

## **Supplementary Statement – Dr Hannah Mueller dated 25/05/2023**

### **Terminology of SNAs**

The term Significant Natural Area does not mean an ecosystem needs to be 'natural' to have value. SNAs could also be named 'Significant Ecological Areas' as they are in other parts of the country such as Auckland, which could avoid misunderstandings.

### **Methodology and assumptions**

I acknowledge that assumptions have been made at a site scale with respect to the presence of fauna species, based on available ecological information. As described in the technical ecological report (dated March 2023), a desktop approach was taken to the identification of SNAs across the city, followed by ground truthing of properties where submissions have been made to check that no areas were misidentified (such as structures, lawns etc).

The approach is in line with the standard methodology to SNA identification across the country, using a standard methodology that has been independently peer reviewed. This has been applied across the Waikato region in previous SNA identification processes.

There is an element of uniqueness to the cSNA approach compared to other SNA identification processes across the country, but that reflects the habitat characteristics, requirements of the threatened fauna species present, and gully landform of linear ecosystems in Hamilton.

Requiring individual assessments and reports for each property: this is not standard methodology for SNA identification, and would be reductionist, ignoring the wider function of the ecosystem. The reliance on nearby records from ecological databases (if suitable habitat is present) to establish the likely presence of a fauna species, including to determine compliance with WRPS criteria, is common ecological practice.

The WRPS criteria includes (at 3):

It is vegetation or habitat that is currently habitat for indigenous species or associations of indigenous species that are:

- classed as threatened or at risk, or
- endemic to the Waikato region, or
- at the limit of their natural range.

Proving the existence of current habitat use by fauna in an area is a challenge, and often requires assumptions to be made. Proving the absence of it is even more difficult. For context, when assessments are made for an individual site for an ecological effects assessment, if fauna surveys do not show the presence of a particular species but there are records of the species in ecological databases, and the habitat and connectivity suggest that the species could be present, the assumption has to be made that the species could be there. Assuming the opposite goes against best ecological practice.

A property-scale approach is likely to lead to a death by a thousand cuts outcome. In Hamilton City, we have a unique situation of threatened species, particularly bats, persisting in an urban environment. Habitat is extremely limited across the city, with most vegetation historically lost to urban development.

Because of this context, any future habitat loss needs to be prevented; that means any further encroachment onto gullies and other SNAs areas needs to be avoided; and that exotic and weedy vegetation also has important function.

The property-scale approach is reductionist as it misses the context and function of the wider ecosystem, and is likely to lead to further fragmentation and habitat loss.

Taking a landscape-scale approach is important to preserve ecological integrity and resilience.

Protecting and restoring what habitat is left is critical to sustaining fauna species within the city.

### **Rules and provisions – planting in cSNAs**

As a minor comment, the intent is to protect values associated with the particular SNA (fSNA and cSNA), so some activities such as the plantings of non-invasive exotic plants within cSNAs could be considered.