



OFFICE OF ENVIRONMENT & HERITAGE

# **Developing a code of practice authorising flying- fox camp management actions**

Public consultation report

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# Executive summary

## Overview

On 24 April 2018, the Minister for the Environment, Gabrielle Upton released the draft *Code of Practice Authorising Flying-fox Camp Management Actions* (Code), which was developed to provide a defence under the *Biodiversity Conservation Act 2016* (BC Act) for public land managers carrying out camp management actions in accordance with the Code.

This report provides a summary of the issues and recommendations raised in the written submissions received during the public consultation period that ran from 24 April to 7 June 2018.

## Submissions overview

A total of 99 submissions were received from individuals, environmental and community groups, business and industry groups, local government, scientific researchers or organisations, and wildlife rehabilitation organisations. Eleven submissions were substantially similar and were considered campaign submissions. Of the unique submissions, 57 submissions directly addressed the content of the Code. The making of the Code was supported by 22 unique submissions but opposed by 44 unique submissions.

## Key issues raised in submissions

### Scope of the Code

- The current licensing framework ensures appropriate planning and stakeholder consultation, which may otherwise result in unintended consequences for affected communities.
- Clarification on the status of the Code in relation to other NSW legislation was sought.

### Objectives

- The principles of the objectives are mostly supported, however, there is concern how the objectives would be achieved by the Code.

### Authorisation

- Reliance on camp managers' self-assessments could result in reduced regulatory oversight, reduced obligation for camp managers to consider long-term management directions and reduced capacity to assess cumulative impacts of multiple actions.
- The Code should not authorise damage to threatened species habitat, threatened ecological communities, lands subject to Biodiversity Stewardship Agreements (BSA) and Conservation Agreements established under the BC Act.

### Routine and high impact camp management actions

- The Code could expose camp managers to unrealistic pressure from the community to undertake high impact camp management actions before considering other low-

impact options, with an unrealistic expectation that issues can be immediately resolved.

- Camp management plans should be mandatory, at least for high impact camp management actions.
- Trimming and clearing of understorey vegetation and habitat modification require limits to avoid habitat destruction, which may result in flying-foxes becoming exposed during heat stress events, sites becoming unsuitable for roosting and potential impacts on other ecological values.
- Disturbance actions are strongly opposed, with key issues raised relating to the ineffectiveness and high cost of dispersals, animal welfare issues and risk of splinter camps.
- The minimum requirements for monitoring prior to high impact camp management actions are not adequate to account for factors such as weather patterns and food availability.
- The allowance for removing 50% of camp vegetation is too high and may result in the continued loss of conservation, heritage and amenity values.

### **Pre-emptive camp management actions**

- Pre-emptive camp management actions could be misused given the limited ability to predict where flying-fox camps could establish. Pre-emptive camp management actions should not impact threatened species habitats and threatened ecological communities.

### **Notifications and stakeholder engagement**

- The minimum timeframe for notifying OEH is considered too short for adequate stakeholder engagement, notification of adjacent councils and informed planning considerations; and too long to mitigate the emergency situations.
- Routine camp management actions should not have the same notification requirements as high impact camp management actions.
- Some submissions recommended longer minimum timeframes for notifying and consulting local residents, all adjacent councils and wildlife rehabilitation groups.
- The Code should recognise trained handlers who have appropriate vaccinations against Australian Bat Lyssavirus, appropriate personal protective equipment and/or relevant BC Act licences, and explicitly state that wildlife rehabilitation groups can attend to injured, sick and orphaned flying-foxes.

### **Requirement of a flying-fox expert**

- There are strong views that a flying-fox expert should have relevant education, experience and/or technical qualifications and be independent of the camp manager to avoid conflicts of interest.
- It is recommended that OEH manage a public directory of approved flying-fox experts to ensure that adequate suitability is met.

