	11
5.5 RISK MANAGEMENT	11
6. DISTRICT FIRE THREAT	11
6.1 CLEVE SEE MAP 8.1.1	12
6.2 ARNO BAY SEE MAPS 8.1.4	12
6.3 DARKE PEAK SEE MAP 8.1.2	12
6.4 RUDALL SEE MAP 8.1.3	12
6.5 RURAL AREAS	12
6.6 PUBLIC LANDS	13
6.6.1 HAMBIDGE NATIONAL PARK	13
6.6.2 HINCKS NATIONAL PARK	13
6.6.3 DARKE PEAK/CARAPPEE CONSERVATION RESERVE	13
6.6.4 CLEVE CONSERVATION PARK	13
7. DISTRICT FIRE PREVENTION STRATEGIES	14
7.1 FIRE HAZARD MANAGEMENT	14
7.1.1 SECTION 40 NOTICES	14
7.1.2 INSPECTIONS	14
7.1.3 ROADSIDE HAZARD MANAGEMENT	14
7.2 FIRE RISK MANAGEMENT	15
7.2.1 WASTE DEPOTS	15
7.2.2 BURN OFFS	15
7.2.3 INCINERATORS	15
7.3 BUFFER ZONES	15
7.4 FUEL BREAKS	15
7.5 ACCESS	15
7.5.1 FIRE ACCESS	15
7.5.2 PROPERTY ACCESS	16
7.6 WATER SUPPLIES	16
7.7 PUBLIC EDUCATION	16
8. LOCAL ACTION PLANS	17
8.1 TOWNSHIP ACTION PLAN	17
8.2 RURAL AREA ACTION PLAN	17
8.3 PUBLIC LANDS ACTION PLAN	18
8.3.1 HINCKS NATIONAL PARK MAP 6.2	18
8.3.2 HAMBIDGE NATIONAL PARK MAP 6.2	19
8.3.3 DARKE PEAK/CARAPPEE CONSERVATION PARKS	19
CLEVE DISTRICT FIRE PREVENTION STRATEGIES	20
<i>FIRE HAZARD MANAGEMENT</i>	20
Rural Properties	20
Township Blocks	20
Council Land	20
National Parks	20

Action	20
<i>FIRE RISK MANAGEMENT</i>	20
Incinerators.....	20
Burning Off.....	20
Public Awareness.....	20
GLOSSARY	21
APPENDIX 1	23
<i>PERMIT REQUIREMENTS</i>	23
APPENDIX 2	24
<i>HAZARD REDUCTION TECHNIQUES</i>	24
APPENDIX 3	26
<i>FIRE PREVENTION MEASURES FOR CLEVE COUNCIL REFUSE DEPOTS</i>	26

1. INTRODUCTION

This plan has been prepared by the Cleve District Bushfires Prevention Committee in accordance with its statutory obligations under section 76 (1)(c) of the Fire and Emergency Act 2005 to prepare bushfire prevention plans for its area.

Due to its location on Eyre Peninsula with surrounding agriculture, National Park and topography Cleve is exposed to bushfire risk.

This plan provides an assessment of the district in relation to the threat from bushfires to district assets, provides strategies for risk minimisation and a works program for their achievement.

. A key object of this plan is to involve the public, both in the town and rural area, in assessing their own and the district assets and to implement Bushfire Prevention Strategies to protect them.

Progress towards the achievement of strategies through the works program will be reviewed at regular intervals through the year and the plan reviewed and updated as necessary on an annual basis.

2. AIMS

The Aims of this Plan are;

To protect life and reduce the impact of bushfires on property throughout the Cleve Council area.

To provide community bushfire protection whilst ensuring that proper land management principles are taken into account.

To educate the community in bushfire prevention.

3. OBJECTIVES

The Plan will:

- 3.1 Define areas of hazard and risk within the Council area.
- 3.2 Define the assets found within the Council area that are threatened by Bushfire.
- 3.3 Define fire prevention responsibilities for all sections of the community.
- 3.4 Define requirements and responsibilities for hazard management throughout the district.
- 3.5 Define requirements and responsibilities for risk management throughout the district.

- 3.6 Propose fire prevention actions throughout the district that have due regard for the environment and proper management principles.
- 3.7 Provide a detailed list of recommended prevention works, including priorities and costings, for townships, settlements and other major assets within the district.
- 3.8 Outline items to be included in district fire prevention education programs.

4. DESCRIPTION OF THE AREA

The District Council of Cleve covers an area of 4803sq kms, It includes the townships of Cleve, Arno Bay, Rudall, Darke Peak and Wharminda. The townships of Cleve and Arno Bay are the main populated areas. The streets are wide providing easy access.

