

## Environmental Assessment-Level 2

| Section 1: Project Overview                                  |  |  |   |
|--|--|--|---|
| <b>Project Details</b>                                       |  |  |   |
| <b>Project Name</b>  | Bennetts Road Drainage realignment   | <b>Group and Directorate</b>                     | Transport Services  |
| <b>Project Number</b>  | NA   | <b>Date:</b>                                     | 29/08/2024  |
| <b>Project Manager / Works Supervisor</b>                    | Adam Richards and Dan Ingram   | <b>Environmental Risk Level (from Section 5)</b> | Minor   |
| <b>Activity</b>  |  |  |   |
| <b>Description of the Activity</b>                           | This project aims to amend and redirect a swale drain located adjacent to 50 and 76 Bennetts Road.   |  |   |
| <b>Objective and need for the Activity</b>                   | <p>Currently the convergence zone between the Bennetts Road culvert and swale drain is eroding the opposite bank at 76 Bennetts Road. Understandably this erosion has caused some concern from the resident who has requested action from the City to protect her property.</p> <p>Given the location of this property and the topography of the surrounding area it is unlikely all hazards associated with erosion can be resolved however efforts to modify the drainage line to reduce the risk of erosion at the convergence have been proposed.</p>  |  |   |
| <b>Methodology</b>   | The eroded swale drain will be reconstructed and diverted to gradually converge with the existing water way rather than depositing directly into the adjacent eroding bank.  |  |   |
| <b>Location:</b>   |  |  |   |
| <b>Address (including Lot and DP)</b>                        | Road reserve and partially within the southern limits of 50 and 76 Bennetts Road   |  |   |
| <b>Landowner</b>   | Road Reserve and Private Land  | <b>Land Zoning</b>                               | Zoned C2 Environmental Conservation and RU2 Rural Landscape |
| <b>Reserve number and managing authority (if applicable)</b> | NA   | <b>Date of Site visit</b>                        | 04/06/2024  |
| <b>Vegetation Type</b>                                       | The subject site is primarily exotic weed species normally found within disturbed roadsides of the Coffs harbour LGA. Exotic planted vegetation both ornamental and agricultural borders the site and comes from the adjacent rural properties. Areas not containing this planed vegetation is predominantly open Pastural Grass land.   |  |   |
| <b>Site Description</b>                                      | <p>The subject site has been subject to heavy clearing practices with no remnant or unimpacted vegetation exists within the subject site or in the immediate area. The swale itself diverts runoff from primarily cleared larger residential lots and drains into the northern most reaches of Coffs Creek (3rd order stream).</p> <p>The proposed activities required dredging works or reclamation works along an eroded drainage line that deposits into a waterway that is identified as Southern Purple Spotted Gudgeon (SPSG) habitat and as such requires a Part 7 Fisheries Management Act permit. Approval of the dredging or reclamation work carried out in an artificial body of water intermittently connected to a</p> |  |   |

# Environmental Assessment-Level 2

natural body of water is subject to approval under part 7 division 3 section 200 (1). Work is not permitted until approval of the Part 7 Fisheries Management Act permit (Appendix A) is granted.

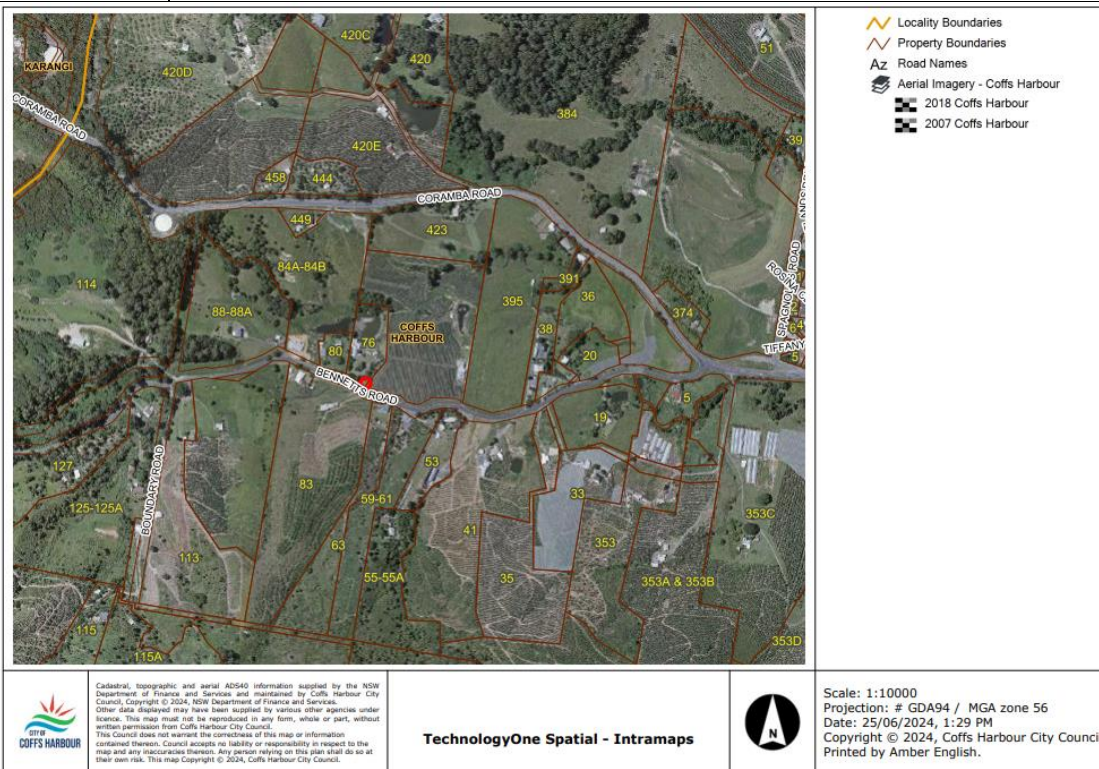


Figure 1: Project locality west Coffs Harbour drainage line into the western limit of Coffs Creek along Bennetts Road.

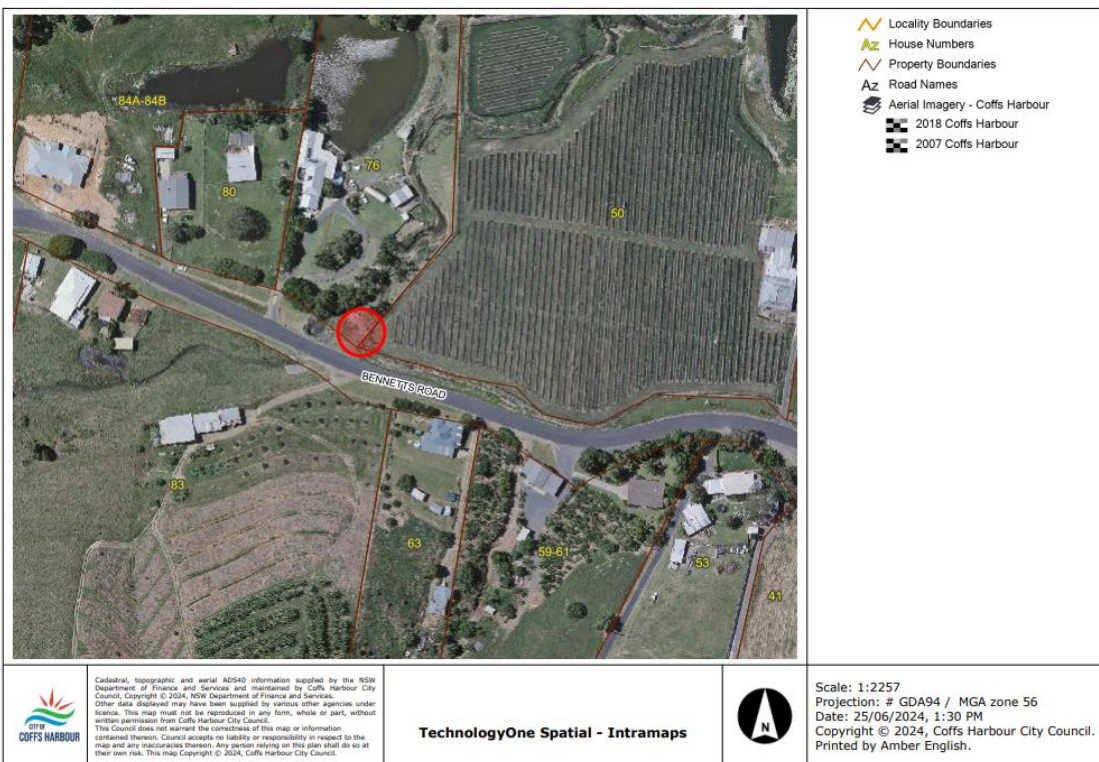


Figure 2: limits of the proposed subject site (area subject to this Environmental Assessment indicated in red)

## Environmental Assessment-Level 2

### Section 2: Planning approval pathway

**This document is for an activity that is exempt development that has a greater than negligible impact on the environment or the activity is permitted without consent.**

The purpose of this document is to satisfy the requirements of Part 5, Division 5.1 of the Environmental Planning and Assessment Act (1979) (EP&A Act) and provides The City with a written record of the required due diligence and compliance with the following legislation.

See the environmental assessment flowchart and procedure or engage the City's Environmental Project Officer for support

| Planning Pathway   | Yes / No |
|--|----------|
| Is the activity permitted as <i>exempt or complying development</i> under the Coffs Harbour Local Environmental Plan (LEP) 2013?   | No       |
| Under the Coffs Harbour LEP the proposed activity would be considered "Environmental protection work" and as such the activity of repairing and realigning the swale drain in an effort to reduce erosion impacts is considered permitted without consent for zoning C2 and Permitted With Consent RU2.  |          |
| Is the activity permitted as <i>exempt development</i> under State Environmental Planning Policy (Transport & Infrastructure) 2021 but assessed as having a <b>greater than negligible</b> impact in the Level 1 assessment?   | Yes      |
| The proposed activity is <b>Exempt</b> under the State Environmental Planning Policy (Transport and Infrastructure) 2021. Division 17, Clause 2.113, Section 1 (xiii) exempts a Public authority from project approval for the purpose of maintaining culverts, drains and other works to improve the quality or control of stormwater runoff. |          |
| Is the activity <i>permissible without consent</i> under State Environmental Planning Policy (Transport & Infrastructure) 2021?  | No       |
| NA   |          |
| Is the activity located within mapped Coastal Zone areas as per State Environmental Planning Policy (Resilience & Hazards) 2021? If yes, continue below. If no, continue to Section 3. (See The City's Resilience and Hazards Flowchart)   | No       |
| Is the activity mapped as coastal wetlands or littoral rainforest and is exempt development as per Part 2.1 Section 2.3 (4) of SEPP (T&I)?   | No       |
| Is the activity mapped as either coastal environment area, coastal use area or coastal vulnerability area and does the activity satisfy the requirements of Part 2.2 Division 2 Section 2.9, Division 3 Section 2.10 and Division 4 Section 2.11 respectively of the SEPP (R&H) 2021   | No       |
| Is the activity within the proximity to coastal wetlands or littoral rainforest and does the activity satisfy Part 2.2 Division 1 Section 2.8 of SEPP (R&H)?   | No       |

## Environmental Assessment-Level 2

### Section 3: Environmental Impact Triggers

This section of the environmental assessment allows the City to fulfil its duties under Section 5.5 of the EP&A Act to consider, to the fullest extent possible, all matters affecting or likely to affect the environment, for the purpose of protection and enhancement of the environment

**Table 1: Activity and Location impact triggers**

| <b>WATERWAY/MARINE:</b>   | <b>Yes / No</b> | <b>Level of impact with controls:</b> |
|---|-----------------|---------------------------------------|
| Is the activity within 40m of a waterway or marine environment (Coastal/Wetland/River/Creek/Estuary/Lake)?  | Yes             | Minor                                 |
| <b>BIODIVERSITY:</b>  |                 |                                       |
| Is the activity located within an area identified on the Biodiversity Values Map?<br><a href="#">Biodiversity Values Map</a>  | Yes             | Minor                                 |
| Is the activity located within the immediate vicinity or near (within 100m) to: <ul style="list-style-type: none"> <li>Threatened species or their habitat or</li> <li>Threatened or Endangered ecological communities</li> </ul> <a href="#">Threatened Species Sightings</a> and / or <a href="#">Protected Matters Search</a> and / or <a href="#">Bionet</a>  | Yes             | Negligible                            |
| Is the activity within 100m of mapped Koala Habitat and requires tree maintenance or removal OR obstructs passage between identified KPOM Links, POM Habitat Links and / or Land Adjoining Primary Koala Habitat)?  | No              | N/A                                   |
| Does the activity require the removal or damage to native vegetation  | No              | N/A                                   |
| Does the activity require any tree maintenance or removal?<br>(See Tree removal flow chart and Part 5 Biodiversity Offsets Procedure)   | Yes             | Negligible                            |
| <b>PUBLIC AMENITY:</b>  |                 |                                       |
| Will the activity negatively impact public amenity within the locality?   | No              | N/A                                   |
| <b>SOIL / EARTHWORKS:</b>   |                 |                                       |
| Is the activity within mapped Acid Sulfate Soils (ASS) and does the activity trigger the need for further investigations or an ASS management plan?<br><a href="#">ASS triggers</a>   | No              | N/A                                   |
| Is the activity within mapped contaminated soils location?  | Yes             | Negligible                            |
| Is the activity within mapped naturally occurring asbestos (NOA) location?<br><a href="#">NOA Map</a>   | No              | N/A                                   |
| <b>HERITAGE</b>   |                 |                                       |
| Is the activity in the vicinity (within 200m) of Aboriginal and/or state heritage areas? Attach a copy of your AHIMS search to Appendix A<br><a href="#">AHIMS</a>  | No              | Negligible                            |
| <p><b>If all the above environmental impact triggers are NO, the environmental risk is deemed to be no greater than a minor risk; continue with this Level 2 Environmental Assessment</b></p> <p><b>If YES has been selected for any of the above environmental triggers and the impact is greater than minor (i.e. moderate or potentially significant), stop this assessment and commence a Level 3 Environmental Assessment and / or talk to the relevant specialist</b></p> |                 |                                       |

## Environmental Assessment-Level 2

### SECTION 4: Approvals, Licences, Permits and Consultation

The table below identifies the other organisations and entities that may be required to give approval, concurrence, licences or permits for the activity.

If you identify the need to contact any of these agencies or entities, we encourage you to contact the relevant staff member in the 'Who to Contact at the City' table.

Any correspondence from external authorities or agencies shall be attached to appendices.