## Reporting

- The maximum allowance of six months to provide records of camp management to OEH is too long.
- The provision of a standard recording and reporting template for reporting outcomes to OEH was recommended.
- Information on the outcomes of camp management actions should be made available to the public.

## Terminology

- Suggestions for improved definition were provided by submissions.

## Next steps

The information contained in the written submissions will be used by the NSW Government to inform the development of the Code.

## Introduction

In March 2018, the draft Code of Practice Authorising Flying-fox Camp Management Actions (Code) was developed upon request from the NSW Minister for the Environment, the Hon. Gabrielle Upton.

The Code is intended to provide a defence to a prosecution for an offence under Division 1 of Part 2 of the *Biodiversity Conservation Act 2016* (BC Act) for actions done in accordance with the Code (Biodiversity Conservation Regulation 2017, clause 2.9).

The objectives of the Code are:

- 1) To enable camp managers to reduce the impacts of flying-fox camps on public land on nearby human settlements in a way that has minimal impact on biodiversity values.
- 2) To minimise adverse human health outcomes from camp management actions.
- 3) To avoid or mitigate harm to flying-foxes and damage to their habitat arising from camp management actions.
- 4) To ensure that communities impacted by flying-fox camps have access to accurate information, are consulted in the process of planning camp management actions and notified prior to implementation of camp management actions.

The Code was open for public consultation from 24 April to 7 June 2018. Ninety-nine written submissions were received.

This report provides a summary of the issues raised in the written submissions.

This report does not provide a NSW Government response to the issues raised in submissions. Input received from the submissions will inform the development of the Code.



# Summary of submissions

## How many submissions were received

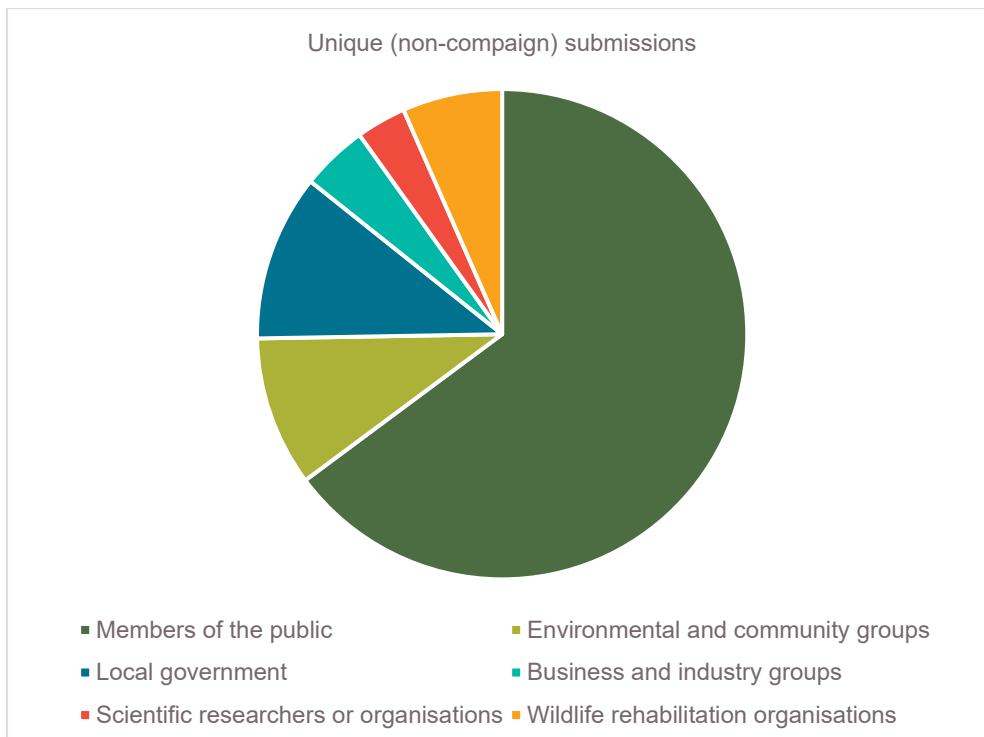
In total, 99 written submissions were received. Of these, eight submissions were substantially similar to other submissions and were excluded for the purposes of quantifying unique submissions below.