There is a well developed shopping area located within the main street area of Cleve. Arno Bay also has a small shopping area in the main street.

4.1 DISTRICT AND COMMUNITY ASSETS

The assets identified below have been identified as being important to the township. The assets included are those that are defined as public assets (i.e. schools, halls and council properties) and privately owned assets that contribute significantly to employment and the socio economic profile of the Council Area.

- Primary Schools x 2,
- High School
- Kindergarten,
- Clubs and Hotels x 7
- Community Halls x 4
- Fire Station x7
- Old Folks Cottages,
- Nursing Home,
- Shopping area,
- Cleanseas Aquaculture,
- Post Office x 3,
- Churches x 5,
- ,
- Cemetery x 4,

Parks and Reserves:

- Service Clubs Reserves/Parks x 2,
- Yeldulknie Weir and reservoir
- Sporting Grounds with Buildings x 5
- Ticklebelly Hill reserve (endangered species)
- Turnbull Park
- National Parks/ Conservation Reserves x 7

4.2 LAND USE

The area is heavily involved in the grain and livestock industries so the surrounding areas are relatively low in native vegetation due to cropping

4.3 LAND TENURE

Land within the District Council of Cleve is vested mostly with freehold/leasehold owners comprising: farmers, graziers, aquaculture and township land owners. Public Lands and unopened road reserves

4.4 TOPOGRAPHY

The District Council of Cleve has vast areas of undulating land covered by fertile soils.. There are areas of steep hills which have light to heavy vegetation

4.5 CLIMATE

The Climate of the District Council of Cleve can be described as a temperate Mediterranean style climate with wet and cool winters and dry warm to hot summers although some summers can be very hot

4.5.1 RAINFALL

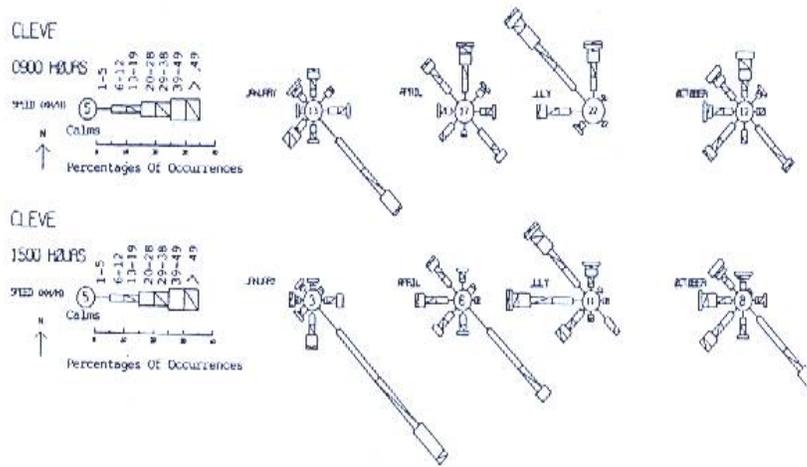
The annual rainfall varies from 320 mmpa to 425 mmpa. Most of the annual rainfall is recorded in a six month period from April to September. Rainfall during the period November to March is generally insufficient to sustain plant growth.. Full curing is reached from late November to mid January. This varies from year to year in accordance with crop rotation and seasonal rainfall.

4.5.2 TEMPERATURE

During the hottest month January, at Cleve the mean maximum temperature is 28.3C and the mean minimum is 15.6C. The coolest month is July when mean monthly maximum temperature falls to 14.8C and mean minimum 6.8C. Thus the seasonal range of maximum temperature is 13.5C while the seasonal range of minimum temperature is 9.2C. The diurnal range for January is 12.7C and for the coolest month 8.0C. Temperatures over 38C are recorded from November to April

4.5.3 WINDS

Mean frequencies of wind directions and speeds at Cleve are presented in the form of wind roses below. In summer, prevailing winds are from the south-east and rarely exceed 30km/hr, while in winter, winds are north to westerly and rarely exceed 40km/hr.



4.5.4 LIGHTNING OCCURRENCE

Thunderstorms and lightning strikes can occur at any time of the year, but the risk of fires starting is greater during summer.

4.5.5 DAYS OF EXTREME FIRE DANGER

Generally between November and April Typically, weather conditions on days of extreme fire danger are hot and dry with fresh north to northwest winds.

4.5.6 ACCESS AND WATER SUPPLIES

Access throughout the district is generally good. A network of bitumen roads link all townships. Access to rural dwellings is adequate with all weather roads servicing most properties. Areas of difficulty are Hincks and Hambridge National Parks, which is limited to four wheel drive vehicles. Evacuation is not a problem.

