

# Flying-fox Habitat Restoration Program 2018 - 2030



Photo: Chris Hudson

---

## Flying-fox Habitat Restoration Program 2018 - 2030

LGNSW partnership with the NSW government's Environmental Trust to deliver \$5M habitat restoration program over 10 years.

- To help councils research, restore and create flying-fox habitat for conservation and conflict reduction.
- **Total project funding \$4.25m:**
  - \$3.4m LGNSW funding & Councils' co-contribution of \$850,000.

# Why this program?

- Increasing conflict between humans and flying-foxes
- Councils growing role in managing or mediating this conflict
- Conservation imperative

# Program Aims

- *Test whether or not flying-foxes move to enhanced, restored or created roost habitat sites, improving our understanding of factors contributing to:*
  - o *site occupation by flying-foxes*
  - o *reduction of conflict with the local community.*
- *Enhance and/or restore roosting and foraging habitat for flying-foxes **in ways that seek to reduce conflict at contentious camp sites and reduce negative impacts for flying-foxes at the urban interface** - with preference for habitat to be as far as possible from human settlement.*
- *To learn and share information about flying-foxes and how habitat creation, enhancement and restoration can improve their conservation and reduce conflict with humans.*

# Establishment phase 2018 - 2019:

- 1) All NSW flying-fox camps mapped, assessed & ranked for potential restoration **and** reduction of conflict
- 2) State wide foraging habitat mapped
- 3) A Program Design Framework for the 10 year restoration program developed
  - i. 1 year for co-design work /detailed local proposal
  - ii. 9 years on ground restoration work at priority sites

Mapping

Program  
Design

# Establishment phase cont'd

4) Monitoring & evaluation framework developed

Monitoring

5) A guide for councils on how to best educate and engage local communities (*draft in development*).

Evaluation

&

These foundation documents 1-4 above now available on LGNSW website.

<https://www.lgnsw.org.au/Public/Policy/Environment/Flying-Fox-Habitat-Restoration-Program/Public/Policy/Flying-Fox-HRP.aspx>

Community  
Engagement

# Program details

2 funding streams:

1. Camp habitat restoration stream
2. Foraging habitat restoration stream

and

Community engagement/education component for all funded projects and support all NSW Councils



Photo: Chris Hudson

# How will the program work?

- First round of funding – Camp restoration funding stream
- Councils in priority camp locations directly approached to determine interest in participating in a co-design process with LGNSW.
- Opportunities for restoration in Camp Mapping report – local knowledge will test and complement this.
- Some ground truthing still needed.



# Funding Proposals /Applications

- Co-designed with LGNSW
- Assessed by project Partnership Advisory Group (expert panel) against funding criteria.
- Assessed progressively as submitted

## How were priority flying-fox camp locations selected?

- All 334 camps scored based on multi criteria (weighted MCDA\*) including:
  - level of potential conflict
  - conservation value of the camp
  - historic mass flying-fox influxes
  - likely rates of Heat Stress Events (HSE)
  - vegetation condition