Of the 91 unique submissions, there were 57 submissions that directly addressed the content of the Code and 34 submissions that provided general comments only.

## Who made submissions

Submissions were received from the following:

- 59 from individual members of the public, including 12 who identified themselves as residents affected by adjacent flying-fox camps.
- 9 from environmental and community groups.
- 10 from local government.
- 4 from business and industry groups.
- 3 from scientific researchers or organisations.
- 6 from wildlife rehabilitation organisations.



**Figure 1** Proportion of unique submissions from various stakeholder types

## Publication of submissions

Submissions will be published on the OEH website except where the authors have requested the submission be kept private or where the content was of a personal and confidential nature.

## How submissions were analysed

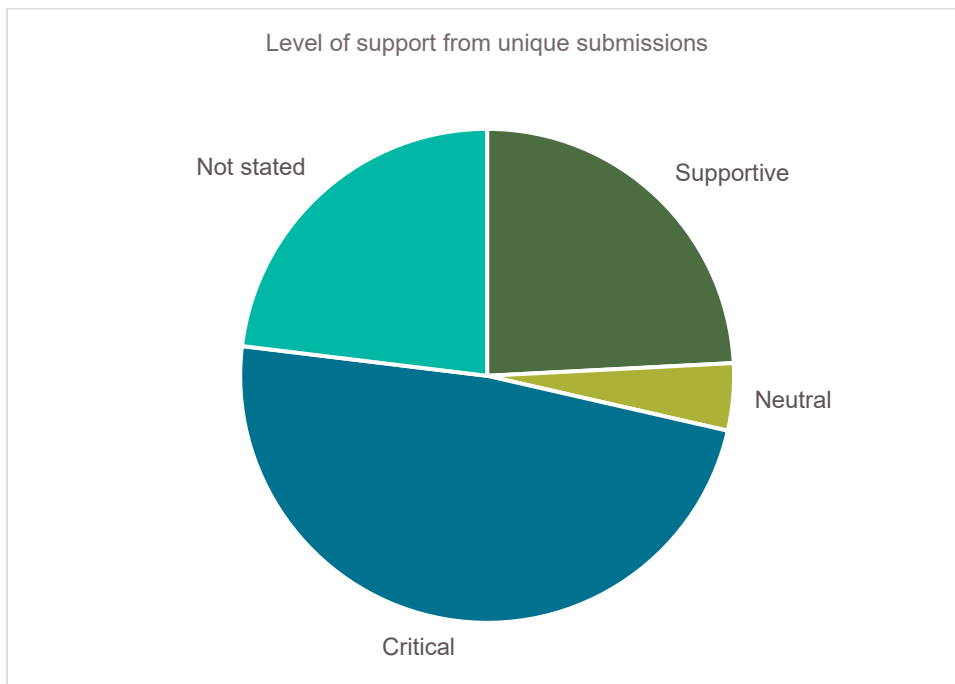
We reviewed and analysed all submissions received. This report identifies the key submission themes and summarises the key points raised by submissions under each theme.

While all submissions were reviewed and considered in detail, this report does not attempt to document every comment made. The report focuses on the key points raised by submissions and highlights comments to show the range of opinions received. Where comments in the submissions have cited literature, these references have been used in this report.

## How many submissions supported the Code

Here, we summarise the numbers of unique submissions based on their support for the Code (Figure 2):

- 22 submissions were supportive of making the Code.
- 4 submissions were neutral towards making the Code.
- 44 submissions were not supportive or critical of making the Code.
- 21 submissions did not state whether they were supportive, neutral or critical of making the Code.

