

F. Research Reports and Specialist Studies

F.1 Introduction

No Appendices

F.2 Project Rationale


No Appendices


F.3 Project Description


No Appendices

F.4 Topography, Geomorphology, Geology and Soils

F.4.1 Soil Sites

Site 1 – Brown Kurosol						
Location	Zone 56, 526154E 6895419N					
Date	13/3/2007					
Surface condition	Soft					
Surface rocks	Few angular cobbles					
Landform	Undulating low hills					
Vegetation						
Geology	Nerangleigh-Fernvale beds					
Description						
Topsoil or subsoil layer and depth:						
Topsoil 0-20cm Subsoil: 20-35+cm						
Characteristics:						
Depth (cm)	Texture	Colour / mottles	Coarse fragments	Structure	pH	EC (dS/m)
0-10	Clay loam+	Dark yellowish brown	Very few coarse gravel	Weak	6	0.04
10-20	Clay loam	Yellowish brown	Nil	Massive	5	
20-35+	Light medium clay	Light olive brown	Nil	Moderate	5	0.03
Photograph of sample landscape, site conditions and soil profile:						
						

Site 2 – Red Dermosol						
Location	Zone 56, 524677E 6891646N					
Date	13/3/2007					
Surface condition	Firm					
Surface rocks	Nil					
Landform	Undulating hills					
Vegetation						
Geology	Nerangleigh-Fernvale beds					
Description						
Topsoil or subsoil layer and depth:						
Topsoil 0-30cm Subsoil: 30-65+cm						
Characteristics:						
Depth (cm)	Texture	Colour / mottles	Coarse fragments	Structure	pH	EC (dS/m)
0-10	Light clay	Very dark grey	Nil	Strong granular	6.5	0.04
10-30	Light clay	Dark brown	Nil	Moderate angular blocky		
30-50	Light medium clay	Reddish brown	Nil	Moderate	5.5	0.03
50-60	Medium clay	Red	Nil	Moderate	5.0	0.03
Photograph of sample landscape, site conditions and soil profile:						
						

Site 3 – Yellow Kurosol						
Location	Zone 56, 530651E 6893384N					
Date	13/3/2007					
Surface condition	Firm					
Surface rocks	Nil					
Landform	Rolling hills					
Vegetation						
Geology	Nerangleigh-Fernvale beds					
Description						
Topsoil or subsoil layer and depth:						
Topsoil 0-5cm Subsoil: 5-80cm						
Characteristics:						
Depth (cm)	Texture	Colour / mottles	Coarse fragments	Structure	pH	EC (dS/m)
0-5	Clay loam	Brown	Nil	Weak	6.5	0.02
5-80	Light medium clay	Reddish yellow	Nil	Strong coarse angular blocky	5.5	0.03
Photograph of sample landscape, site conditions and soil profile:						
						

Site 4 –Red Ferrosol						
Location	Zone 56, 528610E 6897173N					
Date	13/3/2007					
Surface condition	Firm					
Surface rocks	Nil					
Landform	Rolling hills					
Vegetation						
Geology	Nerangleigh-Fernvale beds					
Description						
Topsoil or subsoil layer and depth:						
Topsoil 0-10cm Subsoil: 10-65+cm						
Characteristics:						
Depth (cm)	Texture	Colour / mottles	Coarse fragments	Structure	pH	EC (dS/m)
0-10	Light clay	Dark brown	Very few medium pebbles	Strong granular	6.5	0.01
10-30	Light medium clay	Reddish brown	Nil	Moderate	6	0.01
Photograph of sample landscape, site conditions and soil profile:						
No Image						

Site 5 – Brown Kurosol	
Location	Zone 56, 527768E 6897707N
Date	13/3/2007
Surface condition	Firm, hardsetting
Surface rocks	Nil
Landform	Gently undulating rises
Vegetation	
Geology	Nerangleigh-Fernvale beds

Description

Topsoil or subsoil layer and depth:
 Topsoil 0-22cm Subsoil: 22-80cm

Characteristics:						
Depth (cm)	Texture	Colour / mottles	Coarse fragments	Structure	pH	EC (dS/m)
0-10	Clay loam sandy	Very dark brown	Few medium pebbles	Moderate	6.5	0.02
10-22	Clay loam sandy	Brown	Few medium pebbles	Weak		
22-30	Light medium clay	Brown with few fine red mottles	Nil	Moderate angular blocky	5.5	0.02
30-80+	Medium clay	Light brown with few medium red mottles	Nil	Moderate angular blocky	5	

