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# **Supplement to the Carbon Credits (Carbon Farming Initiative – Tidal Restoration of Blue Carbon Ecosystems) Methodology Determination 2022**

## Disclaimer

This document has been developed to support the Carbon Credits (Carbon Farming Initiative—Tidal Restoration of Blue Carbon Ecosystems) Methodology Determination 2022 (the Determination) and is incorporated by various provisions of the Determination. This document does not replace relevant legislative provisions or other laws. All users are encouraged to read this document in conjunction with relevant legislation, including the Determination, referenced throughout this document. Where there are any inconsistencies, please be aware that the legislative provisions will take precedence.

Interested parties should make their own independent enquiries and obtain their own independent professional advice prior to relying on, or making any decisions in relation to, the information provided in this document. This document will be updated periodically, and users should note that requirements may change over time.

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## Part A: Project operations and maintenance plans

Part A details requirements and recommendations for preparing a project operations and maintenance plan for a tidal restoration project as required by sections 5 and 14 of the Carbon Credits (Carbon Farming Initiative—Tidal Restoration of Blue Carbon Ecosystems) Methodology Determination 2022 (the Determination).

### Requirements:

1. It is a requirement that the project operations and maintenance plan include the following specifications about each tidal restriction mechanism to be removed or modified as part of the eligible project activities and any necessary infrastructure and drainage infrastructure that is to be used, removed, modified, installed or constructed as part of the eligible project activities.
  - a) The location of any existing and proposed mechanisms or infrastructure
  - b) The approximate dimensions of any existing and proposed mechanisms or infrastructure
  - c) The design specifications of existing and proposed mechanisms or infrastructure, including the objective of any proposed works (e.g. flood mitigation, drainage, flow impediment, exclusion)
2. It is a requirement that the project operations and maintenance plan include a description of how relevant Commonwealth, State or Territory government requirements will be addressed prior to the removal, modification, installation or construction of any tidal restriction mechanisms, necessary infrastructure, and drainage infrastructure. Requirements may relate to:
  - a) Acid sulfate soils
  - b) Protected flora, fauna or heritage
  - c) Ramsar or nationally important wetlands
  - d) Contaminated lands
  - e) Flood mitigation
  - f) Infrastructure design
3. It is a requirement that the project operations and maintenance plan include the following specifications about any maintenance actions required to ensure the ongoing intended function of tidal restriction mechanisms, necessary infrastructure and drainage infrastructure during the permanence obligation period of the project:
  - a) The type of maintenance actions required
  - b) The frequency of required maintenance actions
  - c) Necessary skillsets or qualifications of an individual to carry out the required maintenance actions
  - d) If any inspections are required, the frequency and nature of those inspections
4. It is a requirement that the project proponent provides the qualified person who is assisting in the preparation or review of a hydrological assessment with information about the timelines for completion of any infrastructure installations, constructions, modifications or removals as part of the eligible project activities.



## **Recommendations:**

1. It is recommended that any modifications, installations or constructions of tidal restriction mechanisms, necessary infrastructure or drainage infrastructure is designed to limit erosion and maximise ecological benefits, for example, providing 'fish friendly' access to the project area.
2. Wherever possible, water velocities should be designed to align with ambient currents of the adjoining waterway. Significant increases in water velocity or turbulence that are created from the installation of infrastructure (e.g. via small orifices) are discouraged.

## Part B: Project extent maps

Part B details requirements and recommendations for preparing a project extent map for a tidal restoration project as required by sections 5 and 16 of the Determination.

The project extent map is to be used as the base map for the hydrological assessment maps and defining carbon estimation areas.