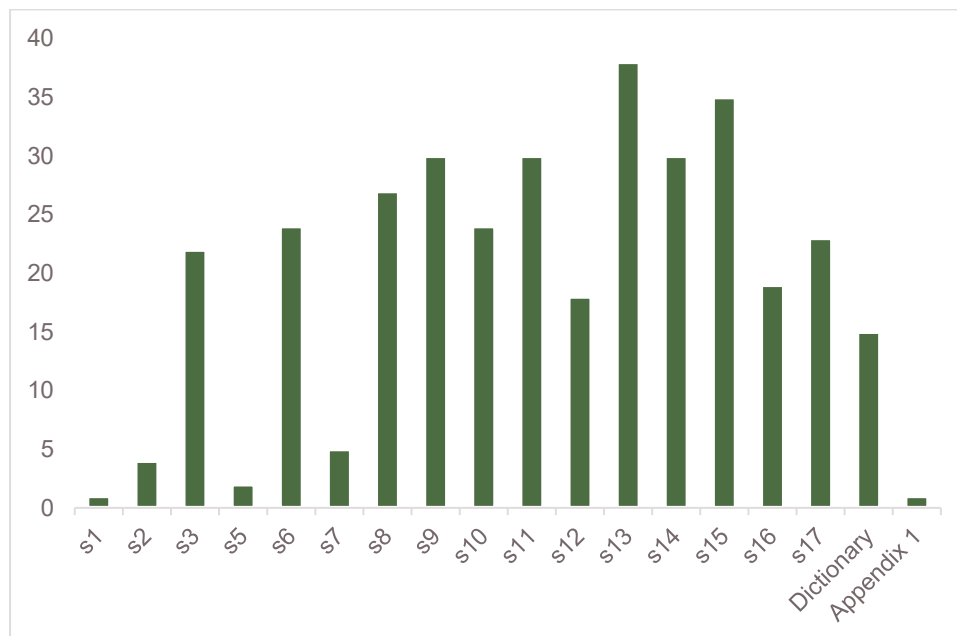


**Figure 2** Number of unique submissions that were supportive, neutral and critical of the draft Code of Practice

## Summary of comments expressed in submissions

Here, we summarise the comments that stakeholders made in relation to sections of the document.

Figure 3 shows the number of submissions that addressed each section of the draft Code of Practice.



**Figure 3** Number of submissions that addressed each section of the draft Code of Practice

### Section 2 Nature and status of Code

Section 2 was addressed by four submissions:

- Clarification on the status of the Code in relation to other NSW legislation (*Prevention of Cruelty to Animals Act 1979*, *Environmental Planning and Assessment 1979*) is sought.
- The Code should refer to obligations under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- The current licensing framework ensures appropriate planning and stakeholder consultation, which may otherwise result in unintended consequences for affected communities.
- Camp management plans should be required for all camps under management.
- A five part ‘test of significance’ in accordance with section 7.3 of the BC Act should precede any high impact camp management actions, to ensure that land managers have considered their impacts on threatened species habitats and threatened ecological communities; to guide the design/methodology of these actions; and to inform any subsequent directions given by OEH under clause 11(2).

### Section 3 Objectives

Section 3 was addressed by 22 submissions:

- The principles of the objectives are mostly supported, however, there is concern for how the objectives would be achieved by the Code.

Responses to the specific objectives:

- CI3(1) Pre-emptive camp management actions may result in outcomes that have significant impacts on biodiversity.
- CI3(2) The formation of new and more numerous splinter camps is likely to affect larger numbers of residents, possibly in less desirable locations, which should be considered in the planning of camp management actions.
- CI3(3) The objectives should also refer to the overall conservation of flying-foxes.  
High impact camp management actions may result in outcomes contrary to this objective.  
This objective should be supported by references to offsetting cleared or modified roosting vegetation by creating or restoring habitat in suitable areas.
- CI3(4) Clauses relating to community engagement should be strengthened to support this objective, for example, earlier notification and the provision of education on the ecological role of flying-foxes and how to co-exist with them.  
Inadequate community consultation may result in vocal minorities having a disproportionate influence on camp management.

