

## Information Sheet: Mosquito Management

The Karnup District Structure Plan (KDSP) area is subject to mosquito risk, arising from its proximity to the Serpentine River System (and Lake Amarillo), Anstey and Paganoni Swamps.

Through long term (and more recent) monitoring, these areas have been found to breed mosquitoes which in some cases are significant in number, are active during the day and night, and which may carry disease. This presents a potentially significant impact on human health and amenity to parts of the District Structure Plan area, which needs to be appropriately managed and planned for.

### The Mosquito Management Challenge

To understand the extent of mosquitoes affecting the District Structure Plan area and their potential impact, the City of Rockingham has undertaken a long term Mosquito Monitoring Program, and more recent additional monitoring. The data collected has been used to prepare a Mosquito Risk Assessment and Management Plan (MRAMP). This includes a risk assessment that has identified an extreme risk for residences constructed within 1 km of known mosquito breeding habitats if appropriate management does not occur.

Ross River Virus and Barmah Forest Virus are the greatest concern to human health, however, mosquitoes can also have a significant impact on amenity, and the enjoyment and use of outdoor areas.

Mosquito mitigation measures are currently in place for the Serpentine River System and Lake Amarillo (to the east of the development area), however measures have yet to be established for Paganoni Swamp (to the south) and Anstey Swamp (to the west). Treatment of these areas is challenging due the limited access and tall, dense over storey vegetation.

For development to occur within the District Structure Plan area a range of controls need to be considered, including management and/or treatment of breeding areas, management of drainage, use of design controls for residential development, improved education, notifications on title, and public information.

Even with these controls, the mosquito nuisance and disease risk will not be fully eradicated, however, an integrated management approach can lower the level of risk to more acceptable levels.

Mosquito management for the District Structure Plan area will require a collaborative approach from various State Government agencies, the City of Rockingham, land owners and proponents.

### Land Use Planning

Where possible, land use planning strategies may include retaining larger lots and lower-risk land uses (i.e. non-residential uses) within closer proximity to mosquito breeding areas, along with stormwater drainage management and residential design controls.

The Department of Health recommends a separation distance of at least 1 km between the standing water level of mosquito breeding areas and sensitive uses, including residential development. This distance is considered the mosquito 'flight zone', which could significantly impact the amount of land that could be developed for residential land uses within the District Structure Plan area.

Effective design treatments for residential land uses in particular, may be necessary at the planning approval/building license stage, including the installation of mosquito screening on all external doors and windows and the provision of enclosed outdoor entertaining areas.

## For More Information

For more information on the Karnup District Structure Plan visit [rockingham.wa.gov.au/kdsp](http://rockingham.wa.gov.au/kdsp)

Visit [cityrockport.com.au](http://cityrockport.com.au) and sign up to the City's online secure portal, Rock Port to receive updates on this project direct to your inbox.