Photograph of sample landscape, site conditions and soil profile:



Site 6 - Tenosol	
Location	Zone 56, 527599E 6897013N
Date	13/3/2007
Surface condition	Soft
Surface rocks	Abundant angular cobbles
Landform	
Vegetation	
Geology	

Description

Topsoil or subsoil layer and depth:

Topsoil 0-15cm Subsoil: Nil

Characteristics:

Depth	Texture	Colour / mottles	Coarse fragments	Structure	pH	EC (dS/m)
0-15cm	Sandy clay loam	Dark grey	Common coarse gravel	Moderate granular	6	0.01

Photograph of sample landscape, site conditions and soil profile:



F.4.2 Erosion and Sediment Control Plan

Overview of Environmental Aspects and Scope

Overview of Significant Environmental Aspects for Construction

An Environmental Impact Statement (EIS) for Hinze Dam Stage 3 will provide complete documentation of the environmental aspects of the project. This will include environmental baseline conditions, project description, assessments of potential project impacts on the environment, mitigation strategies, and an environmental management plan (EMP). The key environmental aspects for the construction phase of the project identified from the EIS studies to date include:

- protection of Water Quality including water quality within the reservoir used for raw water supply to GCCC water treatment plants, and quality of runoff from construction working areas that could discharge into downstream receiving waters;
- erosion and Sediment Control and associated impacts on water quality and land stability;
- extent of vegetation clearing;
- management of noise, vibration, air quality, and visual amenity impacts; and
- traffic management on public roads to and from the site.

Information on the context, potential impacts, and management of the above environmental factors will be detailed in the EIS. Generally, the majority of the above significant impacts will be manageable by appropriate and strategic construction methodologies and a detailed Construction EMP will be prepared upon completion of the EIS and following detailed design and construction planning.