The area is reasonably serviced by S.A. Water. See MAP 4.5.

It should be noted that in the Hundred of Rudall pressure is low, but this is not a problem due to CFS procedures during suppression.

Fire fighting water is available from this network via hydrants. Most, if not all farms have adequate water from bores or dams, to protect life and assets, although in a drought situation this may change.

4.6 INFRASTRUCTURE

The identification and description of major roadways, railways etc., and how these are likely to be impacted on during a wildfire event.

Access through the Council area is generally good with a network of well maintained all weather roads

Access to private rural dwellings and sheds in this area is generally satisfactory, the majority of properties having graveled roads to and around houses, sheds etc.

The Council area has major infrastructure to consider. These include the high voltage major electricity lines, sub stations, tourist roads (Transport SA), above ground water mains, storage tanks, pump stations (SA Water), aerodrome, grain silos (Ausbulk), railway (Southern Rail)

5. THE FIRE PROBLEM

5.1 FIRE HISTORY

The Cleve District historically has been an area periodically prone to large or major fires.

Typically, the most destructive fires occur under extreme weather conditions.

Typically the most destructive fires in this zone occur on days with extreme weather conditions. The conditions that generally contribute to severe fires are;

- 100% grassland curing
- strong winds
- hot temperatures and low humidity

5.2 FIRE CAUSE STATISTICS

Description	YEAR									
Township										
Machine										
Burnoff										
Re-Kindle										
Camping										
Vandalism										
Welders etc										
Lightning										

5.3 FIRE HAZARD

Hazard is the fire fuel (ie vegetation) and takes into consideration such factors as quantity, arrangement and moisture content. Due to the diversity of land use in the Cleve Council, it is considered appropriate to rate hazard levels according to vegetation type.

In the rural area, fire hazard varies throughout the year due to pasture levels and cropping

The largest fire hazard is crops at maturity and large areas of grassland when 100% cured. Hincks, Hambidge National Parks are located in the south western and north western corner of the district and has a perimeter break, but because of its inaccessibility and large area of scrub is a hazardous area requiring a specific plan.

a) Remnant Native Scrub - High Risk

This category is the vegetation type with the highest fuel loading, being native mallee scrub. Hincks/Hambidge National Parks, Caralue and the Darke Peak Ranges conservation parks. Both conservation parks have access roads and are surrounded by good all weather roads.

b) Crops - Medium High Risk

Due to the seasonal rotation of crops within the district, a piece of land in one year may be considered a high hazard when a good crop is cured and ready for harvesting. However, the same land in the next year may be a low hazard if no crop is sown. It is important to note the dynamic nature of fuel loads (hazard level) in cropping areas as this understanding is crucial to effective fire prevention planning. Fuel loadings for a mature and cured crop range up to 14 t/ha and in extremely good years may exceed this.

c) Grazing - Low Risk

This category poses a low fire hazard as standing grasses are kept low due to the grazing, and any trees are scattered enough so that a fire will still behave as a low intensity grass fire. This type of vegetation does not produce much litter and as such, fires should not create any major difficulties to suppress. Fuel loadings in this category are below 5 t/ha.

5.3.1 HAZARD MANAGEMENT

Currently some local landowners undertake hazard management practices. Such practices include ploughing fire breaks around perimeter fences and dwellings, and hazard reduction by burning, grazing, slashing, mowing and chemical spraying. Grazing is the preferred method of hazard reduction for most farmers.

The Electricity Trust of South Australia carries out clearance work on overhead hazards through the Council area. This is done as often as required after inspections by ETSA personnel.

Transport SA has a policy of selective weed spraying as well as the main roadsides being graded as is deemed necessary.

National Parks and Wildlife SA undertake a Hazard Management Program within the reserves under their management. Each reserve has a Bushfire Prevention Plan with a works program for hazard management.

The District Council of Cleve undertakes roadside hazard reduction by slashing, chemical spraying or grading. The Council's properties are also well maintained throughout the year.

Fire prevention and safety is practiced by the majority of persons in the district and is probably the reason why this district experiences few major fires.

5.4 FIRE RISK

Fire risk is the likelihood or probability of a fire starting or escaping from a specific cause.

Lightning	Low
Farming Machinery	Moderate
Arson	Low
Camp Fires	Low
Burning Off / Rekindles	High
Incinerators	Low

5.5 RISK MANAGEMENT

Significant actions have been taken by various land managers to help manage or reduce the risk of a fire occurring (ie. minimise the causes) within the district.