## Section 6 Authorisation

Section 6 was addressed by 24 submissions:

- CI6(1) Whether councils must grant appropriate delegations to council officers responsible for actions authorised by the Code should be clarified.
- CI6(2) Poorly-considered camp management actions may result in negligent killing of flying-foxes.
- CI6(3) The exemption of declared areas of outstanding biodiversity value should be extended to threatened species habitats, threatened ecological communities and lands subject to Biodiversity Stewardship Agreements (BSA) and Conservation Agreements established under the BC Act.
- CI6(4) What is considered reasonably necessary is contentious and often part of the difficulty faced by councils and communities.  
The impacts on nearby human settlements that the Code concerns should be specified to exclude cases in which impacts are either perceived or minor.
- CI6(5) Guidance on how to avoid and minimise impacts on animals, plants and ecological communities is sought.
- CI6(6) Reliance on the self-assessments of camp managers may result in reduced regulatory oversight, reduced obligation for camp managers to consider long-term management directions and reduced capacity to assess cumulative impacts of multiple actions.

## Section 7 Camp management actions

Section 7 was addressed by five submissions:

- Circumstances under which camp management actions should cease such as extreme heat, cold or storm events should appear in section 7.
- Section 7 does not include pre-emptive camp management actions (s10), therefore clarity on whether these actions are authorised by the Code is sought.

## Section 8 Routine camp management actions

Section 8 was addressed by 27 submissions:

- The ambiguity of this section was commended, allowing for local interpretation of appropriate actions.

Responses to the specific routine camp management actions:

CI8(a) This clause should include trimming of vegetation to maintain existing buffers and walking tracks.

Due to understorey vegetation providing important retreat sites during extreme heat, limits should be placed on the amount of trimming, such as removal of weeds and plants not favoured by flying-foxes.

CI8(b) The interpretation of this clause may include planting exotic or non-endemic species, which may reduce the ecological value of the vegetation community.

CI8(c) Clarification on what constitutes minor habitat restoration for the benefit of roosting flying-foxes is sought.

CI8(d) Commended.

CI8(e) Commended.

Limits should be placed to minimise disturbance, such as requirements for grass cutting machinery of low decibel output, no more than one machine operated simultaneously (to allow flying-foxes to move to another part of the camp for respite) and ceasing activities if the number of flying-foxes in flight increases above a stated threshold.

CI8(f) Commended.

## Section 9 High impact camp management actions

Section 9 was addressed by 30 submissions:

- The ambiguity of this section was commended, allowing for local interpretation of appropriate actions.
- Camp managers may be exposed to unrealistic pressure to undertake disturbance actions before considering other options such as improved vegetation management.
- Camp management plans should be a requirement prior to implementing any high impact camp management actions. This supports comprehensive consideration of other options and adequate risk assessment.

Responses to the specific high impact camp management actions:

CI9(a) Trimming and clearing vegetation at the camp boundary has been effective, however, the total available camp habitat should be taken into consideration.

Work should be undertaken at night or periods when the camp is vacant and supervised by a suitably qualified arborist.

Parameters for the maximum width of a buffer and how the camp boundaries are determined should be defined.

- CI9(b) Installing noise attenuation fencing is commended, however, the construction of any fencing should not block flying-fox flight paths or access to preferred water sources.

The installation of such structures should be assessed through existing planning and environmental legislation due to both amenity impacts on residents and ecological impacts.

- CI9(c) Disturbance actions are strongly opposed and should not be encouraged apart from exceptional circumstances, with key issues raised relating to the ineffectiveness and cost of dispersals, animal welfare issues and risk of splinter camps

Representatives of affected residents should be consulted during the planning of high impact camp management actions.

Information on necessary agencies to contact should be added, for example, licence application with the Environmental Protection Authority and notification of Rural Fire Service and NSW Police Force for the use of smoke.

