



**OPERATIONAL ORDER**  
**SPECTACLED**  
**FLYING-FOX RELOCATION**  
**OPERATIONAL PERIOD**  
**June to July 2020**



**REVEGETATION CONTRACTORS**

Making the Environmental Difference

Version (iii)

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# Authority

This Operational Order has been prepared by Revegetation Contractors on behalf of the Cairns Regional Council Flying-fox Relocation Management Group.

This Operational Order has been developed to implement deterrent measures to disperse and permanently relocate a nationally important population of Spectacled Flying-fox (*Pteropus conspicillatus*) located at 151 Abbott Street, Cairns, Queensland (see EPBC Act referral 2019/8424).

Approval for Cairns Regional Council to undertake this action was made by Andrew McNee, Assistant Secretary, Environmental Approvals Division, DAWE on the 15<sup>th</sup> May 2020 utilising sections 130(1) and 133(1) of the Environment Protection and Biodiversity Conservation Act 1999 (Cth).

This approval remains in effect until the 1<sup>st</sup> October 2024

# Document Control

This Operational Order is a controlled document. The controller of the document is the Chair of the Cairns Regional Council Flying-fox Relocation Management Group. Any proposed amendments to this plan should be forwarded by email to:

## Amendment Control

Any changes to the intent of the document must be endorsed by the Cairns Regional Council Flying-fox Relocation Management Group.

## Amendment Register

Version	Issue Date	Comment	Author	Date
Draft	9/6/2020	Draft submitted to Cairns Regional Council		9/6/2020
Draft	24/6/2020	Draft submitted to Cairns Regional Council		24/6/2020
i	29/6/2020	Revised & released by CRC		29/6/2020
ii	01/07/2020	Updated to include Decision Matrix		01/07/2020
iii	01/07/2020	Updated to include lessons learnt from rehearsal on 1/7/2020. Timings for operational days to commence at 0400 instead of 0500 and finish by 0630. Update Wildlife Carer duties. Include another rehearsal on Fri 3/7/20.		01/07/2020

# Glossary

AAPA	Australian Airline Pilots Association
AAWHG	Australian Aviation Wildlife Hazard Group
ASA	Air Services Australia
CASA	Civil Aviation Safety Authority
CRC	Cairns Regional Council
DAWE	Department of Agriculture Water and the Environment
DEHP	Department of Environment and Heritage Protection
DES	Department of Environment and Science
DoEE	Department of Environment and Energy
NRA	Natural Resources Assessments Pty Ltd
PTCZ	Primary Tree Clearance Zone
SFF	Spectacled Flying-fox

# CONCEPTS

## Command, Control and Coordination

Multi-agency incident management requires a clear understanding of the differences between command, control and coordination. The following definitions which are widely accepted in Australia have been adopted in this plan.

### Command

The direction of members and resources of an agency in the performance of that agency's role and tasks. – Command relates to agencies and operates vertically within an agency. – Authority to command is established in legislation or by agreement within an agency.

### Control

The overall direction of incident management activities in agreed situations. – Control relates to situations and operates horizontally across agencies. – Authority for control is established in legislation or in an operational plan, and carries with it the responsibility for tasking other agencies in accordance with the needs of the situation.

### Coordination

The bringing together of agencies and resources to ensure an effective response. It is primarily concerned with the systematic acquisition and application of resources (organisational, personnel and equipment) in accordance with the requirements imposed by a incident or situation. It operates vertically within agencies as a function of the authority to command, and horizontally across agencies as a function of the authority to control.

# DUTY STATEMENTS

## OPERATIONS

- Coordinate and direct operational activities in accordance with Incident Action Plan (IAP).
- Isolate and contain scene.
- Establish and maintain inner and outer cordons.
- Implement IAP
- Establish staging areas.
- Brief personnel and assign tasks.
- Manage/supervise operations using trained & competent staff.
- Coordinate external agencies.

## PLANNING

- Develop incident response objectives & planning
- Develop IAP.
- Conduct ongoing situation awareness.
- Liaise with:
  - Specialist support.
  - Other responding agencies.
- Determine resource needs.
- Prepare communications plan.
- Prepare a plan for the recovery and return of resources.
- Rehabilitation of incident area.

## COMMAND

- Responsible for incident command, control & coordination.
- Develop & maintain situational awareness.
- Establish command and lead.
- Establish Forward Command Post.
- Assign tasks to trained and competent personnel.
- Manage risks and ensure efficiency.
- Manage media.
- Provide Situation Reports (SITREPS).
- Ensure log of incident is maintained.
- Ensure post incident Debrief.
- Ensure post incident Evaluation Report.

## INTELLIGENCE

- Receipt, collation, evaluation, analysis and dissemination of information.
- Gather, collate & display information about the incident including:
  - Site plan.
  - Issues
  - Deadlines.
  - Hazardous materials.
  - Site plans and/or maps.
- Ensures security of all documentation

## ADMIN & LOGISTICS

- Acquiring, recording & tracking of resources in support of incident management.
- Identify personnel, resource & equipment including PPE requirements.
- Ensure equipment is only used by trained personnel.
- Obtain specialist support if required.
- Maintain records of personnel, resources & equipment status.
- Provision of food/refreshments.
- Installation and maintenance of communication equipment.
- Arranging medical assistance if required.
- Process incident documentation.

## **1. SITUATION:**

The progressive loss of roost trees from surrounding areas of the Cairns CBD and across the wider Cairns landscape has increased the reliance of Spectacled Flying - foxes (SFF) to roost in a small number of trees in the vicinity of the Cairns City Library. According to Cohen (2017) there are approximately 3,000 – 4000 Spectacled Flying - foxes (SFF) within the Cairns CBD. The majority of these SFF roost in the four fig trees surrounding the Cairns library. This location remains the preferred site for the species' daytime camp.

The reduction in available 'spill over' trees has resulted in a more intensive and persistent use of the primary roost trees surrounding the library. This increase in roost tree use at the library is causing more frequent and sustained damage to the trees. Over time, this reduces the available canopy area that can be used by the SFF colony. Further, the damage is reducing the health of the trees, which has devolved risks to public safety (eg falling branches).

The high usage of the limited number of trees by SFF is progressively decreasing the health of the trees and contributing to the further loss of roosting space. This deterioration in tree health/roost quality will likely continue unless the demand on the roost trees is reduced (by the SFF population reducing or more roost trees becoming available) and the trees are permitted adequate time to recover.

The health of roost trees at the library site, and therefore viability of the site as an SFF roost, is diminishing. The continuation of periodic SFF pup mortality events is a risk. In the absence of information to the contrary, the current situation involving high rates of pup mortality is considered likely to be interfering with the recovery of SFF. In response to these circumstances, Cairns Regional Council (CRC) seeks to change its strategy of managing the Cairns City SFF colony to active management that encourages the flying-foxes to move from the Cairns City FF colony to a suitable location outside of the Cairns CBD (**Figure 2**). The relocation of the colony to a more suitable location will seek to reduce pup mortality and thereby contribute to the objective of avoiding a long-term decline in the national population of the species.

## **2. MISSION:**

To relocate the Cairns City SFF colony from the Cairns City Library to the Cairns Central Swamp.

## **3. OBJECTIVES:**

- i. Relocate the Cairns City SFF colony without injury or death to any SFF.
- ii. Prevent SFF from flying into Cairns Airport controlled airspace.
- iii. Prevent injury or death to any human during the relocation process .



## **4. EXECUTION:**

Preparations for the relocation of the SFF colony at the Cairns City Library 151 Abbott Street Cairns known as the Primary Tree Clearance Zone (PTCZ) are planned to commence on the 30 June 2020 and continue until approximately 10 July 2020. The activity will be conducted in two phases, a Rehearsal Phase and an Operational Phase.

### **4.1 Rehearsal Phase Tuesday 30 June to Friday 3 July 2020.**

Prior to operations commencing contractors and relevant CRC employees will undertake operational familiarisation sessions to run through the mission, objectives and any contingency plans. These sessions will also provide an opportunity to ensure;

- All personnel have an understanding of their roles and responsibilities
- Procedures and tactics to be used adhere to the relevant legislation and are operationally sound
- Equipment to be used is serviceable and fit for purpose.

#### **4.1.1 Wildlife Carers**

From the evening of the 1<sup>st</sup> July 2020 until the 10 July 2020 an appointed Wildlife Carer will undertake surveillance of known locations within the Cairns CBD where SFF have either been injured or died as a result of collisions with buildings or other obstacles. This count will be conducted each morning prior to the SFF colony returning from nocturnal feeding activities, and each evening after the SFF leave their roosts for the night. This count must be forwarded to the Relocation Coordinator each morning and evening so the data can be captured within the Guardian Information Management System. **Refer to Appendix 16.**

#### **Day 1: Tuesday 30 June 2020 – Workshop for all personnel involved.**

- Timings: 1000 to 1200
- Location: Cairns Regional Council Civic Rooms, 119-145 Spence St Portsmith.

#### **Day 2: Wed 01 July – Trial field rehearsal**

- Timings: 0500 to 0700
- Locations: Cairns City Library 151 Abbott St Cairns (PTCZ)

#### **Day 3: Thurs 2 July**

- Any lessons learnt will be included in relevant plans and procedures.

#### **Day 4: Friday 3 July – Trail field rehearsal**

- Timings 0400 – 0630
- Locations: Cairns City Library 151 Abbott St Cairns (PTCZ)

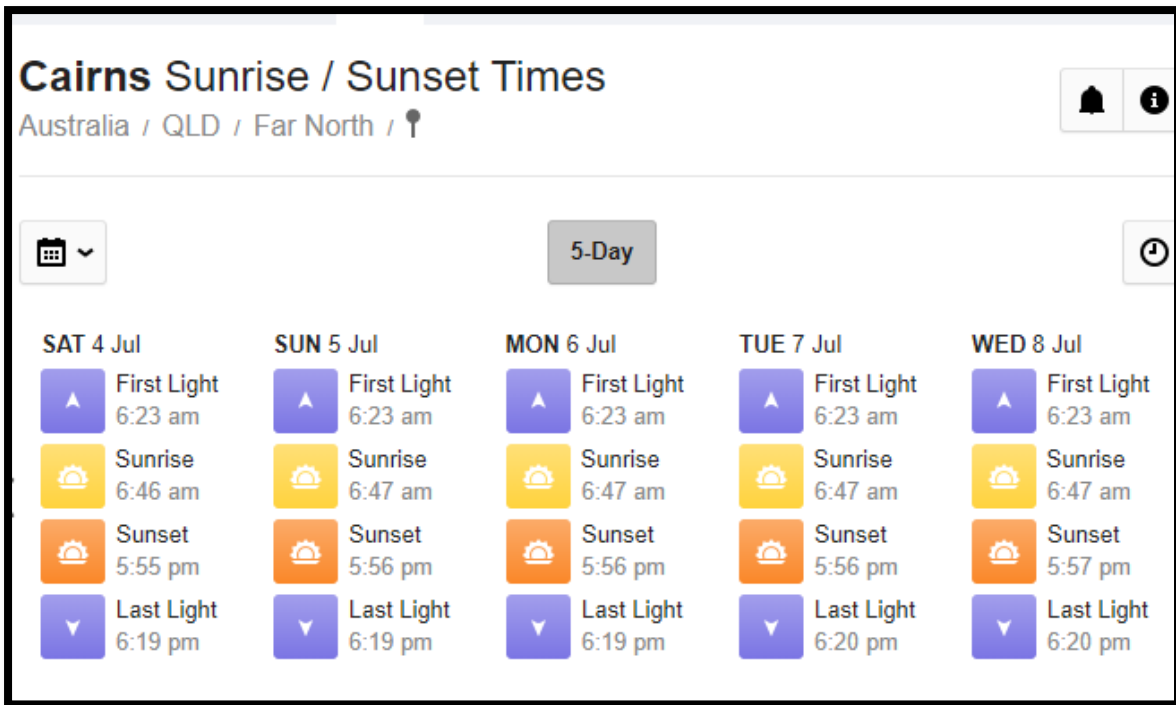
#### 4.2 Operational Phase 4 July to 10 July

The relocation of the SFF colony in the vicinity of the Cairns City Library known as the Primary Tree Clearance Zone (PTCZ) is planned to commence on the 4 July 2020 and continue until approximately 10 July 2020. Relocation operations are to be limited to a maximum of 2 periods, each of up to 2.5 hours duration, in any 24 hour period, and be conducted before sunrise and after sunset.

Temporary security fencing displaying 'No Entry' and 'No Trespassing' signage will be erected on the footpath bordering Abbott, Aplin and Lake Streets on the evening of the 2 July 2020 after fly out time to prevent unauthorised access to the PTCZ throughout the operational period.



Coordination of this operation will be undertaken using the Guardian Incident Management System.



### Day 1 Saturday 4 July 2000

**Timings: 0400 to 0630hrs**

- Prior to morning SFF fly in, Bat Rescue staff are to undertake surveillance of known locations within the Cairns CBD where SFF have been injured or died as a result of collisions with buildings or other obstacles. Results to be forwarded to Relocation Coordinator.
- All staff assigned to this operation will meet at the PTCZ site at 0400.
- The Relocation Supervisor will undertake a Safety and Operational Briefing to ensure all staff have a thorough understanding of their duties, roles and responsibilities.
- Relocation Stop Trigger Flowcharts will be distributed to all participants to ensure all activities are managed in accordance with the Code of Practice – Ecologically sustainable management of flying-fox roosts *Queensland Nature Conservation Act 1992*.
- Passive equipment such as Long Range Acoustic Devices (LRADs), high intensity lighting and other audio equipment will be set up in strategic locations within the PTCZ to provide a passive deterrent to the original roost site.
- Suitably qualified team members from Seascope will operate the LRADs, whilst other team members will be equipped with other passive equipment.
- As flying-foxes begin to fly in from their nights foraging, they will be actively deterred from the roost site in an effort to prevent landing where practicable.

