Erosion Prone Area Palm Island Shire Local Government Area

Erosion Prone Area Definition

- 1. Erosion prone areas are deemed to exist over all tidal water to the extent of Queensland Coastal Waters and on all land adjacent to tidal water.
- 2. Erosion prone areas include areas subject to inundation by the highest astronomical tides (HAT) by the year 2100 or at risk from sea erosion.
- 3. On land adjacent to tidal water the landward boundary of the erosion prone area shall be defined by whichever of the following methods gives the greater erosion prone area width:
 - a line measured 40 metres landward of the plan position of the present day HAT level except where approved revetments exist in which case the line is measured 10 metres landward of the upper seaward edge of the revetment, irrespective of the presence of outcropping bedrock;
 - b. a line located by the linear distance shown on Table 1 and measured, unless specified otherwise, inland from:
 - i. the seaward toe of the frontal dune (the seaward toe of the frontal dune is normally approximated by the seaward limit of terrestrial vegetation or, where this cannot be determined, the level of present day HAT); or
 - ii. a straight line drawn across the mouth of a waterway between the alignment of the seaward toe of the frontal dune on either side of the mouth
 - c. the plan position of the level of HAT plus 0.8 m vertical elevation.

Except:

- i. where the linear distance specified in 3b is less than 40 metres, in which case section 3a. does not apply and the erosion prone area width will be the greater of 3b and 3c; or
- ii. where outcropping bedrock is present and no approved revetments exist, in which case the line is defined as being coincident with the most seaward bedrock outcrop at the plan position of present day HAT plus 0.8m; or
- iii. in approved canals in which case the line of present day HAT applies, irrespective of the presence of approved revetments or outcropping bedrock.
- 4. Erosion prone areas defined in accordance with the above are deemed to exist throughout all the local government areas, irrespective of whether the entire local government area is depicted on erosion prone area plans for the area.

Notes to clarify the definition

- 1. The specific location along the coast to which each erosion prone area linear distance applies (a segment) is shown in Table 1.
- 2. A map indicating the approximate location along the coast of each linear distance segment is attached.
- 3. Each erosion prone area segment is located on the coastline between 2 points defined by latitude and longitude. A projection of each point to the nearest actual coastline and continuing inland perpendicular to the coast defines the erosion prone area segment.
- 4. "Present day HAT" in the definition is always taken to be the present day level of HAT for the coastline as defined in the Queensland Tide Tables for that year or as defined by empirical methodology at the site.
- 5. The extent of the erosion prone area where it is defined by "HAT plus 0.8m" is the HAT coastline at the year 2100 and includes sea level rise to that time. It is determined by the area of land inundated to the level HAT of the nearest adjacent open coast or river tide gauge plus 0.8m vertical elevation. Site based HAT is not to be used as present day attenuation of inland HAT level due to flow constraints may not persist to 2100 with coastline response to sea level rise. For further explanation see the Coastal Hazard Technical Guide.
- 6. Where noted on Table 1 (and the map) the specified linear distance applies except where a revetment has been constructed and maintained to the approved design in which case the landward boundary of the erosion prone area is at the upper seaward edge of the revetment (A-line).
- 7. The approximate erosion prone area footprint is shown on Coastal Hazard Area Maps available on the Department of Environment and Heritage Protection website at www.ehp.qld.gov.au. These footprints are indicative only and the definition in this plan prevails for any inconsistency between the two.
- 8. This erosion prone area plan may be updated from time to time and a new revision created. Please check with the Department of Environment and Heritage Protection or the local government that this copy is the current version prior to using the contained information in any way.

Date of Erosion Prone Area Declaration: 8 July 2015	Plan No:
Date of Erosion Prone Area Amendment:	PIS3A

PIS3A Table 1: Linear distances for the erosion prone area and the specific location of each segment

Erosion prone area segment number	Segment start longitude (degrees)	Segment start latitude (degrees)	Segment end longitude (degrees)	Segment end latitude (degrees)	Erosion prone area linear distance (Width in metres)
PISO01	146.57961	-18.76633	146.56945	-18.75894	0m
PISO02	146.56945	-18.75894	146.56960	-18.75511	130m Possible Bedrock
PIS003	146.56960	-18.75511	146.57172	-18.75289	0m
PIS004	146.57172	-18.75289	146.57658	-18.74746	130m Possible Bedrock
PISO05	146.57658	-18.74746	146.57557	-18.74428	0m
PISO06	146.57557	-18.74428	146.57599	-18.74214	130m Possible Bedrock
PIS007	146.57599	-18.74214	146.57561	-18.74008	0m
PIS008	146.57561	-18.74008	146.57816	-18.72639	130m Possible Bedrock
PISO09	146.57816	-18.72639	146.58162	-18.72209	50m Possible Bedrock
PISO10	146.58162	-18.72209	146.58576	-18.70644	130m Possible Bedrock
PIS011	146.58576	-18.70644	146.57981	-18.69141	50m Possible Bedrock
PISO12	146.57981	-18.69141	146.57329	-18.68352	130m Possible Bedrock
PISO13	146.57329	-18.68352	146.57296	-18.67696	165m Possible Bedrock
PIS014	146.57296	-18.67696	146.63434	-18.74001	50m Possible Bedrock
PISO15	146.63434	-18.74001	146.64426	-18.75066	130m Possible Bedrock
PISO16	146.64426	-18.75066	146.62156	-18.76065	50m Possible Bedrock
PISO17	146.62156	-18.76065	146.61708	-18.76177	130m Possible Bedrock
PISO18	146.61708	-18.76177	146.60860	-18.75805	50m Possible Bedrock
PISO19	146.60860	-18.75805	146.60572	-18.75969	130m Possible Bedrock
PISO20	146.60572	-18.75969	146.59802	-18.75887	0m
PISO21	146.59802	-18.75887	146.57961	-18.76633	130m Possible Bedrock

