



MARSHALL DAY
Acoustics



PORTS OF AUCKLAND NOISE

Community Presentation (2 June 2022)

PORT NOISE

The Auckland Unitary Plan provides guidelines to ensure that residential communities can co-exist with ports and their associated activities. This is achieved in two parts:

- **Noise Rules**

- Noise contours and land use controls associated with ‘hum’ of port operations

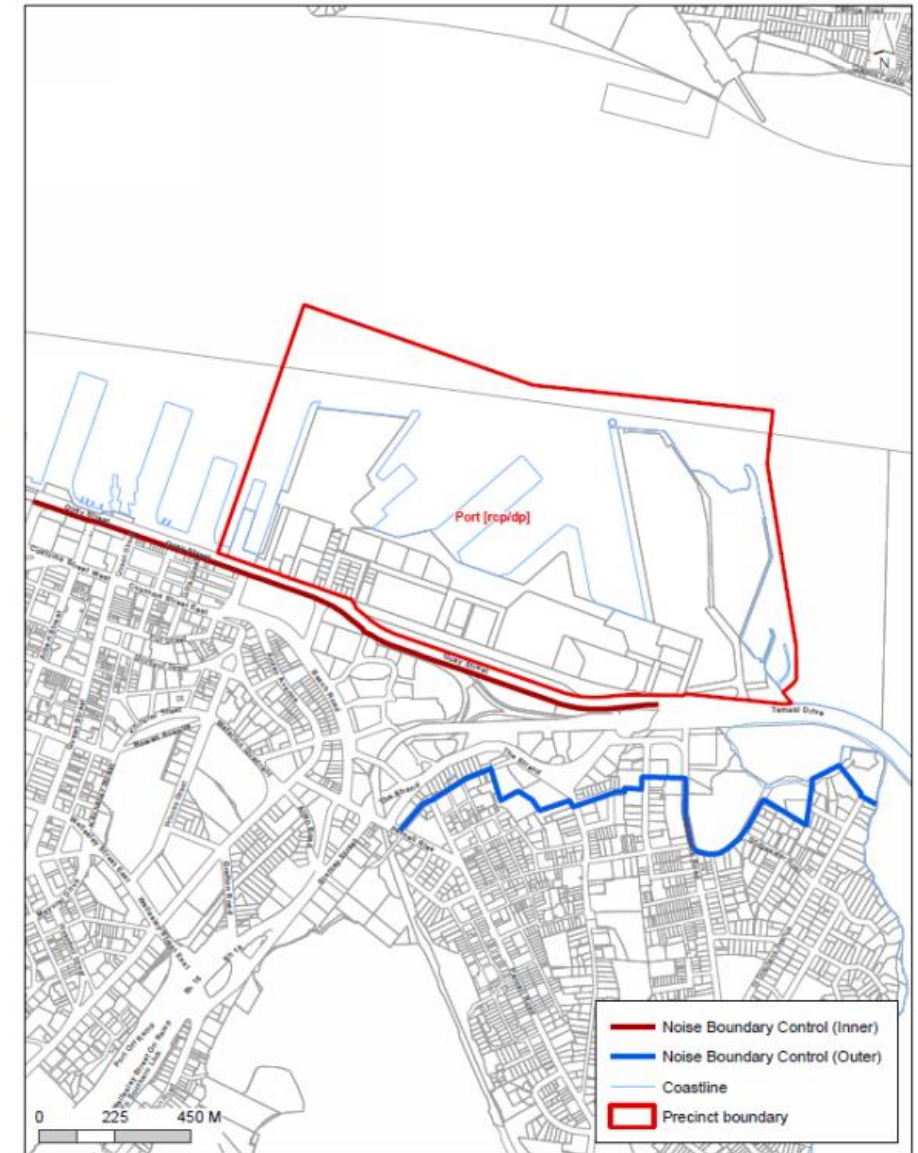
- **Port Noise Management Plan**

- Minimise noise effects, such as ‘bangs’ from container handling



AUCKLAND UNITARY PLAN

Noise Controls	Period	Inner control boundary (Quay St)	Outer control boundary (Parnell)
Noise level	7am – 11pm (day)	-	55 dB L_{Aeq}
	11pm – 7am (night)	60 dB L_{Aeq} 85 dB L_{AFmax}	50 dB L_{Aeq} 75 dB L_{AFmax}
Long term average	'Peak week'	+3 decibels	+3 decibels
Short term average	'Peak night' (attended monitoring)	+5 decibels	+5 decibels



MODELLING THE 'HUM'

- Port noise model routinely updated to reflect operations and equipment
- Model verification ongoing via noise monitoring during busy periods
- Noise levels from NZ ports have generally remained stable over the last decade



LONG TERM NOISE MONITORING

Three noise monitors; Port Light Tower, Parnell (Gladstone Rd) and Devonport (residential interface).

Period spanned Dec 2019 to June 2020, including the Covid lockdown. Monitoring focused on 3am – 5am period to minimise other noise (e.g. road traffic)



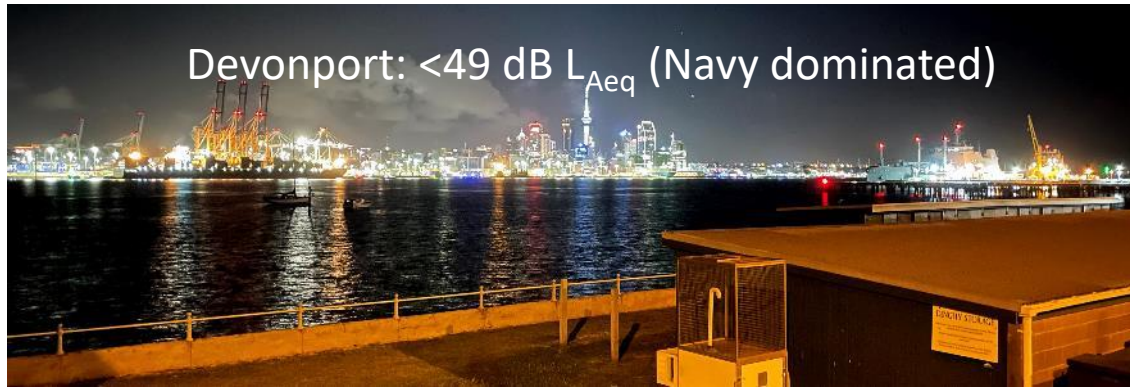
Hum (ambient level):

- Devonport: median period ~ 44 dB L_{Aeq} . Low signal to noise, mix of coastal noise (wind/waves), port, Navy and city/traffic.
- Gladstone: median period ~ 55 dB L_{Aeq} . Good signal to noise, mix of port and truck movements on Tamaki Dr and the Strand.

Bangs (events):

- Local road traffic movements at both locations regularly above 75 dB L_{AFmax}
- Devonport: Port ~ 60 to 65 dB L_{AFmax}
- Gladstone: Port ~ 65 to 70 dB L_{AFmax}
- Steel loading at Gladstone during the day $\sim 75 - 80$ dB L_{AFmax}

ATTENDED NOISE MONITORING (NOV 2020, 3AM - 5AM)



Gladstone carpark: 49 dB L_{Aeq}

Augustus Terrace: 47 dB L_{Aeq}

NOISE MANAGEMENT PLAN

Good-neighbour code of practice to minimise or manage the effects of port noise:

- Performance Standards
- Staff training
- Equipment selection (e.g. new cranes / straddles)
- Safety alarms (e.g. replacement of tonal ‘beepers’)
- Night activities
- Tenants and contractors
- Noise monitoring
- Community engagement



QUESTIONS?