### Requirements:

3. It is a requirement that one or more geospatial maps are produced which includes all land identified as impacted land for a tidal restoration project in a hydrological assessment under Part C for a tidal introduction project.
4. It is a requirement that the map(s) are submitted to the Regulator electronically.
5. It is a requirement that the project extent map(s) include:
  - a) Information that clearly spatially identifies:
    - i. The location of all proposed project areas for the project and connectivity with tidal waterways
    - ii. Polygon(s) that outline all project areas for the project and lot boundaries
    - iii. Proposed locations where tidal waters will enter and exit the project area(s)
    - iv. Any waterbodies in the project area including rivers, lakes and oceans
  - b) Elevation contour lines of the project area with a minimum interval of 1 m resolution
  - c) Relevant boundaries and land tenures for the project area(s), including (but not limited to):
    - i. cadastral boundaries including land title(s) of private properties or Crown Reserves
    - ii. adjoining Ramsar or nationally important wetland boundaries
    - iii. marine reserves
    - iv. national parks
    - v. ambulatory boundaries (i.e. where a body of water defines the boundary of land)
  - d) Geographic features for the project area(s), including (but not limited to):
    - i. Land containing acid sulfate soils
    - ii. Structures such as culverts, floodgates, levees, drainage channels, farm dams, pumping infrastructure, or other structures made by people
    - iii. Infrastructure including buildings, roads and powerlines
    - iv. Necessary infrastructure, drainage infrastructure, existing infrastructure, existing drainage infrastructure and tidal restriction mechanisms relating to the project.
  - e) Land features for project area(s), including (but not limited to):
    - i. The location and spatial extent of threatened ecological communities
    - ii. The location of Registered Aboriginal Heritage sites
6. It is a requirement that project proponents use one or more of the following data sources to delineate site elevation, and spatial extent of project area(s) for the project:
  - a) Differential Global Positioning System (GPS)
  - b) Field surveys and sampling
  - c) Governmental geospatial elevation datasets including spatial data from <https://elevation.fsd.org.au/>

d) Cadastral database

7. It is a requirement to provide spatial data that has a horizontal and vertical accuracy equivalent to (or better than) a Category 2 Classification (Vertical Accuracy of +/-0.3m and Horizontal Accuracy of +/-0.9m RMSE, 1 sigma or 68%) as per the Intergovernmental Committee on Surveying and Mapping (ICSM) unless otherwise specified in the Supplement <https://www.icsm.gov.au/sites/default/files/2017-03/ICSM-GuidelinesDigitalElevationDataV1.pdf>
8. It is a requirement that all water levels are in metres Australian Height Datum (m AHD) to at least one decimal place.
9. Produced maps must follow the guidelines as stated in the Carbon Farming Initiative Mapping Guidelines, as available on the Department of Industry, Science, Energy and Resources' website and updated from time to time. As of 3 December 2021, the CFI Mapping guidelines were available at: [https://www.industry.gov.au/sites/default/files/2020-07/cfi-mapping\\_guidelines.pdf](https://www.industry.gov.au/sites/default/files/2020-07/cfi-mapping_guidelines.pdf)

**Recommendations:**

1. It is recommended that project proponents assess the appropriateness of the dataset(s) selected for the intended use against the following criteria:
  - a) Age of the dataset(s)
  - b) Scale and extent
  - c) Resolution
  - d) Accuracy
  - e) Classification, aggregation, generalisation systems
  - f) Integrity of dataset
  - g) Relevance to the proposed activity

## Part C: Hydrological assessment

Part C details requirements and recommendations for preparing crediting period tidal inundation maps, permanence period tidal inundation maps and project start tidal inundation maps for tidal restoration projects as required by sections 5 and 15 of the Determination.

Use the spatial data compiled for Parts A and B as the base layers for maps prepared in this part.

### Requirements:

1. It is a requirement that geospatial tidal inundation maps are produced.
2. It is a requirement that tidal inundation maps are submitted to the Regulator electronically.
3. It is a requirement that the spatial data prepared in Part B is included in maps prepared under this part, and that the spatial data is complete to at least the extent of the tidal inundation area for each map prepared under this part.
4. Where a hydrodynamic computer model is used to simulate onsite tidal inundation to produce the tidal inundation maps under this part, it is a requirement to include in the model:
  - a) each drainage infrastructure to be used during the permanence period for water moving from one area of land to another area of land; and
  - b) each tidal restriction mechanism to be used during the permanence period to impede, reduce, restrict or prevent inundation of other land by tidal flows; and
  - c) each object, device or structure on any land to be used during the permanence period to impede, reduce, restrict or prevent inundation of other land by tidal flows.
5. If a hydrodynamic model is applied, the accuracy of the modelled prediction(s), as a function of the Root Mean Square Error (RMSE), must be stated. Implications of the data accuracy must be described, with reference to the potential for inundation.
6. It is a requirement that the **project start tidal inundation map** is produced based on the highest astronomical tide (or 99.5th percentile of the water level dataset) at the time of undertaking the hydrological assessment and includes the proposed location(s) where tidal waters will enter and exit the tidal inundation area.
7. It is a requirement that the **permanence period tidal inundation map** is produced based on the highest astronomical tide (or 99.5th percentile of the water level dataset) at the end of:
  - a) if the project is a 25-year permanence period project—32 years from a date which is not more than 24 months before the date of the application for the project to be declared as an eligible offsets project; or
  - b) if the project is a 100-year permanence period project—107 years from a date which is not more than 24 months before the date of the application for the project to be declared as an eligible offsets project is submitted;and includes the proposed location(s) where tidal waters will enter and exit the tidal inundation area.
8. It is a requirement that the **crediting period tidal inundation map** is produced based on the highest astronomical tide (or 99.5th percentile of the water level dataset) at the end of 32 years from a date which is not more than 24 months before the date of the application for the project to be declared as an



