



MARINE DREDGING GUIDELINE COMMENTS REGISTER

Reviewer	INPEX Operations Australia Pty Ltd
Review document title	Marine Dredging Guideline
Document revision No.	0.2
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No.	Context	INPEX Comment
1	Section 1	<p><i>"Marine dredging activities may require regulation under a suite of Territory and Commonwealth legislation. This guidance focuses on the main statutory authorisation processes associated with marine dredging activities in Territory waters."</i></p> <p>The draft Marine Dredging Guideline (Draft Guideline) only focuses on NTG processes and does not cover Commonwealth process or legislative requirements. Suggest this is made specifically clear in the purpose, see suggested text below:</p> <p><i>"Marine dredging activities may require regulation under a suite of Territory and Commonwealth legislation. This guidance focuses on the main Territory statutory authorisation processes associated with marine dredging activities in Territory waters."</i></p>
2	Section 2.1	<p>INPEX suggests that the Draft Guideline adopts the capital and maintenance dredging definitions provided in the <i>National Assessment Guideline for Dredging</i> (NAGD; Commonwealth of Australia 2009) so there is consistency between Territory and Commonwealth guidance. Further, extractive dredging as defined in the Draft Guidance should come under either capital or maintenance dredging depending on the location of dredging (e.g. borrow ground dredging for backfill from a new location constitutes capital dredging, whereas dredging material from an existing dredged channel for construction purposes may be considered maintenance dredging as long as the channel depth or width is not increased or widened respectively).</p>

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3	Section 2.3	<p><i>"Potential environmental impacts from dredging and disposal of dredged material include:</i></p> <ul style="list-style-type: none"> • <i>increased turbidity and reduced light availability</i> • <i>marine ecosystem impacts (direct, indirect and cumulative) on bottom-dwelling (benthic) habitats and communities, seagrasses and corals due to disturbance of the seabed</i> • <i>contaminant release (including impacts associated with acid sulfate soils) impacting on water quality</i> • <i>increased sedimentation affecting marine flora and fauna..."</i> <p>INPEX suggest bullet points are revised to avoid repetition. For instance, seagrass and coral form part of benthic communities along with other flora and fauna, such as macroalgae and sponges. Suggested revised wording:</p> <p><i>"Potential environmental impacts from dredging and disposal of dredged material include:</i></p> <ul style="list-style-type: none"> • <i>increased turbidity and sedimentation and reduced light availability</i> • <i>marine ecosystem impacts (direct, indirect and cumulative) on bottom-dwelling (benthic) habitats and communities, seagrasses and corals due to disturbance of the seabed</i> • <i>contaminant release (including impacts associated with acid sulfate soils) impacting on water quality</i> • <i>increased sedimentation affecting marine flora and fauna..."</i>
4	Section 2.3	<p><i>"Environmental impact is unavoidable within a capital dredging footprint and new disposal area. This is less of an issue for maintenance dredging activities as the works occur within areas of existing and repeated disturbance."</i></p> <p>Section 2.1 defines three types of dredging, however impacts from capital and maintenance dredging only appear to be considered. As per Item 2 above, INPEX suggest extractive dredging is removed as a definition as it should come under capital and/or maintenance dredging. If extractive dredging definition remains suggest commentary also needs to be included similar to capital and maintenance dredging.</p>
5	Section 2.3	<p><i>"This is due to those direct impacts being largely unavoidable and recolonising biota being well-adapted to surviving within dynamic benthic habitats."</i></p> <p>INPEX suggest this sentence is removed from the Draft Guideline as not all recolonising biota are well-adapted as the frequency of maintenance dredging among other factors will determine recolonisation, for instance opportunistic biota may recolonise quickly, however over time the community and population dynamics may change with less opportunistic species (diversity and abundance) present. The main point is that direct loss of habitat in dredge or spoil disposal footprints is assessed as part of the capital dredging approval and these impacts are considered permanent, as such are inherently accepted for maintenance dredging (i.e. loss of habitat is not reassessed under maintenance dredging).</p>

