



## Our Corporate Values

- Community Focus
- Can-do Attitude
- Continual Improvement
- Excellence
- Team Work
- Accountability
- Active Communication

## ENVIRONMENT & SUSTAINABILITY ADVISORY GROUP MEETING

Date: 27 March 2018  
Time: 3.30pm – 4.30pm  
Council Chambers

### 1. MEETING OPENED

The Chair opened the meeting and acknowledged and paid respect to the Ngarluma people both past and present, traditional custodians of this land.

### 2. ATTENDEES

Ryan Hall	Director Development Services	City of Karratha (Chair)
Simon Kot	Director SP & Infrastructure	City of Karratha
Jerom Hurley	Manager Planning Services	City of Karratha
Brian Wall	Manager Infrastructure Services	City of Karratha
Morne Hattingh	Manager City Services	City of Karratha
Cr Grant Cucel	Deputy Mayor	City of Karratha
Mike Muller	Parks & Gardens Coordinator	City of Karratha
Dr Ty Hibberd	Community Member	
Dr Ken Mulvaney	Community Member	
Vicki Long	Community Member	
Geraldine Burgess	Community Member	
Geoff Passmore	Guest	Parks & Wildlife Service
Carol Rowston	Guest	Parks & Wildlife Service

### 3. APOLOGIES

Cr Peter Long	Mayor	City of Karratha
Amanda Berry	Community Member	
Laurinda Timmins	Community Member	

### 4. BUSINESS ARISING FROM PREVIOUS MEETING

Nil

### 5. AGENDA ITEMS

#### 5.1 Welcome/Introduction and Terms of Reference

Welcome to the newly appointed members for the 2018/19 Environment & Sustainability Advisory Group. At the February 2018 Ordinary Council meeting, Council adopted (Council resolution # 154010) the appointed members and the tabled Terms of Reference.

#### 5.2 Review of Adopted Environmental Strategy (2013)

*Presentation by Jerom Hurley, Manager Planning Services, City of Karratha – Environmental Strategy Review.*

The objective of the Environment and Sustainability Advisory Group under the adopted Terms of Reference is to provide advice to Council on the review of Council's Environmental Strategy (2013). The ESAG should advise Council on a way forward for this review.

**The Environment and Sustainability Advisory Group resolved to defer its advice to Council on the review of the City of Karratha Environmental Strategy (2013).**

- **A copy of the Environmental Strategy is attached. ESAG members are to provide comments on the scope of the review prior to the next meeting.**

#### 5.3 Bushfire Risk Management Plan (BRMP)

*Presentation by Geoff Passmore, Operations Manager, Parks & Wildlife Service Pilbara Region and Craig Watts, Manager Regulatory Services, City of Karratha – Fire Mitigation Works within National Parks and the Draft Bushfire Risk Management Plan.*

Local Governments are required to develop a Bushfire Risk Management Plan to detail bushfire mitigation and prevention measures. The City's BRMP has been developed in consultation with landowners and meets the standard required by the Office of Bushfire Risk Management. Mitigation works will follow DFES and DCBA processes.

**The Environment and Sustainability Advisory Group resolved to advise Council that it supports the adoption of the Bushfire Risk Management Plan.**

- **It was noted that individual members may send through comments. Vicki Long has emailed comments and are attached herewith.**

#### 5.4 Weed Management – Karratha Hills (Item by Vicki Long)

The Karratha hills, until recently have been a remarkable example of weed free vegetation in close proximity to the town site. Weed free vegetation within close range of any development, and in the Pilbara generally, being largely pastoral/mining, is of high conservation value – it's rare! As such the vegetation of the hills is a valued asset for local residents, tourists and the City itself. The impact of the invasion of weeds is not generally well understood and the public generally acknowledge their lack of knowledge in this aspect.

1. How are weeds currently being managed along the Yaburara Heritage Trail? This is probably well in hand.
2. How are negotiations going with the Mountain Bike Club regarding management of erosion and weeds along their trails. I believe someone in the City was negotiating with the Club. I noticed for the first time last week buffel grass along the MB trail I was walking on in a location where it has not appeared before.
3. How ESAG can promote understanding of weeds and how we can help the MBC and the City manage weeds.

**The Environment and Sustainability Advisory Group resolved to advise Council that weed management is an environmental issue that should be receiving attention, with weed management along the Yaburara Heritage Trail being an example.**

#### 5.5 Climate Council Cities Power Partnership (Item by Amanda Berry)

The Climate Council brings a unique set of skills that enable us to build and deliver the Cities Power Partnership program and ensure that it differs from existing programs for local councils.