NOTE: Search the Intramaps module 'Environmental Impact Assessment' and/or hyperlinks for the Triggers listed below.

| Trigger for approval, licence or permit |   | Authority and relevant approval  | Applicability  | Type of Licence, Permit or Consultation  |
|---|---|--|----------------|--|
| <b>Aboriginal land claim</b>            | Working on land that is subject to a Land Claim                         | Local and State Aboriginal Land Councils   | Not Applicable |  |
| <b>Heritage</b>                         | Working near <a href="#">State Heritage areas or items</a>              | NSW State Heritage   | Applicable     | No permit required. Assessed in accordance with the cities Aboriginal Cultural Heritage Management Plan (see section 5.16)                                 |
|   | Working near <a href="#">Local heritage areas or items</a>              | The City's heritage Officer  | Not Applicable |  |
|   | Harm or potential harm to <a href="#">Aboriginal objects and places</a> | Local Aboriginal Land Council<br>Aboriginal Heritage Impact Permit (AHIP)<br>s90 NP&W Act                                | Not Applicable |  |
| <b>Landholder</b>                       | Working on land not owned or controlled by the City                     | Landowner consent:<br><a href="#">Crown Lands</a> ,<br><a href="#">Forestry Corp.</a> ,<br><a href="#">NPWS, private</a> | Applicable     | No permit required. The Project Manager is to inform residents of proposed works and acquire property owner approval prior to commencement of construction |

## Environmental Assessment-Level 2

| Trigger for approval, licence or permit |  | Authority and relevant approval   | Applicability  | Type of Licence, Permit or Consultation   |
|---|--|---|----------------|---|
| <b>Native title</b>                     | Working in an area that is subject to Native Title (Crown Land)                      | Report from the City's Native Title Manager(s)<br>Or<br><a href="#">Lands Advisory Services (LANDSAS)</a> | Not Applicable |   |
| <b>Pollution and hazards</b>            | Asbestos removal   | Safework NSW - <a href="#">Licenced removalist</a>  | Not Applicable |   |
|   | Storage of hazardous chemicals   | Safework NSW - <a href="#">Hazardous chemical notification</a>  | Not Applicable |   |
| <b>Roads</b>                            | Working on a classified road not under the City's control                            | <a href="#">TfNSW or Crown Lands</a>  | Not Applicable |   |
| <b>Utilities</b>                        | Earthworks near services (telecommunications, electricity, water, sewer, stormwater) | <a href="#">Before You Dig Australia check - Essential Energy, Telstra, Optus, NBN, the City</a>          | Not Applicable |   |
| <b>Water/ waterways</b>                 | Dredging and reclamation in waterways (mapped key fish habitat)                      | <a href="#">Part 7 Fisheries Permit - DPI</a><br>Crown Lands permit (if required)                         | Applicable     | Permit required. Environmental assessment document is considered incomplete until permit is acquired and attached |
|   | Dewatering or extraction of ground water   | <a href="#">NSW DPE (Water) Access Licence (s89 WM Act)</a>   | Not Applicable |   |
|   | Removal / harm to Aquatic /  | <a href="#">Part 7 Fisheries Permit - DPI</a><br>Or   | Not Applicable |   |

## Environmental Assessment-Level 2

| Trigger for approval, licence or permit |  | Authority and relevant approval                    | Applicability  | Type of Licence, Permit or Consultation |
|---|--|--|----------------|---|
|   | Marine Vegetation                              | <a href="#">Fisheries Marine Park Permit - DPI</a> |                |   |
|   | Working in Solitary Islands Marine Park (SIMP) | <a href="#">Fisheries Marine Park Permit - DPI</a> | Not Applicable |   |
|   | Blocking Fish Passage                          | <a href="#">Part 7 Fisheries Permit - DPI</a>      | Not Applicable |   |

## Environmental Assessment-Level 2

### SECTION 5 : Environmental Impact Assessment

**Impact:** *If the impact is applicable to your activity undertake the impact assessment. If the impact is not applicable to your activity, the impact assessment is not required but evidence shall be provided as to why it is not applicable eg. dates and outcomes of intramap searches and communication with technical specialists*

**Impact Description:** *If the impact is applicable, identify and describe the specific impacts from the activity. Descriptions can include the cause, extent, severity and duration; identification of any source and receivers. Describe if the impact is current, occurs only during works or continues post works*

**IMPACT LEVEL – if Positive, Negligible or Minor continue with Level 2 assessment. If Moderate, commence a Level 3 Environmental Assessment**

**Impact Without Control:** *Provide a description of the impact from the environmental factor. The impact shall be prior to any environmental controls being implemented.*

**Environmental Controls:** *Identify appropriate environmental controls to reduce impact from the environmental factor. Hierarchy of environmental controls include Elimination, Substitution, Engineering, Administration, Safeguards*

**Impact With Control:** *Considering the impact from the environmental factor and the identified environmental controls, determine the final impact on the environment from the activity.*

#### Duration of the impact

| Severity of the Impact |             | Negligible (No measurable impact) | Short term impacts (during construction) | Mid-term Impacts (Impacts until natural process resumes) | Long Term Impacts       | Irreversible            |
|------------------------|-------------|-----------------------------------|--|--|-------------------------|-------------------------|
|                        | Negligible  | Negligible                        | Negligible                               | Negligible   | Negligible              | Negligible              |
|                        | Minor       | Minor                             | Minor                                    | Moderate   | Moderate                | Potentially Significant |
|                        | Moderate    | Moderate                          | Moderate                                 | Moderate   | Potentially Significant | Potentially Significant |
|                        | Significant | Potentially Significant           | Potentially Significant                  | Potentially Significant                                  | Potentially Significant | Potentially Significant |

When considering the likely impact of an activity on the environment, the proponent and determining authority must take into account the factors set out in Table 5 below. These factors are listed in clause 171(2) of the Environmental Planning and Assessment Regulation 2021.



## Environmental Assessment-Level 2

| Environmental Factors and Impacts   |   |                     |
|---|---|---------------------|
| Aspect, Applicability and Impact  | Environmental controls  | Impact with control |
| <b>Air</b>  |   |                     |
| <b>1. Dust</b>  |   |                     |
| <p style="text-align: center;">Applicable</p> <p>It is unlikely excess amounts of dust will be generated as a result of works however dust from vehicular movements, plant, equipment and materials should still be considered given the projects proximity to the sensitive riparian zone.</p> | <p>Dust management will be conducted using the following methods:</p> <ul style="list-style-type: none"> <li>• Where practical, minimise the area of disturbance by using progressive work practices.</li> <li>• Construction works will not be carried out during strong winds or in weather conditions where high levels of dust or air borne particulates are likely.</li> <li>• Dust suppression techniques are to be utilised to minimise the potential for dust generation/dispersal during works, as required.</li> <li>• Vehicles transporting waste or other materials that may produce dust would be covered during transportation.</li> <li>• Debris and waste would be immediately collected into appropriate covered storage facilities and removed from the site as soon as practical to ensure light-weight material is not dispersed by wind gusts</li> </ul> | Negligible          |
| <b>2. Odours</b>  |   |                     |

## Environmental Assessment-Level 2

|  |  |            |
|--|--|------------|
| Applicable   |  |            |
| Odours associated with the proposed works would be produced through fumes released from vehicles, plant, equipment and chemicals. These odours will be indirectly managed by other proposed mitigation measures discussed within this table (section 5).   | Any predicted odours are expected to be mitigated by other practices.<br>Including the limiting of emissions, work hours and safe disposal of any waste produced from works.   | Negligible |
| <b>3. Emissions</b>  |  |            |
| Applicable   |  |            |
| Emission (gases, liquid droplets or solid particles) release from plant, equipment and materials are likely to occur. However any emissions produced as a result of works are not expected to be in excess and will be appropriately mitigated by the methods outlined in the adjacent column.         | <ul style="list-style-type: none"> <li>• Proper maintenance and tuning of engines</li> <li>• Catalytic converters and exhaust filters (if available)</li> <li>• Correct fuel specification</li> <li>• Limiting idling time</li> <li>• Avoiding overloading</li> <li>• Appropriate height of discharge above ground level</li> </ul>  | Negligible |
| <b>Noise</b>   |  |            |
| <b>4. Noise</b>  |  |            |
| Applicable   |  |            |
| Enter impact description e.g. noise from vehicles, machinery, plant, equipment and people (usage). Includes context consideration e.g. timing, duration, character, level, and proximity to sensitive locations such as hospital, schools, residential, businesses. Identify the source and receivers. | <p>The following safeguards and mitigation measures will be implemented to prevent and/ or minimise adverse impacts relating to noise and vibration:</p> <ul style="list-style-type: none"> <li>• Construction activities will be undertaken in within standard construction hours: <ul style="list-style-type: none"> <li>- Monday to Friday 7:00 am to 6:00 pm.</li> <li>- Saturday 8:00 am to 1:00 pm.</li> <li>- Sundays or public holidays No work on</li> </ul> </li> <li>• Where practicable, noise control should occur at the source and modifications to noise control should be investigated and implemented, such as sourcing low noise power tools or hydraulic or electrically controlled equipment instead of petrol or pneumatic equipment.</li> </ul> | Minor      |

## Environmental Assessment-Level 2

|  |   |                   |
|--|---|-------------------|
|  | <ul style="list-style-type: none"> <li>• The most appropriately sized tool for the respective job will be used, keeping in mind that the smaller the tool, the less potential noise generated.</li> <li>• Any noise complaints will be recorded and include suitable identification/ description of the noise source (e.g., continual/ impulsive) and general location of the complaint. Any noise complaints will be investigated and actioned as required.</li> <li>• All local residents likely to be affected will be notified at least five working days prior to the start of any works associated with the activity that may have an adverse noise or vibration impact.</li> <li>• Works are to be carried out during normal work hours. Any work that is performed outside normal work hours or on Sundays or public holidays may not be permitted and, if permitted, works are to minimise noise impacts.</li> <li>• Where out-of-hours activities are required a Noise and Vibration Management Plan will be prepared and implemented in consultation with local residents</li> </ul> |                   |
| <b>5. Vibration</b>  |   |                   |
| <p style="text-align: center;">Applicable</p> <p>Vibration from vehicles, machinery, plant and equipment. Will be controlled using similar practices to noise controls. No excess impacts from vibration are expected as a result of works` Includes context consideration e.g. timing, duration, character, level and proximity to sensitive locations such as hospital, schools, residential businesses. Identify the source and receivers and potential risk of damage to assets.</p> | <p>As above (section 5.4)</p>   | <p>Negligible</p> |
| <b>Water</b>   |   |                   |
| <b>6. Stormwater</b>   |   |                   |

## Environmental Assessment-Level 2

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|---|---|--|
| <p style="text-align: center;">Applicable</p> <p>The proposed works aim to rehabilitate and better manage the flow of storm water. Possible impacts associated with storm water flow include risks such as; pollution of stormwater with sediment, soils, chemicals, fuels, litter, debris.</p> | <p>Where possible, avoid works during forecast high rainfall events and plan works to occur during periods of no or low flow.</p> <p>Appropriate measures for sediment and erosion control consistent with Best Management Practice (i.e. Landcom 2004), Managing Urban Stormwater: Soils and Construction (4th Edition) are to be in place before and during construction and until the site has been rehabilitated. Measures may need to be modified to suit changing weather conditions experienced during the construction phase and should be checked and cleaned frequently.</p> <p>Any stockpiles on site are to be fenced off and sediment fencing to be placed around them until they are moved.</p> | <p style="text-align: center;">Minor</p> |
| <p><b>7. Groundwater</b></p>  |   |  |
| <p style="text-align: center;">Not Applicable</p> <p>It is not expected that the proposed works will have an impact on groundwater.</p>   | <p style="text-align: center;">NA</p>   | <p style="text-align: center;">N/A</p>   |
| <p><b>8. Waterways</b></p>  |   |  |

## Environmental Assessment-Level 2

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|--|---|--------------|
| <p style="text-align: center;">Applicable</p> <p>Waterways are both natural and artificial waters including rivers, streams, lakes, lagoons, swamps, wetlands, unconfined surface water (including gutters), dams or tidal waters (including the sea) and water in mains, pipes and channels. The proposed works will be primarily within the swale drain located on the corner of 76 Bennetts Road however, some realignment works will be needed within the 3<sup>rd</sup> order stream located within the subject site. These works aim to reduce the impact of erosion on the opposite bank located at 76 Bennetts Road.</p> <p>No marine vegetation or fish passageway obstruction will occur as a result of works. However, a permit for dredging and reclamation works will be required from fisheries.</p> | <p>Appropriate measures for sediment and erosion control consistent with Best Management Practice (i.e. Landcom 2004), Managing Urban Stormwater: Soils and Construction (4th Edition) are to be in place before and during construction and until the site has been rehabilitated. Measures may need to be modified to suit changing weather conditions experienced during the construction phase and should be checked and cleaned frequently.</p> <p>Any temporary stockpiles of potentially dispersible material that are not required for imminent use will be dampened as required or stabilised with spray grass or appropriate geo-fabric.</p> <p>No waste and/or wastewater will be discharged directly or indirectly into drains or waterways.</p> <p>Works within the bank/waterland are not permitted to commence until a fisheries permit has been acquired. Please attach a copy of the acquired permit to this document and have a copy accessible to personnel on site.</p> | <p>Minor</p> |
| <p><b>Soil</b></p>   |   |              |
| <p><b>9. Erosion and sediment</b></p>  |   |              |
| <p style="text-align: center;">Applicable</p> <p>No greater risk or significant risk of erosion is expected as a result of works. The proposed project aims the mitigate and manage the risks associated with erosion and the long term risk it presents to the land holder at 76 Bennetts Road.</p> <p>Short term erosion controls are discussed in the adjacent collum.</p>  | <p>Works would only commence once all erosion and sediment controls have been established. The controls would be maintained in place until the works are complete and all exposed erodible materials are stabilised.</p> <p>Appropriate measures for sediment and erosion control consistent with Best Management Practice (i.e. Landcom 2004), Managing Urban Stormwater: Soils and Construction (4th Edition) are to be in place before and during construction</p>   | <p>Minor</p> |

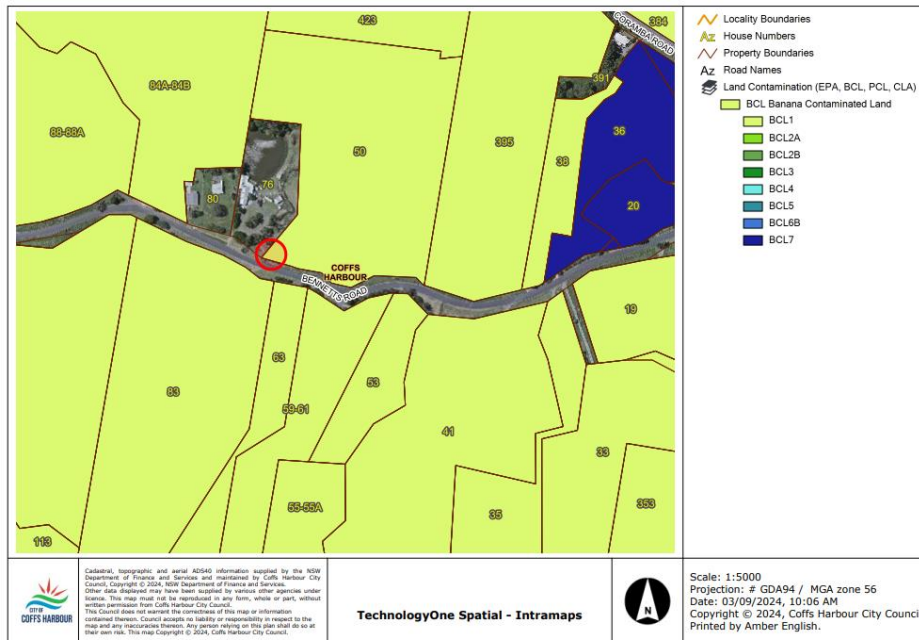
## Environmental Assessment-Level 2

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|   | <p>and until the site has been rehabilitated. Measures may need to be modified to suit changing weather conditions experienced during the construction phase and should be checked and cleaned frequently.</p> <p>Erosion and sedimentation controls would be checked and maintained (including clearing of sediment from behind barriers) on a regular basis (including after any precipitation events) and records kept and provided on request.</p> <p>Imported materials would be sourced as clean material from an approved site/provider.</p> <p>Disturbance of natural sediments and groundcover vegetation would be minimised as far as possible.</p> |              |
| <b>10. Acid sulphate soils</b>  |   |              |
| <p>Not Applicable</p> <p>No acid sulphate souls observed within the subject site or in the surrounding area.</p>  | <p>NA</p>   | <p>N/A</p>   |
| <b>11. Contamination</b>  |   |              |
| <p>Applicable</p> <p>The swale drain intersects a section of mapped BCL 1 and the majority of the surrounding properties have been mapped as BCL 1. BCL 1 is land that has current or historical use of banana cultivation. BCL 1 has not been sampled and is considered potentially contaminated and requires further investigation.</p> | <p><b>BCL controls</b></p> <p>Given the proximity/presence of BCL 1 a preliminary site investigation (referred to as an Initial Site Investigation in s.2 NSW EPA Guidelines for Assessing Banana Plantation Sites, 1997) is required in accordance with the Contaminated Land Procedure.</p>   | <p>Minor</p> |

# Environmental Assessment-Level 2

Studies identified banana growing as a land use which has resulted in elevated concentrations of pesticide related agricultural chemical residues. The primary contaminants identified were Arsenic (As), Lead (Pb) and Organochlorine pesticides (including Dieldrin, Aldrin & DDT). These metals and compounds are considered to be persistent within the environment and can pose a threat to human health and the environment at certain concentrations. Any identified contaminants are to be dealt with in accordance with the City's Contaminated Land Procedure.