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6	Section 3.1	<p><i>"Dredging activity in Territory waters may require several statutory authorisations, depending on the type and location of dredging activity and the significance of potential environmental impacts.</i></p> <p><i>Table 1 lists a range of marine dredging related activities and statutory authorisations that may be needed under the EP Act, Planning Act 1999 (Planning Act), Mineral Titles Act 2010 (MT Act) and Water Act 1992 (Water Act)."</i></p> <p>As per Item 1 above suggest making it very clear the Draft Guideline is for Territory only. Suggested revised wording:</p> <p><i>"Dredging activity in Territory waters may require several Territory statutory authorisations, depending on the type and location of dredging activity and the significance of potential environmental impacts.</i></p> <p><i>Table 1 lists a range of marine dredging related activities and Territory statutory authorisations that may be needed under the EP Act, Planning Act 1999 (Planning Act), Mineral Titles Act 2010 (MT Act) and Water Act 1992 (Water Act)."</i></p>
7	Section 3.1	<p><i>"• Environment Protection (Sea Dumping) Act 1981 (Cth)—sea dumping in Commonwealth waters."</i></p> <p>This bullet point must be revised as it is incorrect. The Sea Dumping Act is applicable to Australian waters not Commonwealth waters. Australian waters include those waters between Territorial Sea Baseline (TSB) and Exclusive Economic Zone (EEZ) and does not include internal waters. Australian waters typically includes Coastal Waters and Territorial Sea (e.g. Territory waters) as the TSB is generally the low water mark (i.e. lowest astronomical tide) with bay closing lines (straight baselines) across bays and rivers generally no more than 6 nm in length. An example figure of this is shown in Figure 2 of the NAGD (Commonwealth of Australia 2009) which is also provided in Figure 1 below and explanatory text of maritime zones is provided on the DCCEE sea dumping website (here). It is noted that there are exceptions to TSB and straight baseline particularly in the Northern Territory, with the territory limits set out in Letters Patent issued by the Governors of each of the states during Federation. Therefore, it is important that proponents seek early advice to determine if their proposed dredging and/or spoil disposal activities occur solely in internal waters or Australian waters as the Sea Dumping Act can apply to projects in Territory waters. As such, INPEX suggest this bullet point be revised as has provided some suggested text:</p> <p><i>"• Environment Protection (Sea Dumping) Act 1981 (Cth)—sea dumping in Commonwealth Australian waters, proponents are encouraged to seek early advice from the Commonwealth to determine if this Act is applicable."</i></p>
8	Section 4	<p>The <i>National Assessment Guideline for Dredging</i> (NAGD; Commonwealth of Australia 2009) should be referenced in Section 4 as this is the Commonwealth technical guideline for environmental impact assessment and permitting of the ocean disposal of dredged material. In particular, the procedure for sampling and analysis of sediments for potential contaminants based on dredge volume etc., which is not covered by WA EPA Technical Guidance or WAMSI DSN.</p>

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9	Section 4	<p>It is stated that “<i>For example, dredging in Darwin Harbour is best done during the wet season when turbidity levels are naturally elevated, and additional impacts from dredging are relatively less compared to dredging in the dry season.</i>”. This example is not justified or supported by peer reviewed published literature and should be removed from the Draft Guideline as some sensitive receptors may be more susceptible to impacts during the wet season due to exposure of natural stressors. This may include reduced light due to naturally increase turbidity in the wet season. Further, INPEX has observed that water temperature in Darwin Harbour is influenced by the timing and passage of tropical systems in the wet season and temperatures can exceed 31°C for extended periods. The WAMSI DSN found that sensitive receptors such as corals are more susceptible to sediment related impacts when exposed to thermal stress, such as elevated sea temperature. Evidence also suggests coral spawning may occur in the wet season, with planktonic larvae and recruitment success potentially significantly impacted by dredging and spoil disposal activities as identified in the WAMSI DSN. As such, dredging when sensitive receptors are not exposed to natural stressors or avoiding sensitive windows is likely to reduce potential impacts and therefore dredging during the dry season may be preferable. As stated in the Draft Guideline, locally-derived information should be used to inform dredging and disposal operations with location and intensity, duration and magnitude of the dredging and spoil disposal activities playing a key role in determining the appropriate timing of dredging and spoil disposal activities.</p>
10	General	<p>INPEX is aware that a Draft Dredging Strategy has been developed by the Department of Infrastructure, Planning and Logistics (DIPL) and this is currently under internal NTG review with external consultation to occur sometime in the future. As INPEX has not yet had the opportunity to review the Draft Dredging Strategy, it is assumed that NT EPA and DIPL will be reviewing both the Draft Dredging Strategy and this Draft Guideline to ensure that both documents are aligned.</p>