The reasons to join:

- Join the movement of towns and cities across Australia taking action to celebrate and accelerate emissions reduction and clean energy successes.
- Access to knowledge hub, webinars, domestic and international experts, training and power analytics

- Support and information on funding partnerships and opportunities
- Marketing reach on City of Karratha's approach to sustainable development
- Making a positive contribution to the building momentum of sustainable change in the Pilbara

The effort to join:

- Select 5 actions to pledge commitment to (which already align with the draft City energy efficiency plan). Timeframe: 6 months from the time of signing up.
- The City will then have resources and 'buddy' councils to share knowledge with on delivering these outcomes.
- Report on progress. Timeframe: 6 monthly from pledge.
- Identify the City organisational role responsible for:
  - a) communicating the pledges;
  - b) planning the pledges;
  - c) implementing the pledges;
  - d) operating the pledge outcomes;
  - e) reviewing the pledge outcomes with any corrective or preventative actions and improvements; and
  - f) reporting on the pledge outcomes.

**The Environment & Sustainability Advisory Group resolved to advise Council that it should consider to apply to become a partner to the Climate Council's Cities Power Partnership Program as part of the third intake for the Program.**

## 6. NEXT MEETING

- Meeting Dates    23<sup>rd</sup> May 2018  
                              22<sup>nd</sup> August 2018  
                              21<sup>st</sup> November 2018

Close meeting: 5.30 pm

## City of Karratha Fire Management Plan

### SUMMARY of Points for Consideration by the City, especially with regard to Biodiversity and the Environment.

- Within the City of Karratha we have 5 Priority Ecological Communities. **ALL 5 of these contact fire sensitive species (Includes Roebourne Plains grass, the chenopod communities, rockpile sensitive species such as *Terminalia supranitifolia*, *Acacia coriacea*, *Flueggea virosa* etc).** Even control burns will destroy these PECS – therefore fire should NOT be planned for Roebourne grass land areas, chenopod areas, rockpile areas.
- The **City of Karratha's Local Biodiversity Strategy Desktop Study** identifies **areas of High Priority for Biodiversity** around each of the towns within the City. These need to be acknowledged by the City and fire burns kept to a minimum within them.
- Prior to any burning the area should be assessed for its biodiversity value – especially for fire sensitive species which, once lost to fire will never recover.
- Prior to burning weeds should be documented. If the area is of high biodiversity then weeds will NOT be abundant. Any weeds present should be removed PRIOR to burning to prevent a mass of germination following the fire.
- It would be beneficial to know details such as **timing for burns, how often burns are scheduled for** (burns should NOT occur unless all species are mature enough and have produced at least one season of seed load) and **the science behind these decisions**.
- Different plants respond differently to hot and cool fires. Therefore when you are driving through the Pilbara countryside you will find vast areas of the somewhat unattractive kanji bush (*Acacia pyrifolia*) or two nerved wattle (*Acacia bivenosa*) (hot fire) or *Acacia arida* (cool fire) – and some of our iconic species – mulga for example (*Acacia aneura*) are disappearing all together.
- Fire affects different land systems in the Pilbara very differently, having more impact on some than others. We need to know the City has taken this into account.
- DBCA need to provide evidence of monitoring of fire and the results for ALL land systems in the Pilbara.
- We need to know more about our **fauna** species before we burn. For example there has NEVER been a fauna trapping exercise done in the Karratha hills. Following the Leisureplex fire, little red Kaluta and spinifex hopping mice (small mammals) were found in Baynton and Nickol gardens being mauled by cats and dogs. Have any returned – what do we have present in our local area and what will fire destroy?
- I think we can successfully manage fire to keep City of Karratha residents safe but I do believe the public need to feel confident that the surrounding local environment (flora and fauna) are not under threat of extinction from the area.

### SPECIFIC FIRE MANAGEMENT PLAN COMMENTS:

#### 1.2 Aims and Objectives

**Bullet point 2:** "Document the process used to identify, analyse and evaluate the risk, determine priorities and develop a plan to systematically treat the risk:

**Question:** Are the risks assessed against State wide criteria? Fire management needs to be assessed against Pilbara conditions when assessing the risk to biodiversity. Conditions in the Pilbara – erratic and low rainfall, particular phenology of native species (ie some very fire sensitive), PECS, weeds and how they react to fire need to be considered. Pilbara specific conditions will not be considered in State criteria.

