1 December 2014

Flying-fox Camp Management Policy Review, PO Box A290, Sydney South, 1232 Via email: flyingfox.policyreview@environment.nsw.gov.au

#### Re: Draft Flying-fox Camp Management Policy

Considering that the draft flying-fox camp management policy and plan is being issued from the OEH, it is important that the document is humane, sustainable and ethical. It needs to address the protection and conservation of flying foxes at the same time as taking appropriate steps to mitigating their impacts on nearby human settlements.

In my view, the policy in its current format does not provide clear guidance, the objectives appear confused, and the plans outlined in the policy do not propose actions that will meet those objectives. The Objectives should be reconsidered and strengthened; particularly from the perspective of conserving flying fox populations (which OEH is legally obligated to do). For example this policy should;

- More clearly and forcefully address the potential impacts of urban development on the flying fox camps (not just make suggestions)
- Based on the above, provide options to minimise the impact of development and urbanisation on a flying fox roost so as to reduce the impacts of development on the camps
- Have more emphasis on the provision of guidance for the management of flying fox camps and foraging habitat areas in the short, medium and long term. This needs to take into consideration the behaviours, habitat and food requirements of the individual species concerned.
- Provide guidance for cooperation between stakeholders including land managers, other land owners and residents in the vicinity and other interested parties, such that more appropriate plans and sustainable plans can be developed for the management of flying foxes in urban and rural areas
- Make provision for the long-term conservation actions proposed to be encouraged and enforced rather than simply suggested.

The policy fails to identify significant issues relating to the management of flying foxes such as;

- The availability of roosting camp habitat (and the carrying capacity of such),
- The foraging locations and habits of the foxes
- The loyalty of flying-foxes to long-term roosts
- The need for ongoing (and sometimes costly) maintenance efforts to prevent the return of flying foxes to long-term roost sites
- The different behaviours and cycles between the different species of flying-fox
- The potential for disruptive actions to make matters worse from the perspective of dispersed roosts resettlement and,

• The potential for increased viral impact on and from stressed animals

The Policy and the Camp Management Plan Template fail to articulate the necessity for land manager to identify issues that arise from the collateral consequences of these management actions for flying fox camps in one area on neighbouring locations (in terms of foraging or camp habitats). This is exacerbated by the allowing the appointment of a suitably experienced project coordinator to be optional.

The over-arching emphasis of the policy is on the impacts of the animals on humans in an urban environment. Although the policy acknowledges the likelihood that urban expansion has triggered these interactions, the policy does not give adequate weight to the need of flying foxes in terms of their needs for roosting and foraging habitats, which directly impacts on their conservation status. Further options to mitigate the impacts of humans on the camps should be investigated. The policy does not adequately address the fact that it is unlawful to harm these protected animals and any proposals to manage the camps must not include actions that may harm them.

While the Camp Management Plan Template makes reference to the fact that 'further consultation with OEH staff will be required for the trigger for level 3' there is no description or definition in either the policy or the camp management template as to what the 'trigger' for level 3 might be or what would be considered 'legally defensible' actions required to implement a level 3 camp dispersal.

The policy outlines the 'challenges and 'uncertain outcomes' arising from dispersal but fails to describe the circumstances or justifications that would 'trigger' such actions.

While I do not question the potential effects of a large roost on residential amenity, the policy does not identify the measures applied to determine the validity of any impacts. When, for example is a camp considered at capacity, too noisy, too close, or too odorous? Are these 'triggers' and if so, at what point do they become 'triggers' for a level 3 action? These things need to be clarified – especially in the light of the potential for a land manager to hold a licence for up to five years.

A separate policy or section should be included on the management of Flying Fox impacts on orchards and or foraging areas outlining legal and viable processes or options to protect fruit and other vegetation as this section does not seem relevant to a Camp Management plan, which this policy purports to be. The animal welfare and ethical issues related to lethal methods of crop protection are significant and different to those related to the management of urban camp management and the public should be given the opportunity to comment on these issues separately.

As a scientist with a Masters in Wildlife Management I believe that this policy does not meet most of its objectives. Below is a summary of my analysis of the policy against each objective:

#### 1. Objective 1, to address the potential impacts of flying fox camps on human health

The policy does not provide any context or practical solutions for the management of health risks and does not provide any scientific evidence-base that the solutions proposed in the policy will achieve objective 1.

#### 2. Objective 2: minimise the impact of camps on local communities

Good community education detailing the real risks and with information perhaps with financial incentives on physical modifications of residences and public buildings near flying-fox colonies, will minimise impacts of living with flying-foxes better than a reliance on dispersals and habitat modification and other class 2 and 3 actions. Dispersals have a very low guarantee of success and are expensive and time consuming. These solutions, with the creation of suitable habitat will provide medium and long-term solutions for the conservation of flying-foxes. These methods are reflected in the IUCN approach.