Where an Initial Site Investigation shows that the land is contaminated with levels of chemical residues above NSW EPA human health investigation thresholds, further assessment is required to delineate the vertical and lateral extent of the contamination. This assessment should be based on NSW EPA 1997 Guidelines for Assessing Banana Plantation Sites, and will be conducted by an appropriately qualified and experienced contaminated land practitioner.



Map of BCL in proximity to the subject site (red)

Similarly, where remediation is necessary to make the land suitable for its current or intended use, the remediation and validation necessary should be carried out in accordance with NSW EPA 1997 Guidelines for Assessing Banana Plantation Sites and other relevant guidelines

### Standard controls

A spill containment kit would be available at all times. All personnel would be made aware of the location of the kit and trained in its effective deployment.

Any required fuels and other liquids will be stored in self-safe chemical storage containers and within bunded areas and as far as practical away from watercourse or drainage lines.

Refuelling of machinery, vehicles or equipment is to be undertaken in areas away from drainage lines or watercourses (as far as practical) and managed in order to prevent any potential spills leaving the refuelling area (e.g. use of bunded areas).

## Environmental Assessment-Level 2

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| <p>In addition to this standard contamination mitigation is required to reduce the risk of potential site contamination through release of chemicals, oils, fuels, heavy metals and other hazardous materials including waste.</p>   | <p>Only clean equipment and vehicles would be used, with equipment being cleaned down before being brought to the site.</p> <p>No waste and/or wastewater will be discharged directly or indirectly into drains or waterways.</p> <p>The Council and EPA will be notified immediately in response to incidents causing or threatening actual or potential harm to the environment in accordance with section 148 of the POEO Act (via EPA Environment Line on 131 555).</p> <p>All equipment would be maintained in good working order and operated according to manufacturer's specifications.</p>   |              |
| <b>Flora &amp; Fauna</b>   |   |              |
| <b>12. Aquatic flora &amp; fauna, threatened species</b>   |   |              |
| <p style="text-align: center;">Applicable</p> <p>Enter impact description e.g. harm to aquatic flora includes cutting, poisoning, removing, trimming, pulling up, gathering or shading. May require permit - refer to Section 4.</p> <p>Harm to aquatic fauna includes taking, unfurling, obstruction of fish passage and marine entanglement.<br/>May require permit - refer to Section 4.</p> <p>Aquatic flora includes live and dead or detached material of saltmarsh, mangroves, seagrasses or seaweeds.<br/>Aquatic fauna whether alive or dead means marine, estuarine or freshwater fish or other aquatic animal that is aquatic at any stage of their life history.</p> | <p>The potential disturbance and damage to threatened species and / or habitat has been assessed by the assessment of significance (Appendix B)</p> <p>Additional mitigation measures associated with aquatic flora &amp; fauna, threatened species &amp; habitat include:</p> <ul style="list-style-type: none"> <li>• Work must not harm threatened fauna (including where they inhabit bridges or other structures eg timber fence posts).</li> <li>• If unexpected threatened fauna or flora species are discovered, stop work immediately and contact THE City's Environmental Project officer (04 5512 8690).</li> <li>• Vegetation that has been protected or planted as part of offset work provided as part of an approved project (eg in association with fauna crossings) is not to be removed.</li> </ul> | <p>Minor</p> |



## Environmental Assessment-Level 2

|  |  |            |
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|  | <ul style="list-style-type: none"> <li>• All pathogens (eg Chytid, Myrtle Rust and Phytophthora) are to be managed in accordance with TfNSW's Biodiversity Guidelines 2011 - Guide 7 (Pathogen Management) and DECC Statement of Intent 1: Infection of native plants by Phytophthora cinnamomi (for Phytophthora).</li> <li>• Declared noxious weeds are to be managed according to requirements under the Noxious Weeds Act 1993 Guide 6 (Weed Management) of TfNSW's Biodiversity Guidelines 2011 and the weedwise website.</li> <li>• Fauna handling must be carried out in accordance with the requirements of TfNSW's Biodiversity Guidelines - Guide 9 (Fauna Handling).</li> <li>• Work must not create an ongoing barrier to the movement of wildlife.</li> </ul>   |            |
| <b>13. Terrestrial flora &amp; fauna, threatened species, populations &amp; ecological communities</b>   |  |            |
| <p style="text-align: center;">Applicable</p> <p>Enter impact description e.g. harm to threatened species including their habitat, populations endangered ecological communities and/or critical habitat.<br/>Provide evidence in Appendices. A Flora and Fauna Assessment may be required.<br/>May require permit - refer to Section 4.</p> | <p>The proposed activity is not anticipated to adversely impact on the ecosystems of the locality. Minimal vegetation removal is required to facilitate vehicle/machinery access for reconstructing the swale. The construction activities associated with reconstructing the swale are temporary in nature, thus, impacts to fauna movement and habitat fragmentation are not anticipated to be significant</p> <p>If unexpected, threatened fauna or flora species are discovered, stop works immediately and notify the Environmental Project Officer (0455 128 690).<br/>In the event any additional vegetation requires modification or removal, the Environmental Project Officer is to be contacted to undertake a site inspection.<br/>The site compound, stockpiles and machinery are not permitted under the dripline of any trees to be retained.</p> | Negligible |

## Environmental Assessment-Level 2

|                                   |   |  |
|-----------------------------------|---|--|
|                                   | <p>Ensure all plant, equipment and personnel are free of soil and potential weed propagules prior to entry to or exit from the site.</p> <p>Efforts must be made to avoid impacts on root zones of adjacent vegetation.</p> <p>Remediation works will be implemented if required and re-vegetation for bank stabilization is proposed. Natives in the creek line have been noted and will likely be used during re-vegetation.</p> <p>The redirection will result in minor direct impacts to native vegetation and habitat, comprising the removal of a number of small trees (DBH &lt;100mm) in the event any larger trees require removal further assessment will be required.</p> <p>There is to be no disturbance or damage to threatened species or critical habitat.</p> <p>Work must not harm threatened fauna (including where they inhabit bridges or other structures eg timber fence posts).</p> <p>Vegetation that has been protected or planted as part of offset work provided as part of an approved project (eg in association with fauna crossings) is not to be removed.</p> <p>All pathogens (eg Chytid, Myrtle Rust and Phytophthora) are to be managed in accordance with TfNSW's Biodiversity Guidelines 2011 - Guide 7 (Pathogen Management) and DECC Statement of Intent 1: Infection of native plants by Phytophthora cinnamomi (for Phytophthora).</p> <p>Fauna handling must be carried out in accordance with the requirements of TfNSW's Biodiversity Guidelines - Guide 9 (Fauna Handling).</p> <p>Work must not create an ongoing barrier to the movement of wildlife.</p> |  |
| <p><b>14. Sensitive areas</b></p> |   |  |

## Environmental Assessment-Level 2

|  |  |            |
|--|--|------------|
| Applicable   |  |            |
| Sensitive areas include wildlife corridors, biobanking sites, property vegetation plans (PVPs), landcare sites and environmental zoning.   | See controls for section 5.12 and 5.13   | Negligible |
| <b>15. Priority weeds, feral animals, pathogens (Biosecurity)</b>  |  |            |
| Applicable   |  |            |
| <p>Any noxious terrestrial or aquatic weeds, feral animals or pathogens located on site will be appropriately managed in accordance with the Biodiversity Guidelines or in accordance with the advice provided by the City's Environmental Project Officer.</p> <p>The classification of significant weeds and Duty of action has been derived from the weed wise website. This website follows the information set forth by the Biosecurity Act 2015, its subordinate legislation, and the Regional Strategic Weed Management Plans (published by each Local Land Services region in NSW). It describes the state and regional priorities for weeds in New South Wales.</p> <p>Definitions of the NSW biosecurity classifications are:</p> <ol style="list-style-type: none"> <li>1. General Biosecurity Duty - prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised so far as is reasonably practicable.</li> <li>2. Regional recommended measure – The plant or parts of the plant should not be traded, carried, grown or released in the environment. Land managers should mitigate the risk of spread of the plant from their land.</li> <li>3. Prohibition on dealings – Must not be imported into the state or sold.</li> </ol> | <p>Weed management is to be conducted in accordance with their relevant biosecurity duty. Recommended treatment and removal for general biosecurity duty weeds includes:</p> <ul style="list-style-type: none"> <li>• Any material containing vegetation transported from the subject site is to be subject to all feasible mitigation measures to reduce the risk of spreading weeds. This includes: <ul style="list-style-type: none"> <li>○ covering loads,</li> <li>○ reduced load size,</li> <li>○ no material overhanging truck bodies,</li> </ul> </li> <li>• Ensure all plant, equipment and personnel are free of soil and potential weed propagules prior to entry to or exit from the site.</li> <li>• Given the locality treatment of in situ weed species will be conducted with approved frog friendly herbicides</li> <li>• Declared noxious weeds are to be managed according to requirements under the Noxious Weeds Act 1993 Guide 6 (Weed Management) of Roads and Maritime's Biodiversity Guidelines 2011 and the weedwise website.</li> </ul> | Negligible |

## Environmental Assessment-Level 2

Out of the species observed on site 10 are considered weeds in northern NSW (see table 1). Of these weeds 5 are classified as weeds of significance and require a general biosecurity duty and an additional weed (Lantana camara) has also been listed. This weed (Lantana camara) requires a general biosecurity duty and an additional biosecurity duty (prohibited on certain dealings) and cannot sold or contained in any sold material (mulch).

Table 1: list of identified weed species, locations and biosecurity duties associated with each species.

Key: No biosecurity ranking = NA, General Biosecurity Duty = GBD, Regional recommended measure = RRM and Prohibition on certain dealings = PD

| Name  | Biosecurity duty |
|---|------------------|
| Blue billy goat weed ( <i>Ageratum houstonianum</i> )   | NA               |
| Cobblers pegs   | NA               |
| Thick head ( <i>Crassocephalum crepidioides</i> )       | NA               |
| Balloon Cotton Bush ( <i>Gomphocarpus physocarpus</i> ) | NA               |
| Arrowhead vine ( <i>Syngonium podophyllum</i> )         | NA               |
| Crofton weed ( <i>Ageratina adenophora</i> )            | GBD              |
| Scotch thistle ( <i>Onopordum acanthium</i> )           | GBD              |
| Camphor laurel ( <i>Cinnamomum camphora</i> )           | GBD              |
| (Possible) Cocos palm ( <i>Syagrus romanzoffiana</i> )  | GBD              |
| Lantana ( <i>Lantana camara</i> )                       | GBD and PD       |

**Heritage**

## Environmental Assessment-Level 2

| 16. Aboriginal Cultural Heritage |   |            |
|----------------------------------|---|------------|
| Applicable                       | <p>Searches of the City’s intramaps performed in August 2024 revealed no registered or otherwise listed historical (non-Aboriginal) sites within or immediately in the vicinity of the Activity area.</p> <p>No future anthropological, archaeological, cultural, historical, or scientific values are expected to change or be impacted upon as the site of the proposal is in previously disturbed and modified land. No impacts are anticipated.</p> <p>According to the newly adopted Aboriginal Cultural Heritage Map and the Coffs Harbour Aboriginal Cultural Heritage Management Plan, the swale drain located on site is outside of any predictive Aboriginal cultural heritage areas. Therefore, in accordance with the above mentioned procedure a basic AHMIS (Aboriginal Heritage Information Management System) search was conducted of the locality given the ‘unmapped’ status of the land. According to section 3.37 of the Management Plan, the process requires a basic AHIMS search and a search of ‘other heritage databases’. The necessary searches were undertaken and no items/sites of cultural heritage were identified (Appendix A).</p> <p>The due diligence code of practice firstly requires an AHIMS search which has already been completed. Regardless of whether the AHIMS search indicates known Aboriginal objects, a proponent will still need to consider whether Aboriginal objects are likely to be in the area of the proposed activity having regard to a number of landscape features. The following landscape features noted in the Due Diligence Code of Practice, that are sensitive to Aboriginal occupation:</p> <ul style="list-style-type: none"> <li>• Within 200m of waters (portions of the site – YES ); or</li> <li>• Located on a sand dune system (NO); or</li> </ul> | Negligible |

## Environmental Assessment-Level 2

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| <ul style="list-style-type: none"> <li>Located on a ridgetop, ridgeline or headland (NO); or</li> <li>Located within 200m below or above a cliff face (NO); or</li> <li>Within 20m of, or in, a cave, rock shelter or a cave mouth (NO).</li> </ul> <p>However, the Due Diligence Code of Practice does say that if the land is 'disturbed' (definition below), then the area of non-compliance (overall site within 200m of waters) above, does not require further assessment.</p> <p>Disturbed - Land is disturbed if it has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable. Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks.</p> <p>Therefore, when considering all of the above, it can be concluded that the proposed Drainage works do not trigger any specific cultural heritage requirements under the processes outlined in S3.37 of the Coffs Harbour Aboriginal Cultural Heritage Management Plan.</p> |  |
| <b>17. Non-indigenous heritage</b>   |  |