During the Fire Danger Season, any burning requires a permit which is issued by an authorised officer under the Fire and Emergency Services Act 2005. Guidelines for the issue of such permits have been set by this committee and are reviewed annually. (Permit requirements Appendix 1). These guidelines provide permit requirements with which permit holders must comply. Risk management actions taken by various land managers include:-

- a) Private Land Owners - Periodic maintenance of exhaust systems on machinery and vehicles and inspection for bearing damage. Use of incinerators is minimised during the Fire Danger Season.
- b) Public Land Managers - ETSA insulators fitted to transformers have stopped the incidence of electrocuted birds falling to the ground and causing fires. ETSA has its own Authorised Office for the district. Australian Southern Railroad has its own Authorised Officer who advised Council on occasions when maintenance requiring permits is undertaken.

6. DISTRICT FIRE THREAT

Throughout the district winds associated with serious fire activity come from the north to north-west, however fire can impact from any direction. The time of

highest fire threat throughout the district is the harvest period, early November to early January, when crops are mature and fully cured.

6.1 CLEVE

Cleve is fortunate that it is almost completely surrounded and protected by the golf course on half the northerly approach, all of the western and half the southern approach. The aerodrome covers the remaining southern approach and all of the eastern approach, which due to their nature are kept mown and well maintained. The remaining northerly approach is light scrub but easily accessible. Fuel depots located in the south west industrial area are also protected. Minor spotting could or would occur, which would in a town of this size, be quickly dealt with by fire suppression crews.

Fuel reduction and mowing is undertaken by Council, golf club and hospital workers, therefore the threat to Cleve township is low.

6.2 ARNO BAY

The township and shack area are protected by the sea from the south, swamplands and mangroves from the west, silos and the Whyalla/Lincoln highway from the north and the golf course from the east. Vacant blocks are monitored by the local CFS and the Fire Prevention Officer. The threat to Arno Bay is low.

6.3 DARKE PEAK

The township of Darke Peak is protected by the railway and silos from the west., The southern and eastern approaches are protected by the golf course and parklands, which are maintained by the Golf Club and Council. The area of concern is the oval to the north, which is deemed a high life risk. To the north of the oval is cropping land. The oval and the sports complex which is well maintained with a swimming pool and underground oval irrigation system. The threat to Darke Peak is low.

6.4 RUDALL

Rudall is surrounded from the south, north and west by 10 metre roads, which act as a buffer zone. From the east it is protected by rail line and silos which maintain this area.

The major fire problems for Rudall would be the possibility of spot fires starting within the town blocks caused by fire burning in the area and from fire burning through the native vegetation and impacting on the dwellings/buildings. Fires to the north on days of bad fire weather would be the worst situation. A wind change to the west or south-west may cause a similar problem. The threat to Rudall is medium.

6.5 RURAL AREAS

This area incorporates by far the vast majority of the district being the largest area where cropping is preferred as the main land use. Fire threat within this

area is moderate for most of the fire season with high threat when crops are at maturity. The topography is hilly and undulating to flat, the fuel levels are variable depending on crop rotation and the time of year. These two factors usually result in moderate fire behaviour. However, fires would be difficult to suppress if there was extreme fire weather and the crops were at a high fuel load. Accessibility is good, as is water supply for asset protection.

Fire risk within this area is high, mainly during the grain harvesting period. The two main causes of fire during this period are lightning strike and machinery failure. Assets within this area are extensive, covering the entire district, the value being in the improved land where high value crops and stock are grown. The population is evenly spread throughout the area. The townships (6.1) are situated along the sealed highways which run through the area. Each town servicing predominantly open agricultural land, meaning homes and lives are at risk from fire.

6.6 PUBLIC LANDS

6.6.1 HAMBIDGE NATIONAL PARK

Section 364, Hundred of Hambidge (See map 6.2)

The park comprises 37 847ha of native scrub bounded by a perimeter access track/fuel break, 25 metres wide. The high risk in this area is a lightning strike within the park or grassland spot fires entering from outside fires. There is no access to the public.

6.6.2 HINCKS NATIONAL PARK

Section 365, Hundred of Hincks (See map 6.2)

The park comprises 66 285ha of native scrub. It is fenced on all perimeters as it is bounded by agricultural lands. There are two access roads across the park. These roads are not public roads, but are used by local farmers. The park is surrounded by a 25 metre access track/fuel break. The risk outside the area is pasture grasses and crops at maturity. This risk level varies according to crop rotation and seasonal conditions. The risks are a lightning strike or fire entering the park from fires outside the park.