- LRAD and Observation teams will be positioned at highly sensitive or specified locations as per **Figure 2** to report on the movement, direction of movements or landings of SFF at those locations. This will allow for immediate response and mitigation measures to be undertaken.
- An Airport Deterrence Barrier using Long Range Acoustic Devices (LRADs) and high intensity lighting will be established approximately 1 kilometre south of the Cairns Airport in the North Cairns Reserve to create a sound and light barrier. Further positioning of this barrier will be determined by the Seascope operators and the Relocation Supervisor subject to the reactions and dispersal directions of the flying-fox colony.
- A Forward Airport Observation Post will be established at the northern end of the Cairns SHS to forewarn the Airport Deterrence Team and the Coordination Centre of any SFF movements towards Cairns Airport airspace. The Coordination Centre will advise Cairns Airport Tower of any possible SFF incursion into Cairns Airport airspace.
- Two Observation teams equipped with high intensity lighting and pool noodles will be located at the Bailey and the Flynn Hotels providing stimulus in an effort to prevent SFF flying into those obstacles.
- Observation and relocation teams will respond to Flying Fox movements and dynamically adjust their positions as required.
- This process will be followed until the flying-foxes are in an acceptable temporary location or any Relocation Stop Triggers occur according to the Code of Practice – Ecologically sustainable management of flying-fox roosts *Queensland Nature Conservation Act 1992*.
- Typical relocation activities are expected to take between 20 to 40 minutes which will be well inside the permitted duration of 2.5 hours stated in the Department of Agriculture Water and the Environment (DAWE) Approval – Conditions of Approval.
- Team members will continue to monitor the flying-fox population at the new roosts as well as conducting reconnaissance throughout the city to identify any potential splinter camps.
- The Relocation Supervisor will conduct an operational de-brief to go through what worked well, what didn't work so well, and opportunities to identify improvements in preparation for the next day's operations.
- A small number of team members will continue to monitor the SFF population in their new location throughout the day to look for signs of excessive stress.

- At dusk each evening team members will undertake flying out surveys and monitor roosting sites for signs of créching.
- After evening SFF fly out, Bat Rescue staff to undertake surveillance of known locations within the Cairns CBD where SFF have been injured or died as a result of collisions with buildings or other obstacles. Results to be forwarded to Relocation Coordinator.
- All activities undertaken by field teams are to be reported to the coordination centre.

### **Day 2 Sunday 5 July 2020**

#### **Timings: 0400 to 0630hrs**

- As per Day 1 – to the next acceptable temporary roost location

### **Day 3 Monday 6 July 2020**

#### **Timings: 0400 to 0630hrs**

- As per Day 1 – to the next acceptable temporary roost location

### **Day 4 Tues 7 July 2020**

#### **Timings: 0400 to 0630hrs**

- As per Day 1 – to the next acceptable temporary roost location

### **Beyond Day 4**

It is envisaged that by day four, and dependent upon SFF behaviour, the SFF colony will have been relocated to their final location. If additional days are needed they will be coordinated in accordance with Day 1. Full relocation days such as those described for Day 1 will only be undertaken for six consecutive days as a maximum, at which time the relocation works will be suspended for one full day.

### **Continual Dissociation.**

Once the colony has been relocated to the desired location continual negative association activities will continue at the original roost site. These works will be characterised by very low intensity activities such as use of pool noodles, lighting and other passive deterrent activities.

## **4.3 RELOCATION METHODOLOGY**

The overarching purpose of the relocation is to relocate the SFF colony from the surrounds of the Cairns City Library to the Cairns Central Swamp using minimal stimulus and no injuries or death to the SFF. Reckless uncontrolled movements of any animals including SFF has the potential to cause stress and a higher incidence of

injury to the animals involved. To alleviate any potential stress to the SFF colony a technique involving 'pressure on, pressure off' will be employed. The principle behind this technique is to stimulate the SFF until a desired result is achieved and then discontinuing the stimulus.

To direct the SFF in a particular direction the Relocation Supervisor will position teams in a manner to further motivate the SFF to move away from the stimulus. This technique will be repeated until the SFF have been relocated to the Cairns Central Swamp or another potential intermediate roost.

The relocation will be undertaken using established methods, tools, and procedures best suited to the task. Tools that may be used for dispersal and deterrence during the relocation include:

### Dispersal and deterrence tools relevant to the relocation

Accepted Methods	Cairns City FF Colony		Intermediate & non target sites	
	Dispersal	Deterrence	Dispersal	Deterrence
Metal clangers	X	X	X	X
Pool noodles	X	X	X	X
LRAD	X	X	X	X
Lights		X		X
Low pressure water sprayers	X		X	
Foggers	X		X	
Non lethal firearms (i)	X		X	

(i) With licensed operators and use of Birdfrite or equivalent cartridges pending approval following consultation with Emergency Services and DES

### Change Management Decision Matrix (modified from NRA (2019))

Authority required	Minor	Moderate		Significant
	Switch between accepted methods (Table 2)	Confirm suitability and timeframe of interim relocation roosts.	Implement new dispersal method	Change final relocation destination
Relocation Supervisor	✓	X	X	X
Project Manager	-	✓	X	X
Suitably Qualified Person	✓	-	X	X
DES	-	-	✓	X
DAWE	-	✓	✓	✓

- ✓ Authorised to undertake
- X Not authorised to undertake
- Denotes that authority level is not required

### **4.3.1 DISPERSAL AND DETERRENCE TEAM**

The dispersal and deterrence team will include members of Seascope Technology using Long Range Acoustic Devices (LRADS) and/or high intensity lighting supported by CRC observers. The first phase of the relocation will focus on dispersing the flying-foxes away from the Cairns City Flying-fox colony located at the PTCZ to potential intermediate roosting habitats within 500 metres of that location.

#### **4.3.1.1 Location:**

At the commencement of the operation LRAD Teams 1 & 2 will be positioned under the trees at the PTCZ to prevent the flying-foxes roosting during their return from nocturnal feeding. Observer Teams 5 and 6 will provide support. LRAD Team 4 (Mark Watson) will undertake his usual activities on the Esplanade to prevent SFF roosting at that location. Further use of the LRAD's and Observer Teams at both static and mobile locations will be determined by the Seascope operators and the Relocation Supervisor subject to the reactions and dispersal directions of the SFF colony.

Further phases will focus on moving (nudging) the flying-foxes in 500 metre incremental steps in a north westerly direction until they either roost at the Cairns Central Swamp or some other alternate long-term roost identified in Figure 2 of the Cairns Flying-fox Relocation Implementation Plan.

Deterrence activities will be undertaken simultaneously with the relocation activities. LRAD Team 1 will remain at the PTCZ undertaking ongoing deterrence, whilst LRAD Team 2 will be mobile responding to SFF splinter groups at unfavourable locations.

#### **4.3.1.2 Personnel:**

Relocation Supervisor	(Revegetation Contractors)
LRAD team 1	(Seascope Technology)
LRAD team 2	(Seascope Technology)
LRAD Team 4	(Seascope Technology)
Observer Team 5	(2 x CRC employees)
Observer Team 6	(2 x CRC employees)
Traffic Management Team	(CRC)

### **4.4 AIRPORT DETERRENCE BARRIER:**

The Airport Deterrence Barrier will include members of Seascope Technology using mobile Long Range Acoustic Devices (LRADS) and high intensity lighting supported by CRC observers and firearms teams to create a sound and light barrier.

#### **4.4.1 Location**

Initial positioning of LRAD team 3 will be approximately 1 kilometre south of the Cairns Airport in the North Cairns Reserve, corner of Lily St and Lake St Cairns. Observer Team 2 and Fire Team 1 will provide support. Further positioning of this barrier will be determined by the Seascope operators and the Relocation Supervisor subject to the reactions and dispersal directions of the flying-fox colony.

#### **4.4.2 Personnel:**

LRAD team 3	(Seascope Technology)
Observer Team 2	(2 x CRC employees)
Fire Team 1	(3 x CRC Natural Assets Management employees)

**Non-lethal pyrotechnics will only be used as a last resort.**

#### **4.4.3 Forward Airport Observation Post:**

A Forward Airport Observation Post will be established to forewarn the Airport Deterrence Team and the Coordination Centre of any SFF movements towards Cairns Airport airspace. The Coordination Centre will advise Cairns Airport Tower of any SFF incursion into Cairns Airport airspace.

#### **4.4.4 Location**

Observer Team 1 will establish a Forward Observation Post at the northern end of the Cairns State High School Oval on Grove Street between Grafton and Sheridan Streets.

#### **4.4.5 Personnel:**

Observer Team 1 (2 x CRC employees)

### **4.5 HOTEL OBSERVATION POSTS**

Two Observation teams equipped with high intensity lighting and pool noodles will be located at the Bailey and the Flynn Hotels providing stimulus in an effort to prevent SFF flying into those obstacles.

#### **4.5.1 Locations**

Observer Team 3 & Wildlife 2	Bailey Hotel 163 Abbott Street Cairns.
Observer Team 4 & Wildlife 3	Flynn Hotel 85 Esplanade Cairns

#### **4.5.2 Personnel**

Observer Team 3	(2 x CRC employees)
Observer Team 4	(2 x CRC employees)

### **4.6 WILDLIFE CARERS**

Wildlife carers will provide guidance on animal welfare throughout the relocation. They will also provide a rapid response to injured or compromised flying-foxes. These wildlife carers are the only personnel permitted to handle injured or compromised flying-foxes. They are to inform the Coordination Centre of any significant issues and/or initiate Stop Triggers as per the Code of Practice – Ecologically sustainable management of flying-fox roosts *Queensland Nature Conservation Act 1992*. One wildlife carer will be mobile with the Relocation Supervisor, the second wildlife carer will remain at the PTCZ monitoring the welfare of any SFF that may return to the original roost.

From the morning of the 1st July 2020 until the 10 July 2020 an appointed Wildlife Carer will undertake surveillance of known locations within the Cairns CBD where SFF have either been injured or died as a result of collisions with buildings or other obstacles. This count will be conducted each morning prior to the SFF colony returning from nocturnal feeding activities, and each evening after the SFF leave their roosts for the night. This count must be forwarded to the Relocation Coordinator each morning and evening so the data can be captured within the Guardian Information Management System.



#### 4.6.1 Personnel:

Wildlife 1  
Wildlife 2  
Wildlife 3

#### 4.6 OBSERVERS

The primary role of the 6 CRC Observer teams will be to observe and report the movements of the SFF colony. Observation Teams will be positioned at highly sensitive locations to report if SFFs are landing in those areas and provide immediate response and mitigation measures. Passive equipment such as high intensity lighting and audio equipment will be set-up in strategic locations to provide a passive deterrent to the original roost site. Observer Teams will be equipped with vehicles, CRC mobile phones, 2-way radios and high intensity lighting. Other duties may include using high intensity lighting to 'nudge' SFFs in directions indicated by the Relocation Supervisor.

##### 4.6.1 Locations

Airport Deterrence Barrier.  
Forward Observation Post.  
Primary Tree Clearance Zone.  
Hotel Observation Post  
Other locations as determined on a daily basis.

#### 4.7 MONITORING AND REPORTING

Monitoring is required to validate success and to allow for timely intervention to avoid adverse impacts. The overarching objective of the operation is to accomplish the relocation of the SFF colony whilst avoiding any harm. The success criteria for the operation is as follows;

Component	Success Criterion	
	Current Site Cairns City SFF Colony	Relocation Site Cairns Central Swamp
Deterrence	Nil SFF deaths	Not applicable
Relocation	Nil SFF deaths	No increasing trend in SFF pup mortality relative to estimated population

Monitoring and Reporting will be undertaken by a Suitably Qualified Person whilst relocation operations are being undertaken. This will include;

- Daily monitoring of SFF at the current site of the Cairns City SFF colony.
- Daily monitoring of SFF at the Cairns Central Swamp.
- Daily monitoring of SFF at intermediate sites should these occur as a component of the relocation operation to the Cairns Central Swamp.

##### 4.7.1 SUITABLY QUALIFIED PERSONS FUNCTION

Suitably qualified persons will provide 3<sup>rd</sup> party monitoring of the operation in accordance with the Code of Practice – Ecologically sustainable management of flying-fox roosts *Queensland Nature Conservation Act 1992* and the Permit issued by the Commonwealth Department of Agriculture Water and the Environment.

A suitably qualified person is a person knowledgeable about flying-fox behaviour and is able to demonstrate experience in successfully:

- (a) classifying flying-fox species; and
- (b) assessing flying-fox population numbers in particular roosts; and
- (c) identifying flying-fox breeding cycles including evidence of breeding and rearing activity in particular roosts; and
- (d) recognising signs of (and circumstances which may result in)—
  - i) distress in flying-foxes, and
  - ii) harm to flying-foxes, and
  - iii) abandoned dependent young flying-foxes.

**4.7.2 Personnel:**

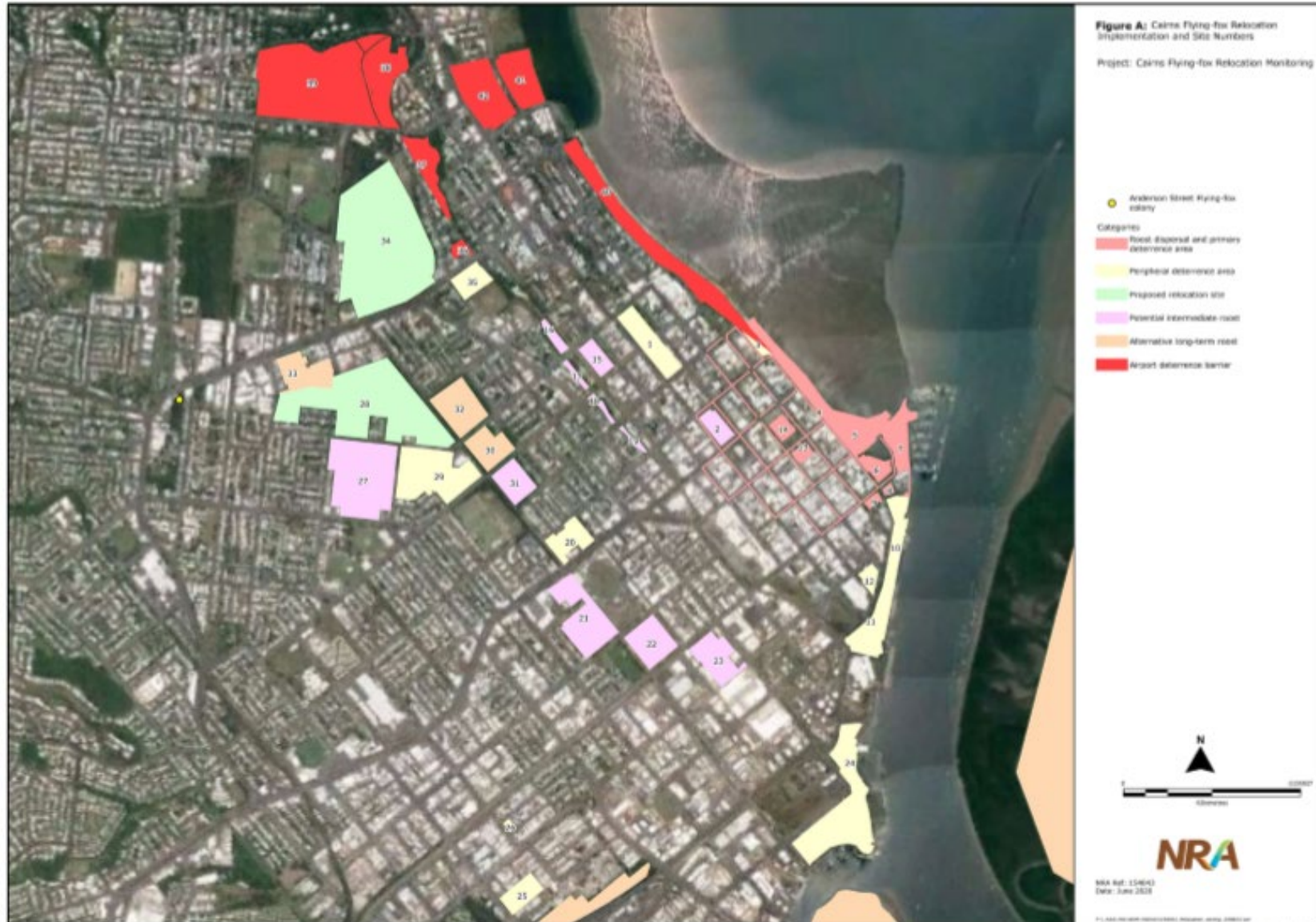
Suitably Qualified Person

Suitably Qualified Person

Suitably Qualified Person

Suitably Qualified Person

Figure 2



#### **4.9 RELOCATION STOP TRIGGERS:**

As per the Cairns Regional Council Flying-fox Implementation Plan dispersal and deterrence activities will be conducted in accordance with the Code of Practice – Ecologically sustainable management of flying-fox roosts *Queensland Nature Conservation Act 1992*. The Code states:

*All management actions must immediately cease, and DES be immediately notified if a flying-fox is killed, injured, or found on the ground as a result of management actions.*

*If a flying-fox is killed, injured or found on the ground the Relocation Coordinator will notify CRC Environmental Officer of Project Environmental Legislation who will advise DES through business as usual arrangements.*

*Management actions may only recommence after*

- *The flying-fox has been removed by an appropriately trained person, and*
- *The person in charge determines, after receiving advice from a person knowledgeable about flying-fox behaviour, that resuming management actions poses no risk to other flying-foxes at or near the roost.*

##### **4.9.1 Stop Trigger 1: Injury or death to SFF.**

Management will consult with the wildlife carers and the suitably qualified person to ascertain if operations can still proceed. Refer to Appendix 12 SFF Relocation: Injury/Death Process Flowchart.

##### **4.9.2 Stop Trigger 2: Possible incursion on Cairns Airport Airspace.**

Management will consult with the Airport Barrier Team, Observer/Spotters and Cairns Airport Tower to ascertain if operations can still proceed. Refer to Appendix 11 SFF Relocation: Airport Defence Flowchart.

##### **4.9.3 Stop Trigger 3: Operational Interruption.**

Management will consult with relevant stakeholders to ascertain if operations can still proceed. Refer to Appendix 13 SFF Relocation: Operational Interruption Process Flowchart.

##### **4.9.4 Other factors that may cause operations to cease.**

Management actions will also cease if unforeseen activities impact on the operation, or the reactions and/or dispersal direction of the flying-fox colony creates any undue risk.

###### **4.9.4.1 Urgent:**

If a significant or urgent incident occurs during the operation the code word is to be broadcast over the CRC Radio Network followed by a brief summary of what has occurred.

- All operations are to cease immediately.
- Those personnel involved in or nearby the incident are to render assistance, make the site safe and/or call emergency services as required.
- All other personnel are to return to the PTCZ.

#### **4.9.4.2 Non Urgent**

If a non urgent incident occurs and operations are required to cease, the Coordination Centre will broadcast the code word over the CRC Radio Network.

- All operations are to cease immediately.
- All other personnel are to return to the PTCZ.

#### **4.10 SAFE WORK METHOD STATEMENTS**

All activities undertaken during the dispersal and deterrence phases must also comply with the following Safe Work Method Statements (SWMS) located within the following Appendixes.

Appendix 8	SWMS	CRC Flying-fox Dispersal Standard Operation Procedure.
Appendix 9	SWMS	CRC Flying-fox Dispersal Risk Assessment
Appendix 10	SWMS	CRC Working On, Near or Adjacent to Roads.
Appendix 14	SWMS	CRC Use of Firearms and Pyrotechnics

#### **4.11 STAKEHOLDERS**

DAWE	DES
CASA	ASA
AAPA	Queensland Health
Cairns Airport	Emergency Services
Cairns Hospital	Cairns Port Authority
Department of Defence	Trinity Bay State High School
Parramatta State School	NRMA Cairns Holiday Park
Cairns State High School	TAFE (Cairns Campus)
CRC Departments	

- Planning and Environment
- Community, Sport and Cultural Services
- Water and Waste
- Infrastructure Services

#### **4.12 COORDINATION CENTRE**

A Coordination Centre for this operation has been established at the Cairns City Library 151 Abbott Street Cairns. The Guardian Incident Management System will be used to coordinate, manage and record all operational activities relevant to this operation. The Cairns City webcam live feed will be utilised to monitor possible movements of SFF colony.

## **5. ADMINISTRATION & LOGISTICS**

### **5.1 ACTIVITY DATES AND LOCATIONS**

#### **5.1.2 Rehearsal Phase Tuesday 30 June to Friday 3 July 2020.**

Prior to operations commencing contractors and relevant CRC employees will undertake operational familiarisation sessions to run through the mission, objectives and any contingency plans. These sessions will also provide an opportunity to ensure;

- All personnel have an understanding of their roles and responsibilities
- Procedures and tactics to be used adhere to the relevant legislation and are operationally sound
- Equipment to be used is serviceable and fit for purpose.

#### **Day 1: Tuesday 30 June 2020 – Workshop for all personnel involved.**

Timings: 1000 to 1200

Location: Cairns Regional Council Civic Rooms, 119-145 Spence St Portsmith.

#### **Day 2: Wed 01 July – Trial field rehearsal**

Timings: 0500 to 0700

Locations: Cairns City Library 151 Abbott St Cairns (PTCZ)

#### **Day 3: Thurs 2 July**

Any lessons learnt will be included in relevant plans and procedures.

#### **Day 4: Friday 3 July – Trail field rehearsal**

- Timings 0400 – 0630
- Locations: Cairns City Library 151 Abbott St Cairns (PTCZ)

#### **5.1.3 Operational Phase Saturday 4 July to Friday 10 July 2020.**

Initial operations will take place in the surrounds of the Cairns City Library 151 Abbott St Cairns and at the Airport Deterrence Barrier indicated in Figure 2 of the Cairns Flying-fox Relocation Implementation Plan. Further operations will take place at sites determined by the Relocation Supervisor based on the results of relocation and deterrence operations and responses of the SFF colony. The expected operation will run for 7 days but will be reassessed as the operation progresses.

#### **5.1.2 Operating Hours.**

Briefings will begin each day at 0400 hours. Primary dispersal and deterrence activities must conclude by 0630 daily. All personnel must then return to the PTCZ for the daily debrief.

## 5.2 PERSONAL PROTECTIVE EQUIPMENT & SAFETY

All participants are to wear their operational dress of the day including personal protective equipment (PPE) and any other safety equipment as required by their agency regulations.

Hats and pink safety vests are to be worn by all personnel operating in the field. It is hoped the SFF will associate the pink vests with deterrent activities and assist in preventing them returning to the original roost.

All vehicles and static sites will also be provided with water, soap and iodine to wash down any possible contaminants. Field teams are to also ensure they have a change of clothes available should their clothes be soiled.

All personnel will operate under the CRC's Job Hazard Analysis for Flying-fox management and deterrence.

## 5.3 ENTRY & SECURITY PROCEDURES

Participants are to report to the **Relocation Supervisor** at 0400hrs from 4 July 2020 onwards for Registration, Safety Briefing & Operations Briefing.

The Cairns City Library Carpark and immediate surrounds will be the Briefing and Staging Area for all participants when not participating in the activity.

## 5.4 CATERING

Catering will be met by own agency.

## 5.5 EXPENSES

### 5.5.1 Incurring/approval of expenditure

Expenses of individual agencies including travel costs and accommodation will be met by their own agency.

### 5.5.2 Allowances and Claims

Allowances and claims of individual agencies are to be processed using their normal financial arrangements.

## 5.6 RESOURCES

Agency	Personnel	Vehicles	Radios	GPS	LRADS
CRC	20	10	12	4	1
Seascope	4				3
Reveg	2				
Wildlife Carers	3				
NRA	1				

## 6. COMMAND & COMMUNICATION



## 6.1 COMMUNICATIONS

Primary means of communication during relocation operations will be conducted on the CRC radio network to ensure all personnel maintain situational awareness. A redundancy channel will also be available if required.

### 6.1.1 Key Contacts

Position/Agency	Name	Mobile	Landline
Cairns Airport Tower			
QPS District Duty Officer			
QPS Tactician			
Coordination Centre			
Relocation Supervisor			
CRC Coord Centre Logger			
CRC Liaison and Logistics			
Wildlife Carer			
Wildlife Carer			
Wildlife Carer			
Seascope LRAD			
Seascope LRAD			
Seascope LRAD			
Seascope LRAD			
NRA Suitably Qualified Person			
CRC Safety Officer			
CRC Media Officer			

### 6.1.2 Callsigns

Position	Name/s	Callsign
Relocation Supervisor		
Coordination Centre		
LRAD Team 1		
LRAD Team 2		
LRAD Team 3		
LRAD Team 4		
Observer Team 1		
Observer Team 2		
Observer Team 3		
Observer Team 4		
Observer Team 5		
Observer Team 6		
Wildlife Carer 1		
Wildlife Carer 2		
Wildlife Carer 3		
Site Safety Officer		
Media Officer		

## **6.2 ROLES AND RESPONSIBILITIES**

### **6.2.1 Project Manager**

The Project Manager will be responsible for coordinating, planning and overseeing management activities, including engaging contractors. The Project Manager will be responsible for implementing relocation and ensuring that activities comply with legislative obligations. The Project Manager will liaise with CRC's Chief Executive Officer or delegate and other relevant department heads.

### **6.2.2 Project Communications**

The CRC Education/Media will be responsible for communicating information about this planned operation.

### **6.2.3 Relocation Supervisor**

The Relocation Supervisor will be responsible for managing the on-ground activities and will liaise with the Project Manager daily and other relevant entities as necessary.

### **6.2.4 Wildlife Carers**

Wildlife Carers from Tolga Bat Hospital will deal with any injured/deceased flying-foxes.

### **6.2.5 Suitably Qualified Persons**

Suitably qualified persons will provide 3<sup>rd</sup> party monitoring of the operation in accordance with the Code of Practice – Ecologically sustainable management of flying-fox roosts *Queensland Nature Conservation Act 1992* and the Permit issued by the Commonwealth Department of Agriculture Water and the Environment.

## **6.3 BRIEFINGS**

The Relocation Supervisor will be responsible for daily briefing/debriefing of all participants.

## **6.4 DOCUMENTATION**

This Operation Order has been developed using the following documentation:

- Cairns Flying-fox Relocation Management Plan.
- Cairns Flying-fox Relocation Implementation Plan.
- CRC SWMS Flying-fox Dispersal Risk Assessment.
- Australian Government, Department of Agriculture Water and the Environment Approval letter.
- Code of Practice – Ecologically sustainable management of flying-fox roosts *Queensland Nature Conservation Act 1992*.

## **6.5 SAFETY INSTRUCTIONS**

A Site Safety Officer has been allocated for this operation.

### **6.5.1 Site Safety Officer**

The role of the site safety officer is to identify and treat all safety hazards or recommend an alternative site if risks pose an unacceptable danger. Risk Management plans have been completed and will be available to the site safety officer. Designated safety officer duties will include monitoring identified safety hazards, providing first aid, ensuring vehicle access, monitoring lighting and noise levels, ensuring protection from rain and sun.

The Safety Officer has overall responsibility for ensuring that safety instructions are complied with for all activities. Additionally, each agency is responsible for ensuring that safety instructions are complied with at their various areas of responsibility through the normal management arrangements

of the primary agency at each site. Any direction given by the Safety Officer in respect of a safety matter is to be immediately complied with.

The safety officer’s roles and responsibilities include:

- Performing site inspection regarding suitability.
- Advising Relocation Supervisor and Relocation Coordinator on possible distractions and boundary limitations to the activity.
- Ensuring the safety of responding vehicles.
- Identifying and reporting any possible risks to the Relocation Supervisor and Relocation Coordinator.
- Registering all participants on a personnel log.
- Evaluating and reporting comments at debriefing.
- Notifying the Relocation Supervisor and Relocation Coordinator immediately of any injuries (lifting, trauma, illness etc) incurred by any participants during the operations.
- Provide Relocation Supervisor with pre- and post-operation reports as they relate to safety.

**Important Note:**

All staff involved in this operation share an equal responsibility to manage safety.

**6.6 RISK ASSESSMENT**

**6.6.1 Likelihood**

Likelihood Rating	Description	Likelihood of Occurrence				
1	Rare	Event may occur once in every 10+ years				
2	Unlikely	Event may occur in every 5 – 10 years				
3	Possible	Event may occur one in every 2 – 5 years				
4	Likely	Event may occur one in every 1 – 2 years				
5	Almost Certain	Event may occur within any one year				
Source: Cairns Regional Council, Enterprise Risk Management Framework, Version 1. Document No #5463735. Provided 21 May 2020						

Source : Cairns Regional Council. Enterprise Risk Management Framework. Version 1. Document No #5463735. Provided 21 May 2020.

**6.6.2 Risk Matrix**

Likelihood	Rating	Consequence				
		1	2	3	4	5
		Insignificant	Minor	Moderate	Major	Catastrophic
Almost certain	5	M	H	H	E	E
Likely	4	L	M	H	H	E
Possible	3	L	M	M	H	E
Unlikely	2	L	L	M	H	H
Rare	1	L	L	L	M	H

Source : Cairns Regional Council. Enterprise Risk Management Framework. Version 1. Document No #5463735. Provided 21 May 2020.

