

Willogoleche Expansion

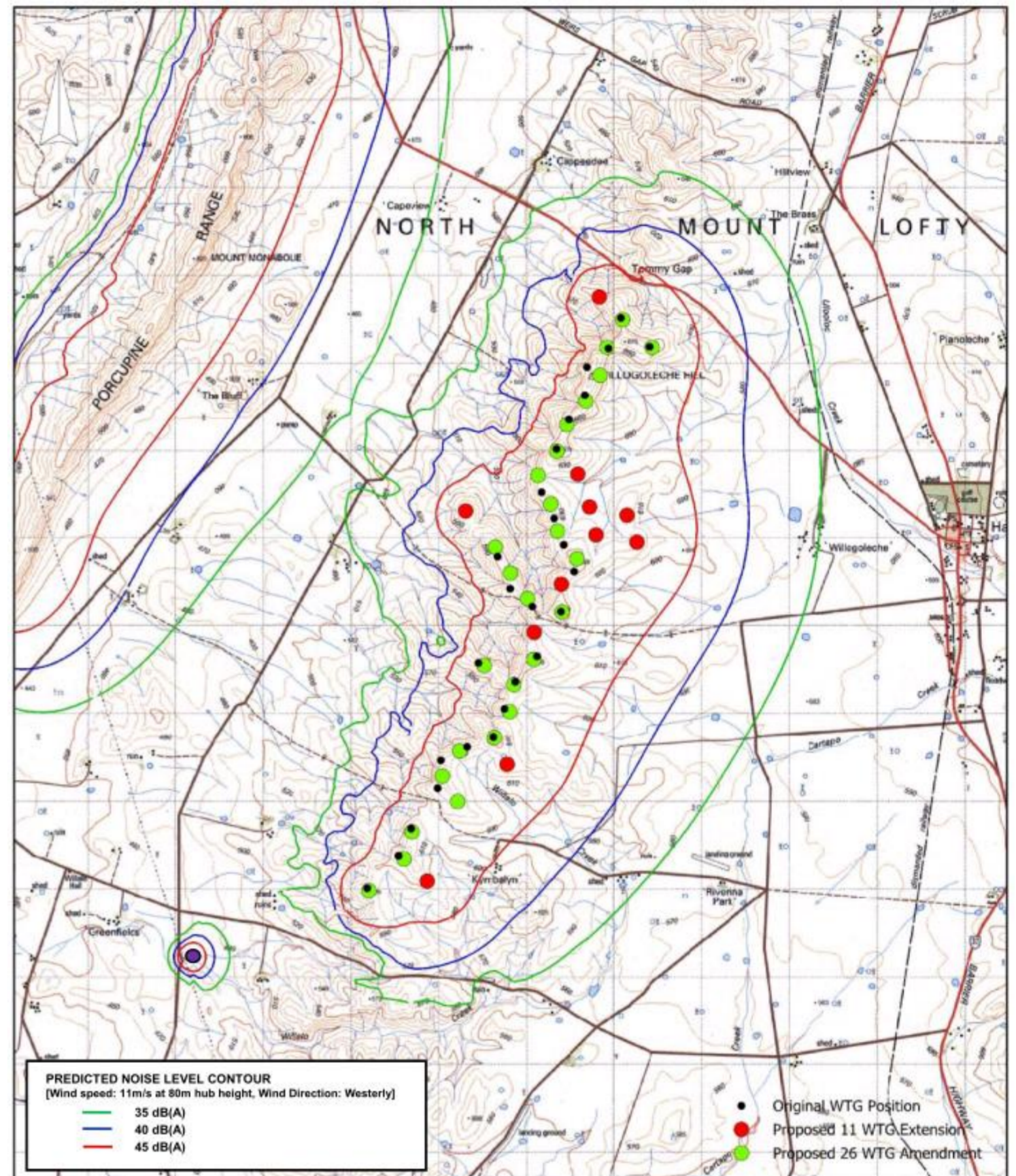


Noise

Turbine noise is mainly created by the aerodynamic swoosh of the blades and some secondary low level mechanical noise of the generator operating inside the nacelle at the top of the turbine tower. Aerodynamic noise is generally unobtrusive, broadband in nature and similar to the background noise of wind in trees.

The noise assessment for the Willogoleche Hill Wind Farm Expansion has been completed based on the "Wind Farms, Environmental Noise Guidelines" published in July 2009 by the Environment Protection Authority ("EPA") of South Australia. The guidelines require that wind farm developments are designed and constructed such that the noise they create does not exceed 5dB(A) above background sound level or 40dB(A) using the 10 minute L_{Aeq} whichever is the greater, at nearby residential properties.

Sonus Pty Ltd were commissioned to conduct background noise monitoring and acoustic modelling against the guidelines. The current modeling indicates that the expanded Willogoleche Hill Wind Farm complies with the SA EPA guidelines.



Cultural Heritage

Aboriginal cultural heritage areas are significant and should be addressed within the requirements of the Aboriginal Heritage Act 1988 ("Act"). The site of the original Willogoleche Hill Wind Farm was determined under Section 12 of the Act to contain no Aboriginal Sites or Aboriginal Objects. Vivienne Wood Heritage Consultant Pty Ltd has been appointed to undertake a desktop study of the area of the proposed wind farm expansion. The desktop study has determined that there are no recorded Indigenous sites of significance within the study area, but has recommended consultation with the Ngadjuri Walpa Juri Lands and Heritage Association Inc to confirm this through a walk-over survey of the site area.

Electro Magnetic Interference (EMI)

Wind turbines have the potential to interfere with microwave, radio, telecom and television signals, by either blocking the signal path or causing the signal to scatter. This is otherwise known as electro-magnetic interference, or EMI. Lawrence Derrick and Associates Telecommunications Consultants have been commissioned to investigate the potential for any EMI to be caused by the Willogoleche Wind Farm expansion. A number of telecommunication links were identified during the permitting of the original Willogoleche Wind Farm and these links are being avoided with the expansion proposal. One of the planning conditions of the original Willogoleche Wind Farm requires pre- and post- construction television surveys. The expansion of the wind farm will comply with the planning conditions of the original Willogoleche Wind Farm in these respects.