## Section 10 Pre-emptive camp management actions

Section 10 was addressed by 24 submissions:

- While pre-emptive camp management actions aim to avoid conflict for both residents and flying-foxes prior to camps being established, clarification on the types of actions is sought.
- Currently, there are no scientific means to predict where flying-fox camps will establish.
- Clarification on when pre-emptive camp management actions can be carried out is sought, for example, whether actions can be carried out when small numbers of flying-foxes are present prior to establishing a camp.

## Section 11 Notification of Environment Agency Head

Section 11 was addressed by 30 submissions:

- The adoption of a camp management plan should be sufficient for carrying out routine camp management actions without notification.
- Requirements for notifying various stakeholders are scattered between sections and should be consolidated into one section for ease of following.
- Aerodromes should also be notified.
- Wildlife rehabilitation groups should be notified with at least five business days' notice in order to make arrangements for attendance and rescue response.

Responses to the specific clauses:

- CI11(1) The minimum timeframe of five business days received mixed criticisms: too short for adequate stakeholder engagement, notification of adjacent councils

and informed planning considerations; and too long to address emergency situations.

Public notification would provide a means for a broad range of stakeholders to comment on proposed actions.

Notification of OEH should be accompanied with monitoring data to inform regulatory assessment.

CI11(2) Minimum timeframes of five to 14 business days are proposed.

CI11(3) Commended.

CI11(4) In rural areas, the 20-km radius may not result in any other councils being notified. Notification of all adjacent councils is a better approach.

Private land managers should also be notified.

The Code provides no means of mediation if an adjacent council disapproves of a proposed action.

## Section 12 Flying-foxes and human and animal health

Section 12 was addressed by 18 submissions:

- Camp managers may not possess the appropriate knowledge to ensure workers are aware of health risks associated with flying-foxes. As such, training and support may be required from NSW Health and/or OEH.
- Trained flying-fox handlers who have appropriate vaccinations against Australian Bat Lyssavirus, appropriate personal protective equipment and/or a relevant BC Act licence should be exempted.

## Section 13 Requirement for a flying-fox expert

Section 13 was addressed by 38 submissions:

- A list of flying-fox experts approved by OEH should be made available to camp managers.
- The flying-fox expert should be independent to the camp manager to avoid conflicts of interest, which may be challenging if they are paid by the camp manager.
- The flying-fox expert should have relevant education and/or technical qualifications, preferably be a certified environmental practitioner, and have expertise to correctly identify signs of stress, fatigue, injury and death in flying-foxes.
- OEH should provide expert advice to camp managers on request and continue to build and share local and regional knowledge.

Responses to the specific clauses:

CI13(1) The ability for a flying-fox pup to fly does not indicate that it is no longer dependent on its mother. Pups may not be able to disperse to alternative camps until six months of age.

Food stress is most appropriately assessed at a regional level, including the condition of surrounding camps.

Advice on the condition of the nearest camps should also be sought if disturbance actions are proposed.

CI13(2) Commended.

CI13(3) Commended.

CI13(4) Camp managers should comply with and not disregard any advice from a flying-fox expert.

## Section 14 Before carrying out camp management actions

Section 14 was addressed by 31 submissions:

CI14(1) Commended.

CI14(2) A standard method for monitoring would be beneficial.

Monitoring for more than five days would be necessary to adequately account for factors such as weather patterns and food availability.

Monthly monitoring may be more appropriate.

Monitoring following the implementation of camp management actions is also necessary; dispersal actions necessitate at least 12 months of monitoring during and following implementation, whereas vegetation removal may only require monitoring for two or three months.

Monitoring and population counts of surrounding camps should also be undertaken.

CI14(3) Commended, however, the clause should explicitly state that wildlife rehabilitation groups can assist injured, sick and orphaned flying-foxes.

CI14(4) Commended, however, a specified period that camp management actions should cease for should be prescribed.