eligible offsets project is submitted, and includes the proposed location(s) where tidal waters will enter and exit the tidal inundation area. The crediting period tidal inundation map is only required for 100-year permanence period projects.

9. It is a requirement that the crediting period tidal inundation maps and permanence period tidal inundation maps apply the projected highest astronomical tide water level using locally relevant sea level rise predictions based on the 50th percentile of RCP8.5 projections<sup>1</sup>, obtained as follows:
  - a) For a crediting period or permanence period between 2050 – 2090 ( $\pm 10$  years), the Sea Level Change Prediction Tool (or relevant updated dataset) available at: <https://www.climatechangeinaustralia.gov.au/en/projections-tools/coastal-marine-projections/marine-explorer/#>, or c) or d)
  - b) For a permanence period that extends beyond 2100, a regional sea level rise projection ( $\pm 10$  years) based on peer-reviewed data published in a scientific journal or government report, or c) or d)
  - c) Australian State or Local Government Authority regional sea level rise advice as provided in a governmental report or website, or
  - d) Calibrated, numerically modelled sea level rise projections that utilise a), b) or c) as sea level boundary conditions to simulate tidal boundary water levels.
10. It is a requirement that all water levels are in metres Australian Height Datum (m AHD) to at least one decimal place.
11. Produced maps must follow the guidelines as stated in the Carbon Farming Initiative Mapping Guidelines, as available on the Department of Industry, Science, Energy and Resources' website and updated from time to time. As of 3 December 2021, the CFI Mapping guidelines were available at: [https://www.industry.gov.au/sites/default/files/2020-07/cfi-mapping\\_guidelines.pdf](https://www.industry.gov.au/sites/default/files/2020-07/cfi-mapping_guidelines.pdf)

### **Recommendations:**

1. Where available, tidal water level time series data should be sourced from the nearest available government operated tidal record station. If the project area is located in an estuary or embayment that experiences frequent sea level anomalies, the 99.5<sup>th</sup> percentile analysis of the time series data may be a more accurate representation of the upper end of the tidal boundary compared to the highest astronomical tide, which does not account for such anomalies.
2. When tidal water level times series data is utilised, the distance from the tidal record station to the project area (via the water course) should be stated and relevant assumptions noted in notes accompanying the map.
3. Where possible, it is recommended that the tidal record station have a minimum of 18.6 years of tidal records to include a tidal epoch (e.g. 1992-2011).

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<sup>1</sup> The Representative Concentration Pathways (RCPs) are developed and used by the IPCC (and others) for making sea level rise projections based on anthropogenic GHG emissions scenarios, and describe four different 21<sup>st</sup> century pathways of GHG emissions, atmospheric concentrations, air pollutant emissions and land use over the next 100 years. RCP8.5 is the very high GHG emissions scenario resulting in the greatest amount of sea level rise compared with the other RCP scenarios: [https://ar5-syr.ipcc.ch/topic\\_summary.php](https://ar5-syr.ipcc.ch/topic_summary.php). RCPs may be updated from time to time.