\***MCDA** – Multi-criteria decision analysis

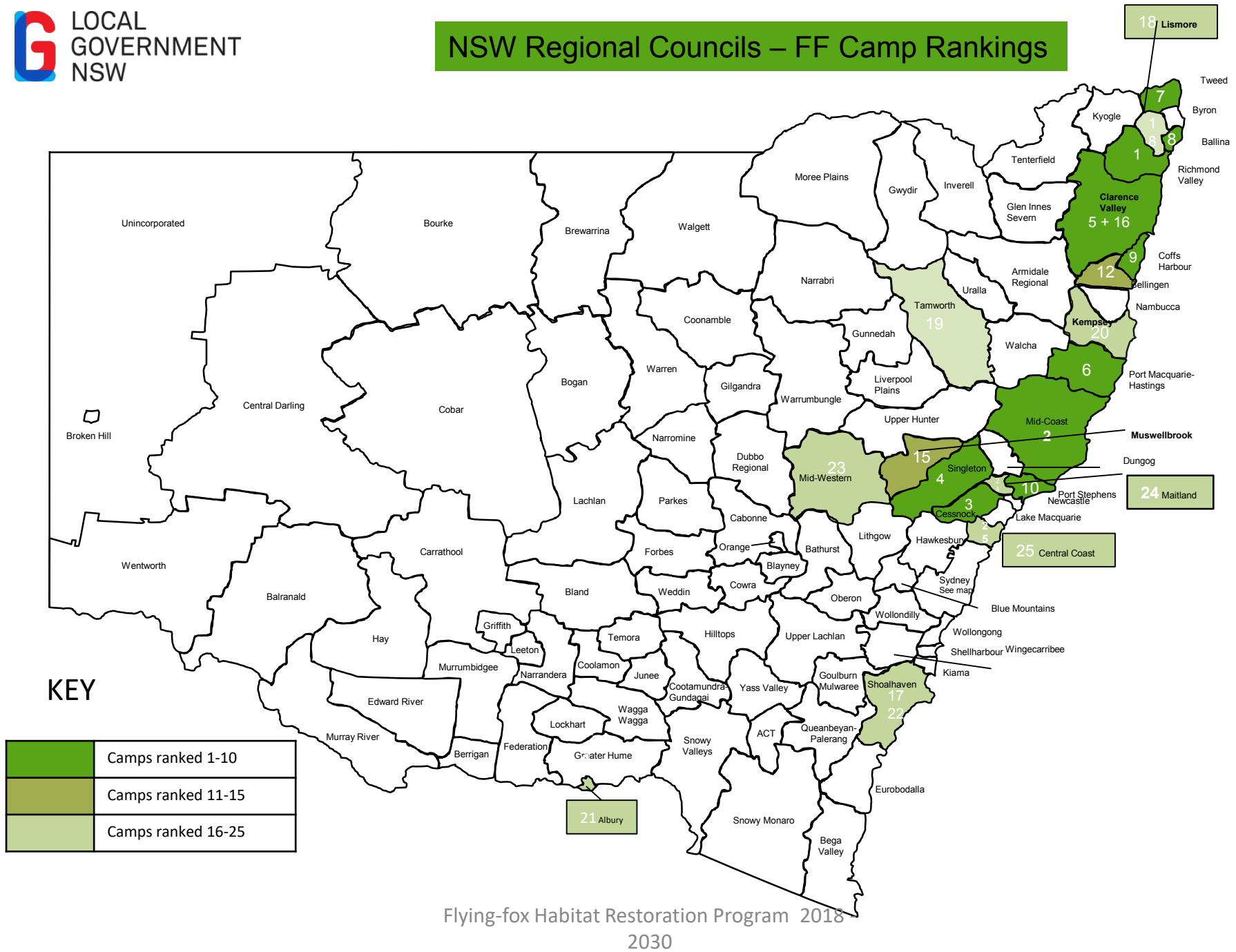
# Top 51 further investigated for restoration potential :

- A. Habitat improvement within the existing camp boundary;
- B. Extension beyond existing camp boundary in low conflict areas;
- C. Creation/improvement of a separate patch within 1,000 m.
- D. Creation/improvement of a separate patch beyond 1,000 m.
- E. Restoration will not meet project aims.

