Great Keppel Island

REVITALISATION PLAN

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GLOSSARY OF TERMS

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Advective Transport	The transport of dissolved material by water movement.
Australian Height Datum (AHD)	A common national plane of level corresponding approximately to mean sea level.
AEP	Annual Exceedance Probability: The measure of the likelihood (expressed as a probability) of an event equalling or exceeding a given magnitude in any given year.
Astronomical tide	Water level variations due to the combined effects of the Earth's rotation, the Moon's orbit around the Earth and the Earth's orbit around the Sun.
Calibration	The process by which the results of a computer model are brought to agreement with observed data.
Chart Datum	Common datum for navigation charts. Typically relative to Lowest Astronomical Tide.
Day	The period between 7:00am and 6:00pm.
dB	Decibel: The decibel is the unit measure of sounds. Most noises occur in a range of 20 dB (quiet rural area at night) to 120 dB (nightclub dancefloor or concert).
dB(A)	Noise levels are most commonly expressed in terms of the 'A' weighted decibel scale, Db(A). This scale closely approximates the response of the human ear, thus providing a measure of the subjective loudness of noise and enabling the intensity of noises with different frequency characteristics (e.g. pitch and tone) to be compared.
dB(lin), dB(linear) OR dB(Z)	Noise levels are sometimes expressed in terms of the linear, Z or un-weighted decibel scale – they all take the same meaning. The value has no weighting applied to it and is the same as the dB level.
dB(C)	Noise levels are sometimes expressed in terms of the 'C' weighted decibel scale, dB(C). This scale is very similar to the dB, dB(lin), dB(linear), dB(Z) un-weighted scale. The difference being that some negative weighting is applied below 250 Hz and above 1 kHz. The magnitude of the weighting is significantly less than the dB(A) scale.
Diurnal	A daily variation, as in day and night.
Ebb Tide	The outgoing tidal movement of water resulting in a low tide.

Evening	The period between 6:00pm and 10:00pm.
Exceedance Probability	The probability of an extreme event occurring at least once during a prescribed period of assessment is given by the exceedance probability. The probability of a 1 in 100 year event (1% AEP) occurring during the first 25 years is 22%, during the first 50 years the probability is 39% and over a 100 year asset life the probability is 63%.
Flood Tide	The incoming tidal movement of water resulting in a high tide.
Foreshore	The area of shore between low and high tide marks and land adjacent thereto.
Free-field	The description of a noise receiver or source location which is away from any significantly reflective objects (e.g. buildings, walls).
Frequency	The number of vibrations, or complete cycles, that take place in one second. Measured in hertz (Hz), where one Hz equals one cycle per second. A young person with normal hearing will be able to perceive frequencies between approximately 20 and 20,000 Hz. With increasing age, the upper frequency limit tends to decrease.
Geomorphology	The study of the origin, characteristics and development of land forms.
Holocene	The period beginning approximately 12,000 years ago. It is characterised by warming of the climate following the last glacial period and rapid increase in global sea levels to approximately present day levels.
HAT	Highest Astronomical Tide: the highest water level that can occur due to the effects of the astronomical tide in isolation from meteorological effects.
IBRA	Interim Biogeographic Regionalisation of Australia.
MHHW	Mean Higher High Water: the mean of the higher of the two daily high waters over a long period of time. When only one high water occurs on a day this is taken as the higher high water.
Night	The period between 10:00pm and 7:00am.
Octave band	Ranges of frequencies where the highest frequency of the band is double the lowest frequency of the band. The band is usually specified by the centre frequency i.e. 31.5, 63, 125, 250, 500 Hz, etc.