## Environmental Assessment-Level 2

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| <p style="text-align: center;">Not Applicable</p> <p>Under Section 139 a person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.</p> <p>A desktop investigation using the Citys intra maps and a search of the State Heritage Register, State Heritage Inventory and LEP heritage listings was undertaken.</p> <p>No local or state heritage listed sites were identified within the subject site or surrounding area</p> | <p>The discovery of a relic needs to be notified under s146 of the Heritage Act.</p> | <p style="text-align: center;">N/A</p> |
| <b>Social</b>  |  |  |
| <b>18. Amenity &amp; Community Disturbance</b>   |  |  |
| <p style="text-align: center;">Not Applicable</p> <p>The land holder at 50 Bennetts road initiated this proposed project and is expecting works. Provided all mitigation measures addressed within this document are abided by no expected impact is expected as a result of works.</p>  | <p style="text-align: center;">NA</p>  | <p style="text-align: center;">N/A</p> |
| <b>19. Public Access &amp; Safety</b>  |  |  |
| <p style="text-align: center;">Not Applicable</p> <p>Works are contained within the road reserve or private land the only expected accessibility issue associated with works is the accessibility issue for the land holder at 50 Bennetts Road. Currently erosion has removed the side access to this property works will aim to reinstate this access if possible during works.</p>  | <p style="text-align: center;">NA</p>  | <p style="text-align: center;">N/A</p> |
| <b>20. Traffic</b>   |  |  |

## Environmental Assessment-Level 2

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| Applicable   |   |            |
| Work will be contained within the road shoulder and are not expected to significantly obstruct traffic. Plant entering and exiting the subject site will reduce access for short periods of time and on foot workers will be adjacent to the roadside as such a Traffic Guidance Scheme (TGS) will need to be in place for the duration of works.  | Works will be subject to approved traffic and safety control measures   | N/A        |
| <b>21. Land Use</b>  |   |            |
| Not Applicable   |   |            |
| The immediate locality at each site will be altered in a minor way by the realignment however, there is no expected impact on the land uses of the subject site.   | NA  | N/A        |
| <b>22. Asset Maintenance</b>   |   |            |
| Applicable   |   |            |
| The reconstruction of the channel should reduce the need to maintain the swale on a regular basis. Some additional maintenance may be required in after times of heavy flows.  | Provide grass treatment at the completion of works to establish grass coverage over the swale to reduce the risk of future erosion  | Negligible |
| <b>Waste</b>   |   |            |
| <b>23. Waste</b>   |   |            |
| Applicable   |   |            |
| It is unlikely surplus excavated material will be generated from the works however if this is not the case and material is required to be removed from the site then appropriate documentation for transport and testing of the material for Excavated Natural Material (ENM) and Virgin Excavated Natural Material (VENM) (in accordance with the NSW Environment Protection Authority and the Protection of the Environment Operations Act 1997) will be | VENM/ENM material imported to the site must be accompanied by the appropriate documentation (s.143 Protection of the Environment Operations Act 1997).<br><br>ENM material must not have more than 2% contamination. If this is the case then it has to go to the appropriate facility to be treated and/ or disposed of. | Negligible |



## Environmental Assessment-Level 2

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| <p>the responsibility of the Project Manager. Or the material can be taken to the appropriate Licensed Waste Facility for disposal.</p>  | <p>If the material is to be taken from a road reserve to another road reserve – the receiving environment must be previously identified and a current Fill Plan is to be prepared for the site. Stockpiling of material is not acceptable and must be spread out in its final location as per the fill plan.</p> <p>Waste material generated by the project will be managed following the principles of waste avoidance by re-use, re-cycling and removal.</p> <p>The site is to be kept clear of rubbish through daily housekeeping and consistent with the City’s three bin system. Plastic bottles, cans and zip lock ties need to be picked up and binned appropriately.</p> <p>No ASS has been identified within the subject site or adjoining area.</p> |                   |
| <p><b>24. Sustainable Resource Use</b></p>   |   |                   |
| <p>Applicable</p> <p>Any work involving the use of plant and equipment will involve consumption of fuel, oil, water, vehicle and plant depreciation, etc. However, as an individual project, it is not anticipated that the works will lead to any increased demands on natural resources that are likely to become in short supply.</p> | <p>NA</p>   | <p>Negligible</p> |
| <p><b>25. Stockpiles</b></p>   |   |                   |
| <p>Applicable</p> <p>Management of stockpiles including materials, location, size, volume, duration and dust, erosion and sedimentation mitigation measures.</p>   | <p>Any stockpiles on site are to be fenced off and sediment fencing to be placed around them until they are moved.</p> <p>Any temporary stockpiles of potentially dispersible material that are not required for imminent use will be dampened as required or stabilised with spray grass or appropriate geo-fabric.</p>  | <p>Negligible</p> |
| <p><b>Hazardous Materials</b></p>  |   |                   |
| <p><b>26. Hazardous &amp; Dangerous Goods</b></p>  |   |                   |




## Environmental Assessment-Level 2

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| <p style="text-align: center;">Applicable</p> <p>Hazardous &amp; Dangerous Goods includes explosives, flammable liquids and gases, corrosives, chemically reactive or acutely (highly) toxic substances. Consider the storage handling, transport, use and disposal. Also includes impacts on the environment and human health. May require licensing – refer to Section 4.</p> | <p>Any Hazardous &amp; Dangerous Goods required will be stored in self-safe chemical storage containers and within bunded areas and as far as practical away from watercourse or drainage lines. All appropriate licencing and training associate with identified hazardous chemicals is required prior to undertaking works</p>  | <p>Negligible</p> |
| <p><b>27. Asbestos</b></p>  |   |                   |
| <p style="text-align: center;">Not Applicable</p> <p>The proposed works are not expected to encounter any NOA or ACM during works.</p>  | <p>In the event asbestos is identified on site stop works and contact the Environmental Project Officer (0455 128 690)</p>  | <p>Negligible</p> |
| <p><b>28. Chemicals</b></p>   |   |                   |
| <p style="text-align: center;">Applicable</p> <p>Chemicals used and/or stored on site can include pesticides, paints, fuels, oils and more. The consideration of storage, handling, transport, use and disposal should be done with the upmost care and in accordance with the best safe practices.</p>   | <p>Any chemicals including fuels and other liquids will be stored in self-safe chemical storage containers and within bunded areas and as far as practical away from watercourse or drainage lines.</p> <p>All appropriate licencing and training associate with identified hazardous chemicals is required prior to undertaking works. All efforts to reduce the risk of pollution impacts on the environment and human health will be taken during use. This includes but is not limited to spraying chemicals away from the body and not towards others, storing chemicals</p> | <p>Negligible</p> |

## Environmental Assessment-Level 2

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|   | appropriately on site, establishing zones away from drainage and catchment lines for chemical use.  |            |
| <b>Natural Hazards</b>  |   |            |
| <b>29. Bushfire (RFS)</b>   |   |            |
| <p style="text-align: center;">Applicable</p> <p>Risks associated with Bushfire Prone Land includes both bushfire risk at the location and the risk of starting a bushfire from the activity i.e. operational machinery and equipment. The Subject site has been identified as Vegetation Category 3 (image ..). Vegetation Category 3 is considered to be medium bush fire risk vegetation. It is higher in bush fire risk than category 2 but lower than Category 1. This category consists of: › Grasslands, freshwater wetlands, semi-arid woodlands, alpine complex and arid shrublands.</p> | <p>The following safeguards and mitigation measures will be implemented in order to prevent adverse impacts relating to bushfire:</p> <ul style="list-style-type: none"> <li>• Works that are likely to cause a fire, such as general purpose hot works (welding, grinding or gas cutting), or any activity that is likely to produce a spark or flame are not to be carried on days with an elevated fire danger or a total fire ban in effect.</li> <li>• A fire extinguisher will be available on machinery for quick response if ignition occurs. All personnel will be made aware of the location of the extinguisher and trained in its effective deployment.</li> <li>• The contractor/ site manager is to maintain awareness of bushfire emergency information, in particular during a bushfire danger period, and be aware of all current bushfire alerts in the wider vicinity of the Activity site.</li> </ul> | Negligible |

# Environmental Assessment-Level 2

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|    |  |   |                   |
|  <p><small>Cadastral, topographic and aerial ACSI00 information supplied by the NSW Department of Planning and Infrastructure and managed by Coffs Harbour City Council. Copyright © 2024, NSW Department of Planning and Infrastructure. Other data provided may have been supplied by various other agencies under license. This may not be reproduced in any form, whole or part, without express permission from Coffs Harbour City Council.</small></p> | <p>TechnologyOne Spatial - Intramaps</p> |  <p>Scale: 1:2257<br/>Projection: # GDA94 / MGA zone 56<br/>Date: 03/09/2024, 4:57 PM<br/>Copyright © 2024, Coffs Harbour City Council.<br/>Printed by Amber English.</p>  |                   |
| <h3>30. Flooding</h3>   |  |   |                   |
| <p style="text-align: center;">Applicable</p> <p>The proposed works have been identified within an area identified as an Indicative Flood Planning Area. Meaning no current flood mapping exists for this location however given the topography of the land flooding is a possible risk for this area</p> <p>The proposed works would not be occurring during times of predicted rainfall in the catchment, and appropriate measures to protect water quality will be installed prior to the start of works.</p>                              |  | <p>Works are advised not to take place during extreme weather events. In the event that works are to proceed all appropriate measures are to be in place to reduce the risk as much as possible.</p> <p>It is unlikely the proposed works will be impacted or present environmental risks as a result of works.</p> | <p>Negligible</p> |
| <h3>31. Coastal Processes</h3>  |  |   |                   |

## Environmental Assessment-Level 2

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| <p style="text-align: center;">Not Applicable</p> <p>No coastal processes have been identified within the subject site or surrounding area.</p>  | <p style="text-align: center;">NA</p>  | <p style="text-align: center;">N/A</p>        |
| <p><b>32. Extreme Weather Events</b></p>   |  |   |
| <p style="text-align: center;">Applicable</p> <p>The proposed works have been identified within an area identified as an Indicative Flood Planning Area. Meaning no current flood mapping exists for this location however given the topography of the land flooding is a possible risk for this area</p> <p>The proposed works would not be occurring during times of predicted rainfall in the catchment, and appropriate measures to protect water quality will be installed prior to the start of works (see sections ... and ...)</p> | <p>Works are advised not to take place during extreme weather events. In the event that works are to proceed all appropriate measures are to be in place to reduce the risk as much as possible.</p> <p>Relevant PPE associated with extreme weather events (heatwaves and high winds) is to be made accessible for all personnel on site. This includes but is not limited to sunscreen hard hats broad brimmed hats and water.</p> | <p style="text-align: center;">Negligible</p> |


|  |
|--|
| <p><b>OVERALL ENVIRONMENTAL IMPACT</b></p> <p><i>The highest impact with controls outcome is the overall impact of the activity.</i></p>   |
| <p> <input type="checkbox"/> Negligible   <input checked="" type="checkbox"/> Minor   <input type="checkbox"/> Moderate   <input type="checkbox"/> Potentially Significant   <input type="checkbox"/> Positive </p> <p>If all the final impacts are <b>negligible, minor or positive</b>, complete Section 6: Declaration and Section 7: Authorisation.</p> <p>If any final impact is <b>moderate or potentially significant</b>, reconsider Environmental Controls or move to a Level 3 Environmental Assessment.</p> |

## Environmental Assessment-Level 2

### SECTION 6: Declaration

Assessing Officer:

- This assessment provides a true and accurate review of the activity in relation to its likely impacts on the environment to the best of my knowledge and this environmental assessment is in accordance with the EP&A Act, EP&A Regulation and the Guidelines approved under Section 170 of the EP&A Regulation. It contains neither false nor misleading information.
- I have the appropriate delegation and training to undertake this assessment
- I have assessed the activity in accordance with Council's Environmental Assessment Procedure and the Level 2 Environmental Assessment form
- The proposed activity has been assessed to have a positive, negligible or minor environmental impact

| Name          | Position/Title                | Signature   | Date       |
|---------------|-------------------------------|---|------------|
| Amber English | Environmental Project Officer |  | 04/09/2024 |


### SECTION 7: Decision Statement and Authorisation

Decision Statement:

- The proposed activity is not likely to have a significant impact on the environment and therefore an EIS is not required
- The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values meaning a SIS is not required
- The proposed activity may proceed provided the environmental controls listed in Section 5 of this document are followed based on the environmental impact being no greater than minor
- This Part 5 Assessment is valid for eighteen (18) months from the approval date below – if works have not commenced by this date this assessment is invalid. Contact the Environmental Project Officer for reassessment.

Authorising Officer:

- I certify that I have reviewed and endorsed the content of this environmental assessment. It is a true and accurate review of the activity in relation to its likely impacts on the environment to the best of my knowledge and this environmental assessment is in accordance with the EP&A Act, EP&A Regulation and the Guidelines approved under Section 170 of the EP&A Regulation. It contains neither false nor misleading information.
- I have the appropriate delegation and training to authorise this assessment
- I have assessed the activity in accordance with Council's Environmental Assessment Procedure and the Level 2 Environmental Assessment form

| Name           | Position/Title              | Signature  | Date      |
|----------------|-----------------------------|--|-----------|
| Daniel Stewart | Section Lead Asset Services |  | 6/09/2024 |

# Environmental Assessment-Level 2

## Appendix A - AHIMS Search



Your Ref/PO Number : 123

Client Service ID : 927439

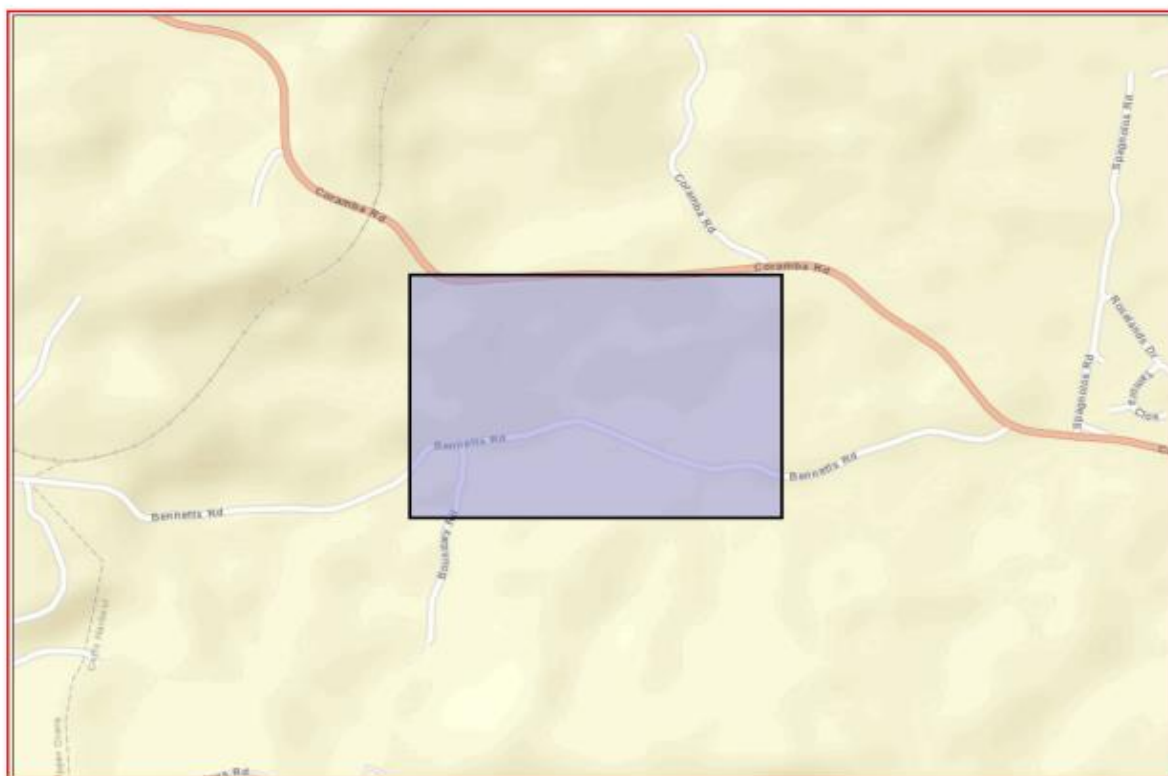
City of Coffs Harbour Council  
 27 Gordon Street  
 Coffs Harbour New South Wales 2450  
 Attention: Amber English  
 Email: [coffs.council@chcc.nsw.gov.au](mailto:coffs.council@chcc.nsw.gov.au)