**Bullet point 6:** “Monitor and review the implementation of treatments to ensure treatment plans are adaptable and risk is managed at an acceptable level.

**Question:** How will fire treatment be monitored? Who will monitor the impacts of the fire treatments? How will its impact on the environment itself be monitored? Against what baseline information? What Priority flora, fauna, PECs etc will be removed? How will their recovery be monitored?

**Question:** Will some unburnt vegetation be maintained in the landscape to maximise vegetation composition and structural diversity, provide refuge for fauna and to assess post fire plant mortality rates against.

**Question:** Does the “monitoring” include considering the number of times “control” burns have got out of control in the area in recent years?

**Question:** Who will be the body responsible for monitoring the impact of fire on vegetation and how regularly a particular land system / area can be re-burnt?

**NOTE a recent paper by Judith Harvey (DBCA – 2017) in Aust Journal of Botany on long term studies of post fire vegetation in arid hummock grass and shrubland indicates that it takes 15-20 years for vegetation to fully recover (and some species will never recover).**

### **Section 3: Establishing the Context**

#### **Section 3.1.1**

#### **Council’s approved Strategic Community Plan 2012-2022**

Our Program: 3.a.1      Protect and enhance the natural environment, open spaces and waterways.

**Comment:** Fires affect different types of land systems and environments in different ways and have cumulative effects over time – some of which are detrimental to those environments that cannot sustain fire. By repeating widescale and repeated burning you are destroying the some of the natural environment so this does not fit with the Strategic Community Plan.

Our Services: 3.a.1.1      Monitor and minimise the environmental effects of active fire.

**Question:** What monitoring has ever been done? Monitoring of the impacts of fire burns – both bushfires and control burns over time within different environment/ land system types needs to be conducted on a regular basis. Please supply evidence that this has been done for the different land systems in areas where fire burns are prescribed for.

#### **3.1.1 Population and Demographics**

It is a widespread belief that TOs used fire to “manage the land” – but the way they did this varies significantly to what is practiced in most “control” burns. The traditional way of burning, described from authentic witnessed sources (eg Last of the Nomads; and the diaries of early explorers) is that they burnt very small patches of vegetation only. Essentially it is generally agreed that no one really knows how fire “management” came about and the methods used by the original Aboriginal people.

WA flora had evolved to cope with this pre-European fire regime (it was different again before the arrival of TO’s – reference Peter Latz – Bushfires and Bush Tucker) but it cannot evolve fast enough to cope with today’s fire regimes. Tim Flannery also argues that the Aboriginal people themselves changed the vegetation through fire over time but once European settlers arrived and started to burn on a wide scale, changes were irreversible. Fire will inevitably change landscapes and vegetation. How much depends on

- Species present
- Intensity of fire
- Frequency of fire
- Seasonality of fire

But it is already very obvious if one is well acquainted with the Karratha Hills. These were burnt extensively 3 years ago in response to a fire incident. A lack of summer rainfall the growing season following this fire resulted in a lack of regrowth. A significantly large portion of the hill landscape was bare of vegetation. The following year, 2017 we had well above average rainfall. This has resulted in topsoil and fine gravels being washed from the bare slopes, causing erosion channels down the slopes and depositing this material down hill. Some regrowth of *Triodia* occurred that year and many opportunistic annual species appeared. Annuals are just that – they occur for 12 months while they grow, flower and seed, then they die. Summer 2018 has seen below average rainfall and the small *Triodia* hummocks are struggling to survive. Annuals were sparse. The weed kapok is rapidly infesting the slopes (aided by the many bike trails being made).

Until the fire a few years ago, the Karratha Hills were of very high conservation significance having virtually NO weed infestations, having PECS in the rockpiles and representing vegetation as it has been for 100’s of years. In the space of a few years we, the City are changing and degrading this.

### 3.2.3 Vegetation

This is a simplistic, generic description of vegetation which ignores conservation values specific to the City of Karratha.

For example : “The coastal strip consists of grasslands and low open woodlands “ – this does not recognise that the **coastal strip in fact contains one Priority 1 PEC, and 2 Priority 3 PECs** which are ONLY found in this vicinity. These have been proved to respond negatively to fire.

The **section fails to recognise the rockpile PECS** found on the Burrup and Karratha hills – which consist of **fire sensitive** species.