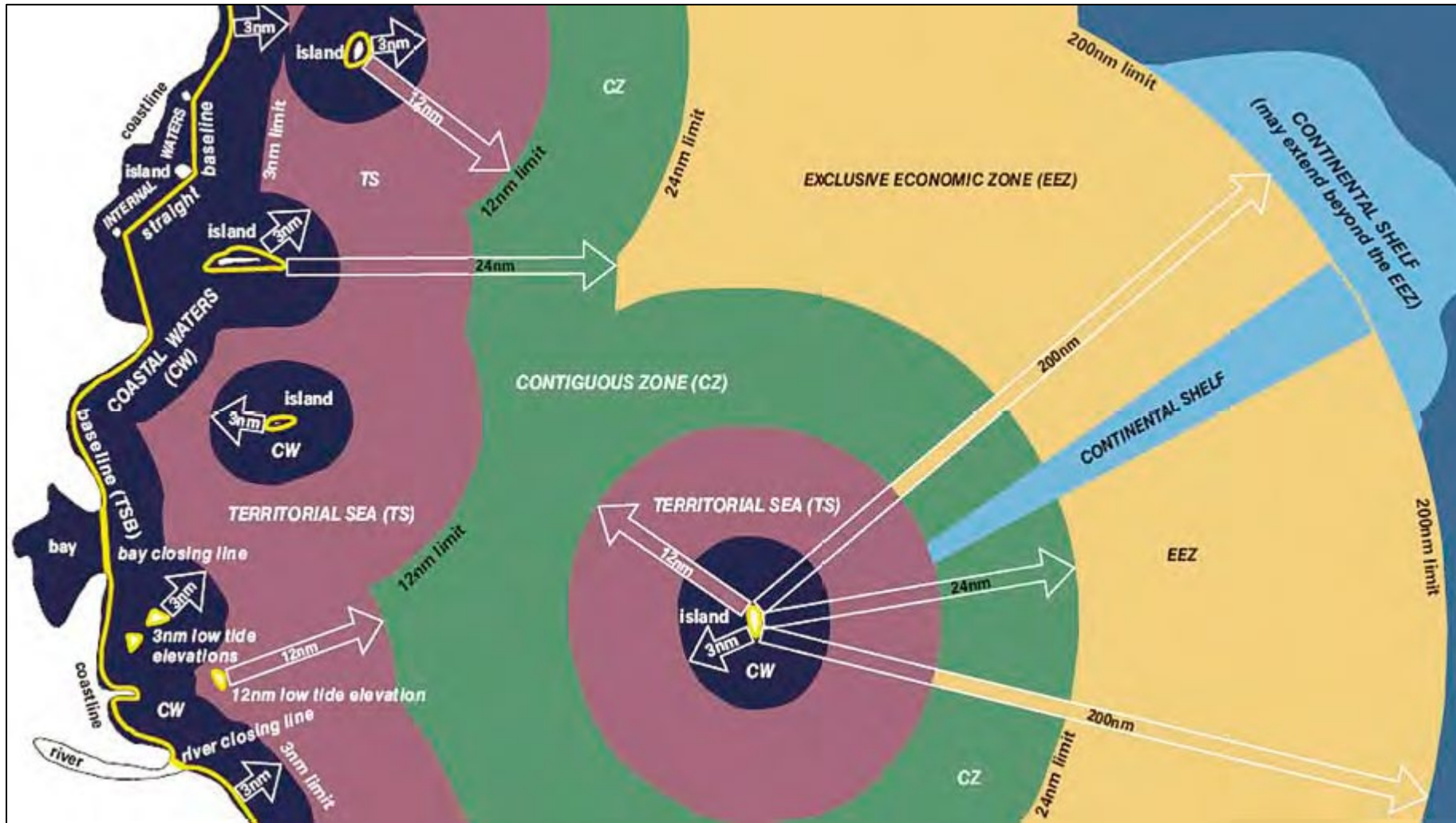


Figure 1: Maritime zones in Australian waters (taken from NAGD (Commonwealth of Australia 2009))