6.6.3 DARKE PEAK/CARAPPEE CONSERVATION RESERVE

(See map 6.2)

The parks comprise 1700ha of scattered vegetation on granite outcrops ranging from 450 to 500 metres in height. These areas are open to the public. The risk of lightning strike is high.

6.6.4 CLEVE CONSERVATION PARK

The former E & W S reserve of 3000ha north of Cleve (now Conservation Park status), is part of what is known as the Cleve Hills, and reaches a height of 410

metres. There is heavy vegetation through the area and access is difficult. The risk again is lightning or fire entering from outside the area.

7 DISTRICT FIRE PREVENTION STRATEGIES

This section outlines and discusses the techniques that will be used to achieve the aims of this fire prevention plan on a district basis. These strategies are to be directed at the fire threat that impacts on the whole district.

7.1 FIRE HAZARD MANAGEMENT

7.1.1 SECTION 40 NOTICES

In order to reduce ground level fuels and therefore the level of fire hazard on private land within the district, particularly around assets, section 40 notices are to be served on landowners and occupiers by the Fire Prevention Officer, where the Fire Prevention Committee considers it necessary. This will be determined by inspection. Notices will only be issued after negotiations have failed. Thereafter Council may undertake any slashing or clearing required and the landowner will be charged accordingly.

7.1.2 INSPECTIONS

Each year at the August/September meeting of the District Fire Prevention Committee, brigades take the opportunity to submit a list of fire hazards which they consider require inspection by the Fire Prevention Officer. Further requests for inspection by the Fire Prevention Officer may be made by private citizens, to the Council or District Fire Prevention Committee or Fire Prevention Officer and other Council Officers. It is expected land owners and occupier's works will begin in September and be completed by Fire Danger Season. Compulsory hazard reduction of blocks where the owner/occupier has failed to comply, should be completed by Council's contractor by a date determined by the Fire Prevention Officer and Committee.

7.1.3 ROADSIDE HAZARD MANAGEMENT

All roadside hazard management must take into account proper land management principles and comply with guidelines set by the Native Vegetation Council. Removal of roadside fire hazards allows roads to be used as fire breaks and helps ensure the safe progress of fire vehicles and evacuation of residents under fire conditions and prevents the rapid spread of fire along roadsides.

Roadside hazard reduction refers to removal of hazardous materials between roadsides and boundary fence lines ie. dead trees, scrub, weeds and excessive growth of grass. Roadsides remain the property of Council and any hazard reduction is done with the approval of Council and Native Vegetation Management Branch on a needs basis and during normal maintenance procedure.

Roadsides under control of the Department of Transport undertake their own grading, slashing and spraying programs.

7.2 FIRE RISK MANAGEMENT

Fire risk management is the reduction of individual causes of fires throughout the district.

7.2.1 WASTE DEPOTS

Located in this area are four refuse dumps owned and maintained by Council. All are situated outside of the towns of Cleve, Arno Bay, Rudall and Darke Peak. These are not a cause of fires in this district, however to avoid the possibility of fires escaping from these areas in the future, management plans need to be continually reviewed by the District Council and Bushfire Prevention Committee and inspected by the Fire Prevention Officer quarterly. Fire prevention measures for all Council refuse depots in the district need to be maintained to the standard of the relevant plan as outlined by the Waste Management Commission for the Cleve District.

7.2.2 BURN OFFS

Fires escaping from burn offs is a minor risk in the district. The Fire and Emergency Services Act 2005, allows Council to control burn offs through the issuing of permits. Reasonable conditions for permits are set and may be amended annually to suit local conditions. Permit conditions will be enforced by Permit Officers and non compliers will be prosecuted by the police.

7.2.3 INCINERATORS

New incinerators are built to a standard therefore causing no threat.

7.3 BUFFER ZONES

The District committee believes specific buffer zones are not required in the district as no major risks exist. However it should be pointed out that Council has an extensive mowing and slashing program already in place.

7.4 FUEL BREAKS

The District Committee monitors in its ongoing program the need for specific fuel breaks. Existing fuel breaks are maintained by Council.

7.5 ACCESS

7.5.1 FIRE ACCESS

The provision of safe access is a vital requirement for the movement of fire vehicles and evacuation of residents and is critical to the early location and suppression of fires. The Cleve district, being an agricultural area, is serviced by adequate public roads giving access to all areas and these are supported by generally good farm roads and tracks.

Access to the Hincks/Hambidge National Parks is limited, but evacuation is not a problem as there is no human life there.

7.5.2 PROPERTY ACCESS

Access to private rural dwellings and sheds in this area is generally satisfactory because being an agricultural area, access to buildings is required for the movement of agricultural machinery, tractors and trucks along tracks and through gateways, within the vicinity of buildings.