Hs	Hs may be defined as the average of the highest 1/3 of wave heights in a waverecord (H1/3), or from the zeroth spectral moment (Hmo).
Intertidal	Pertaining to those areas of land covered by water at high tide, but exposed at low tide, eg. intertidal habitat.
Littoral Zone	An area of the coastline in which sediment movement by wave, current and wind action is prevalent.
Littoral Drift Processes	Wave, current and wind processes that facilitate the transport of water and sediments along a shoreline.
Neap Tides	Neap tides occur when the Sun and Moon lie at right angles relative to the Earth (the gravitational effects of the moon and sun act in opposition on the ocean).
Noise sensitive receiver or receptor	The definition can vary depending on the project type or location, but generally defined a building or land area which is sensitive to noise. Generally it includes residential dwellings (e.g. houses, units, caravans, marina), medical buildings (e.g. hospitals, health clinics, medical centres), educational facilities (e.g. schools, universities, colleges).
Pleistocene	The period from 2.5M to 12,000 years before present that spans the Earth's recent period of repeated glaciations and large fluctuations in global sea levels.
Reverberant field	The description of a noise receiver or source location which is in a room or near significant reflective objects (e.g. surrounded by walls).
Semi-diurnal	A twice-daily variation, e.g. two high waters per day.
Spring Tides	Tides with the greatest range in a monthly cycle, which occur when the Sun, Moon and Earth are in alignment (the gravitational effects of the moon and sun act in concert on the ocean).
Storm Surge	The increase in coastal water levels caused by the barometric and wind set-up effects of storms. Barometric set-up refers to the increase in coastal water levels associated with the lower atmospheric pressures characteristic of storms. Wind set-up refers to the increase in coastal water levels caused by an onshore wind driving water shorewards and piling it up against the coast.
Storm tide	Coastal water level produced by the combination of astronomical and meteorological (storm surge) ocean water level forcing.

Tidal Planes	A series of water levels that define standard tides, eg. 'Mean High Water Spring' (MHWS) refers to the average high water level of Spring Tides.
Tidal Range	The difference between successive high water and low water levels. Tidal range is maximum during Spring Tides and minimum during Neap Tides.
Tides	The regular rise and fall in sea level in response to the gravitational attraction of the Sun, Moon and Earth.
VMP	Vegetation Management Plan.
Velocity Shear	The differential movement of neighbouring parcels of water brought about by frictional resistance within the flow, or at a boundary. Velocity shear causes dispersive mixing, the greater the shear (velocity gradient), the greater the mixing.
Wind Shear	The stress exerted on the water's surface by wind blowing over the water. Wind shear causes the water to pile up against downwind shores and generates secondary currents.
Lp	The instantaneous noise level, which is noted during a noise event.
LpA	As for Lp except the frequency weighting is defined as being the 'A' weighted decibel scale. Often the 'A' is not included in the subscript if the level is reported as being dB(A).
L1	The noise level exceeded for 1% of the measurement period.
L10	The noise level exceeded for 10% of the measurement period. It is sometimes referred to as the average maximum noise level.
L90	The noise level exceeded for 90% of the measurement period. This is commonly referred to as the background noise level.
minL90	The background noise levels calculated using the 'lowest 10th percentile' of the L90 levels in each period of the day. This 'lowest 10th percentile' method is defined in the Queensland Department of Environment and Resource Management (DERM) guidelines.
minL90, 1hour	As for minL90 except the measurement intervals are defined as 1 hour duration.

Leq	The equivalent continuous sound level, which is the constant sound level over a given time period, which is equivalent in total sound energy to the time-varying sound level, measured over the same time period.
Leq, 1hour	As for Leq except the measurement intervals are defined as 1 hour duration.
LAmax OR maxLpA	Maximum A-weighted sound pressure level.
LAmax,T	Average maximum A-weighted sound pressure level.
LAmax, adj, T	Adjusted average maximum A-weighted sound pressure level.
Leq (24 hour)	The average Leq noise level over the 24-hour period from midnight to midnight.
LAr,Tr	The rating noise level, as used by the Queensland Department of Environment and Resource Management (DERM) EcoAccess "Planning for Noise Control" guideline document.
LAr,1hr	The 1 hour noise level which is based on the LAeq, 1hr noise level but only includes the noise contribution of the source under investigation (e.g. a mine) and the background noise, but excludes other noises which may influence the ambient measured level (e.g. birds, insects).
PNL	The planning noise level, as used by the Queensland Department of Environment and Resource Management (DERM) EcoAccess "Planning for Noise Control" guideline document.
GRP	Gross Regional Product: A measurement of the market value of all final goods and services produced within a regionally defined area over a given period of time.
GSP	Gross State Product: A measurement of the economic output of a state (for the purposes of the EIS, Queensland).
Person years of employment	Expresses the amount of time (years) it would take one full-time equivalent worker to complete a set task.
Q100 Flood Event	means the Queensland 100 year flood level, which is a flood event that will occur, on average once every 100 years.
VAC	Visual Absorption Capacity: The capacity of the existing landscape to absorb development without significant change to scenic values.