## 6.6.3 Consequence

Consequence	Rating	Financial (Revenue & Costs)	Information & Data	Assets / Property	People	Provision of Service / Performance	Environment	Reputation	Regulatory
Catastrophic	5	Huge financial loss (e.g. > 10% of revenue)	Extensive loss of / damage to assets and / or infrastructure. Permanent loss of data. Widespread disruption to the business.	Widespread, substantial / permanent damage to assets and / or infrastructure	Long-term disruption to work practices and routines. Impact on well-being of personnel. Extensive life-threatening impact; potentially large numbers of serious injuries and fatalities.	Long term / irreversible impact on ability to deliver client services.	Long-term, large scale damage to habitat or environmental. Serious / repeated breach of legislation / licence conditions. Cancellation or licence and/or prosecution.	Widespread, ongoing national and possibly international media attention. Severe embarrassment to the organisation. Viability of the organisation in its current form is questionable.	Intervention and extended sanctions causing extended disruption / loss of control over operations.
Major	4	Major financial loss (e.g. 5% to 10% of revenue).	High risk of loss / corruption of data; significant catch-up will be required. Business continuity plans should be implemented.	Significant / permanent damage to assets and / or infrastructure.	Major disruption to work routines and practices. Additional resources may be required. Significant number of serious injuries requiring hospitalisation and long-term treatment. Small number of fatalities.	Major, long-term disruption to services. Serious breach of legal / contractual obligations.	Severe impact requiring remedial action and review of processes to prevent re-occurrence. Penalties and / or direction or compliance order incurred.	Adverse publicity in regional / national media. Embarrassment to the organisation.	Significant fines and sanctions resulting in operating restrictions and disruptions
Moderate	3	High financial loss (e.g. 2% to 5% of revenue).	Moderate to high loss of IT. Some data may be permanently lost. Workarounds may be required.	Moderate to high damage requiring specialist / contract or equipment to repair or replace.	A number of injuries requiring hospitalisation and long-term treatment. Moderate disruption to work routines and schedules.	Some serious disruption to services; some contravention of legal / contractual obligations.	Moderate impact on the environment; no long term or irreversible damage. May incur cautionary notice or infringement notice.	Significant complaints. Some adverse publicity.	Breaches resulting in sanctions, fines and referrals for further investigation
Minor	2	Minor financial loss (e.g. ½% to 2% of revenue).	Minor loss / damage to IT and communication. Some data catch-up may be required.	Minor loss / damage. Some repairs may be required.	Small number of injuries; first aid or out-patients – treatment required. Some inconvenience to personnel.	Minor, temporary disruption to services. Minor inconvenience to client(s).	Minor localised impact; one-off situation easily remedied.	May cause some complaints (justified or unjustified).	Segmented incidents/ More Moderate breaches attracting a "warning"
Insignificant	1	Low financial loss (e.g. ¼% of revenue).	Negligible loss of or damage to IT and communications. No loss of data.	Negligible damage to or loss of assets.	No significant injuries. No significant impact on personnel.	Short-term, localised interruption to service / performance.	Minor breach of environmental policy / practices. Negligible impact on the environment.	Negligible impact on reputation.	Isolated breaches/ Minor incidents

Source : Cairns Regional Council. Enterprise Risk Management Framework. Version 1. Document No #5463735. Provided 21 May 2020.

#### **6.6.4 Risk Register**

The Risk Register has been completed in relation to Harm to SFF, Harm to Humans and Harm to other Biota. It was adopted by the Flying-fox Relocation Management Group on the 23 June 2020. The Register is too large to be incorporated into this document and is held by Cairns Regional Council and Natural Resource Assessments Pty Ltd.

#### **6.7 MEDIA AND VISITORS**

All visitors or media are to report to the CRC Media Officer.

#### **6.8 RELOCATION STOP TRIGGERS**

As per the Cairns Regional Council Flying-fox Implementation Plan dispersal and deterrence activities will be conducted in accordance with the Code of Practice – Ecologically sustainable management of flying-fox roosts *Queensland Nature Conservation Act 1992*. The Code states:

*All management actions must immediately cease, and DES be immediately notified if a flying-fox is killed, injured, or found on the ground as a result of management actions.*

*If a flying-fox is killed, injured or found on the ground the Relocation Coordinator will notify Council Environment Officer of Project Environmental Legislation who will advise DES through business as usual arrangements.*

*Management actions may only recommence after*

- *The flying-fox has been removed by an appropriately trained person, and*
- *The person in charge determines, after receiving advice from a person knowledgeable about flying-fox behaviour, that resuming management actions poses no risk to other flying-foxes at or near the roost.*

Management actions will also cease if unforeseen activities impact on the operation or the reactions and/or dispersal direction of the flying-fox colony creates any undue risk.

**STOP – RESET – REASSESS**

**Appendix 1: Operational Briefing Template**

<b>Activity Name:</b>		<b>Date Prepared:</b>	<b>Time Prepared:</b>
<b>Operational Period:</b>		<b>Operational Period Date/Time:.....</b> <b>To.....</b>	
		<b>ACTION LOCATION:</b>	
		<b>Map Attached?    Yes.....    No.....</b>	
		<b>SITUATION:</b>	
		<b>MISSION:</b>	
		<b>EXECUTION:</b>	
		<b>ADMINISTRATION &amp; LOGISTICS:</b>	
		<b>COMMAND &amp; COMMUNICATION:</b>	
		<b>CURRENT/COMPLETED ACTIONS:</b>	
		1.	
		<b>RESOURCES SUMMARY: (Type, Number, ETA, Location/Assignment)</b>	
<b>Prepared By: (Name/Title)</b>		<b>Approved By Relocation Supervisor</b>	

## Appendix 2 Situation Reports (SITREPS)

- Employ the same SITREP briefing format up or down.
- As additional information becomes available, a more detailed SITREP should be given.
- SITREPS are to be given at nominated time intervals, eg. half hourly, hourly etc.
- SITREPS should only contain FACT and should not include any assumptions or predictions.

SITREPS should contain the following information:

1. **Activity** – (What happened/Where/When/How happened/Who is affected).
  - a. Overview of immediate effects from impact of the event.
  - b. Estimate of problem – size/scope/area/numbers involved etc.
2. **Own Resources** – (What has been done to date)
  - a. Who and what is involved, spare capacity, location of own control and units.
  - b. Activities undertaken by resources, Changes in locations, Activities proposed.
  - c. Results from operations undertaken during the period.
3. **Evaluation** – (What is proposed to be done)
  - a. Overview of activities and effects of operations undertaken to date.
  - b. Intentions.
  - c. Resources required.
4. **Other Considerations**
  - a. Public safety messages/instructions
  - b. Inform Media Officer

### SAMPLE SITREP

<b>Briefing for</b>	
<b>Situation:</b>	
<b>Mission:</b>	
<b>Execution:</b>	
<b>Administration &amp; Logistics</b>	
<b>Command &amp; Communications</b>	
<b>ARE THERE ANY QUESTIONS?</b>	

<b>Time and Date:</b>	<b>Time and Date:</b>
<b>Briefing Officer:</b> <b>(Name/Title)</b>	<b>Authorising Officer:</b> <b>(Name/Title)</b>

**Appendix 3 Running Log Template**

**Officer:**

**Scribe**

**Page**

**of**

**Situation**

**Date**

**Location**

Time	Issue/Occurrence	Comments/Factors/Tasking/Outcomes



Courses of Action open to.....	Courses of Action open/available to us
Courses of Action open to .....	Courses of Action open/available to us

Plan For	
What needs to be done:	
What are the limitations:	
Who is going to do it:	
When:	
How:	
Where:	
WHY:	
Time:                      Date:	Compiled By:

## **Appendix 6            Traffic Management Plan**

### **Points to Consider:**

- Establishing control points for traffic control around or away from the activity or scene.
- Access routes for council, agency or emergency vehicles into the area.
- Possible marshalling or assembly areas from the site or area, and:
- Identify alternate routes if necessary.
- Providing mapping of Traffic Management Plan.
- Whether road is controlled by CRC or DTMR.

### **Advise Council Executive/Qld Police Service (QPS) / Department of Transport & Main Roads (DTMR)**

- Of the proposed Traffic Management Plan.
- Of the information that needs to be released to media.
- To arrange a meeting to brief supervising officers (if practicable).
- That regular SITREPS are provided or will be provided at nominated intervals.



### **Delegate tasks by appointing a supervisor or senior officer:**

- To manage the roadway space in and leading to the site or area (e.g. the opening of traffic lanes and closing of roadway space, parking of council, agency or emergency vehicles, managing traffic control devices etc); and
- To ensure deployment of staff in accordance with the plan

- Appendix 7 – Stakeholder Contact List

Organisation	Name	Role	Mobile	Email	Landline

## Appendix 8 – Flying-fox Dispersal Standard Operation Procedure

FLYING FOX DISPERSAL SOP – Standard Operating Procedure																		
Job/Task Step	Control Options/Safety Precautions																	
Potential Hazards																		
Training and Competence requirements	If there is no licencing requirements all staff are to be inducted on the plant before use. Trailer hitching and load safety training																	
Additional Mandatory PPE (Personal Protective Equipment) (List any PPE that is above the standard requirement for Council)																		
Conduct <b>Stop Think Act</b>	Check for Hazards Above – power lines, trees, bats, faeces & urine Below – trenches, trip hazards, underground services Behind – vehicles, equipment, members of public, workmates Hidden –Syringes, faeces <ul style="list-style-type: none"> <li>Occupational violence</li> <li>Loose, muddy or unstable ground for outriggers</li> <li>Manual handling – strains and sprains</li> <li>Burns – heat from lights</li> <li>Exposure to the bat's saliva or neural tissue and bitten or scratched</li> <li>Job rotation - when monitoring flying foxes</li> </ul>																	
Pedestrian and traffic control	Implement Traffic Guidance Scheme if applicable If required isolate the worksite to members of the public by fencing/barrier and/or use of a spotter																	
<b>Flying Fox Dispersal</b> pre-start check & operation	<ul style="list-style-type: none"> <li>Conduct pre-start as per Manufactures Instruction Manual or the Plant Induction</li> <li>Read Operators Manual for light tower</li> </ul>																	
Specific Procedures	<p><b>Do not handle any bat (flying-foxes or micro bats)</b> If you come across a bat (flying-foxes or micro bats) <b>Do Not Touch</b> - Call FNQ Wildlife Rescue 07 40534467 If you have been bitten or scratched and or exposed to the bat's saliva or neural tissue contact Queensland Health 13HEALTH (13 43 25 84) and complete an incident report</p> <p><b>Setting up light tower trailer</b></p> <ul style="list-style-type: none"> <li>Position the light tower trailer as close to the desired position to reduce the need to manually reposition the trailer</li> <li>Set up trailer on suitable ground that will support the outrigger legs, if necessary use a suitable packing material under the outrigger pads such as a timber block</li> <li>Be aware of the radius of the mast when telescoped out and lowered</li> <li>Shut down light tower as per operators manual, be aware the lights will be very hot</li> <li>Ensure out riggers are locked out to prevent tipping over when not in use</li> </ul>																	
																		
<table border="1"> <thead> <tr> <th>Voltage Range (Phase to Phase)</th> <th>MINIMUM SAFE DISTANCE In Metres (Feet)</th> </tr> </thead> <tbody> <tr> <td>0-300V</td> <td>AVOID CONTACT</td> </tr> <tr> <td>Over 300-50 KV</td> <td>3 (10)</td> </tr> <tr> <td>Over 50 KV to 200 KV</td> <td>5 (15)</td> </tr> <tr> <td>Over 200 KV to 350 KV</td> <td>6 (20)</td> </tr> <tr> <td>Over 350 KV to 500 KV</td> <td>8 (25)</td> </tr> <tr> <td>Over 500 KV to 750 KV</td> <td>11 (35)</td> </tr> <tr> <td>Over 750 KV to 1000 KV</td> <td>14 (45)</td> </tr> </tbody> </table>	Voltage Range (Phase to Phase)	MINIMUM SAFE DISTANCE In Metres (Feet)	0-300V	AVOID CONTACT	Over 300-50 KV	3 (10)	Over 50 KV to 200 KV	5 (15)	Over 200 KV to 350 KV	6 (20)	Over 350 KV to 500 KV	8 (25)	Over 500 KV to 750 KV	11 (35)	Over 750 KV to 1000 KV	14 (45)	<p><b>LRDA 100x noise machine</b></p> <ul style="list-style-type: none"> <li>Follow manufactures specifications taking particular note of operation zones on page 10 of the equipment manual</li> <li>Only set up LRAD in identified permit areas</li> <li>Ensure that all members of the public stay out of immediate vicinity of the LRAD 100x speaker</li> <li>Frequently change the angle of looking up when monitoring flying foxes</li> <li>Consider using an umbrella to prevent contact with faeces and urine</li> <li>Work in close proximity with team mates wherever possible</li> <li>Maintain contact with Camera Room (4044 3760) via mobile phone and or radios and report in any instances of feeling unsafe</li> </ul>	
Voltage Range (Phase to Phase)	MINIMUM SAFE DISTANCE In Metres (Feet)																	
0-300V	AVOID CONTACT																	
Over 300-50 KV	3 (10)																	
Over 50 KV to 200 KV	5 (15)																	
Over 200 KV to 350 KV	6 (20)																	
Over 350 KV to 500 KV	8 (25)																	
Over 500 KV to 750 KV	11 (35)																	
Over 750 KV to 1000 KV	14 (45)																	



PO Box 359, Cairns, QLD 4870  
Ph: 07 4044 3044 Fax: 07 4044 3614  
ABN: 24 310 025 910

## SAFE WORK METHOD STATEMENT (SWMS)

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### FLYING FOX DETERRENT RISK ASSESSMENT

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Effective Date: 25/06/2020

Authorised by:

Next Review: 25/06/2022

Signed:

Authorisation Date

\_\_\_\_\_  
25/06/2020  
\_\_\_\_\_

## SECTION 1.PROCEDURE DETAILS

All personnel conducting this work MUST be made aware of these methods of control at toolbox meetings and / or pre-start meetings before work commences, with on-site enforcement by the Site Supervisor.



### TASK-SPECIFIC PPE, TOOLS & EQUIPMENT

Long pants

Long sleeve shirt

Safety boots

Wide brim hat

Hearing protection - Plugs

Other PPE as determined by Risk Assessment



### RELEVANT LEGISLATION & CODES OF PRACTICE (COP)

WH&S Act 2011

WH&S Regulation 2011

Managing Noise and Preventing Hearing Loss at Work Code of Practice 2011




### RELEVANT TRAINING

White Card / Construction Induction Training

Relevant tool box talks as specified by Supervisor

## SECTION 2.INDUCTION

All new employees or contractors are to be inducted and sign the Licence & Site Induction record below. By signing this record, employees or contractors are acknowledging that they have read and understood this SWMS document.

Name	Company	Certificate/ Licence #	Induction Card #	Signature	Date Inducted
Example:					
Pease Street Roundabout Recurbing and Resurfacing					
Jim Bloggs	ABC Road Contractors	L67787	I78676		dd/mm/yy



## SECTION 3.ROUTINE ACTIVITIES

This section consists of routine activities often of a generic nature which can be risk assessed once for the period of the activity. Risks should be reviewed at least every 12 months.