## 3. Objective 3: provide a balance between conservation of flying-foxes and their impacts on human settlements

This policy does not achieve a balance as it is heavily biased towards human wellbeing rather than conservation of flying foxes. The policy will not achieve this objective unless it is amended to make clear that all land managers have an obligation to protect, regenerate and conserve both food resources and roosting habitat for flying-foxes. The approach needs to be much more clearly stated in the policy and in the Camp Management Template. The policy must also require both the NSW Government and Local Government to allocate resources over at least 10 years to ensure these objectives are achieved.

## 4. Objective 4: clarify roles and responsibilities for OEH, local councils and other land managers such as managers of Crown Lands

The section on roles and responsibilities is incomplete. There are also Government agencies and non-government organisations responsible for enforcing the animal welfare aspects. The OEH has the responsibility not only for successfully managing camp management plans, but for the conservation of flying foxes (as well as other species) and ensuring compliance with the laws which protect native animals in NSW. Also, as it stands today the Australian Government has responsibility for enforcing the protection of nationally threatened species under the EPBC Act — (not only approving interventions).

There are no roles or responsibilities specified relating to the implementation or management of the longer-term conservation efforts outlined in section 6. As stated above, the government needs to make a genuine commitment to implementing those recommendations. If not this section will have no impact and the OEH will have failed to take action to meet its conservation responsibility. It will also have failed to address objective 8 of the policy.

# 5. Objective 5: provide options for land managers to obtain upfront five year licensing to improve flexibility in the management of flying-foxes

It should be made clear that five-year licences are for approved specified actions over the five-year period and contain camp-specific triggers for when dispersal activities must be suspended or terminated. These triggers should not be optional.

It should be made clear that a licence applies to a specific camp on a land-owner's land, and not necessarily apply to any other camps that may form after the licence is granted.

The five year licence will be problematic unless these conditions are clearly detailed. The licence must relate to a specific property, with specific conditions. It must be clear that the location or conditions change, a new licence must be sought. (For example a licence given for a particular property with a small camp of little-red flying-foxes cannot be used in the following year to manage a large maternity camp of Grey-headed flying foxes on an adjoining property — even if it is under the control of the same land manager).

6. Objective 6: enable land managers and other stakeholders to use a range of suitable management responses to sustainably manage flying-foxes Objective 6 of the draft policy requires land managers and other stakeholders to sustainably manage flying-foxes. It will be impossible for individual landowners and Local Government to do this without an overall long-term plan throughout the entire range of each flying-fox species, not just the state of NSW. Each local management plan must be oversighted by OEH state-wide, and must measure the cumulative impact, but also NSW must work with neighbouring States and the Commonwealth to ensure coordinated sustainable management policies are in place in each state that flying-foxes are present.

Any action which removes further flying-fox habitat (including camp dispersal or disturbance) needs to be balanced by the creation of new habitat. For example, if Level 1 or 2 actions of trimming or removal of trees is used to move flying-foxes, then there must be planting or regeneration of more than was removed. Removal of trees represents many decades of growth so to compensate, more than twice as many need to be grown to replace those removed.

If camp dispersal or disturbance is to take place, (Level 3 action) then appropriate alternative roosts must be identified within 5km distance of the disturbance site. Note that of the documented attempts to relocate flying foxes in Australia, most have resulted in movements of less than 900m from the initial site (Table 2 on p. 283 in Roberts et al).

 Objective 7: require land managers to consider the behaviours, habitat and food requirements of flying-foxes when developing and implementing camp management plans

OEH has the responsibility to ensure that land managers have the necessary knowledge of behaviour and ecology of flying-foxes. ABS recommends that management plans are made in consultation with bat experts and that the cumulative impacts of all camp management plans are considered and analysed by OEH to ensure that the species will persist in to perpetuity.

The policy must be complimented by a long-term scientific monitoring program of flying-fox populations in NSW for all three species to ensure the proper triggers are in place to allow for adaptive management practices.

8. Objective 8: enable long term conservation of flying-foxes in appropriate locations by encouraging land managers to establish and protect sufficient food supplies and roosting habitat.

Research into creating foraging and roosting habitat is to be commended. As well as creation of new habitat, existing habitat needs to be conserved and native vegetation clearing rates drastically reduced, including managing state forests sustainably.

Conservation of flying-fox habitat needs to be planned on a regional basis and will need the expertise of OEH to assist Local Government. Unless there is a concerted and coordinated effort requiring all stakeholders to participate in protecting and regenerating habitat, flying-foxes will simply be shifted to other sites in urban areas.

The policy must be complemented by a long-term scientific monitoring program of flying-fox populations in NSW for all three species to ensure the proper triggers are in place to allow for adaptive management practices.

Education of communities and stake-holders on ecology of flying-foxes and their essential services and on real risks of living near a colony, and advice on physical modifications to lessen impacts is a key strategy in learning to live with flying-foxes.

Potential of tourism should be considered in the policy as this could bring financial benefits into the local community, some of which funds could be used for creation of new habitat and mitigating impacts to neighbouring residents.

Because of the welfare and conservation issues involved, it should also be referred to the NSW Animal Welfare Advisory Council for advice before being considered as a final draft for enactment.

Sincerely,

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