Date: 04 September 2024

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lat, Long From : -30.2889, 153.0683 - Lat, Long To : -30.2842, 153.076, conducted by Amber English on 04 September 2024.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

|          |  |
|----------|--|
| <b>0</b> | <b>Aboriginal sites are recorded in or near the above location.</b>          |
| <b>0</b> | <b>Aboriginal places have been declared in or near the above location. *</b> |

# Environmental Assessment-Level 2

## If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette](https://www.legislation.nsw.gov.au/gazette) (<https://www.legislation.nsw.gov.au/gazette>) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

## Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



# Environmental Assessment-Level 2

## Appendix B – Assessment of Significance

# Environmental Assessment-Level 2

| Section 1: Project Overview  |  |                           |            |
|--|--|---------------------------|------------|
| <b>Project Details</b>   |  |                           |            |
| <b>Location</b>  | Bennetts Road Drainage Realignment   | <b>Date of site visit</b> | 04/06/2024 |
| <b>Proposed works</b>  | Reseal and realign swale drain to reduce erosion impacts.  |                           |            |
| <b>Activity</b>  |  |                           |            |
| <p>This project aims amend and redirect a swale drain located adjacent to 50 and 76 Bennetts Road.</p> <p>Currently the convergence zone between the Bennetts Road culvert and swale drain is eroding the opposite bank at 76 Bennetts Road. Understandably this erosion has caused some concern from the resident who has requested action from the City to protect her property.</p> <p>Given the location of this property and the topography of the surrounding area it is unlikely all hazards associated with erosion can be resolved however efforts to modify the drainage line to reduce the turbidity at the convergence have been proposed.</p> <p>The eroded swale drain will be reinstated and diverted to gradually converge with the existing water way rather than depositing directly into the adjacent eroding bank.</p> |  |                           |            |
| <b>Location:</b>   |  |                           |            |
| <b>Address (including Lot and DP)</b>  | Road reserve and partially within the southern limits of 50 and 76 Bennetts Road   |                           |            |
| <b>Site Description</b>  | <p>The subject site has been subject to heavy clearing practices with no remnant or unimpacted vegetation exists within the subject site or in the immediate area. The swale itself diverts runoff from primarily cleared larger residential lots and drains into the northern most reaches of Coffs Creek (3rd order stream)</p> <p>The subject site is primarily exotic weed species normally found within disturbed roadsides of the Coffs harbour LGA. Exotic planted vegetation both ornamental and agricultural borders the site and comes from the adjacent rural properties areas not containing this planed vegetation is predominantly open Pastural Grass land.</p> |                           |            |

# Environmental Assessment-Level 2

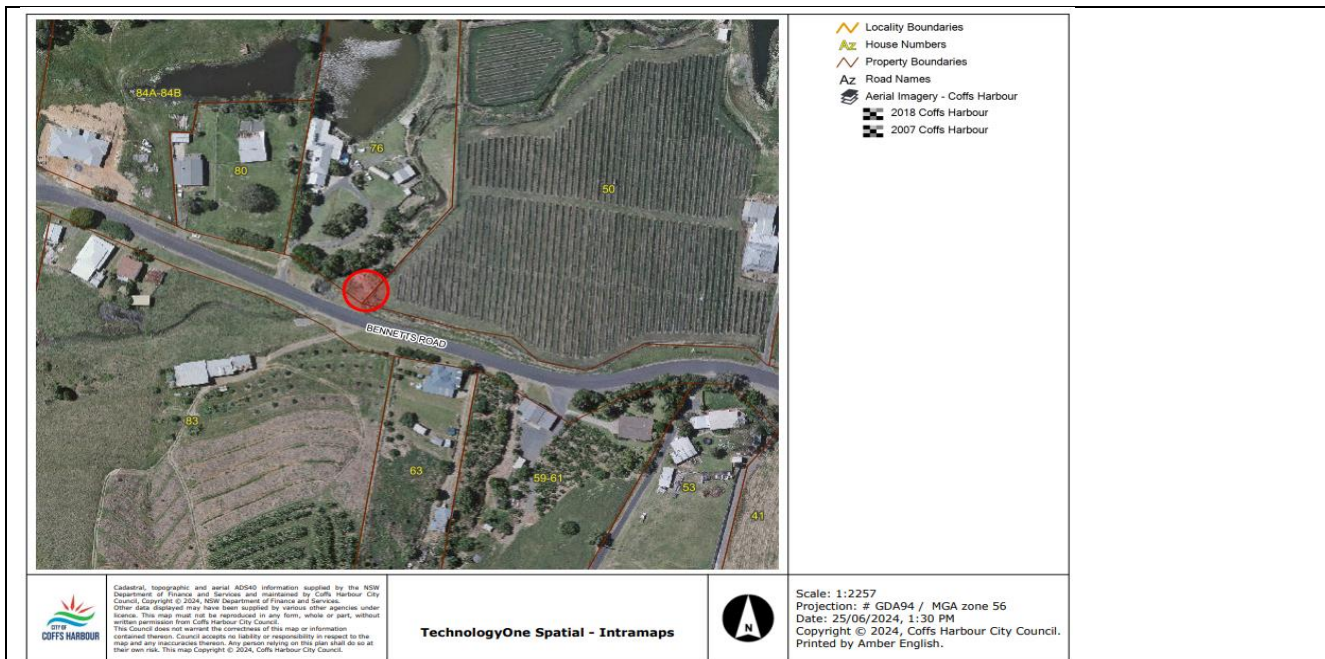


Figure 1: limits of the proposed subject site (red).

## Section 2: Background

### Species information

Southern Purple Spotted Gudgeon (*Mogurnda adspersa*) (SPSG) occurs in inland drainages of the Murray-Darling basin as well as coastal drainages of northern NSW and Queensland. Presence of the species across coastal and inland waterways has been identified in the DPI Fisheries 'Known and expected distribution of threatened fish species' mapping. SPSG are listed as an endangered species under the Fisheries Management Act 1994.

The species can be found in a variety of habitats such as rivers, creeks, streams and billabongs with slow-flowing or still waters. Cover in the form of aquatic vegetation, overhanging vegetation from riverbanks, leaf litter, rocks or snags is an important key feature of this species habitat.

# Environmental Assessment-Level 2

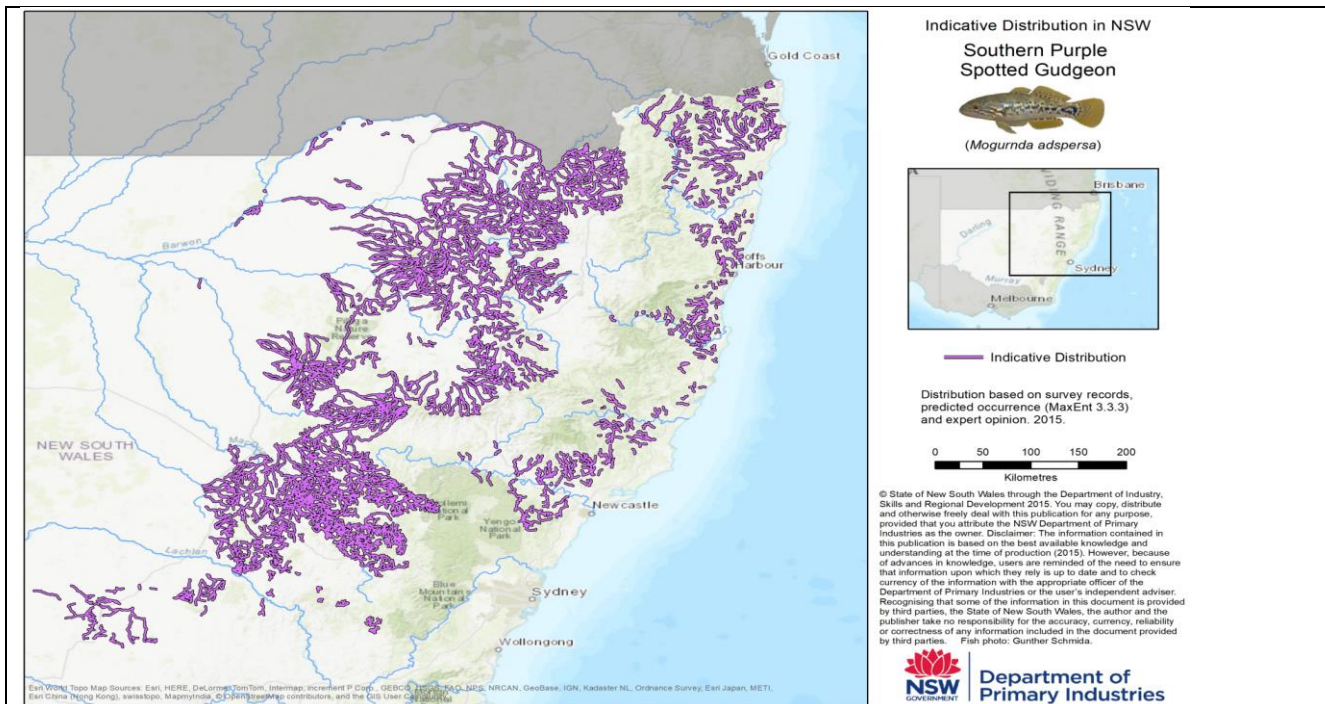


Figure 2: Distribution of Southern purple spotted gudgeon. Image sourced from Southern purple spotted gudgeon threatened species profile (1970).



Figure 3: A male Southern Purple Spotted Gudgeon guarding eggs in captivity. Image sourced from Southern purple spotted gudgeon threatened species profile (1970)

## Threats to the Southern Purple Spotted Gudgeon

## Environmental Assessment-Level 2

- Predation and competition with introduced fish such as Eastern Gambusia (*Gambusia holbrooki*) and Redfin Perch (*Perca fluviatilis*)
- Habitat disturbance by Common Carp (*Cyprinus carpio*)
- Fluctuations in water levels and flow due to river regulation
- Increased turbidity and damage of stream banks by livestock access
- Decreased water quality due to agricultural runoff and siltation
- Extreme weather events, such as drought and bushfires
- Local extinctions may not be naturally recolonised because of the species' inability to disperse the long distances required.

### Section 3: Assessment of Significance

(s7.3 of the Biodiversity Conservation Act 2016)

**(1) The following is to be taken into account for the purposes of determining whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats—**

- (a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

The proposed maintenance works aim to realign and reduce the impacts of observed erosions. The proposed works will include some low impact dredging and reclamation works around existing infrastructure (stormwater swale drain) The works are not expected to impact any marine vegetation as a result of works some adjacent terrestrial flora will require removal. Given the subject sites locality (within cleared fields) it is unlikely the minimal amount of proposed clearing will impede on the quality of present habitat. Vegetation proposed for clearing includes a variety of weed species, pastural grasses and 3-4 palm species. See field assessment and environmental assessments for further details.


The proposed realignment of the swale drain is expected to reduce the turbidity storm water flow and would likely result in an overall improvement of potential SPSG habitat.

It is considered unlikely that works will result in adverse effects on the life cycle of the species, or negatively impact on the viability of a local population.

- (b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity—
- (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or
  - (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

## Environmental Assessment-Level 2

|   |
|---|
| <p>N/A the species are not an endangered ecological community or critically endangered ecological community.</p>  |
| <p>(c) in relation to the habitat of a threatened species or ecological community—</p> <ul style="list-style-type: none"> <li>(i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and</li> <li>(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and</li> <li>(iii) (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,</li> </ul> |
| <p>Given the reduction of invasive flora species and reduced impact of the stormwater runoff it is expected that long term work will improve upon the identified SPSPG habitat. There is the potential for short term impacts associated with sedimentation and minor clearing however provided work comply with the Environmental Assessment mitigation measures it is expected that any potential impact to the present habitat will be minimal and only for the duration of works. It is unlikely the proposed works will result in the long term impact on the habitat of the identified SPSPG.</p>                             |
| <p>(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),</p>   |
| <p>It is unlikely the proposed works will result in an adverse effect to the immediate site. There are no identified sites of outstanding biodiversity value where works are proposed.</p>  |
| <p>(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.</p>  |
| <p>There are key threatening process associated with the proposed work (addressed in Environmental Assessment) however, these threats are unlikely to impact the SPSPG habitat.</p>   |

| <b>Section 3: Conclusion</b>  |                               |  |            |
|---|-------------------------------|--|------------|
| <p>Mitigation measures associated with works are set out in the Environmental Assessment. Provided these measures are implemented during the works then it is considered unlikely there will be any detrimental or negative impacts to the Southern Purple Spotted Gudgeon Habitat.</p> |                               |  |            |
| Name  | Position/Title                | Signature  | Date       |
| Amber English   | Environmental Project Officer |  | 05/09/2024 |

# Environmental Assessment-Level 2

## Appendix C – Field Assessment

# Environmental Assessment-Level 2

## Field Assessment

### Bennetts Road Drainage Upgrade

1. **Location:** -30.287494, 153.073319
2. **Property No:** 76 BENNETTS ROAD COFFS HARBOUR NSW 2450
3. **Land Owner and/or Reserve Manager:** Road Reserve and partially contained within 76 BENNETTS ROAD COFFS HARBOUR NSW 2450 owners are currently listed as MS SJ STEELE & MS CT LONGSTAFF
4. **The aim of the project being;**  
Repair erosion damage caused during wet weather events at a unsealed conflux zone joining runoff drainage and Coffs Creek

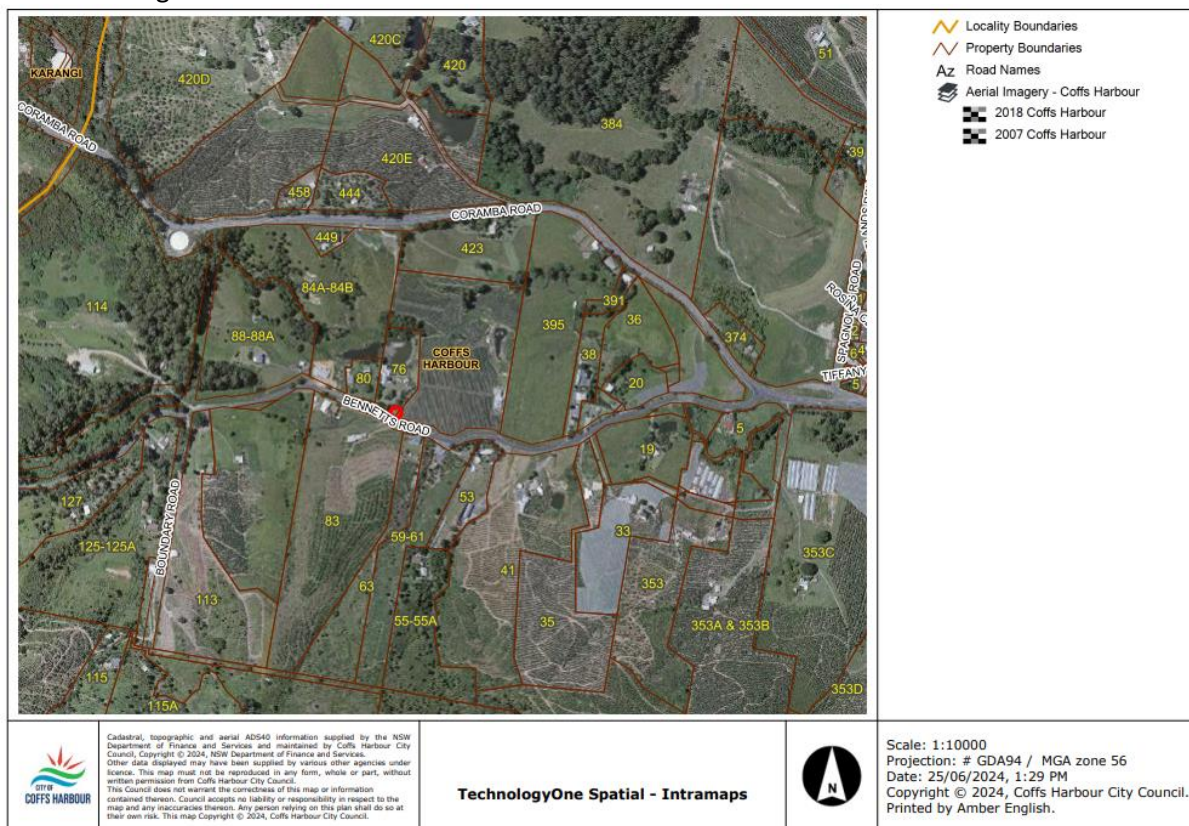


Figure 1: Project locality west Coffs Harbour drainage line into the western limit of Coffs Creek along Bennetts Road.