7.6 WATER SUPPLIES

The total area covered by this Fire Prevention Plan is predominantly rural and as a result many of the dwellings in the area are farm houses and associated buildings, in some instances close to towns, which by necessity have large capacity water supplies (ranging from 20,000 litres to 90,000 litres) available within their close proximity, to supply water for livestock and general domestic use. These supplies are maintained by pumps driven by various energy supplies. Wind, fossil fuels, electricity, solar, for example, and are generally more than adequate as a water supply for use in the protection of assets.

Most rural landholders in the area have portable petrol or diesel driven pumps capable for use, in the event of the electricity supply being interrupted, as a back up for the protection of life and assets. The community does not require a standard.

7.7 PUBLIC EDUCATION

Public education used properly can be a powerful help to fire prevention, incorporated with the high awareness of fire prevention already in the district. Education program to be conducted in September/October and any other times deemed necessary by the Committee. The following issues will be covered during various educational programs. The residents of each township and settlement in the district should be advised of the existence of this plan. Proper use of incinerators, controlled burning around assets, permit burning, clearance of overhanging trees around assets, 20 metre home buffer zones, farm fire protection, the home as a refuge, the availability of literature regarding fire safety/prevention. The importance of a well maintained and functioning portable petrol or diesel driven pump (or pumps) that can be used as a back up for protection of life and assets in the event of the electrical supply being interrupted. These issues are to be reviewed annually by the committee and may be changed accordingly. Education may be via road signs, newsletters (schools), Council information pamphlet, public meetings and any other means the committee deems necessary or appropriate. Fire Danger signs are erected by the Council, at the entrance points to the district on the main highway roadsides for the duration of the Fire Danger Season. These signs are erected before Fire Danger Season and removed at the conclusion of Fire Danger Season.

8. LOCAL ACTION PLANS

8.1 TOWNSHIP ACTION PLAN

All towns within the district are serviced by the E & W S Department and the water supply is deemed adequate. Access in and around the townships is excellent and the road network is sealed. Council has in place a program of slashing and mowing. Regular upgrading of this program is ongoing. The Fire Prevention Officer carries out regular inspections then after discussion with the committee and local brigades, implements the work in Councils work program. Should any hazard exist, the Fire Prevention Officer contacts the owner of the land. eg. private blocks within a township, fuel depot owners or the public in general to discuss the possible hazard. Should negotiations break down the Fire Prevention Officer will issue a section 40 notice, Council workmen will then clear the hazard.

8.2 RURAL AREA ACTION PLAN

These plans are to be completed by the District committee in association with local brigades.

A) Community Assets

All assets listed in 6.6 have been covered No assets other than individual farms are located in the rural area.

B) Fire Hazard Management

The fire hazard within this area is crops and pasture grass when fully cured and remnant native vegetation. See map 6.2.

A minimum 20 metre fuel modified zone on all sides of assets in the open agricultural areas is required. Greater distances may be required in some cases but could be dependant on Native Vegetation approval.

Properties in this area will be inspected annually by the Fire Prevention Officer and/or brigades and Section 40 notices served by Council if required. Re-inspections and action may be taken.

C) Fuel Breaks/Buffer Zone

The provision of farm fuel boundary breaks is recommended in the area. 4 metres to be the minimum width, and a maximum height of 100mm - A Section 40 notice will only require the above if deemed necessary by the Committee. Most farmers practice this presently, particularly where farmland abuts townships.

D) Fire Risk Reduction

Fire risk within this area is moderate, mainly during the grain harvesting period. The two main causes of fire during this period are lightning and machinery failure. The risk of lightning strikes causing fire cannot be altered by human input. The risk of fires caused by machinery failure can be reduced. This can only be done by education regarding maintenance of

machinery. This committee considers machinery maintenance procedures to be of a satisfactory standard but re-education prior to the Fire Danger Season is important. This shall be done via Bushfire Prevention Committee newsletter.

E) Access

Access throughout the area is satisfactory.

F) Water Supplies

The area has adequate water supply for asset protection.

G) Refuge Area

The family home is the primary refuge place in this area with townships being the next available safety point.

8.3 PUBLIC LANDS ACTION PLAN

Any plans to be completed by landowners/managers.

8.3.1 HINCKS NATIONAL PARK MAP 6.2

A) Community Assets

Hincks itself is considered an asset because it is remnant native vegetation and is protection for native fauna.

B) Hazard Management

National Parks and Wildlife Service are preparing their own bushfire prevention plan for the area. A copy of this plan will be included as an appendix when it becomes available.