4. Where possible, it is recommended that tidal analysis comply with the Intergovernmental Committee of Survey and Mapping Tidal Analysis Recommendations as per:  
[https://www.icsm.gov.au/sites/default/files/2017-07/SP9\\_v4.4\\_May2017.pdf](https://www.icsm.gov.au/sites/default/files/2017-07/SP9_v4.4_May2017.pdf)
5. Where the above tidal record data is not available or reliable, alternative methods for estimating tidal water elevation may be considered. It is recommended that project proponents assess the appropriateness of the dataset(s) selected for the intended use against the following criteria:
  - a) Age of the dataset(s)
  - b) Scale and extent
  - c) Resolution
  - d) Accuracy
  - e) Classification, aggregation, generalisation systems
  - f) Integrity of dataset
  - g) Relevance to the proposed activity
6. It is recommended that modelling of tidal inundation is undertaken with consideration of the following factors:
  - a) Conservative estimates should be applied, where relevant. This is particularly relevant when locally available datasets are limited. For example, conservative estimates of tidal inundation may include the use of spatial mapping tools, such as Geographic Information Systems (GIS), where tidal boundary conditions are applied across the project area (e.g. no onsite hydraulic head losses).
7. It is recommended that the implications of storm surge and rainfall/flooding are considered in tidal inundation estimates. Storm surge and flooding implications may require detailed onsite calculations where onsite works to allow tidal inundation are likely to remove or reduce existing flood mitigation or storm surge barriers, thereby reducing overall protection from such events to adjacent landholdings beyond the project area. It is recommended that local guidelines or best practice should be applied.

## Part D: Defining Carbon Estimation Areas

Part D details requirements and recommendations for defining carbon estimation areas (CEAs) and preparing carbon estimation area map(s) for tidal restoration projects as required by section 22 of the Determination. It also includes requirements for providing evidence of the baseline land type of a carbon estimation area, as required by section 33 of the Determination.

### Requirement:

1. It is a requirement that CEA map(s) are produced.
2. It is a requirement that geospatial CEA map(s) are submitted to the Regulator electronically.
3. It is a requirement that the spatial data prepared for Part B is used as the base map data for CEA map(s) prepared under this part.
4. It is a requirement that the area of each CEA is provided in hectares to 1 decimal place.
5. It is a requirement that the average elevation of each CEA to one decimal place with respect to the Australian Height Datum (AHD) is provided.
6. It is a requirement that for a CEA comprising supratidal forest or mangroves, vegetation within the CEA is of similar age such that 90% of the plants comprising the land type have established over a period of time no greater than 5 years after the first vegetation of that land type appeared.
7. If part of the land within a CEA transitions into a different land type, such that the CEA contains more than one single or dominant land type, it is a requirement that the different land types in a CEA are separated into separate CEAs for the last day of the reporting period in which the transition occurred.
8. The geographic boundaries of each carbon estimation area must be defined:
  - a) in accordance with the Carbon Farming Initiative Mapping Guidelines, as available on the Department of Industry, Science, Energy and Resources' website and updated from time to time. As of 3 December 2021, the CFI Mapping guidelines were available at: [https://www.industry.gov.au/sites/default/files/2020-07/cfi-mapping\\_guidelines.pdf](https://www.industry.gov.au/sites/default/files/2020-07/cfi-mapping_guidelines.pdf)
  - b) to ensure that a single or dominant land type as defined in accordance with the BlueCAM guidance only is included within the boundary of the CEA, using at least one of the following:
    - i. field surveys;
    - ii. ecosystem community or equivalent spatial data current for the date of CEA representation including different vegetation types, including different mangrove types as defined below
    - iii. aerial photography which is date-stamped and geo-referenced;
    - iv. remotely sensed imagery, bathymetry or other relevant data products;
    - v. deposited title plans from a State or Territory land title registry;with a maximum resolution of  $\pm$  four meters. For clarity, a resolution as small as possible is preferable and must not exceed  $\pm$  four meters.
9. The information required to evidence the baseline land type of a CEA includes at least one of the following:
  - a) field surveys;

- b) ecosystem community or equivalent spatial data relevant at the date of project declaration including different vegetation types;
- c) aerial photography which is date-stamped and geo-referenced for the date of project declaration;
- d) remotely sensed imagery or other relevant data products for the date of project declaration; or
- e) deposited title plans from a State or Territory land title registry;

with a maximum resolution of  $\pm$  four meters. For clarity, a resolution as small as possible is preferable and must not exceed  $\pm$  four meters.

The mangrove types in Requirement 8 b ii are defined as:

**scrub mangroves:** an ecosystem comprised of mangroves that are at maturity, less than 2m tall.

**tall mangroves:** an ecosystem comprised of mangroves that are equal to or greater than 2m height at maturity, and commonly occur in the low intertidal zone, or adjacent to water (ocean, rivers or creeks).