# Environmental Assessment-Level 2

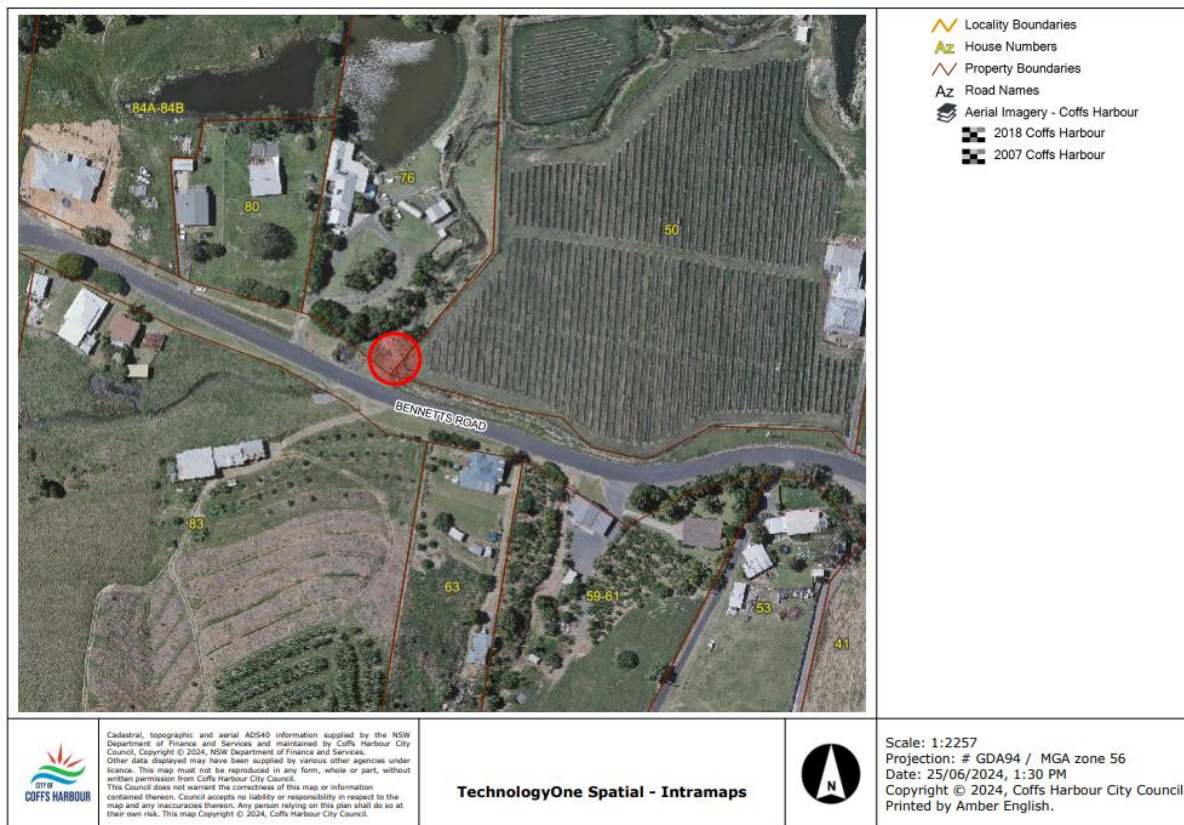


Figure 2: limits of the proposed subject site (area subject to this Environmental Assessment indicated in red)

## 5. Local Environmental Plans (LEP) 2013 Zoning: RU2

## 6. Legislation Relevant to the Activity

### 6.1 State Environmental Planning Policy (Transport and Infrastructure) 2021?

The proposed activity is **Exempt** under the State Environmental Planning Policy (Transport and Infrastructure) 2021. Division 17, Clause 2.113, Section 1 (xiii) exempts a Public authority from project approval for the purpose of maintaining culverts, drains and other works to improve the quality or control of stormwater runoff.

### 6.2 Fisheries Management Act 1994 No 38

The *Fisheries Management Act 1994* (FM Act) aims to conserve fish and their habitat in NSW waters. Part 7 Division 1 of the FMA provides for protection of aquatic habitats and Division 3 of that section regulates dredging and reclamation works. Section 200 of the FM Act requires Local government authorities to have a permit when carrying out dredging and reclamation work on water land.

The proposed activities required dredging works or reclamation works along an eroded drainage line that deposits into identified as Southern Purple Spotted Gudgeon (SPSG) habitat and as such requires a Part 7 Fisheries Management Act permit. Approval of the dredging or reclamation work carried out in an artificial body of water intermittently connected to a natural body of water is subject to approval under part 7 division 3 section 200 (1). Work is not permitted until approval of the Part 7 Fisheries Management Act permit (Appendix E) is granted.

In addition to this an Assessment of Significance (Appendix B) for the SPSG was undertaken in accordance with the NSW Department of Primary Industries "Threatened species assessment guidelines" (2008) was undertaken by the Cities Environmental Project Officer on the 26/06/2024. The assessment found that provided sedimentation controls (see Environmental Assessment) are in place and no pollution of the subject site and / or water way occurs any potential impact on this threatened

# Environmental Assessment-Level 2

species will be concentrated to this locality, short term, and negligible with no obstruction of fish passages way or life cycle.

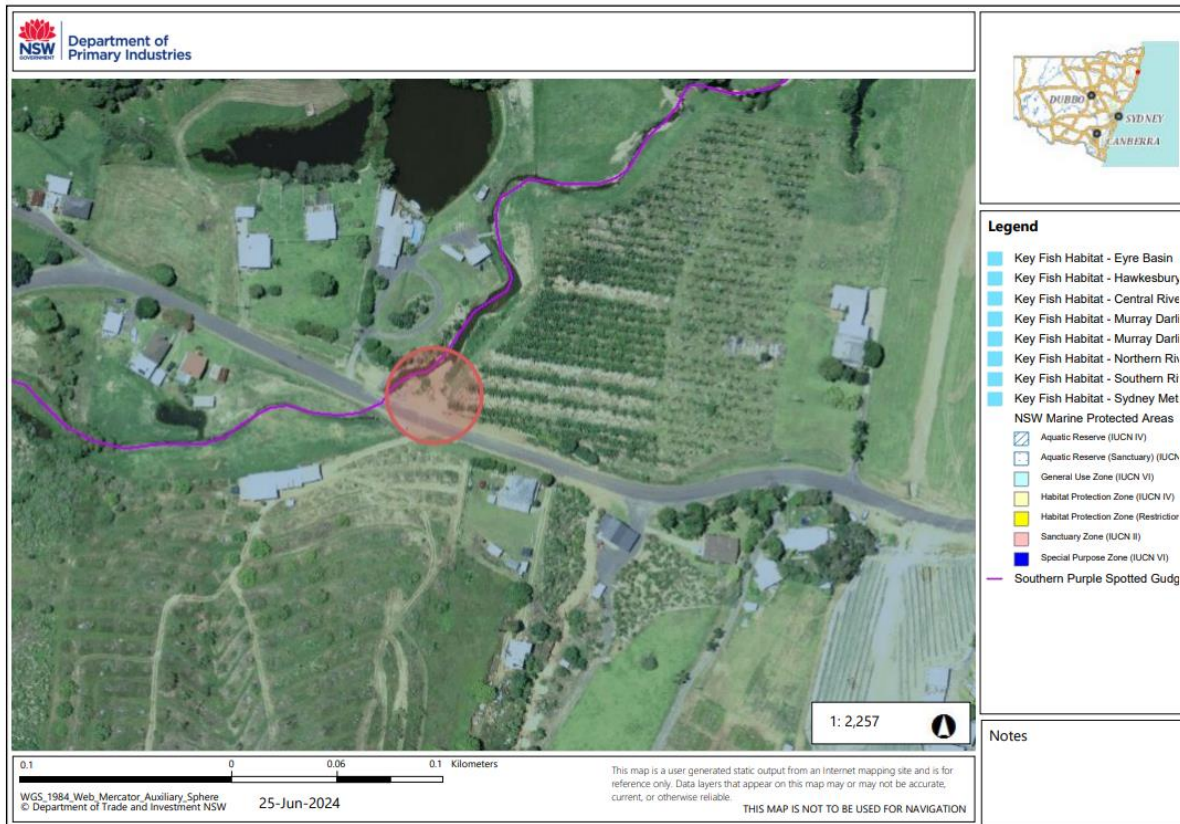


Figure 3: The subject sites (red) proximity to the identified SPSG habitat (Purple)

## 7. Habitat within footprint

The subject site is relates to two converging eroded unsealed storm water drains that consists of moderately sized rocks contained within what looks to be a red clay loam soil type. Vegetation on site is primarily exotic weed species and holds little environmental value. The stormwater drainage line that will be subject to maintenance currently contains no water flowing or otherwise.

## 8. Potential or confirmed threatened spp.

A search of Fisheries NSW Spatial Data Portal (Figure 3) conducted on the 25/06/2024 identified mapped SPSG habitat. This triggered an Assessment of Significance (Appendix B) for the SPSG. The assessment found that provided sedimentation controls are in place and no pollution of the subject site and / or water way occurs any potential impact on this threatened species will be concentrated to this locality, short term, and negligible with no obstruction of fish passages way or life cycle.

No additional threatened flora, fauna or habitat was observed during the initial desktop review or site visits. A Protected Matters search of the subject site with a 1km buffer was also conducted on the 04/09/2024. This search identified 61 threatened species and 5 threatened ecological communities potentially withing the subject site or adjacent area however, none were observed during the site inspection.

# Environmental Assessment-Level 2

## 9. Vegetation type present on site

The subject site is primarily exotic weed species normally found within disturbed roadsides of the Coffs harbour LGA. Exotic planted vegetation both ornamental and agricultural borders the site and comes from the adjacent rural properties areas not containing this planned vegetation is predominantly open Pastoral Grass land.

## 10. Weeds of significance

The classification of significant weeds and Duty of action has been derived from the weed wise website. This website follows the information set forth by the Biosecurity Act 2015, its subordinate legislation, and the Regional Strategic Weed Management Plans (published by each Local Land Services region in NSW). It describes the state and regional priorities for weeds in New South Wales.

Definitions of the NSW biosecurity classifications are:

1. General Biosecurity Duty - prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised so far as is reasonably practicable.
2. Regional recommended measure – The plant or parts of the plant should not be traded, carried, grown or released in the environment. Land managers should mitigate the risk of spread of the plant from their land.
3. Prohibition on dealings – Must not be imported into the state or sold.

Out of the species observed on site 10 are considered weeds in northern NSW (see table 1). Of these weeds 5 are classified as weeds of significance and require a general biosecurity duty and an additional weed (Lantana camara) has also been listed. This weed (Lantana camara) requires a general biosecurity duty and an additional biosecurity duty (prohibited on certain dealings) and cannot sold or contained in any sold material (mulch).

Table 1: list of identified weed species, locations and biosecurity duties associated with each species.

Key: No biosecurity ranking = NA, General Biosecurity Duty = GBD, Regional recommended measure = RRM and Prohibition on certain dealings = PD

| Name  | Biosecurity duty |
|---|------------------|
| Blue billy goat weed ( <i>Ageratum houstonianum</i> )   | NA               |
| Cobblers pegs   | NA               |
| Thick head ( <i>Crassocephalum crepidioides</i> )       | NA               |
| Balloon Cotton Bush ( <i>Gomphocarpus physocarpus</i> ) | NA               |
| Arrowhead vine ( <i>Syngonium podophyllum</i> )         | NA               |
| Crofton weed ( <i>Ageratina adenophora</i> )            | GBD              |
| Scotch thistle ( <i>Onopordum acanthium</i> )           | GBD              |
| Camphor laurel ( <i>Cinnamomum camphora</i> )           | GBD              |
| (Possible) Cocos palm ( <i>Syagrus romanzoffiana</i> )  | GBD              |
| Lantana ( <i>Lantana camara</i> )                       | GBD and PD       |

## 11. Contaminated soils:

# Environmental Assessment-Level 2

The presence of contaminated soils has been identified within part of the subject site has with a preliminary check of councils mapping and the subject site is located adjacent to mapped as Banana Contaminated Land (BCL). Given the partial presences of BCL, the sites topography and the surrounding BCL the potential for soil contamination on site from past agricultural practices and surface water hydrology processes is relatively high.

As one of Australia's key banana producing regions many areas within the City's local government area have over the past 100 year been used for the cultivation of bananas. The City has designated all land mapped as past/present banana growing land, as being potentially contaminated requiring assessment prior to giving consent for a change in land use. The use of the subject site will not be changing. However, the City is committed to promoting a safe and healthy working environment, ensuring that any risks of exposure to land contamination is appropriately considered and managed prior to undertaking operational works. This commitment is extended to ensuring that the Cities operations for the management or contaminated lands do not unduly impact on the health of the environment or community. Studies conducted on BCL have found elevated concentrations of pesticide related agricultural chemical residues. The primary contaminants identified were Arsenic (As), Lead (Pb) and Organochlorine pesticides (including Dieldrin, Aldrin & DDT). These metals and compounds are considered to be present and can pose a threat to human health and the environment at certain concentrations. To ensure that development on former banana lands will not increase the risk of harm to human health or other aspects of the environment, a preliminary investigation (soil testing) is required to be submitted prior to approval of the proposed activity. Pending the results of the contamination study the activity is approved to proceed provided the risk to environment and health are mitigated or negligible.