C) Fuel Break/Buffer Zone

Hincks is surrounded by a 20 metre break with an additional 5 metre track around the boundary.

D) Fire Risk Reduction

There is no specific risk within the area.

E) Access

Besides the 5 metre track there are two internal roads in the park.

F) Water Supplies

There is no water supply within the park.

The park is not open to the public.

8.3.2 HAMBIDGE NATIONAL PARK MAP 6.2

A) Community Assets

Hambidge itself is considered an asset because it is remnant native vegetation and is protection for native fauna.

B) Hazard Management

National Parks and Wildlife Service has its own bushfire prevention plan for the area. A copy of this plan will be included as an appendix when it becomes available.

C) Access

Again a 25 metre fuel break around the park.

D) Fire Risk Reduction

There is no specific risk within the area.

E) Access

Access to some sections of this area is possible via farm gates from adjoining properties, but general access by large numbers of vehicles or heavy vehicles, is not wise or safe.

F) Water Supplies

There is no water supply within the park.

Hambidge is also not open to the public.

8.3.3 DARKE PEAK/CARAPPEE CONSERVATION PARKS

- A) The parks are much smaller and open to the public, although the amount of visitors is small. National Parks and Wildlife Service are preparing plans for these parks which will then become an appendix to this plan.

CLEVE DISTRICT FIRE PREVENTION STRATEGIES

FIRE HAZARD MANAGEMENT

Rural Properties

- ☞ All rural properties to have adequate fire breaks or fuel reduction.
- ☞ Priority to be given to property assets, eg homesteads, sheds and other structures.
- ☞ Minimum 20 metre break and fuel reduction on north and west sides where practicable.
- ☞ Cropped land and ungrazed higher risk areas to have adequate breaks.
- ☞ Rural land adjacent to towns to have adjoining fire breaks or fuel reduction.
- ☞ Proper landcare management to be observed at all times.
- ☞ Breaks to include either ploughing, slashing, burning, chemical knockdown or adequate grazing to reduce fuel to acceptable level.

Township Blocks

- ☞ All blocks to have hazards reduced to acceptable level.

Council Land

- ☞ Perimeters of towns to be slashed where practicable.
- ☞ Rubbish dumps to have suitable fire breaks constructed.

National Parks

- ☞ Most National Parks adequate - liaise closely with N.P.W.S.

Action

- ☞ Council to inform landholders/occupiers of their obligations each year with Council rate notices.
- ☞ Those who fail to take adequate measures of hazard reduction to be notified by fire prevention officer, or served with a section 40 notice.

FIRE RISK MANAGEMENT

Incinerators

- ☞ Only CFS approved incinerators to be used during the fire danger season.
- ☞ This committee to set acceptable standards for this district.

Burning Off

- ☞ This district has a permit system operating satisfactorily.
- ☞ Observe permit guidelines - review district permit rules annually.

Public Awareness

- ☞ By raising the level of public awareness we can improve our fire prevention measures considerably.
- ☞ Any available means can be used to raise public awareness. eg press releases and fact sheets are available from CFS Headquarters. Circulars in local newspaper, Council newsletter, Council rates.
- ☞ Topics may vary with each season. Eg Winter - household dangers, heaters etc. Spring - preparation of fire breaks for coming Fire Danger Season. Summer fire safety on headers and other machin

GLOSSARY

Assets

Land use, constructions and developments of both a physical and cultural nature upon which individuals or the community generally place value.

Bushfire

The term is not restricted to forest or scrub fire but is generally considered to mean any fire in the open which is or was out of control.

Bushfire Prevention

Any reasonable action that may be taken in the country area of the State:-

- a) To reduce or eliminate the risk of outbreak of bushfire.
- b) To prevent or inhibit 1) the spread of any bushfire, 2) any increase in the intensity or seriousness of any bushfire. Or
- c) To mitigate the effect of any bushfire.

Fire Danger Season

That period of the year within which restrictions on the use of fires are applied, as set by the CFS Board.

Curing

The degree of drying out of fire fuels measures in % dry.

Fire Prevention Officer (FPO)

A person appointed by Council and suitably qualified to undertake the fire prevention role under the Fire and Emergency Services Act 2005.

Fire Risk

Fire risk refers to the relative chance, or probability, of fires starting and is determined by the presence or absence of causative agencies which may result in the ignition of fire.

Fire Suppression

All action taken to detect, control and extinguish fires.

Fuel Reduction

Treatment of fuel that reduces the risk and spread of fire by reduction of available fuels, generally achieved by :-

- a) Prescribed burning;
- b) Mechanical removal;
- c) Chemical Treatments.