# Priority Camp Site Locations – Top 25 LGAs

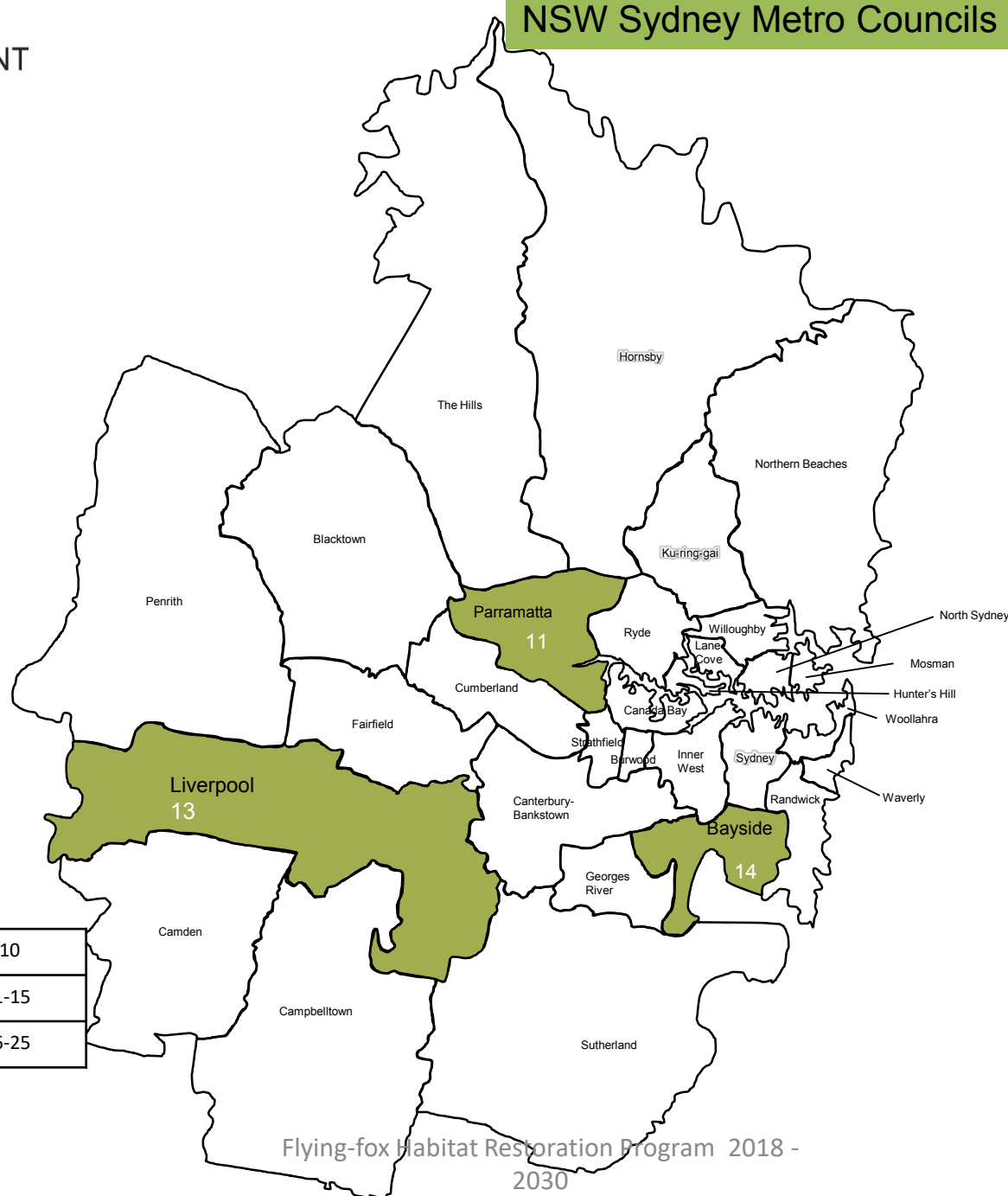
Rank in top 25	Council	Rank in top 25	Council	Rank in top 25	Council
1	Richmond Valley	11	Parramatta	21	Albury
2	Mid-Coast	12	Bellingen	22	<b>Shoalhaven</b>
3	Cessnock	13	Liverpool/ Fairfield	23	Mid-Western
4	Singleton	14	Bayside	24	Maitland
5	<b>Clarence Valley</b>	15	Muswellbrook	25	Central Coast
6	Port Macquarie-Hastings	16	<b>Clarence Valley</b>		
7	Tweed	17	<b>Shoalhaven</b>		
8	Ballina	18	Lismore		
9	Coffs Harbour	19	Tamworth		
10	Port Stephens	20	Kempsey		