In the event that approval is obtained sediment controls will be implemented in accordance with sedimentation methods presented in Landcom's Managing Urban Stormwater: Soils and construction (2004).

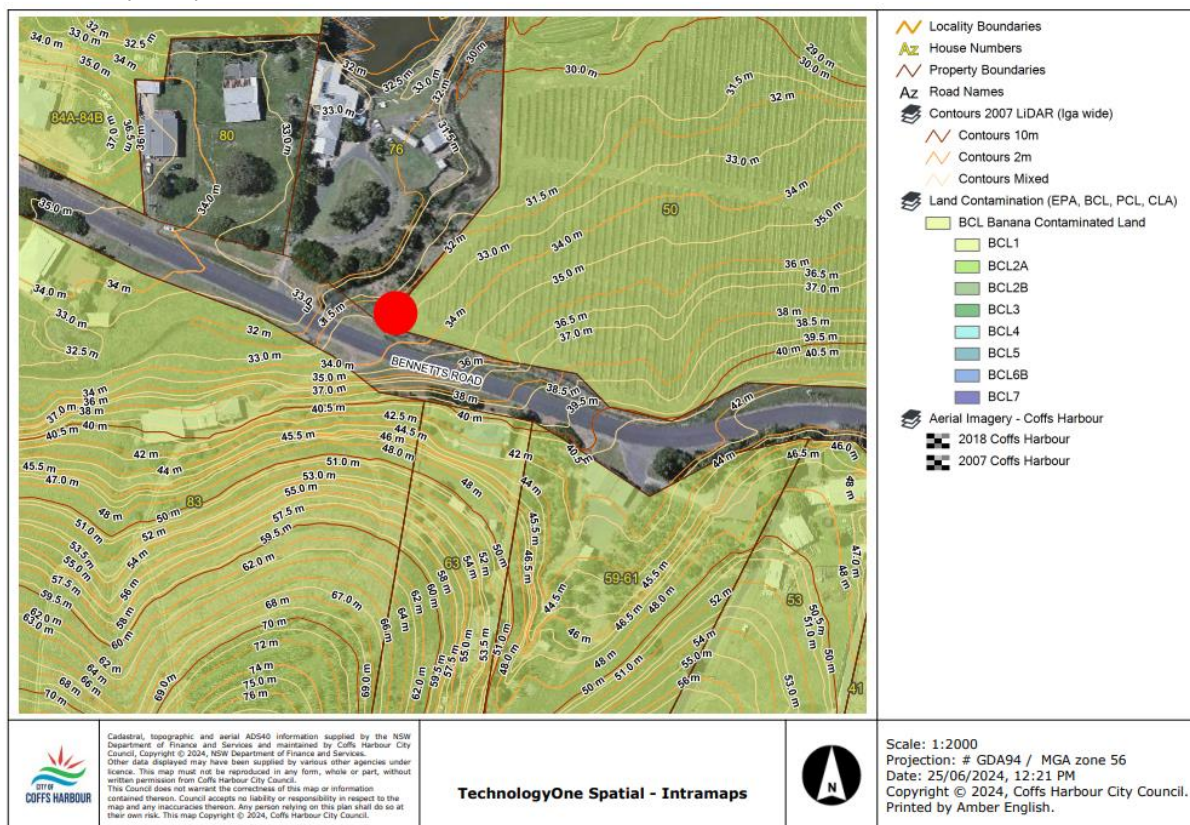


Figure 4: BLC and contours within and surrounding the subject site (red).

## Environmental Assessment-Level 2

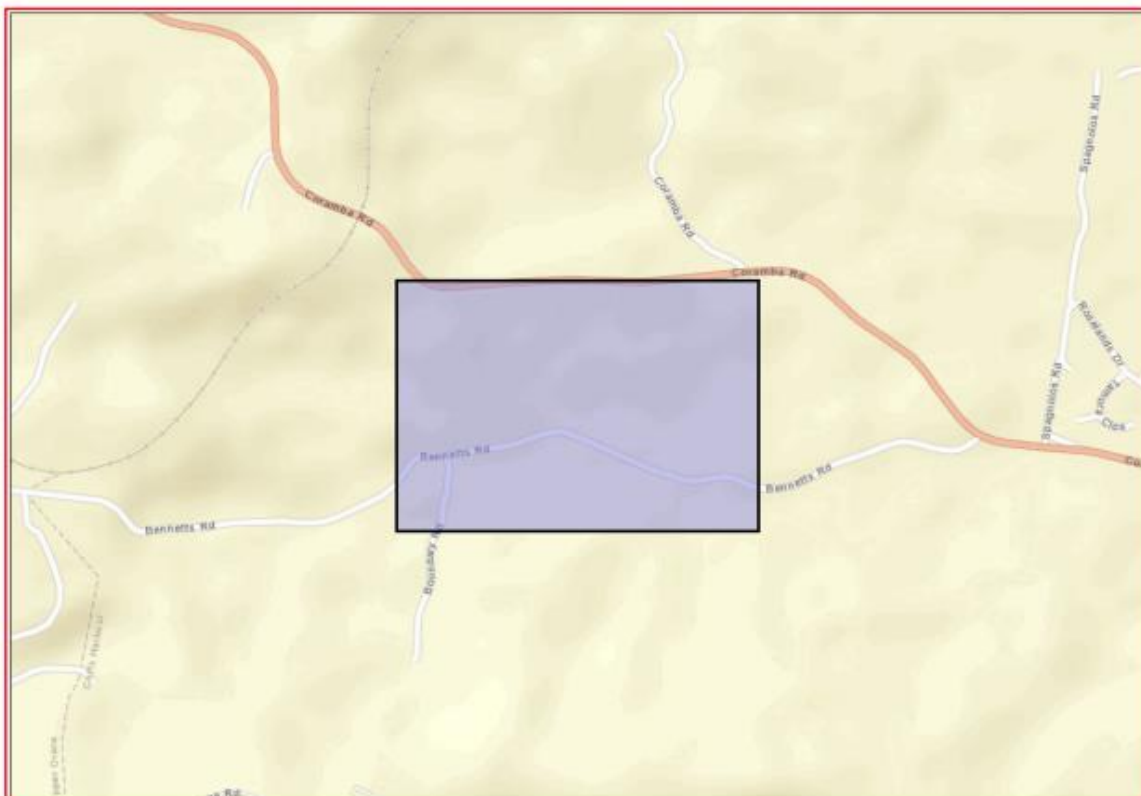
### 12. Aboriginal Heritage Search

A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) on the 04/09/2024 identified no Aboriginal sites located within the immediate area. It is not expected the proposed works will result in any impact on any Aboriginal heritage.

Although low in risk, as a precautionary measure however, if any material suspected to be of possible Aboriginal origin is located, all works must cease immediately in the vicinity of the find and the 'Procedure for unexpected discovery of an Aboriginal object' is to be followed. That is – STOP WORK, notify all on site crew, isolate and protect the find area and inform City of Coffs Harbour Environmental Project Officer.

**AHIMS Web Service search for the following area at Lat, Long From : -30.2889, 153.0683 - Lat, Long To : -30.2842, 153.076, conducted by Amber English on 04 September 2024.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

|  |
|--|
| <b>0 Aboriginal sites are recorded in or near the above location.</b>          |
| <b>0 Aboriginal places have been declared in or near the above location. *</b> |

Figure 5: AHIMS Search results.

### 13. Concerns not present

# Environmental Assessment-Level 2

## Appendix D – Protected Matters Search

A search of Coffs Harbor City mapping has found the site and surrounding land is not impacted by the following concerns:

- No mapped Acid Sulphate Soil
- No mapped Koala Habitat
- No mapped Coastal and Resilience layers

In the event any of the listed or additional no concerns are identified on site an immediate stop works order is to be in place until the site has been reassessed and cleared by the Environmental Project Officer.



Australian Government

Department of Climate Change, Energy,  
the Environment and Water

# EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 04-Sep-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

# Summary

## Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

|   |      |
|---|------|
| <a href="#">World Heritage Properties:</a>                    | None |
| <a href="#">National Heritage Places:</a>                     | None |
| <a href="#">Wetlands of International Importance (Ramsar)</a> | None |
| <a href="#">Great Barrier Reef Marine Park:</a>               | None |
| <a href="#">Commonwealth Marine Area:</a>                     | None |
| <a href="#">Listed Threatened Ecological Communities:</a>     | 5    |
| <a href="#">Listed Threatened Species:</a>                    | 61   |
| <a href="#">Listed Migratory Species:</a>                     | 15   |

## Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

|   |      |
|---|------|
| <a href="#">Commonwealth Lands:</a>                                 | None |
| <a href="#">Commonwealth Heritage Places:</a>                       | None |
| <a href="#">Listed Marine Species:</a>                              | 22   |
| <a href="#">Whales and Other Cetaceans:</a>                         | None |
| <a href="#">Critical Habitats:</a>                                  | None |
| <a href="#">Commonwealth Reserves Terrestrial:</a>                  | None |
| <a href="#">Australian Marine Parks:</a>                            | None |
| <a href="#">Habitat Critical to the Survival of Marine Turtles:</a> | None |

## Extra Information

This part of the report provides information that may also be relevant to the area you have

|   |      |
|---|------|
| <a href="#">State and Territory Reserves:</a>           | None |
| <a href="#">Regional Forest Agreements:</a>             | 1    |
| <a href="#">Nationally Important Wetlands:</a>          | None |
| <a href="#">EPBC Act Referrals:</a>                     | 3    |
| <a href="#">Key Ecological Features (Marine):</a>       | None |
| <a href="#">Biologically Important Areas:</a>           | None |
| <a href="#">Bioregional Assessments:</a>                | None |
| <a href="#">Geological and Bioregional Assessments:</a> | None |



# Details

## Matters of National Environmental Significance

### Listed Threatened Ecological Communities

[\[ Resource Information \]](#)

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

| Community Name  | Threatened Category   | Presence Text                         | Buffer Status       |
|---|-----------------------|---------------------------------------|---------------------|
| <a href="#">Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest of New South Wales and South East Queensland ecological community</a>        | Endangered            | Community may occur within area       | In feature area     |
| <a href="#">Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland</a>   | Endangered            | Community may occur within area       | In feature area     |
| <a href="#">Dunn's white gum (<i>Eucalyptus dunnii</i>) moist forest in north-east New South Wales and south-east Queensland</a>            | Endangered            | Community may occur within area       | In buffer area only |
| <a href="#">Lowland Rainforest of Subtropical Australia</a>   | Critically Endangered | Community likely to occur within area | In feature area     |
| <a href="#">Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions</a> | Endangered            | Community likely to occur within area | In feature area     |

### Listed Threatened Species

[\[ Resource Information \]](#)

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

| Scientific Name  | Threatened Category   | Presence Text   | Buffer Status   |
|--|-----------------------|---|-----------------|
| <b>BIRD</b>  |                       |   |                 |
| <a href="#">Anthochaera phrygia</a><br>Regent Honeyeater [82338] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| <a href="#">Atrichornis rufescens</a><br>Rufous Scrub-bird [655] | Endangered            | Species or species habitat may occur within area      | In feature area |

| Scientific Name  | Threatened Category   | Presence Text  | Buffer Status   |
|--|-----------------------|--|-----------------|
| <a href="#">Botaurus poiciloptilus</a><br>Australasian Bittern [1001]                          | Endangered            | Species or species habitat known to occur within area  | In feature area |
| <a href="#">Calidris acuminata</a><br>Sharp-tailed Sandpiper [874]                             | Vulnerable            | Species or species habitat may occur within area       | In feature area |
| <a href="#">Calidris canutus</a><br>Red Knot, Knot [855]                                       | Vulnerable            | Species or species habitat may occur within area       | In feature area |
| <a href="#">Calidris ferruginea</a><br>Curlew Sandpiper [856]                                  | Critically Endangered | Species or species habitat may occur within area       | In feature area |
| <a href="#">Calyptorhynchus lathami lathami</a><br>South-eastern Glossy Black-Cockatoo [67036] | Vulnerable            | Species or species habitat known to occur within area  | In feature area |
| <a href="#">Charadrius leschenaultii</a><br>Greater Sand Plover, Large Sand Plover [877]       | Vulnerable            | Species or species habitat likely to occur within area | In feature area |
| <a href="#">Climacteris picumnus victoriae</a><br>Brown Treecreeper (south-eastern) [67062]    | Vulnerable            | Species or species habitat likely to occur within area | In feature area |
| <a href="#">Erythrorchis radiatus</a><br>Red Goshawk [942]                                     | Endangered            | Species or species habitat may occur within area       | In feature area |
| <a href="#">Falco hypoleucos</a><br>Grey Falcon [929]  | Vulnerable            | Species or species habitat may occur within area       | In feature area |
| <a href="#">Gallinago hardwickii</a><br>Latham's Snipe, Japanese Snipe [863]                   | Vulnerable            | Species or species habitat known to occur within area  | In feature area |
| <a href="#">Grantiella picta</a><br>Painted Honeyeater [470]                                   | Vulnerable            | Species or species habitat may occur within area       | In feature area |

| Scientific Name   | Threatened Category   | Presence Text  | Buffer Status       |
|---|-----------------------|--|---------------------|
| <a href="#">Hirundapus caudacutus</a><br>White-throated Needletail [682]  | Vulnerable            | Species or species habitat known to occur within area  | In feature area     |
| <a href="#">Lathamus discolor</a><br>Swift Parrot [744]   | Critically Endangered | Species or species habitat likely to occur within area | In feature area     |
| <a href="#">Melanodryas cucullata cucullata</a><br>South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093] | Endangered            | Species or species habitat may occur within area       | In feature area     |
| <a href="#">Neophema chrysostoma</a><br>Blue-winged Parrot [726]  | Vulnerable            | Species or species habitat may occur within area       | In feature area     |
| <a href="#">Numenius madagascariensis</a><br>Eastern Curlew, Far Eastern Curlew [847]                               | Critically Endangered | Species or species habitat may occur within area       | In feature area     |
| <a href="#">Rostratula australis</a><br>Australian Painted Snipe [77037]  | Endangered            | Species or species habitat likely to occur within area | In feature area     |
| <a href="#">Stagonopleura guttata</a><br>Diamond Firetail [59398]   | Vulnerable            | Species or species habitat may occur within area       | In feature area     |
| <a href="#">Sternula nereis nereis</a><br>Australian Fairy Tern [82950]   | Vulnerable            | Species or species habitat may occur within area       | In feature area     |
| <a href="#">Turnix melanogaster</a><br>Black-breasted Button-quail [923]  | Vulnerable            | Species or species habitat may occur within area       | In feature area     |
| <b>FROG</b>   |                       |  |                     |
| <a href="#">Assa darlingtoni</a><br>Pouched Frog [1965]   | Vulnerable            | Species or species habitat may occur within area       | In buffer area only |
| <a href="#">Litoria aurea</a><br>Green and Golden Bell Frog [1870]  | Vulnerable            | Species or species habitat may occur within area       | In feature area     |