If the activity is carried out in a location or using equipment and tools that are not routine (eg construction) then the risks should be re-assessed for that specific project, location, team, equipment, etc.

<b>COMMON STEPS</b>				
Person responsible: Site Supervisor & Workers				
<b>Job/Task Step</b> A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.	<b>Incident/ Contact Types/ Hazards</b>	<b>Risk Score Before Control</b> (Refer Section 5)	<b>Control Options/Safety Precautions</b>	<b>Risk Score After Control</b> (Refer Section 5)
Conduct Pre-Start Briefing	<ul style="list-style-type: none"> <li>▪ Poor communication</li> <li>▪ Unidentified hazards</li> <li>▪ Non Compliance</li> <li>▪ Financial Cost</li> <li>▪ Business/Public Perception</li> </ul>	M-53	<ul style="list-style-type: none"> <li>▪ Pre-start briefing to ensure all staff are fully aware of the scope of work before work commences.</li> <li>▪ Ensure all workers have Induction white card and undertake WHS site specific induction covering:                             <ul style="list-style-type: none"> <li>- Command Structure and communications</li> <li>- All worksite hazards</li> <li>- Work site safety</li> <li>- Safe Work Method Statements (SWMS) and appropriate Control measures</li> <li>- What to do in an emergency (Emergency procedures)</li> <li>- Identify site supervisor &amp; second in charge (2IC)</li> <li>- Personal Protective Equipment</li> <li>- Traffic management plan/guidance scheme requirements in accordance with MUTCD Part 3</li> </ul> </li> </ul>	L-28
Wearing of Personal Protective Equipment	<ul style="list-style-type: none"> <li>▪ Hazardous Substances</li> <li>▪ Burns</li> <li>▪ Fire</li> <li>▪ Environmental Contamination</li> <li>▪ Laceration/ Cuts to body</li> <li>▪ UV Radiation (Sun)</li> <li>▪ Noise</li> <li>▪ Animal bites and stings</li> <li>▪ Falls Trips &amp; Slips</li> </ul>	<b>M-53</b>	<ul style="list-style-type: none"> <li>▪ Never conduct works unless you have all the PPE required to conduct the activity.</li> <li>▪ Always inspect PPE prior to use to ensure it is in good repair</li> <li>▪ If using hazardous chemicals consult with SDS and type of personal protective equipment required</li> <li>▪ <b>Minimum PPE required is:</b> <ul style="list-style-type: none"> <li>- Long sleeve shirt (sleeves rolled down) and trousers.</li> <li>- Correctly fitting safety boots (steel capped) to protect the feet from harm.</li> <li>- Wide brim hat to protect you from sun burn.</li> <li>- Safety glasses if required</li> </ul> </li> <li>▪ <b>Higher levels of PPE are to be used if risk assessment of work area deems it such as:</b> <ul style="list-style-type: none"> <li>- Protective face shields to protect the eyes</li> <li>- Hearing protection, earplugs or ear muffs to protect hearing from being damaged.</li> <li>- Gloves to protect the hands from cuts and burns.</li> <li>- Face mask or respirator to protect the respiratory system from dusts/fumes/vapours</li> </ul> </li> </ul>	L-28
Conduct Pre-Start Inspection	<ul style="list-style-type: none"> <li>▪ Injury</li> <li>▪ Damage to equipment</li> </ul>	<b>M-53</b>	<ul style="list-style-type: none"> <li>▪ Before work starts, a competent person is to check all equipment as per manufacturer's specifications e.g. Dead man switches, emergency stop buttons, fuels and lubricants and hoses and fittings for damage and condition.</li> </ul>	L-28

## COMMON STEPS

Person responsible: Site Supervisor & Workers

Job/Task Step A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.	Incident/ Contact Types/ Hazards	Risk Score Before Control (Refer Section 5)	Control Options/Safety Precautions	Risk Score After Control (Refer Section 5)
			<ul style="list-style-type: none"> <li>▪ If a pre-start inspection identifies faulty or out of service equipment it is to be tagged “danger do not use” immediately and reported to Supervisor</li> <li>▪ The Site Supervisor is to ensure that all control methods are adhered to.</li> <li>▪ All workers to be advised of any changes to the worksite before work commences.</li> <li>▪ Check barricading and signage are in place before commencement of work</li> <li>▪ Ensure compliance with the Manual of Uniform Traffic control Devices including the Traffic Management Plan (TMP):</li> <li>▪ The SWMS for Working on, near or adjacent to Roads &amp; Railway is also required to be attached to this SWMS.</li> </ul>	
Environmental	<ul style="list-style-type: none"> <li>▪ Environmental contamination</li> </ul>	<b>H-60</b>	<ul style="list-style-type: none"> <li>▪ Spill response equipment – (including marine booms) to be on site at all times whilst work is being conducted ( if required)</li> <li>▪ Ensure all erosion and sediment control is in place prior to works commencing ( if required)</li> <li>▪ Repair any damage to waterway as a result by works conducted ( if required)</li> <li>▪ Chemicals must not be stored near or adjacent to drains, watercourses or waterways.</li> <li>▪ Do not decant chemicals near or adjacent to drains, watercourses or water ways</li> <li>▪ Do not refuel near or adjacent to drains, watercourses or water ways.</li> <li>▪ If a chemical spill occurs report incident immediately to environmental officer and complete an Incident / Hazard report.</li> </ul>	L-36
Heat Management	<ul style="list-style-type: none"> <li>▪ Heat Illness</li> </ul>	H-60	<p><b>Workplace specific control measures can be:</b></p> <ul style="list-style-type: none"> <li>▪ Where possible, reorganise work times so that heavy manual tasks are done early in the morning or late afternoon</li> <li>▪ Where possible provide shade structures to remove workers from direct sunlight</li> <li>▪ Where possible provide fans to increase air flow</li> </ul> <p><b>Individual control measures:</b></p> <ul style="list-style-type: none"> <li>▪ Advise your supervisor immediately if you consider there is a significant risk of heat illness or fatigue</li> <li>▪ Take regular rest breaks</li> <li>▪ Take additional rest breaks if feeling the effects of heat</li> <li>▪ If feeling weak or faint, immediately stop work and cool down. Seek medical advice if symptoms persist</li> <li>▪ Maintain regular water intake and if required Take electrolyte replacement supplements (THORZT (maximum 3 satchels per day).</li> </ul>	L-36
Safety in General	<ul style="list-style-type: none"> <li>▪ Hazardous Substances</li> <li>▪ Environmental Contamination</li> <li>▪ Laceration/ Cuts to body</li> <li>▪ Noise</li> <li>▪ Falls Trips &amp; Slips</li> <li>▪ Heat stress</li> </ul>	M-53	<ul style="list-style-type: none"> <li>▪ Only trained &amp; qualified persons are to work on site</li> <li>▪ All visitors are to wear the correct PPE and be escorted on site at all times</li> <li>▪ Records should be kept for all work site activities and qualifications including: SWMS, risk assessments, Toolbox talks, licenses, tickets/certificates.</li> </ul>	L-28

## COMMON STEPS

Person responsible: Site Supervisor & Workers

Job/Task Step A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.	Incident/ Contact Types/ Hazards	Risk Score Before Control (Refer Section 5)	Control Options/Safety Precautions	Risk Score After Control (Refer Section 5)
	<ul style="list-style-type: none"> <li>▪ Manual Handling</li> <li>▪ Financial Cost</li> <li>▪ Business/Public Perception</li> </ul>		<ul style="list-style-type: none"> <li>▪ Report all Incidents and Hazard immediately to supervisor and complete an Incident/Hazard report as soon as possible.</li> </ul>	


## FLYING FOX DISPERSAL RISK ASSESSMENT

Person responsible: Site Supervisor & Workers

Job/Task Step A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.	Incident/ Contact Types/ Hazards	Risk Score Before Control (Refer Section 5)	Control Options/Safety Precautions	Risk Score After Control (Refer Section 5)
Transport of equipment to work site Including hitching Light tower trailer to vehicle	<ul style="list-style-type: none"> <li>▪ Manual Handling</li> <li>▪ Vehicle &amp; Trailer damage when aligning vehicle and trailer</li> <li>▪ Trailer could become detached from vehicle</li> </ul>	M48	<ul style="list-style-type: none"> <li>▪ Ensure that correct lifting techniques are used</li> <li>▪ Driver is to ensure that a spotter is available to guide reversing vehicle into ideal connecting position</li> <li>▪ Ensure correct hitching technique is use as per the 'Trailer Hitching SWMS'</li> <li>▪ Position the Light Tower Trailer as close possible to the desired spot to reduce the need to manually position it</li> </ul>	L32
Setting up Light Tower Trailer	<ul style="list-style-type: none"> <li>▪ Electrocution</li> <li>▪ Manual handling</li> </ul>	H-57	<ul style="list-style-type: none"> <li>▪ Before using the Light Tower you must read the operators manual for the machine that you are about to use</li> <li>▪ Ensure that correct manual handling techniques are used</li> <li>▪ Set up trailer only on a firm, flat level surface</li> <li>▪ Ensure that the ground is suitable to support the machine, particularly under each of the outrigger pads. A suitable packing material such as a timber block may be required on soft surfaces to ensure that the outriggers do not sink under the weight</li> <li>▪ Do not set up light tower close to overhead power lines and never place tower within the exclusion zone. Be aware of the radius of the mast when telescoped out and lowered. Be aware</li> </ul>	L-32

## FLYING FOX DISPERSAL RISK ASSESSMENT

Person responsible: Site Supervisor & Workers

Job/Task Step A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.	Incident/ Contact Types/ Hazards	Risk Score Before Control (Refer Section 5)	Control Options/Safety Precautions	Risk Score After Control (Refer Section 5)																
			of swaying tree branched in strong winds. <ul style="list-style-type: none"> <li>▪ Shut down of light tower, follow the operators manual - the lights will be very hot - DO NOT TOUCH</li> </ul>																	
			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Voltage Range (Phase to Phase)</th> <th style="text-align: center;">MINIMUM SAFE DISTANCE In Metres (Feet)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0-300V</td> <td style="text-align: center;">AVOID CONTACT</td> </tr> <tr> <td style="text-align: center;">Over 300-50 KV</td> <td style="text-align: center;">3 (10)</td> </tr> <tr> <td style="text-align: center;">Over 50 KV to 200 KV</td> <td style="text-align: center;">5 (15)</td> </tr> <tr> <td style="text-align: center;">Over 200 KV to 350 KV</td> <td style="text-align: center;">6 (20)</td> </tr> <tr> <td style="text-align: center;">Over 350 KV to 500 KV</td> <td style="text-align: center;">8 (25)</td> </tr> <tr> <td style="text-align: center;">Over 500 KV to 750 KV</td> <td style="text-align: center;">11 (35)</td> </tr> <tr> <td style="text-align: center;">Over 750 KV to 1000 KV</td> <td style="text-align: center;">14 (45)</td> </tr> </tbody> </table>	Voltage Range (Phase to Phase)	MINIMUM SAFE DISTANCE In Metres (Feet)	0-300V	AVOID CONTACT	Over 300-50 KV	3 (10)	Over 50 KV to 200 KV	5 (15)	Over 200 KV to 350 KV	6 (20)	Over 350 KV to 500 KV	8 (25)	Over 500 KV to 750 KV	11 (35)	Over 750 KV to 1000 KV	14 (45)	
Voltage Range (Phase to Phase)	MINIMUM SAFE DISTANCE In Metres (Feet)																			
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Over 350 KV to 500 KV	8 (25)																			
Over 500 KV to 750 KV	11 (35)																			
Over 750 KV to 1000 KV	14 (45)																			
Operation of the LRAD-100x 'Noise Machine'	<ul style="list-style-type: none"> <li>▪ Hearing loss</li> </ul>	H-65	<ul style="list-style-type: none"> <li>▪ Follow manufacturers specifications, taking particular note of Operation Zones detailed in page 10 of Equipment Manual</li> <li>▪ Only set up LRAD in identified permit areas</li> <li>▪ Wear additional PPE as required</li> <li>▪ Install barricading to prevent members of the public from entering the exclusion zone</li> <li>▪ Ensure that all members of the public stay out of immediate vicinity of LRAD 100X speaker</li> </ul>	L-28																
Monitoring Flying Foxes movement	<ul style="list-style-type: none"> <li>▪ Repetitive stress on neck from looking up</li> <li>▪ Possible contact with flying fox faeces and urine</li> <li>▪ Interaction with the public</li> </ul>	M53	<ul style="list-style-type: none"> <li>▪ Frequently change the angle of looking upward</li> <li>▪ Take breaks as required</li> <li>▪ Consider using additional PPE e.g. umbrella to prevent contact with faeces and/or urine'</li> <li>▪ Work in close proximity with team mates wherever possible</li> <li>▪ Maintain contact with Camera Room and or Communications centre via</li> </ul>	L-40																

## FLYING FOX DISPERSAL RISK ASSESSMENT

Person responsible: Site Supervisor & Workers

Job/Task Step A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.	Incident/ Contact Types/ Hazards	Risk Score Before Control (Refer Section 5)	Control Options/Safety Precautions	Risk Score After Control (Refer Section 5)
			mobile phone and or radios and report in any instances of feeling unsafe	
Interaction with public	<ul style="list-style-type: none"> <li>▪ Occupational violence</li> </ul>	M-53	<ul style="list-style-type: none"> <li>▪ Work in close proximity with team mates wherever possible</li> <li>▪ Maintain contact with Camera Room and or Communications centre via mobile phone and or radios and report in any instances of feeling unsafe</li> </ul>	L-28
Storage	<ul style="list-style-type: none"> <li>▪ Injury to MOP</li> </ul>	H-65	<ul style="list-style-type: none"> <li>▪ Ensure the outriggers are in place when not in use to prevent the machine from toppling over</li> </ul>	L-40
Bitten or scratched by bat	<ul style="list-style-type: none"> <li>▪ Injury / illness / zoonosis</li> </ul>	H-65	<ul style="list-style-type: none"> <li>▪ Report contact type immediately to supervisor</li> <li>▪ Go to emergency department ASAP and inform them of the situation</li> <li>▪ Adhere to medical advice</li> </ul>	L-40

## SECTION 4.MONITORING & REVIEW PROCESS

<b>Job/Task Step</b> A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.	<b>Incident/ Contact Types/ Hazards.</b>	<b>Risk Score Before Control</b> (Refer Section 5)	<b>Control Options/Safety Precautions</b>	<b>Risk Score After Control</b> (Refer Section 5)
<p><b>Conducting On-going Monitoring</b>                      Site Supervisor/Ganger/Person in control, to conduct ongoing monitoring of the activity process, hazards and any changes.</p> <p><b>Conducting a Review of the SWMS</b>                      Site Supervisor/Ganger/Person in control &amp; in consultation with all relevant stake holders will review this SWMS</p> <p>Person Responsible: Site Supervisor &amp; Workers</p>	<ul style="list-style-type: none"> <li>▪ Contamination</li> <li>▪ Poor communication</li> <li>▪ Unidentified hazards</li> <li>▪ Non Compliance</li> <li>▪ Financial Cost</li> <li>▪ Business/Public Perception</li> </ul>		<ul style="list-style-type: none"> <li>▪ Site Supervisor/Ganger/Person in control, must conduct ongoing monitoring of the worksite activity process, hazards and changes including:                             <ul style="list-style-type: none"> <li>- Checklists,</li> <li>- Inspections, and</li> <li>- Consultation</li> </ul> </li> <li>▪ Site Supervisor/Ganger/Person in control, must communicate all new activity hazards and or changes to all relevant worksite workers via regular toolbox talks.</li> <li>▪ Site Supervisor must conduct a review process of the following:                             <ul style="list-style-type: none"> <li>▪ Other control measures:-                                     <ul style="list-style-type: none"> <li>- This SWMS has been reviewed for this particular worksite activity.</li> <li>- This SWMS will be reviewed and updated when major changes to the work tasks have been identified.</li> </ul> </li> </ul> </li> </ul> <p>Date of review: ____ / ____ / ____</p> <p>Signed _____</p> <ul style="list-style-type: none"> <li>▪ Site Supervisor/Ganger/Person in control, must communicate all changes of this Safe Work Method Statement to all relevant worksite workers via regular toolbox talks.</li> </ul>	

## SECTION 5.RISK ASSESSMENT MATRIX

RISK ASSESSMENT PROCESS	
<b>Step 1</b>	Identify hazards
<b>Step 2</b>	Assess risks that may result because of hazards;
<b>Step 3</b>	Control measures to prevent or minimise the level of risks;
<b>Step 4</b>	Implement control measures; and
<b>Step 5</b>	Monitor and review the effectiveness of the control measures.