**tall hinterland mangroves:** an ecosystem comprised of mangroves that are equal to or greater than 2m height at maturity, and occur in the high intertidal zone adjacent to dry land.

As of 3 December 2021, descriptions of the different types of mangroves in different states are available at:

QLD: <https://wetlandinfo.des.qld.gov.au/wetlands/ecology/components/flora/mangroves/>

SA:

[https://www.naturalresources.sa.gov.au/files/sharedassets/northern\\_and\\_yorke/coast\\_and\\_marine/yp\\_2014\\_assets\\_-\\_part\\_2\\_-\\_marine\\_ecological\\_assets\\_-\\_section\\_7\\_-\\_mangroves.pdf](https://www.naturalresources.sa.gov.au/files/sharedassets/northern_and_yorke/coast_and_marine/yp_2014_assets_-_part_2_-_marine_ecological_assets_-_section_7_-_mangroves.pdf);

NSW: [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0020/236234/mangroves.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0020/236234/mangroves.pdf)

VIC: [http://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/water\\_sss\\_white\\_mangrove](http://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/water_sss_white_mangrove)

WA: [https://www.fish.wa.gov.au/Documents/recreational\\_fishing/fact\\_sheets/fact\\_sheet\\_mangroves.pdf](https://www.fish.wa.gov.au/Documents/recreational_fishing/fact_sheets/fact_sheet_mangroves.pdf)

NT: [https://nt.gov.au/\\_data/assets/pdf\\_file/0007/204694/mangrove-education-pack.pdf](https://nt.gov.au/_data/assets/pdf_file/0007/204694/mangrove-education-pack.pdf)

## Recommendations:

1. It is recommended that project proponents assess the appropriateness of the dataset(s) selected for the intended use against the following criteria:
  - a) Age of the dataset(s)
  - b) Scale and extent
  - c) Resolution
  - d) Accuracy
  - e) Classification, aggregation, generalisation systems
  - f) Integrity of dataset
  - g) Relevance to the proposed activity

## Part E: Sourcing data for BlueCAM input

Part E details requirements and recommendations for obtaining input data for BlueCAM for a tidal restoration project projects as required by subsection 27(7) of the Determination.

### Requirements:

1. It is a requirement that tidal range for each CEA is calculated using the best available data source (in order of priority):
  - a) Government calculated tidal range values using the nearest location to the tidal restriction mechanism being removed or modified as part of the eligible project activities (resources provided in Part F), or
  - b) The calculated difference between the locally measured Mean Highest High Water (MHHW) versus the Mean Lowest Low Water (MLLW) tidal planes taken from a minimum of 18.6 years of tidal records at the nearest tidal water level recording location to the tidal restriction mechanism being removed or modified as part of the eligible project activities, or
  - c) The calculated difference between the locally measured Mean Highest High Water (MHHW) versus the Mean Lowest Low Water (MLLW) tidal planes taken from available tidal records (minimum 3 years) at the nearest tidal water level recording location to the tidal restriction mechanism being removed or modified as part of the eligible project activities, or
  - d) The maximum range in tidal water levels, as measured at the nearest tidal water level gauge to the tidal restriction mechanism being removed or modified as part of the eligible project activities based on the highest tidal water level to the lowest tidal water level during non-flood categorised periods. Flood categorised periods are determined by the local flood authority in each state or territory.
2. It is a requirement that the average elevation of each CEA is determined using the mean of the topographic elevations as mapped in Part B Requirement 3(b) for each CEA.

### Recommendation:

1. Where possible, historical tidal water levels for Requirement 1 should be obtained from a reputable, preferably government operated, water level gauge with a minimum of 12 months data (and preferably over 18.6 years data) from a location with similar tidal characteristics to the CEA.

## Part F: Resources

Part F provides a range of resources to use when preparing hydrological assessments, project extent maps, acid sulfate soils management plans and project operations and maintenance plans for tidal restoration projects.