| Scientific Name   | Threatened Category   | Presence Text  | Buffer Status       |
|---|-----------------------|--|---------------------|
| <a href="#">Mixophyes balbus</a><br>Stuttering Frog, Southern Barred Frog (in Victoria) [1942]  | Vulnerable            | Species or species habitat likely to occur within area | In feature area     |
| <a href="#">Mixophyes iteratus</a><br>Giant Barred Frog, Southern Barred Frog [1944]  | Vulnerable            | Species or species habitat known to occur within area  | In feature area     |
| <a href="#">Phyloria sphagnicola</a><br>Sphagnum Frog [59709]   | Vulnerable            | Species or species habitat may occur within area       | In buffer area only |
| <b>INSECT</b>   |                       |  |                     |
| <a href="#">Argynnis hyperbius inconstans</a><br>Australian Fritillary [88056]  | Critically Endangered | Species or species habitat may occur within area       | In feature area     |
| <b>MAMMAL</b>   |                       |  |                     |
| <a href="#">Chalinolobus dwyeri</a><br>Large-eared Pied Bat, Large Pied Bat [183]   | Endangered            | Species or species habitat likely to occur within area | In feature area     |
| <a href="#">Dasyurus maculatus maculatus (SE mainland population)</a><br>Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]                            | Endangered            | Species or species habitat likely to occur within area | In feature area     |
| <a href="#">Notamacropus parma</a><br>Parma Wallaby [89289]   | Vulnerable            | Species or species habitat may occur within area       | In feature area     |
| <a href="#">Petauroides volans</a><br>Greater Glider (southern and central) [254]   | Endangered            | Species or species habitat likely to occur within area | In feature area     |
| <a href="#">Petaurus australis australis</a><br>Yellow-bellied Glider (south-eastern) [87600]   | Vulnerable            | Species or species habitat known to occur within area  | In feature area     |
| <a href="#">Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)</a><br>Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104] | Endangered            | Species or species habitat known to occur within area  | In feature area     |
| <a href="#">Potorous tridactylus tridactylus</a><br>Long-nosed Potoroo (northern) [66645]   | Vulnerable            | Species or species habitat likely to occur within area | In feature area     |

| Scientific Name   | Threatened Category   | Presence Text   | Buffer Status       |
|---|-----------------------|---|---------------------|
| <a href="#">Pseudomys novaehollandiae</a><br>New Holland Mouse, Pookila [96]  | Vulnerable            | Species or species habitat may occur within area                  | In feature area     |
| <a href="#">Pteropus poliocephalus</a><br>Grey-headed Flying-fox [186]  | Vulnerable            | Foraging, feeding or related behaviour known to occur within area | In feature area     |
| <b>PLANT</b>  |                       |   |                     |
| <a href="#">Acronychia littoralis</a><br>Scented Acronychia [8582]  | Endangered            | Species or species habitat likely to occur within area            | In feature area     |
| <a href="#">Arthraxon hispidus</a><br>Hairy-joint Grass [9338]  | Vulnerable            | Species or species habitat likely to occur within area            | In feature area     |
| <a href="#">Coleus nitidus listed as Plectranthus nitidus</a><br>Nightcap Plectranthus, Silver Plectranthus [91380] | Endangered            | Species or species habitat may occur within area                  | In feature area     |
| <a href="#">Corynocarpus rupestris subsp. rupestris</a><br>Glenugie Karaka [19303]                                  | Vulnerable            | Species or species habitat known to occur within area             | In feature area     |
| <a href="#">Cryptostylis hunteriana</a><br>Leafless Tongue-orchid [19533]   | Vulnerable            | Species or species habitat may occur within area                  | In feature area     |
| <a href="#">Cynanchum elegans</a><br>White-flowered Wax Plant [12533]   | Endangered            | Species or species habitat likely to occur within area            | In feature area     |
| <a href="#">Endiandra hayesii</a><br>Rusty Rose Walnut, Velvet Laurel [13866]                                       | Vulnerable            | Species or species habitat may occur within area                  | In feature area     |
| <a href="#">Fontainea sp. Coffs Harbour (A.S.Benwell 341, NSW1102027)</a><br>[91784]                                | Critically Endangered | Species or species habitat likely to occur within area            | In feature area     |
| <a href="#">Haloragis exalata subsp. velutina</a><br>Tall Velvet Sea-berry [16839]                                  | Vulnerable            | Species or species habitat may occur within area                  | In buffer area only |

| Scientific Name   | Threatened Category   | Presence Text  | Buffer Status   |
|---|-----------------------|--|-----------------|
| <a href="#">Leichhardtia longiloba listed as Marsdenia longiloba</a><br>Clear Milkvine [91911]  | Vulnerable            | Species or species habitat known to occur within area  | In feature area |
| <a href="#">Macadamia integrifolia</a><br>Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]            | Vulnerable            | Species or species habitat may occur within area       | In feature area |
| <a href="#">Macadamia tetraphylla</a><br>Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough-leaved Queensland Nut [6581] | Vulnerable            | Species or species habitat likely to occur within area | In feature area |
| <a href="#">Parsonsia dorrigoensis</a><br>Milky Silkpod [64684]   | Endangered            | Species or species habitat likely to occur within area | In feature area |
| <a href="#">Persicaria elatior</a><br>Knotweed, Tall Knotweed [5831]  | Vulnerable            | Species or species habitat may occur within area       | In feature area |
| <a href="#">Phaius australis</a><br>Lesser Swamp-orchid [5872]  | Endangered            | Species or species habitat likely to occur within area | In feature area |
| <a href="#">Rhodamnia rubescens</a><br>Scrub Turpentine, Brown Malletwood [15763]   | Critically Endangered | Species or species habitat known to occur within area  | In feature area |
| <a href="#">Rhodomyrtus psidioides</a><br>Native Guava [19162]  | Critically Endangered | Species or species habitat likely to occur within area | In feature area |
| <a href="#">Samadera sp. Moonee Creek (J.King s.n. Nov. 1949)</a><br>[86885]  | Endangered            | Species or species habitat likely to occur within area | In feature area |
| <a href="#">Sarcochilus fitzgeraldii</a><br>Ravine Orchid [19131]   | Vulnerable            | Species or species habitat may occur within area       | In feature area |
| <a href="#">Syzygium hodgkinsoniae</a><br>Smooth-bark Rose Apple, Red Lilly Pilly [3539]  | Vulnerable            | Species or species habitat may occur within area       | In feature area |

| Scientific Name   | Threatened Category | Presence Text   | Buffer Status       |
|---|---------------------|---|---------------------|
| <a href="#">Thesium australe</a><br>Austral Toadflax, Toadflax [15202]        | Vulnerable          | Species or species habitat known to occur within area | In feature area     |
| <a href="#">Vincetoxicum woollsii listed as Tylophora woollsii</a><br>[40080] | Endangered          | Species or species habitat known to occur within area | In feature area     |
| <a href="#">Zieria prostrata</a><br>Headland Zieria [56782]                   | Endangered          | Species or species habitat may occur within area      | In buffer area only |

## REPTILE

|  |            |  |                 |
|--|------------|--|-----------------|
| <a href="#">Coeranoscincus reticulatus</a><br>Three-toed Snake-tooth Skink [59628] | Vulnerable | Species or species habitat may occur within area | In feature area |
|--|------------|--|-----------------|

## Listed Migratory Species

[ [Resource Information](#) ]

| Scientific Name   | Threatened Category | Presence Text  | Buffer Status   |
|---|---------------------|--|-----------------|
| <b>Migratory Marine Birds</b>                             |                     |  |                 |
| <a href="#">Apus pacificus</a><br>Fork-tailed Swift [678] |                     | Species or species habitat likely to occur within area | In feature area |

## Migratory Terrestrial Species

|  |            |   |                 |
|--|------------|---|-----------------|
| <a href="#">Cuculus optatus</a><br>Oriental Cuckoo, Horsfield's Cuckoo [86651] |            | Species or species habitat may occur within area      | In feature area |
| <a href="#">Hirundapus caudacutus</a><br>White-throated Needletail [682]       | Vulnerable | Species or species habitat known to occur within area | In feature area |
| <a href="#">Monarcha melanopsis</a><br>Black-faced Monarch [609]               |            | Species or species habitat known to occur within area | In feature area |
| <a href="#">Myiagra cyanoleuca</a><br>Satin Flycatcher [612]                   |            | Species or species habitat known to occur within area | In feature area |
| <a href="#">Rhipidura rufifrons</a><br>Rufous Fantail [592]                    |            | Species or species habitat known to occur within area | In feature area |

| Scientific Name   | Threatened Category   | Presence Text  | Buffer Status   |
|---|-----------------------|--|-----------------|
| <a href="#">Symposiachrus trivirgatus as Monarcha trivirgatus</a><br>Spectacled Monarch [83946] |                       | Species or species habitat known to occur within area  | In feature area |
| <b>Migratory Wetlands Species</b>   |                       |  |                 |
| <a href="#">Actitis hypoleucos</a><br>Common Sandpiper [59309]                                  |                       | Species or species habitat may occur within area       | In feature area |
| <a href="#">Calidris acuminata</a><br>Sharp-tailed Sandpiper [874]                              | Vulnerable            | Species or species habitat may occur within area       | In feature area |
| <a href="#">Calidris canutus</a><br>Red Knot, Knot [855]  | Vulnerable            | Species or species habitat may occur within area       | In feature area |
| <a href="#">Calidris ferruginea</a><br>Curlew Sandpiper [856]                                   | Critically Endangered | Species or species habitat may occur within area       | In feature area |
| <a href="#">Calidris melanotos</a><br>Pectoral Sandpiper [858]                                  |                       | Species or species habitat may occur within area       | In feature area |
| <a href="#">Charadrius leschenaultii</a><br>Greater Sand Plover, Large Sand Plover [877]        | Vulnerable            | Species or species habitat likely to occur within area | In feature area |
| <a href="#">Gallinago hardwickii</a><br>Latham's Snipe, Japanese Snipe [863]                    | Vulnerable            | Species or species habitat known to occur within area  | In feature area |
| <a href="#">Numenius madagascariensis</a><br>Eastern Curlew, Far Eastern Curlew [847]           | Critically Endangered | Species or species habitat may occur within area       | In feature area |

## Other Matters Protected by the EPBC Act

| Listed Marine Species |                     |               | [ Resource Information ] |
|-----------------------|---------------------|---------------|--------------------------|
| Scientific Name       | Threatened Category | Presence Text | Buffer Status            |
| Bird                  |                     |               |                          |



| Scientific Name  | Threatened Category   | Presence Text  | Buffer Status   |
|--|-----------------------|--|-----------------|
| <a href="#">Actitis hypoleucos</a><br>Common Sandpiper [59309]                           |                       | Species or species habitat may occur within area                           | In feature area |
| <a href="#">Apus pacificus</a><br>Fork-tailed Swift [678]                                |                       | Species or species habitat likely to occur within area overfly marine area | In feature area |
| <a href="#">Bubulcus ibis as Ardea ibis</a><br>Cattle Egret [66521]                      |                       | Species or species habitat may occur within area overfly marine area       | In feature area |
| <a href="#">Calidris acuminata</a><br>Sharp-tailed Sandpiper [874]                       | Vulnerable            | Species or species habitat may occur within area                           | In feature area |
| <a href="#">Calidris canutus</a><br>Red Knot, Knot [855]                                 | Vulnerable            | Species or species habitat may occur within area overfly marine area       | In feature area |
| <a href="#">Calidris ferruginea</a><br>Curlew Sandpiper [856]                            | Critically Endangered | Species or species habitat may occur within area overfly marine area       | In feature area |
| <a href="#">Calidris melanotos</a><br>Pectoral Sandpiper [858]                           |                       | Species or species habitat may occur within area overfly marine area       | In feature area |
| <a href="#">Charadrius leschenaultii</a><br>Greater Sand Plover, Large Sand Plover [877] | Vulnerable            | Species or species habitat likely to occur within area                     | In feature area |
| <a href="#">Gallinago hardwickii</a><br>Latham's Snipe, Japanese Snipe [863]             | Vulnerable            | Species or species habitat known to occur within area overfly marine area  | In feature area |
| <a href="#">Haliaeetus leucogaster</a><br>White-bellied Sea-Eagle [943]                  |                       | Species or species habitat known to occur within area                      | In feature area |

| Scientific Name  | Threatened Category   | Presence Text  | Buffer Status   |
|--|-----------------------|--|-----------------|
| <a href="#">Hirundapus caudacutus</a><br>White-throated Needletail [682]   | Vulnerable            | Species or species habitat known to occur within area overfly marine area  | In feature area |
| <a href="#">Lathamus discolor</a><br>Swift Parrot [744]  | Critically Endangered | Species or species habitat likely to occur within area overfly marine area | In feature area |
| <a href="#">Merops ornatus</a><br>Rainbow Bee-eater [670]  |                       | Species or species habitat may occur within area overfly marine area       | In feature area |
| <a href="#">Monarcha melanopsis</a><br>Black-faced Monarch [609]   |                       | Species or species habitat known to occur within area overfly marine area  | In feature area |
| <a href="#">Myiagra cyanoleuca</a><br>Satin Flycatcher [612]   |                       | Species or species habitat known to occur within area overfly marine area  | In feature area |
| <a href="#">Neophema chrysostoma</a><br>Blue-winged Parrot [726]   | Vulnerable            | Species or species habitat may occur within area overfly marine area       | In feature area |
| <a href="#">Numenius madagascariensis</a><br>Eastern Curlew, Far Eastern Curlew [847]                            | Critically Endangered | Species or species habitat may occur within area                           | In feature area |
| <a href="#">Pterodroma cervicalis</a><br>White-necked Petrel [59642]   |                       | Species or species habitat may occur within area                           | In feature area |
| <a href="#">Rhipidura rufifrons</a><br>Rufous Fantail [592]  |                       | Species or species habitat known to occur within area overfly marine area  | In feature area |
| <a href="#">Rostratula australis as Rostratula benghalensis (sensu lato)</a><br>Australian Painted Snipe [77037] | Endangered            | Species or species habitat likely to occur within area overfly marine area | In feature area |

| Scientific Name   | Threatened Category | Presence Text   | Buffer Status   |
|---|---------------------|---|-----------------|
| <a href="#">Sterna striata</a><br>White-fronted Tern [799]                                      |                     | Migration route may occur within area                                     | In feature area |
| <a href="#">Symposiachrus trivirgatus as Monarcha trivirgatus</a><br>Spectacled Monarch [83946] |                     | Species or species habitat known to occur within area overfly marine area | In feature area |

## Extra Information

### Regional Forest Agreements [\[ Resource Information \]](#)

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

| RFA Name                           | State           | Buffer Status   |
|------------------------------------|-----------------|-----------------|
| <a href="#">North East NSW RFA</a> | New South Wales | In feature area |

### EPBC Act Referrals [\[ Resource Information \]](#)

| Title of referral  | Reference | Referral Outcome      | Assessment Status | Buffer Status   |
|--|-----------|-----------------------|-------------------|-----------------|
| <b>Controlled action</b>   |           |                       |                   |                 |
| <a href="#">Clarence Valley and Coffs Harbour Regional Water Supply Project</a>                              | 2005/2191 | Controlled Action     | Post-Approval     | In feature area |
| <a href="#">Pacific Highway Upgrade - Coffs Harbour Bypass, NSW</a>  | 2017/8005 | Controlled Action     | Post-Approval     | In feature area |
| <b>Not controlled action</b>   |           |                       |                   |                 |
| <a href="#">Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia</a> | 2015/7522 | Not Controlled Action | Completed         | In feature area |

# Caveat

## 1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

## 2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

## 3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

## 4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

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# Environmental Assessment-Level 2

## Appendix E – Fisheries Permit