# NSW Regional Councils – FF Camp Rankings



**KEY**

	Camps ranked 1-10
	Camps ranked 11-15
	Camps ranked 16-25



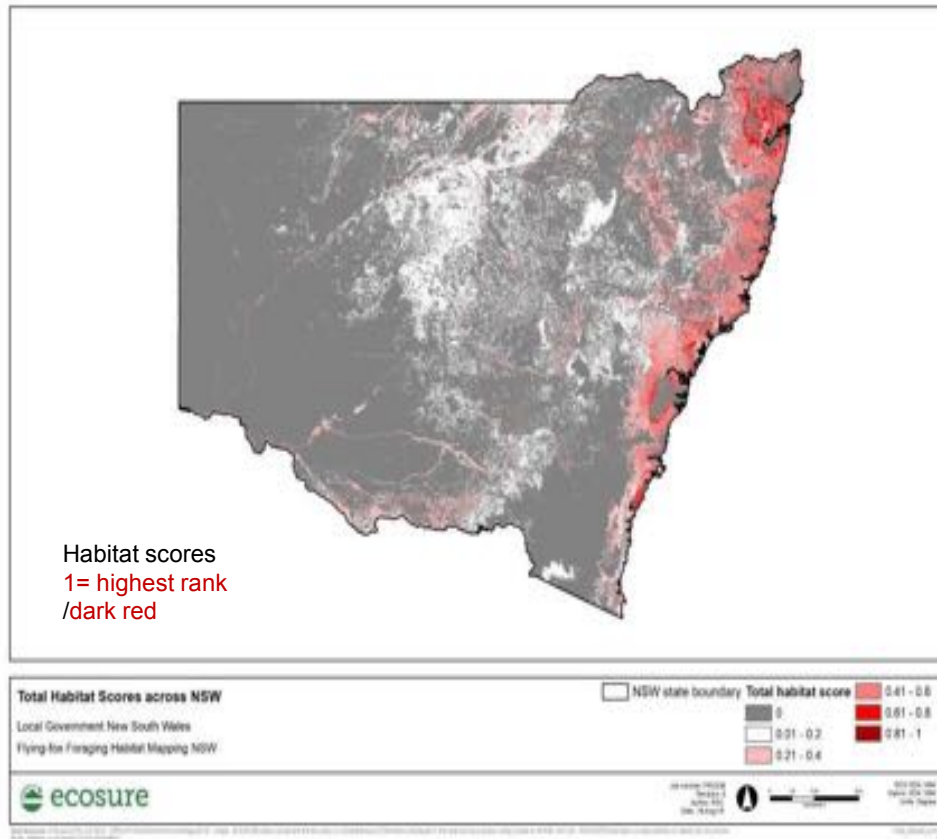
**KEY**

	Camps ranked 1-10
	Camps ranked 11-15
	Camps ranked 16-25

## Funding Stream 2 - Foraging Restoration

- Invitations for this funding stream – early 2021
- Some details still being finalised
- Foraging mapping report available on LGNSW website now

# Foraging Mapping



Mapping enables foraging opportunities to be taken into account when identifying priority areas.

Provides land managers information on native feeding resources for FF in their local area.



# Foraging mapping examined

- 60 blossom diet species scored based on:
  - -productivity
  - -annual reliability
  - -flowering duration
- 54 fruit-producing habitats assessed based on species richness

# Next Steps

- 1) Partnership Advisory Group (PAG) to review camp mapping priorities and provide guidance on design details.
  
- 2) LGNSW to contact selected Councils for Stream 1 Camp restoration funding:
  - i. EOI – Dec 2020
  - ii. Co-design process with LGNSW
  - iii. Councils submit detailed application –
  - iv. Applications assessed progressively as submitted
  
- 3) PAG to review foraging mapping and priorities
  
- 4) LGNSW to contact Councils for Stream 2 Foraging restoration funding – early next year.

# How Can Others Be Involved ?

- Support councils in priority locations to be involved/ identify opportunities
- Opportunities to partner with Councils:
  - to build on other restoration/conservation programs
  - community education/engagement events etc.
  - landholder agreements - restoration of habitat on freehold land with security of tenure for conservation
  - long term evaluation and monitoring to 2030 and beyond.

# Keep in touch with the Program

- Program information and mapping resources available on LGNSW website

## [Flying-Fox-Habitat-Restoration-Program](#)

- Subscribe to LGNSW [Flying-fox Flyer](#) for occasional program updates

# References

Ecosure, Flying-fox Habitat Restoration Program - Camp Mapping Final Report  
November 2019, Local Government NSW

Eby, P., Sims, R. and Bracks, J. 2019. Flying fox Foraging Habitat Mapping NSW: a seamless map for assessing temporal and spatial patterns of habitat quality for flying foxes. Report to Local Government Association New South Wales.