Note: Always conduct a risk assessment before and after the control measures are implemented, as this will identify if the control measures are effective in reducing risks.

RISK ASSESSMENT CALCULATOR					
Likelihood	Consequences Assess the likelihood & consequences from the Hazards or Risk				
	Insignificant No Injury <\$1,000 cost	Minor First Aid only no time lost \$1,000 - \$5,000 cost	Moderate < 4 days off –cuts sprains & sprains \$5,000 – \$50,000 cost	Major >4 days off broken/fractured bones etc \$50k- \$250k cost	Catastrophic Death or loss of limb or bodily function >\$250k cost
Almost certain Is expected to occur in most circumstances	M-52	H-64	E-76	E-88	E-100
Likely Will probably occur in most circumstances	M-44	H-56	H-68	E-80	E-92
Possible Could occur	L-36	M-48	H-60	E-73	E-84
Unlikely Could occur but not expected	L-28	L-40	M-53	H-65	E-78
Rare Occurs only in exceptional circumstances	L-20	L-32	M-45	H-57	H-69

## SECTION 6.RESIDUAL RISK ACCEPTANCE CONTROLS

Score	Action
E73 – E100	No work is to commence before risk is mitigated to ALARP (As Low As Reasonably Practical) and the (SWMS) is accepted by management.
H56 - H69	<p>The work must be strictly supervised by a competent person.</p> <p>All persons are to be fully trained and competent to complete the task.</p> <p>A prestart briefing to all staff is to occur and cover the following - the task, its hazards, risks and controls. This meeting is to be documented e.g. Tool box talk</p>
M44 – M53	<p>If it is a one off task work can commence on task with supervision after: all persons are briefed on the risk and controls (SWMS) before commencing work.</p> <p>If it is a routine task all persons are to be inducted on the work process and deemed competent by the supervisor before being allowed to conduct work unsupervised.</p> <p>All processes are to be documented.</p>
L 20 – L40	Competent person can do work unsupervised within the documented process (SWMS or Standard Operating Procedure).



## SECTION 7.EMERGENCY PROCEDURES

<p>Type of Emergency A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.</p>	<p>Consequences Type</p>	<p>Risk Score Before Control (Refer Section 7)</p>	<p>Control Options / Safety Precautions (Refer Section 6)</p>	<p>Risk Score After Control (Refer Section 7)</p>
<ul style="list-style-type: none"> <li>▪ Employee/Member of the public Injured</li> <li>▪ Accident</li> <li>▪ Environmental Incident</li> <li>▪ Fire</li> <li>▪ Personal Threat</li> <li>▪ Natural Disaster</li> </ul>	<ul style="list-style-type: none"> <li>▪ Injury/Death</li> <li>▪ Damage to equipment</li> <li>▪ Environmental damage</li> <li>▪ Non Compliance</li> <li>▪ Financial Cost</li> <li>▪ Business/Public Perception</li> </ul>		<p><u>Conduct an Emergency Procedure Risk Assessment Including:</u></p> <ul style="list-style-type: none"> <li>▪ Possible Emergencies               <ul style="list-style-type: none"> <li>- Accidents</li> <li>- Spills</li> <li>- Fire</li> <li>- Personal Threat</li> </ul> </li> <li>▪ Possible Consequences               <ul style="list-style-type: none"> <li>- Death</li> <li>- Injury/Illness</li> <li>- Damage to equipment</li> <li>- Environmental damage</li> </ul> </li> <li>▪ Methods of Response (Control)               <ul style="list-style-type: none"> <li>- Alerting</li> <li>- Emergency Services</li> <li>- First Aid requirements</li> <li>- Emergency Assembly Area</li> <li>- Spill response</li> <li>- Evacuation/isolation</li> </ul> </li> </ul> <p><u>EMERGENCY PROCESS</u></p> <ul style="list-style-type: none"> <li>▪ Remain Calm</li> <li>▪ Raise the Alarm (Get Help)               <ul style="list-style-type: none"> <li>- Emergency Services (if required)</li> <li>- Supervisor</li> </ul> </li> <li>▪ Check for Danger</li> <li>▪ Render Assistance (First Aid, spill control, if safe to do so)</li> <li>▪ Evacuate or Isolate area if required</li> <li>▪ Report Incident</li> </ul> <p><u>Personal Threat</u></p> <ul style="list-style-type: none"> <li>▪ De-escalate</li> <li>▪ Evacuate</li> <li>▪ Report</li> </ul>	

Service		Phone	
	Ambulance	000	
	Fire	000	
	Police	000	
	Cairns Hospital	(07) 4226 0000	
	Babinda Hospital	(07) 4067 8200	
	Poisons Information	13 11 26	
	DERM (Environment Protection)	1300 130 372	
	First Aid Officer: name		
	WH&S Officer:		
	Environmental Officer:		

**What to tell the Operator**

- Your name
- What is the exact location of the emergency
- Request which service is required (Police, Fire and/or Ambulance)
- What is the phone number you are calling from
- What is the problem, what exactly happened

**Medical Emergency**

- How many people are hurt
- How old is the person
- Is the person conscious (awake)
- Is the person breathing

**Fire Emergency**

- What is the type of Fire incident (Building fire, home fire, bush fire, car fire etc.)

**Police Emergency**

- What is the type of incident (fatality assault, robbery, trespass, vehicle)

**SAFE WORK METHOD STATEMENT**  
**SWMS001 - WORKING ON, NEAR, OR ADJACENT TO ROAD**  
 Person Responsible: Site Supervisor & Workers

Site/Location:

Date:

Job/Task Step -A brief description of work step/task.	Incident / Contact Types / Hazards	Control Options / Safety Precautions
Communicating SWMS	<ul style="list-style-type: none"> <li>▪ Poor communication or understanding of SWMS resulting in injury / incident</li> </ul>	<ul style="list-style-type: none"> <li>▪ Supervisor is responsible for review and communicating SWMS controls to crew at the pre-start</li> <li>▪ Crew is responsible for speaking up if they do not understand the control or have issues with the controls</li> </ul>
Hi Vis ability requirements (mandatory)  <i>(List any PPE that is above the standard requirement for Council)</i>	<ul style="list-style-type: none"> <li>▪ Struck by moving objects (vehicles, plant &amp; equipment)</li> <li>▪ Breach of the WHS ACT</li> </ul>	<ul style="list-style-type: none"> <li>▪ All workers shall wear a Day and / or Night high visibility garments that comply with the Australian Standards AS/NZ 4602 – High Visibility Safety Garments.               <ul style="list-style-type: none"> <li>▪ <b>NOTE:</b> Garments must be in good condition and not faded, torn or otherwise compromised by normal wear &amp; tear &amp; must reflect the work activity i.e. Working within a road corridor or Q-Rail site</li> </ul> </li> <li>▪ Hi vis garment to be worn over any warn clothing during colder weather.</li> </ul>
Competency requirements  <i>(mandatory)</i>	<ul style="list-style-type: none"> <li>• Unsafe work site</li> <li>• Injury to workers</li> <li>• Damaged Equipment</li> <li>• Unlicensed workers</li> <li>• Breach of the WHS ACT</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction Induction Card</li> <li>▪ 1 x Level 2 Traffic Management qualified person per crew working on, near, or adjacent to a road</li> <li>▪ Labour Hire staff to have a minimum of Working in Proximity to Traffic Part 1</li> </ul>
Pedestrians transiting through or around the work site	<ul style="list-style-type: none"> <li>▪ Unsafe work site</li> <li>▪ Unauthorised access</li> <li>▪ Loss of work time</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provisions for pedestrians shall meet at a minimum the requirements of sections of the Manual of Uniform Traffic Control Devices Part Three Works on Roads</li> <li>▪ If pedestrians keep encroaching onto the worksite implement a spotter/security to protect the worksite and/ or increase MUTCD controls</li> <li>▪ Safety barriers, temporary fencing or high visibility barrier mesh to be installed.</li> <li>▪ Mandatory Safety Construction signage to be installed</li> <li>▪ DO NOT USE DELINATION/SAFETY TAPE TO DELINEATE THE PEDESTRIAN TRAVEL PATH</li> </ul>
Consultation with Traffic Controllers if used.	<ul style="list-style-type: none"> <li>▪ Miss communication causing confusion resulting in possible injury / incident</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consult with Traffic Controllers on the Traffic Management Plan (TMP) / Traffic Guidance Scheme (TGS)</li> <li>▪ Induct Traffic Controllers into the SWMS</li> <li>▪ Identify communication methods</li> <li>▪ Work is not to commence until the TMP is implemented</li> <li>▪ Work is not to commence until a video of the site has been taken by the Traffic Controllers.</li> </ul>
Working within the road corridor without Traffic Control onsite	<ul style="list-style-type: none"> <li>▪ Incorrect signage and site set up resulting in incident</li> </ul>	<ul style="list-style-type: none"> <li>▪ Refer to Traffic Control Guide available on Tablets via Content Locker</li> <li>▪ Take a photo of the site set-up prior to commencing work.</li> </ul>
Working within the road corridor:  Laying out signage and traffic control devices <i>(Private property line to private property line)</i>	<ul style="list-style-type: none"> <li>▪ Struck by moving objects (vehicles, plant &amp; equipment)</li> <li>▪ Hitting objects with parts of body</li> <li>▪ Falls trips &amp; slips</li> <li>▪ Non Compliance</li> <li>▪ Financial Cost</li> <li>▪ Business/Public Perception</li> </ul>	<ul style="list-style-type: none"> <li>▪ Compliance with the current version of Manual of Uniform Traffic Control Devices including the Traffic Management Plan (TMP)</li> <li>▪ Where possible work facing traffic, if not possible, consider the use of a spotter</li> <li>▪ Complete the Working in the Road Corridor – Traffic Management Plan (TMP) – Daily Report &amp; Checklist form for each worksite including: Details of the site, signage used, daily inspections and the</li> </ul>

TMP Diagram and ensure adequate buffer zone between work area and vehicle movement has been implemented

# SAFE WORK METHOD STATEMENT

## SWMS001 - WORKING ON, NEAR, OR ADJACENT TO ROAD

Person Responsible: Site Supervisor & Workers

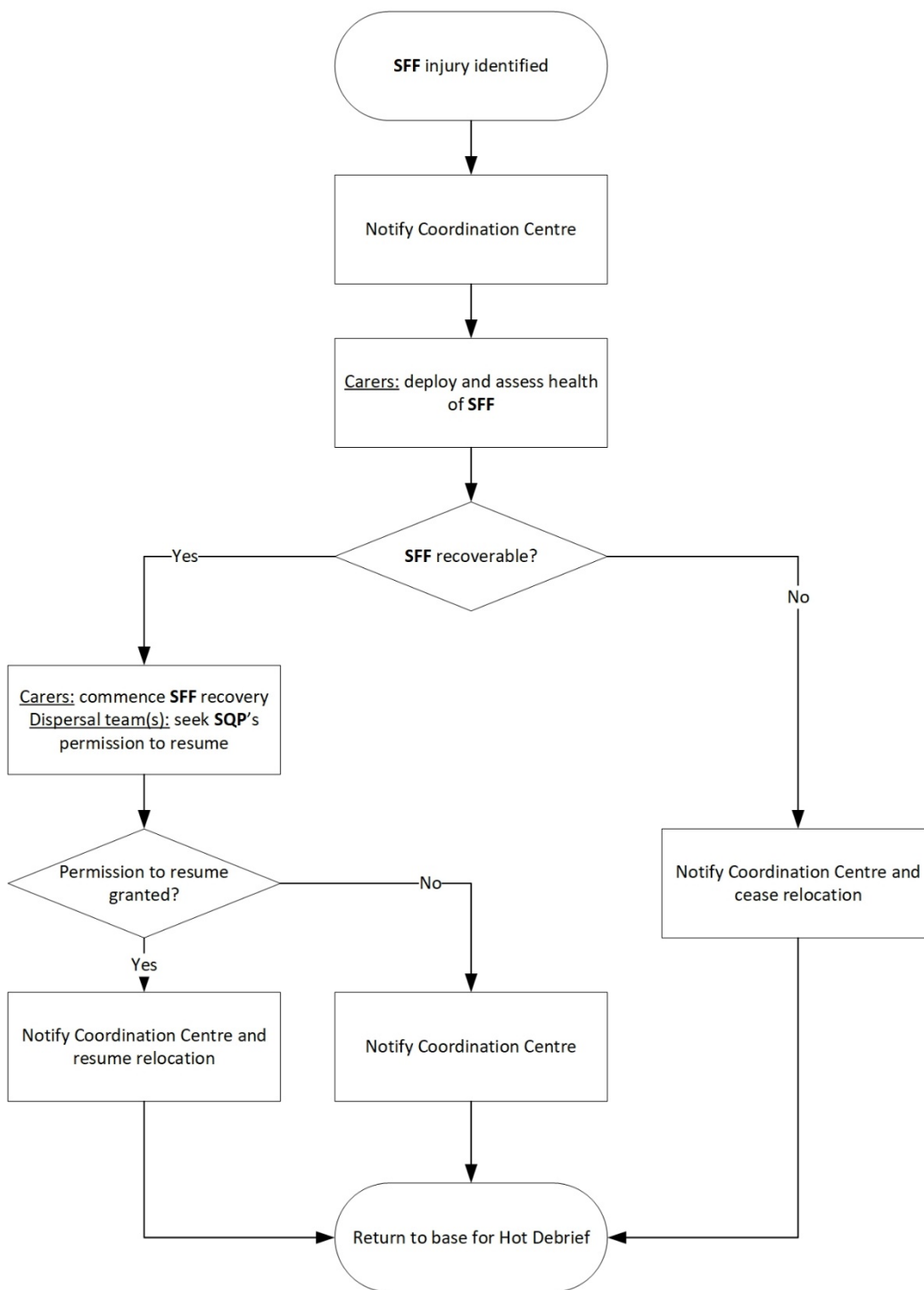
Site/Location:

Date:

### Induction Record

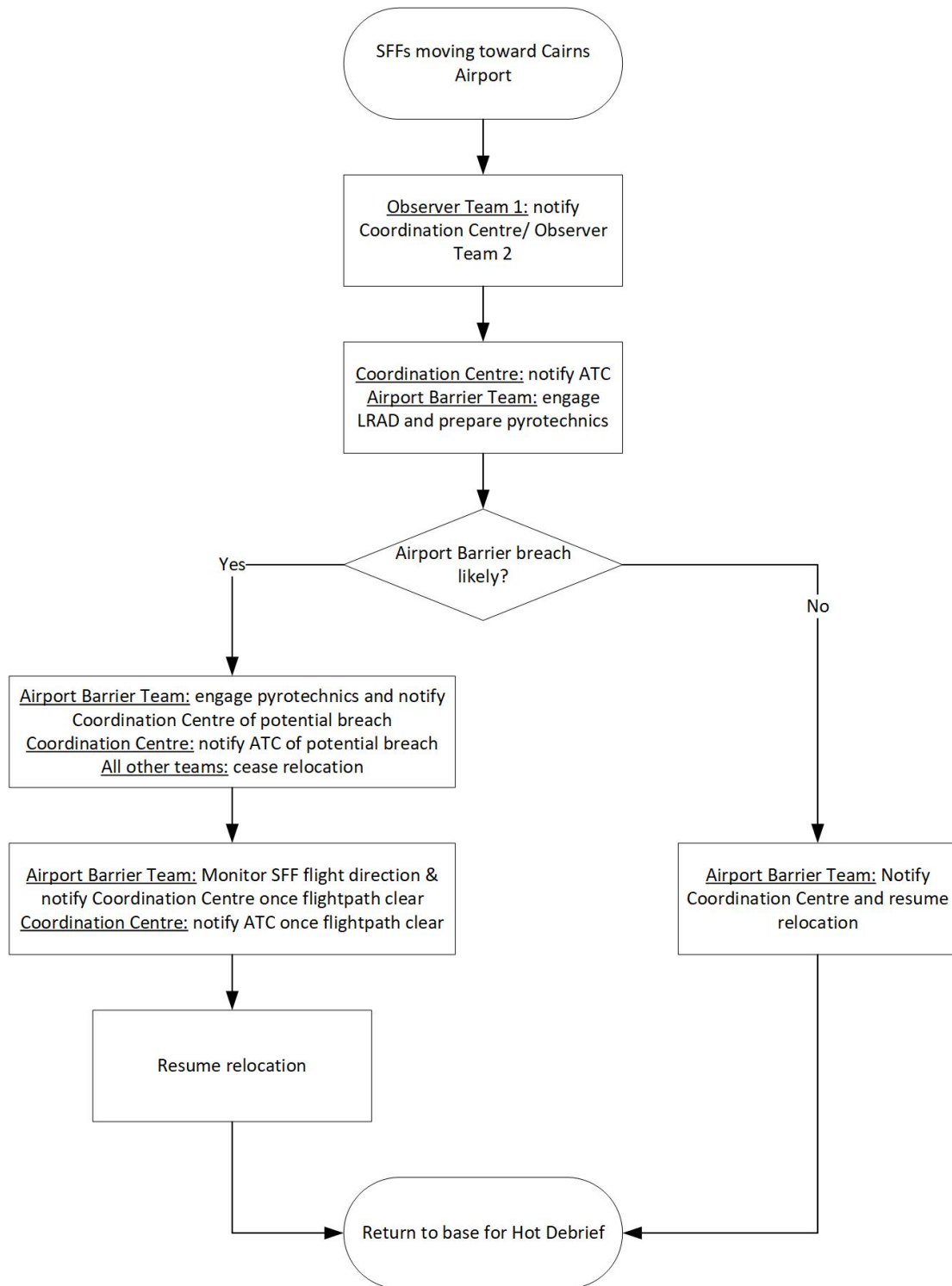
White Card	Name	Company	Signature	Date

Spectacled Flying Fox Relocation: Injury/ Death process flowchart (#6409544)



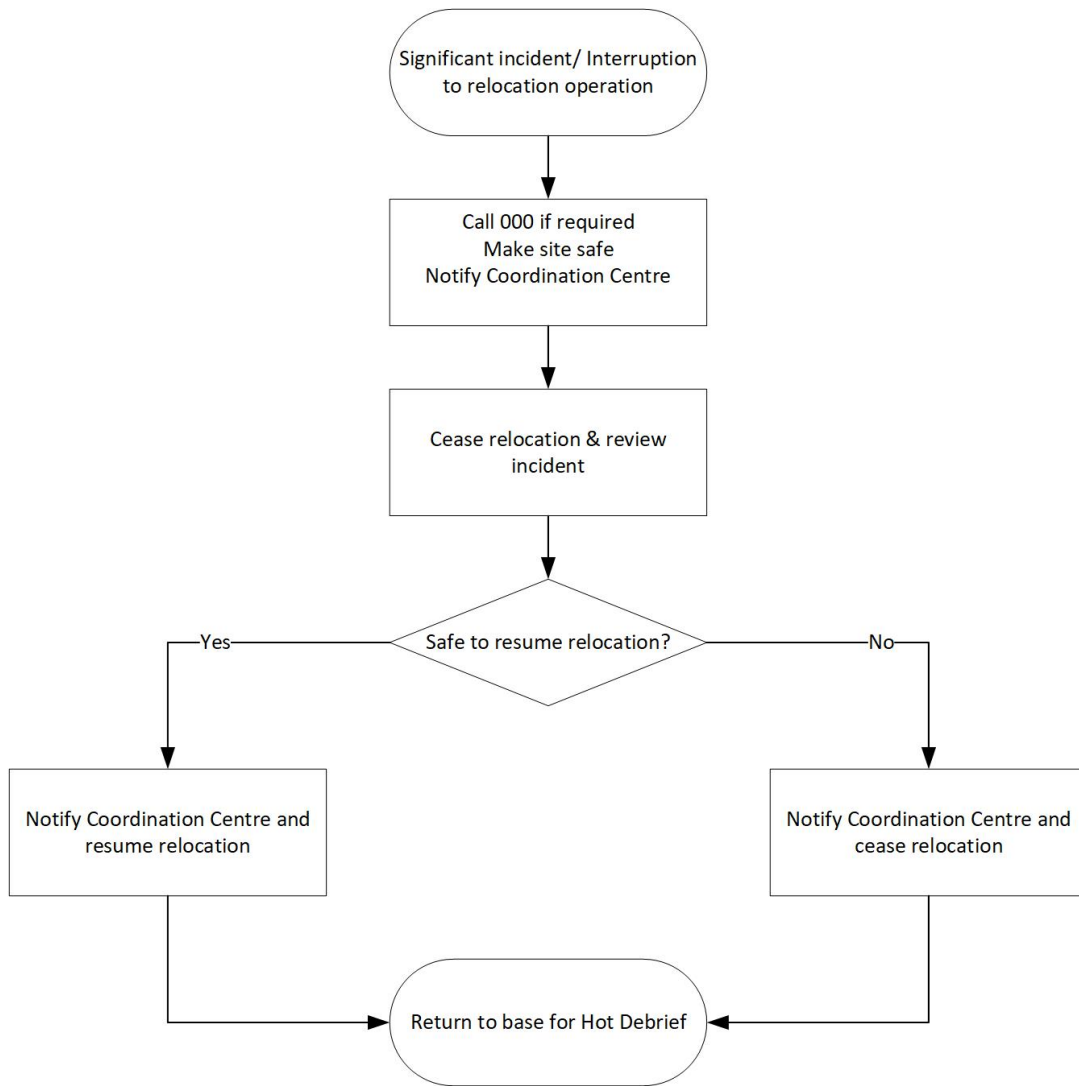
Glossary	
ATC: Air Traffic Control	
LRAD: Long Range Acoustic Device	
SFF: Spectacled Flying Fox(es)	
SQP: Suitably Qualified Person	

Spectacled Flying Fox Relocation: Airport Defence process flowchart (#6409548)



<b>Glossary</b>	
<b>ATC:</b> Air Traffic Control	
<b>LRAD:</b> Long Range Acoustic Device	
<b>SFF:</b> Spectacled Flying Fox(es)	
<b>SQP:</b> Suitably Qualified Person	

Spectacled Flying Fox Relocation: Operational Interruption process flowchart (#6409551)



<b>Glossary</b>	
<b>ATC:</b> Air Traffic Control	
<b>LRAD:</b> Long Range Acoustic Device	
<b>SFF:</b> Spectacled Flying Fox(es)	
<b>SQP:</b> Suitably Qualified Person	

**Appendix 14 SWMS Use of Firearms**

**JOB SAFETY ANALYSIS**

**SECTION A: JOB DETAILS**
















Job Title:	Operating a Shotgun with non-lethal shot for Speckaled Flying Fox Dispersion		
Location/Address:	Cairns City		
Description of Work:	Operating a Shotgun with non-lethal shot for Speckaled Flying Fox Dispersion	Date/s of Activity:	
Prepared by:		Date Prepared:	
<b>PERMIT REQUIRED</b>	Confined Space	<b>ISOLATION</b>	Mechanical
	Hot Works		Electrical
			Hydraulic
			Pneumatic

**SECTION B: RISK MANAGEMENT PROCESS**

<b>Step 1</b>	<b>Identify hazards</b> – Identify the things or situation that could potentially cause harm to people.
<b>Step 2</b>	<b>Assess risks</b> – Consider what could happen if someone is exposed to a hazard and how likely that is.
<b>Step 3</b>	<b>Control hazards</b> – Try to eliminate the risk first, or if that is not possible, put controls in place that minimise the risk so far as reasonably practicable.
<b>Step 4</b>	<b>Residual risk</b> – Re-Assess the risk for each task with the control measures implemented
<b>Step 5</b>	<b>Communicate and implement control measures; and</b>
<b>Step 6</b>	<b>Monitor and review the effective of the control measures</b> – ensure they are working as planned. If not, review the task analysis, hazard and controls and rectify.



**STEP 1: HAZARD IDENTIFICATION**

CATEGORY	HAZARD	CATEGORY	HAZARD	CATEGORY	HAZARD				
Gravitational 	<input type="checkbox"/> Falling object <input type="checkbox"/> Working at height <input type="checkbox"/> Incomplete scaffolding <input type="checkbox"/> Lifting equipment <input type="checkbox"/> Excavation / trenching <input type="checkbox"/> Use of ladders <input type="checkbox"/> Holes, penetrations, gaps <input type="checkbox"/> Structural failure / exceeding floor / Rack load rating <input type="checkbox"/> Ground stability	Pressure  Noise  Thermal 	<input type="checkbox"/> Compressed gases <input type="checkbox"/> Hydraulic <input type="checkbox"/> High pressure steam <input type="checkbox"/> Water <input type="checkbox"/> Vacuum <hr/> <input type="checkbox"/> Noise Level e.g. daily exposure <input type="checkbox"/> Vibration <input type="checkbox"/> Peak <hr/> <input type="checkbox"/> Steam/condensate <input type="checkbox"/> Hot materials <input type="checkbox"/> Hot surfaces <input type="checkbox"/> Hot work (welding/grinding) <input type="checkbox"/> Heat <input type="checkbox"/> Cold	General Work Area 	<input type="checkbox"/> Access / egress <input type="checkbox"/> Confined space <input type="checkbox"/> Restricted work area <input type="checkbox"/> Restricted visibility <input type="checkbox"/> Interaction with others <input type="checkbox"/> Unauthorised personnel / public Weather <input type="checkbox"/> Illumination / glare / transition <input type="checkbox"/> Wet / slippery <input type="checkbox"/> Windy <input type="checkbox"/> UV exposure Work Organisation <input type="checkbox"/> Slip and trip hazards <input type="checkbox"/> Poor ventilation <input type="checkbox"/> Dust <input type="checkbox"/> Poor housekeeping <input type="checkbox"/> Protrusions <input type="checkbox"/> Disorganisation				
Electrical 	<input type="checkbox"/> Underground cables <input type="checkbox"/> Transformers <input type="checkbox"/> High voltage equipment <input type="checkbox"/> Sub-stations / switch rooms <input type="checkbox"/> No earth leakage protection <input type="checkbox"/> Radiation / laser	Ergonomic 	<input type="checkbox"/> Repetitive/overuse <input type="checkbox"/> High low Reach <input type="checkbox"/> Awkward / heavy loads <input type="checkbox"/> Sedentary / poor posture <input type="checkbox"/> Over exertion / fatigue <input type="checkbox"/> Design / layout	Fire /Explosion 	<input type="checkbox"/> Unguarded moving parts <input type="checkbox"/> Drawing in / cutting points <input type="checkbox"/> Impact and crushing areas <input type="checkbox"/> Auto-start equipment <input type="checkbox"/> Inadequate isolation points <input type="checkbox"/> Hand and power tool condition <input type="checkbox"/> Welding or cutting <input type="checkbox"/> Abrasive blasting/grinding <input type="checkbox"/> Stored energy <input type="checkbox"/> Interlocks non-operational	Biological 	<input type="checkbox"/> Legionella / bacteria / viruses <input type="checkbox"/> Insects / animals / plants <input type="checkbox"/> Body fluids <input type="checkbox"/> Sharps e.g. needles	Environmental 	<input type="checkbox"/> Inappropriate chemical storage <input type="checkbox"/> Oxy-acetylene welding <input type="checkbox"/> Flammable liquids use & storage <input type="checkbox"/> Self-ignition combustibles, e.g. dust, <input type="checkbox"/> Soil, water or air contamination <input type="checkbox"/> Stormwater contamination <input type="checkbox"/> Contaminated materials <input type="checkbox"/> Waste, e.g. effluent, hazardous <input type="checkbox"/> Solid / packaging waste <input type="checkbox"/> Fuel (gas, diesel, oils, petrol)
Mechanical 	<input type="checkbox"/> Hand and power tool condition <input type="checkbox"/> Welding or cutting <input type="checkbox"/> Abrasive blasting/grinding <input type="checkbox"/> Stored energy <input type="checkbox"/> Interlocks non-operational	Chemical 	<input type="checkbox"/> Strong acids/bases (caustic) <input type="checkbox"/> Volatile organic compound <input type="checkbox"/> Toxic / hazardous substances <input type="checkbox"/> Unlabeled containers <input type="checkbox"/> Gases or vapours e.g. noxious, fumes <input type="checkbox"/> Asbestos / synthetic mineral fibre <input type="checkbox"/> Inadequate storage <input type="checkbox"/> Incompatible storage	Emergency 	<input type="checkbox"/> Traffic / pedestrian interaction <input type="checkbox"/> Underground services <input type="checkbox"/> Overhead services <input type="checkbox"/> Rated capacity of forklift <input type="checkbox"/> Poor condition <input type="checkbox"/> Registered plant (out of inspection) <input type="checkbox"/> Unlicensed / untrained operators <input type="checkbox"/> Vehicle instability, e.g. rollover <input type="checkbox"/> Mobile plant interactions <input type="checkbox"/> Driving <input type="checkbox"/> Towing	Psychological 	<input type="checkbox"/> Unrealistic workload / dis-organisation <input type="checkbox"/> Aggression / bullying / assault <input type="checkbox"/> Inappropriate behaviour <input type="checkbox"/> Personal issues <input checked="" type="checkbox"/> other	Wellness 	<input type="checkbox"/> Lack of first aid facilities <input type="checkbox"/> Poor communication <input type="checkbox"/> Working alone <input type="checkbox"/> Remote work <input type="checkbox"/> Fitness for work <input type="checkbox"/> Proactive medical/disease management <input type="checkbox"/> Fatigue <input type="checkbox"/> Alcohol / drug abuse <input type="checkbox"/> Other