Hazard

Hazard is the fire fuel (ie vegetation) and takes into consideration such factors as quantity, arrangement and moisture content. Hazard, therefore, includes such things as a paddock of wheat, a block of forest or long grass on a roadside but only at such times as the flammable material has dried out sufficiently to ignite and burn.

Threat of Fire

The total probability of exposure of assets to fire in a bushfire situation.

APPENDIX 1

PERMIT REQUIREMENTS

During the Fire Danger Season every year, it is prohibited to burn grass and or scrub without a permit. Permits for burning off will be issued after a certain time frame and will be subject to the following conditions:-

- 1) That the land immediately around the land to be burnt off, must be cleared of all flammable material to a distance of at least four metres;
- 2) That there shall be sufficient persons present who are able to assist in controlling a fire, at the site of the fire, from the time it is lighted, to the time it is completely extinguished;
- 3) That the fire shall not be lit before 12 noon;
- 4) No burning on Saturday/Sunday or Public Holidays;
- 5) That the fire must be lit from the leeward side of the land to be burnt off, to establish a protective break and then may be lighted from the windward side of the land;
- 6) That the holder of the permit must, not more than 7 days and not less than 2 hours before the fire is lighted, give notice of his or her intention to light the fire:-
 - a) To any person who owns, occupies or is in charge of land adjoining the land to be burnt off;
 - b) To the Council office (08) 86282004.

When advising the Council Office of your intention to burn, you will be required to give the permit number, Section, Hundred, area to be burnt and type of vegetation.

The permits will automatically be cancelled if the permit has been issued for a Total Fire Ban Day.

Any other conditions that may be considered appropriate by the local Authorised Permit Officer with guidelines established by the District Bushfire Prevention Committee. These guidelines will be reconsidered each year.

APPENDIX 2

HAZARD REDUCTION TECHNIQUES

A) Slashing

The most common form of fuel reduction on road reserves and private property.

Advantages

- cost effective
- quick and relatively simple
- promotes growth of green summer grasses
- can leave habitat areas and regeneration areas for native species
- good for small sensitive areas.

Disadvantages

- if done too early, can lead to second cut and further cost
- attention required annually
- reduces habitat for fauna.

B) Bulldozing

An effective method of removing fuel in almost any terrain. Must useful in hilly country or densely vegetated areas. Mostly used for site preparation or fire break construction to allow annual slashing programs.

Advantages

- can modify (complete removal or thin) fuel on most terrain
- allow annual slashing.

Disadvantages

- expensive
- creates soil disturbance and possible erosion
- aesthetically displeasing.

C) Prescribed Burning

A very effective fuel modification technique, particularly when used over broad expanses. It is important that burning cycles are linked to reproductive cycles of plants.

Advantages

- cheap
- does not destroy habitats
- effective in producing large areas of fuel reduction in one hit.

Disadvantages

- dependant on appropriate weather conditions
- risk of fire "escaping" and causing damage.

D) Ploughing

Removal of all vegetation and exposing bare earth in a strip to remove/bury fuel. Main application is along farm boundaries and road reserves.

Advantages

- forms a bare earth firebreak
- clumps of bushes/trees can be left
- can be done once for the year.

Disadvantages

- may aid soil erosion
- poor habitat for fauna
- annual attention needed.

E) Chemical Usage

An effective method of killing vegetation. Effective for creating strips of reduced fuel, eg. roadsides, fence lines.

Advantages

- not affected by terrain
- quick, cost effective.

Disadvantages

- may damage crops/ornamental plants (spray drift)
- chemical side-effects, public liability
- may lead to soil erosion.

F) Grazing

Cheap and effective fuel modification technique, especially over broad acres.

Advantages

- cheap
- effective in all types of terrain.

Disadvantages

- fencing required
- reduces selective plants that are attractive to stock
- does not remove litter layer.

APPENDIX 3

FIRE PREVENTION MEASURES FOR CLEVE COUNCIL REFUSE DEPOTS

1. The construction of a fire break around the inside of the boundary fence to at least 4 metres in width and being maintained free of all flammable material throughout the fire danger season.
2. The construction of a fire break around the outside of the litter control fence to at least 4 metres in width and being maintained free of all flammable material throughout the fire danger season.
3. The area inside the litter control fence being maintained free of flammable vegetation.
4. The area inside the boundary fence being fuel reduced prior to the commencement of the fire danger season.
5. This Council does not burn.
6. Outside of the fire danger season only the Works Manager has the authority to authorise the burning of any refuse depots in the Cleve district.