1. It is recommended that the below resources are used to assess the proposed tidal inundation extent taking into consideration sea level rise as well as storm surge events:
  - a) Assessing climate change in estuaries (including modelling approaches):  
<http://estuaries.wrl.unsw.edu.au/index.php/climate-change/risk-assessment-guide/>
  - b) Sea level Rise and You: Information about the future:  
<https://coastadapt.com.au/tools/coastadapt-datasets#future-datasets>
  - c) A review of sea level rise impacts on estuarine dynamics:  
<https://www.sciencedirect.com/science/article/pii/S0048969721015382?via%3Dihub>
  - d) State specific sea level rise information:  
<https://coastadapt.com.au/state-level-specific-information>
  - e) Sea Level Rise: Science and Synthesis for NSW:  
<https://climatechange.environment.nsw.gov.au/-/media/NARCLim/Files/Climate-Change-Impact-Reports/Sea-Level-Rise-Science-and-Synthesis-for-NSW.PDF?la=en&hash=E3608D4BA290AEC7EFB6C07630977055362BC473>
  - f) National information regarding storm inundation and mapping can be sourced at:  
[https://arr.ga.gov.au/\\_data/assets/pdf\\_file/0016/40552/Project18\\_Stage3\\_Report\\_draftForDiscussion1.pdf](https://arr.ga.gov.au/_data/assets/pdf_file/0016/40552/Project18_Stage3_Report_draftForDiscussion1.pdf)
2. It is recommended that the below Government resources are used to assess the proposed tidal inundation extent taking into consideration sea level rise:
  - a) National Data:  
<http://www.bom.gov.au/oceanography/projects/ntc/monthly/>
  - b) New South Wales:  
<https://www.mhl.nsw.gov.au/Data-OceanTide>
  - c) Queensland:  
<https://www.msq.qld.gov.au/Tides/Open-data>
  - d) Western Australia:  
<https://www.transport.wa.gov.au/imarine/download-tide-wave-data.asp>
  - e) Northern Territory:  
<https://nt.gov.au/marine/for-all-harbour-and-boat-users/tides/check-the-tides/2020-and-2021-tidal-information-nt-ports>

- f) Tasmania:  
<https://dpiipwe.tas.gov.au/land-tasmania/geospatial-infrastructure-surveying/geodetic-survey/coordinate-height-and-tide-datums-tasmania>
  - g) South Australia  
<https://data.environment.sa.gov.au/Coast-and-Marine/Data-Systems/Coastal-Flood-Mapping-Viewer/Pages/default.aspx>
3. Clear spatial information about the tidal inundation area is fundamental to manage potential risks associated with the project activity and to determine eligibility for registration under the Emissions Reduction Fund. It is recommended that proponents consider example mapping guidelines, including (but not limited to):
- a) Boundary Considerations and Mapping Guidelines:  
<https://www.environment.gov.au/system/files/resources/2d62c935-0728-48ad-bde3-dc939040ecb5/files/module-1-mapping-2nd-ed.pdf>
  - b) Guidance on the collection and use of data for location-based analysis:  
<https://www.anzlic.gov.au/resources/guidance-collection-and-use-data-location-based-analysis>
  - c) Foundational Spatial Data Framework Link Platform:  
<https://link.fsdf.org.au/>
  - d) Spatial Land Information Resources:  
<https://www.anzlic.gov.au/resources>
  - e) State specific links to Council maps and boundaries:  
<https://alga.asn.au/resources/council-maps-boundaries/>
4. Where an acid sulfate soils management plan is required, it must take into consideration any applicable Commonwealth, State and Territory and Local Government guidance. These may include the following resources as applicable:
- a) National Acid Sulfate Soil Guidance:  
(General) <https://www.waterquality.gov.au/issues/acid-sulfate-soils>  
(Dewatering) <https://www.waterquality.gov.au/sites/default/files/documents/dewatering-acid-sulfate-soils.pdf>
  - b) New South Wales:  
<https://www.environment.nsw.gov.au/topics/land-and-soil/soil-degradation/acid-sulfate-soils>  
[www.dpi.nsw.gov.au/data/assets/pdf\\_file/0007/167875/restoring-balance-guidelines.pdf](http://www.dpi.nsw.gov.au/data/assets/pdf_file/0007/167875/restoring-balance-guidelines.pdf)  
<https://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf>
  - c) Queensland:  
<https://www.qld.gov.au/environment/land/management/soil/acid-sulfate/explained>
  - d) Western Australia:

<https://www.der.wa.gov.au/your-environment/acid-sulfate-soils/69-ass-guidelines>

e) Northern Territory:

[https://nt.gov.au/\\_data/assets/pdf\\_file/0005/228992/nt-land-suitability-guidelines.pdf](https://nt.gov.au/_data/assets/pdf_file/0005/228992/nt-land-suitability-guidelines.pdf)

f) Victoria:

[https://www.marineandcoasts.vic.gov.au/\\_data/assets/pdf\\_file/0016/31237/CASS-BPMG-2010.pdf](https://www.marineandcoasts.vic.gov.au/_data/assets/pdf_file/0016/31237/CASS-BPMG-2010.pdf)

g) South Australia:

[https://www.epa.sa.gov.au/files/8371\\_guide\\_sc\\_acid.pdf](https://www.epa.sa.gov.au/files/8371_guide_sc_acid.pdf)

<http://www.environment.sa.gov.au/files/bf760a40-77cf-401c-8df4-9e3900ec4cc7/no33.pdf>

h) Tasmania:

<https://dpiw.tas.gov.au/Documents/ASS-Guidelines-FINAL.pdf>

5. When preparing project extent maps, it is recommended that project proponents consult the following resources regarding recognised Aboriginal Heritage sites as applicable:

a) Queensland:

<https://culturalheritage.datsip.qld.gov.au/achris/public/home>

b) New South Wales:

<https://www.environment.nsw.gov.au/awssapp/Login.aspx?ReturnUrl=%2fawssapp>

c) Victoria:

<https://www.aboriginalvictoria.vic.gov.au/victorian-aboriginal-heritage-register>

d) South Australia:

<https://www.dpc.sa.gov.au/responsibilities/aboriginal-affairs-and-reconciliation/aboriginal-heritage/aboriginal-heritage-registers>

e) Western Australia:

<https://www.wa.gov.au/service/aboriginal-affairs/aboriginal-cultural-heritage/search-aboriginal-sites-or-heritage-places>

f) Northern Territory:

<https://nt.gov.au/property/land/heritage-listings/heritage-register-search-for-places-or-objects>

g) Tasmania:

<https://www.aboriginalheritage.tas.gov.au/about-us/aboriginal-heritage-register>

6. When preparing project extent maps, it is recommended that proponents consult the following resources regarding identifying ecologically significant features such as Ramsar wetlands or threatened ecological communities, as applicable:

a) South Australia

<https://data.environment.sa.gov.au/NatureMaps/Pages/default.aspx>



7. When preparing project operations and maintenance plans, it is recommended that proponents consult the following resources:
  - a) Rehabilitating Habitats: floodgate management (NSW Department of Primary Industries)  
<https://www.dpi.nsw.gov.au/fishing/habitat/rehabilitating/floodgate>
8. When preparing mosquito management plans, it must take into consideration any applicable Commonwealth, State and Territory and Local Government guidance. These may include the following resources as applicable:
  - a) Queensland:  
[https://environment.des.qld.gov.au/\\_data/assets/pdf\\_file/0027/88632/pr-cp-mosquito-management.pdf](https://environment.des.qld.gov.au/_data/assets/pdf_file/0027/88632/pr-cp-mosquito-management.pdf)
  - b) New South Wales: Mosquito management is managed by some local councils via Development Control Plans or management planning guidance. The Regulator recommends contacting the relevant local council for the most up to date resources on mosquito management.
  - c) Victoria:  
[https://content.health.vic.gov.au/sites/default/files/migrated/files/collections/research-and-reports/m/mosquito\\_manage---pdf.pdf](https://content.health.vic.gov.au/sites/default/files/migrated/files/collections/research-and-reports/m/mosquito_manage---pdf.pdf)
  - d) South Australia:  
<https://www.sahealth.sa.gov.au/wps/wcm/connect/6f5e908045c6d6e18dceefac725693cd/mozzie-resource-aug06.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-6f5e908045c6d6e18dceefac725693cd-nKQfCUD>  
<https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/public+health/pest+management/mosquitos/mosquito+integrated+management+guidelines>
  - e) Western Australia:  
[https://ww2.health.wa.gov.au/Articles/J\\_M/Mosquito-management](https://ww2.health.wa.gov.au/Articles/J_M/Mosquito-management)
  - f) Northern Territory:  
[https://digitallibrary.health.nt.gov.au/prodjspui/bitstream/10137/2687/2/Construction practice near tidal areas Dec 2017.pdf](https://digitallibrary.health.nt.gov.au/prodjspui/bitstream/10137/2687/2/Construction%20practice%20near%20tidal%20areas%20Dec%202017.pdf)