Camp management actions should not occur within three weeks of a heat stress event.

## Section 15 While carrying out camp management actions

Section 15 was addressed by 35 submissions:

CI15(2) The 12-hour period should start from the commencement of disturbance actions.

CI15(3) A minimum parameter for a designated rest area with an allowable distance from neighbouring residents should be considered, however how the rest area would be protected from acoustic disturbance or disturbance with smoke during windy conditions may be challenging.

The location of the rest area should be determined by the flying-fox expert and communicated to wildlife rehabilitation groups to facilitate monitoring and assisting flying-foxes.

CI15(4) The effectiveness of disturbance actions should be evaluated before further actions are carried out.



CI15(5) Accurate population monitoring is required to ensure compliance with this clause.

The length of time for ceasing disturbance should be specified.

CI15(6) Any felling, lopping and removal of large branches should occur at night or during a period when the camp is vacant, as stated in the OEH *Flying-fox Camp Management Policy*.

CI15(7) The maximum parameter for removing vegetation at 50% is too high, resulting in concern over the continued loss of conservation, heritage and amenity values.

CI15(8) The management of splinter camps should be borne by the manager of the original camp.

## Section 16 Community education and engagement

Section 16 was addressed by 19 submissions:

- Community engagement should include a comprehensive explanation of potential benefits and consequences of camp management actions and provide estimated costs.

Responses to the specific clauses:

CI16(1) Engagement activities may include community meetings, surveys, and pamphlets advising residents of information sources and methods of feedback.

In past cases, lack of proper notification has resulted in increased community conflict.

CI16(2) Notification should be via posted correspondence.

The 3-day minimum timeframe is not adequate for notifying affected residents. Suggested minimum timeframes ranged from seven days to four weeks.

CI16(3) This information should be accompanied by information on the ecological importance of flying-foxes and their threatened status to avoid skewing the perception of flying-foxes.

CI16(4) The avenue for providing information and comment should be readily accessible and transparent or at least provided to OEH as part of section 17.

## Section 17 Record keeping

Section 17 was addressed by 23 submissions:

CI17(1) Commended, however, a standard recording and reporting template would be beneficial.

CI17(1)(a) The time of day actions are carried out should be reported.

CI17(1)(b) Advice from the flying-fox expert should be provided to OEH.

CI17(1)(c) An explanatory note identifying the relevant legislative provisions and penalties should accompany the point relating to whether any terms of the Code are contravened.

The legal implications of clause 17(1)(4) should be clarified. For example, whether declaration of contravention provides a defence against prosecution or could be used as evidence in a prosecution.

CI17(2) A maximum allowance of six months to provide records is too long. After six months, OEH is unlikely to be able to take corrective action and the participants in the action may no longer be available.

Information that relates to adverse impacts, food shortage, ill-health or impacts to adjacent camps should be reported immediately.

## Dictionary

The Dictionary was addressed by 15 submissions:

Camp boundary	Camp boundaries are dynamic, always changing and includes overflow areas that are not regularly used by flying-foxes except at periods of peak capacity.
Flying-fox camp	This definition appears to be inclusive of locations where one single animal has roosted on a single occasion. The definition should specify that camp is an area used by roosting flying-foxes over a sustained period.
Flying-fox expert	Flying-fox experts should be registered on a directory maintained by OEH and made available to camp managers.
Heat stress event	This definition should focus on the condition of hyperthermia, rather than solely on weather conditions.
Stress or fatigue	This definition can be better contextualised by the following additions; signs of psychological strain; licking as an example of spreading saliva; flying-foxes descending lower than 50% of the normal roosting height; and excessive diurnal flight.

Definitions for the terms and phrases below are sought:

- Buffer – used in clause 9(a).
- Harm – used in clauses 3(3), 9(c), 15(6), Dictionary (Flying-fox expert).

## **Next steps**

The information contained in the written submissions will be used by the NSW Government to inform the development of the Code.