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SECTION C: JOB SAFETY ANALYSIS				
Person responsible: Site Supervisor & Workers				
Job/Task Step A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.	Incident/ Contact Types/ Hazards.	Risk Score Before Control (Step 2)	Control Options/Safety Precautions (Step 3)	Risk Score After Control (Step 4)
Identification of Gun License	<ul style="list-style-type: none"> <li>▪ Untrained and certified persons using weapons</li> </ul>	H	<ul style="list-style-type: none"> <li>▪ Check licenses before issuing gun to person.</li> <li>▪ Maintain register of licensed persons</li> </ul>	L
Familiarity training on new weapon system	<ul style="list-style-type: none"> <li>▪ Person not inducted/familiar with safety features and loading/firing of system could cause injury to firer and/or others</li> </ul>	M	<ul style="list-style-type: none"> <li>▪ Have familiarity training on the weapon system consisting of:                             <ul style="list-style-type: none"> <li>▪ Safety Features</li> <li>▪ Loading</li> <li>▪ Firing</li> <li>▪ Unloading</li> <li>▪ Misfire of weapon system</li> </ul> </li> </ul>	L
Competency of firing the weapon	<ul style="list-style-type: none"> <li>▪ Person not aware of the recoil or noise of the weapon when firing may cause loss of confidence in handling the weapons system causing injury to firer or others</li> </ul>	M	<ul style="list-style-type: none"> <li>▪ Confirm competence and develop confidence to operate system by firing the types of round to be used for the activity</li> <li>▪ Competency assessment made on the range</li> <li>▪ Regular range practice</li> </ul>	L
Carriage of weapon	<ul style="list-style-type: none"> <li>▪ Damage to weapon during transit may causing weapon to malfunction</li> <li>▪ Weapon discharging due to being loaded during transit</li> </ul>	M	<ul style="list-style-type: none"> <li>▪ Weapon to be transported in a secure way during transit</li> <li>▪ Weapon to be in the unloaded condition during transit</li> <li>▪ Weapon to be transported with trigger lock in place and when possible with bolt removed and stored locked in the glove box</li> </ul>	L

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SECTION C: JOB SAFETY ANALYSIS				
Person responsible: Site Supervisor & Workers				
Job/Task Step A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.	Incident/ Contact Types/ Hazards.	Risk Score Before Control (Step 2)	Control Options/Safety Precautions (Step 3)	Risk Score After Control (Step 4)
Issue of ammunition	<ul style="list-style-type: none"> <li>▪ Ammunition type (i.e lethal round) may be issued inadvertently which can lead to serious injury or death of persons or flying fox</li> <li>▪ Ammunition may be stolen by firer to use personally</li> </ul>	<b>M</b>	<ul style="list-style-type: none"> <li>▪ Ammunition is to be sighted and deemed correct type and number by firer before receipting ammunition</li> <li>▪ Ammunition is to be stored separately in a secure container during transport</li> </ul>	L
Loading weapon onsite	<ul style="list-style-type: none"> <li>▪ Unauthorised discharge whilst loading may cause injury to others</li> </ul>	<b>M</b>	<ul style="list-style-type: none"> <li>▪ Only authorised shot (non-lethal bird fright) is to be used</li> <li>▪ Weapon only to be loaded immediately prior to being fired (not in the loaded condition whilst carrying)</li> <li>▪ When loading weapon, is to be pointed in a safe direction (not at persons)</li> </ul>	L
Firing the weapon system	<ul style="list-style-type: none"> <li>▪ Damage to building or structures</li> <li>▪ Injury to persons</li> </ul>	<b>L - M</b>	<ul style="list-style-type: none"> <li>▪ Weapon only to be fired on command of the Comcen</li> <li>▪ Weapon is only to be fired in the air <b>on an incline of 45 degrees or greater – not horizontally or decline</b></li> <li>▪ <b>Weapon is not to be fired directly at any buildings/structure or person</b></li> <li>▪ <b>Record of number of rounds fired is to be kept</b></li> </ul>	L
Unloading / make safe	<ul style="list-style-type: none"> <li>▪ Damage to building or structures</li> <li>▪ Injury to persons</li> </ul>	<b>M</b>	<ul style="list-style-type: none"> <li>▪ Weapon is to be unloaded in a safe location</li> <li>▪ Weapon is to be cleared (no round in chamber) by operator and buddy</li> <li>▪ Firing the action is to occur in the air in a safe direction – as per firing the weapon system with snap caps</li> </ul>	L

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### SECTION C: JOB SAFETY ANALYSIS

Person responsible: Site Supervisor & Workers

Job/Task Step <small>A brief description of what is to be done in the order they are carried out. Consider the equipment involved and the work method.</small>	Incident/ Contact Types/ Hazards.	Risk Score Before Control (Step 2)	Control Options/Safety Precautions (Step 3)	Risk Score After Control (Step 4)
Weapon malfunction	<ul style="list-style-type: none"> <li>▪ Incorrect identification of malfunction and/or rectification may cause injury to firer</li> </ul>	M	<ul style="list-style-type: none"> <li>▪ Carry out action as taught to clear the malfunction</li> <li>▪ If weapon is serviceable continue with fire orders</li> </ul>	L
Round malfunctions (hard struck) or barrel obstruction	<ul style="list-style-type: none"> <li>▪ Round may discharge at a later time causing injury to persons and or equipment</li> <li>▪ Wad may stick in the barrel of gun during firing causing blockage leading to injury to persons and or equipment</li> </ul>	M	<ul style="list-style-type: none"> <li>▪ Do actions as per bird shot requirements</li> <li>▪ Have a hard storage box to place malfunctioned rounds</li> <li>▪ Check gun barrel after each firing to ensure there is no blockage</li> <li>▪ Equipment on site to be able to remove stuck wad</li> <li>▪ Storage box is to be separated from vehicle cabin by a physical wall</li> </ul>	L
Return of unused rounds	<ul style="list-style-type: none"> <li>▪ Persons using rounds for personnel use</li> </ul>	M - L	<ul style="list-style-type: none"> <li>▪ Rounds to be accounted for and returned to issuing officer</li> <li>▪ Record of rounds fired are to be communicated to issuing officer</li> <li>▪</li> </ul>	L
	<ul style="list-style-type: none"> <li>▪</li> </ul>		<ul style="list-style-type: none"> <li>▪</li> </ul>	

**SECTION D: CONSULTATION – Employees and contractors have contributed and been consulted, understand the hazards and risk controls associates with this task and will implement and comply with the control measures. Inform the Supervisor if the hazards of the task change.**

Date	Name	Signature	Company
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<b>SECTION E: SUPERVISOR APPROVAL – Responsible for ensuring implementation and monitoring</b>	
Supervisor Name:	
Supervisor Signature:	
Date Approved:	
Review Date:	

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Step 2: RISK MATRIX	Consequence				
Consequence Criteria	Insignificant	Minor	Moderate	Major	Catastrophic
<b>People</b>	No injury	First aid only - no time lost	Medical Expenses Only or less than 4 days' time lost ie. minor lacerations, skin abrasions, sprains and strains or illness	More than 4 days' time off work due to injury ie. severe sprain/strains or illness  Deep laceration requiring multiple sutures/causing broken bones  Severe back injury or psychological injury	Death or loss of limb or bodily function
<b>Property</b>	Negligible damage to or loss of assets	Minor loss / damage. Some repairs may be required	Moderate damage requiring specialist / contract or equipment to repair or replace	Significant / permanent damage to assets and / or infrastructure	Widespread, substantial permanent damage to assets and / or infrastructure
<b>Financial</b>	Low financial loss (e.g. < \$1,000)	Minor financial loss (e.g. \$1,000 - \$5,000)	Moderate financial loss (e.g. \$5,000 - \$50,000)	Major financial loss (e.g. \$50,000 - \$250,000)	Huge financial loss (e.g. > \$250,000)
Likelihood	Risk Score				
<b>Almost certain</b> Event may occur within any 1 yr	<b>M</b>	<b>H</b>	<b>H</b>	<b>E</b>	<b>E</b>
<b>Likely</b> Event may occur one in every 1 – 2 yrs	<b>L</b>	<b>M</b>	<b>H</b>	<b>H</b>	<b>E</b>
<b>Possible</b> Event may occur one in every 2 – 5 yrs	<b>L</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>E</b>
<b>Unlikely</b> Event may occur in every 5 – 10 yrs	<b>L</b>	<b>L</b>	<b>M</b>	<b>H</b>	<b>H</b>
<b>Rare</b> Event may occur once in every 10+ yrs	<b>L</b>	<b>L</b>	<b>L</b>	<b>M</b>	<b>H</b>

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Step 4: RESIDUAL RISK ACCEPTANCE	Action
<b>E - Extreme</b>	No work is to commence before risk is mitigated to ALARP (As Low As Reasonably Practical) and the risk assessment/plan is accepted by management and employees
<b>H - High</b>	The work must be strictly supervised by a competent person. All persons are to be fully trained and competent to complete the task. A prestart briefing to all staff is to occur and cover the following - the task, its hazards, risks and controls. This meeting is to be documented e.g. SWMS
<b>M - Medium</b>	If it is a one off task, work can commence on task with supervision after all persons are briefed on the risk and controls before commencing work. If it is a routine task, all persons are to be inducted on the work process and deemed competent by the supervisor before being allowed to conduct work unsupervised All processes are to be documented.
<b>L - Low</b>	Competent person can do work unsupervised within the documented process

### Step 3: HIERACHY OF RISK CONTROL

When deciding on the control measures to prevent or minimise risk, the hierarchy of control must be considered. The hierarchy of control is:

Control Level	Hierarchy of control	Definition
<b>1</b>	<b>Elimination</b>	Eliminate the work process, material, or hazardous substance completely
<b>2</b>	<b>Substitution</b>	Replace the work process, material, or hazardous substance with a safer one
	<b>Isolation</b>	Isolate the person(s) from the work process, material, or hazardous substance
	<b>Engineering</b>	Design or re-design the work process, material or work environment
<b>3</b>	<b>Administration</b>	Limit the person(s) exposure to risk by job rotation, following a safe work procedure and/or providing adequate training
	<b>PPE</b>	Use personal protective equipment to protect the person(s)

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**Appendix 15      Evaluation**

What worked well			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10			
What didn't work so well	How Can We Improve	Action	Due date



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## Appendix 16 Wildlife Carer Daily Checks

From the evening of the 1 July 2020 until the 10 July 2020 an appointed Wildlife Carer will undertake surveillance of known locations within the Cairns CBD where SFF have either been injured or died as a result of collisions with buildings or other obstacles. This count will be conducted each morning prior to the SFF colony returning from nocturnal feeding activities, and each evening after the SFF leave their roosts for the night. This count must be completed on the proforma Record of dead or injured flying foxes forwarded to the Relocation Coordinator each morning and evening so the data can be captured within the Guardian Information Management System.

**Sites to check include:**

**Cairns City Library**

**Flynn Hotel**

**Bailey Hotel**

**Mantra Hotel**

**Riley Hotel**

**Lake St Car Park**

**Centre Point Tower**

### Schedule

Date	Time	Wildlife Carer	Note
Tuesday 30 June	AM		
"	PM		
Wednesday 1 July	4 am		
"	PM		
Thursday 2 July	AM		
"	PM		
Friday 3 July	AM		
"	PM		
Saturday 4 July	4 am		
"	PM		
Sunday 5 July	4 am		
"	PM		
Monday 6 July	AM		
"	PM		
Tuesday 7 July	AM		
"	PM		
Wednesday 8 July	AM		
"	PM		
Thursday 9 July	AM		
"	PM		
Friday 10 July	AM		

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Date	Time	Wildlife Carer	Note
“	PM		

**CRC Flying-fox Relocation – Proforma  
Record of dead or injured flying-foxes**

Person undertaking check:		Date:		Start time:		End time:	
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Time:							
Species code:							
Condition code:							
Site location (refer to map):							
Specific location (ground, tree):							
Photo number:							
Action code:							

<b>If RD SFF is found, report immediately to Relocation Manager</b>							
Confirm reported (yes/no):							

Total injured/dead flying-foxes found during check:	
---	--

**Codes**

Species	
SFF	Spectacled Flying-fox
LRFF	Little Red Flying-fox
Condition	
IN	Injured
RD	Recently dead (within past 24 hours)
DD	Dead and decomposing (>24 hours)
Action	
TC	Taken into care
DB	Disposed in path bin
AP	Action pending (not accessible)