Erosion and Sediment Control Overview

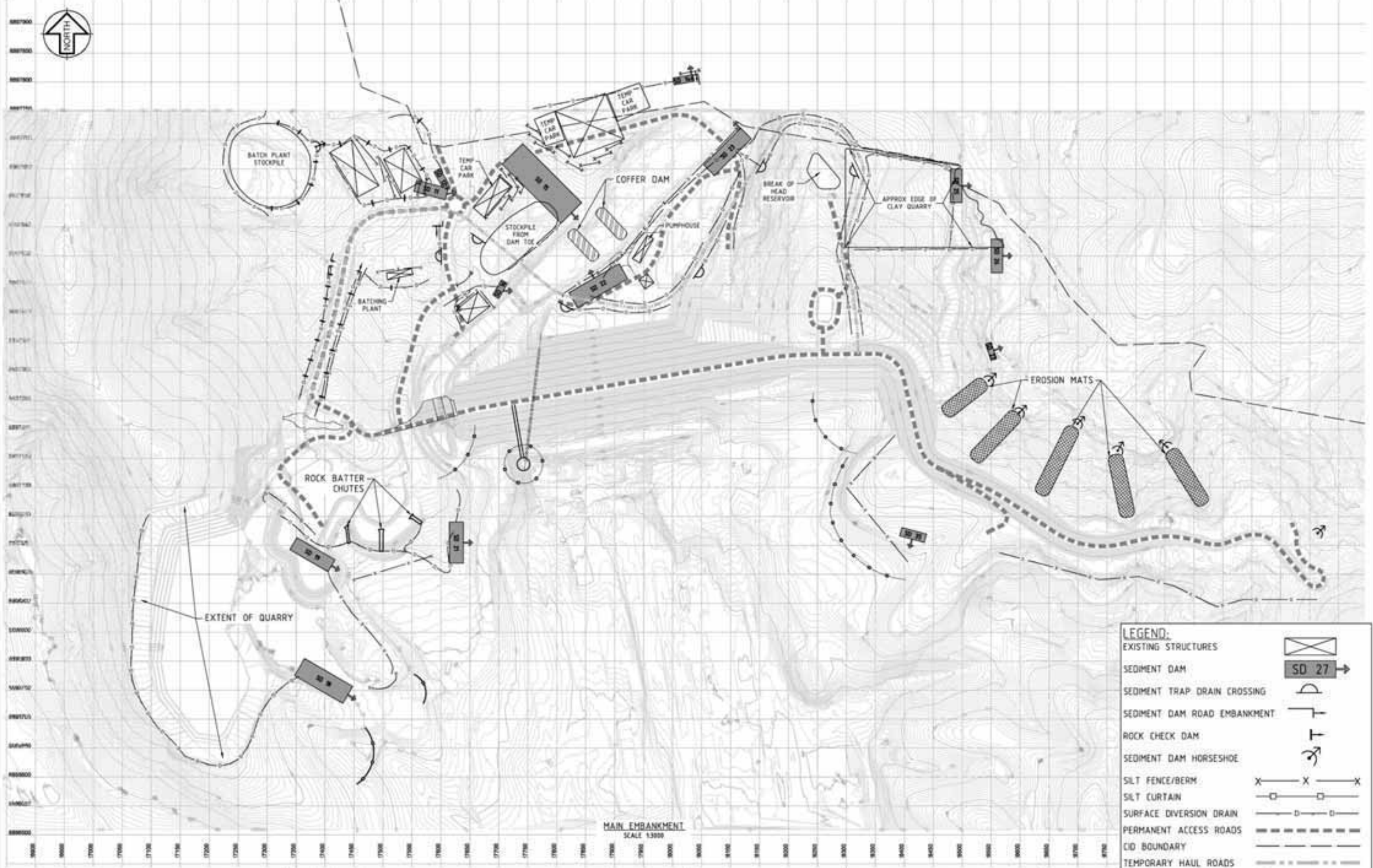
Construction methods alone will not be sufficient to management the risks and requirements for erosion and sediment control (ESC). Structural ESC control measures will be required throughout the construction phase of the project to minimise erosion and capture sediment. Appropriate design of ESC control measures will be required, and the design approach for a preliminary erosion and sediment control plan is described herein. Further detailed assessments of erosion risks and detailed design of ESC works will be undertaken in the detailed design phase of the project. The strategies and measures described herein are limited to preliminary design undertaken for the purposed of estimating the Target Outturn Cost.

In general, the key erosion and sediment control risks have been identified for the following areas of construction:

- clearing around sections of the upstream reservoir area from the existing Stage 2 Full Supply Level up to the new Stage 3 Full Supply Level;
- areas to be disturbed around the vicinity of the main embankment and saddle dams to prepare foundation works and associated drainage works;
- runoff from the hard rock quarry area on the left abutment;
- runoff from haul roads, temporary parking areas, stockpile areas, batch plant, and lay down areas; and
- runoff from the clay borrow area.

The appropriate types of erosion and sediment control measures for each of the above working areas will vary depending on the specific erosion risks, construction methods, topographic and drainage constraints. For an overview of the general arrangements for sediment and erosion control see **Figure 1**.

A1



LEGEND:

EXISTING STRUCTURES	
SEDIMENT DAM	
SEDIMENT TRAP DRAIN CROSSING	
SEDIMENT DAM ROAD EMBANKMENT	
ROCK CHECK DAM	
SEDIMENT DAM HORSESHOE	
SILT FENCE/BERM	
SILT CURTAIN	
SURFACE DIVERSION DRAIN	
PERMANENT ACCESS ROADS	
CID BOUNDARY	
TEMPORARY HAUL ROADS	

MAIN EMBANKMENT
SCALE 1:3000



Designed	JW		
Drawn	SCB		
Checked			
Approved			
Scale	AS SHOWN		
Rev	By	App'd	Date



Project Title: **HINZE DAM STAGE 3**

Drawing Title: **GENERAL ARRANGEMENT
EROSION & SEDIMENT CONTROL**

Status: **PRELIMINARY**

CAD File Number: **FIGURE 13.1.DWG**
Job Number: **42626000**

Client: **BDAN ZONE 56
AHD**
Date: **15/01**
Figure: **Fig 13.1**
Rev: **A**

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Erosion and Sedimentation Control Measures

Overview

The types of erosion and sediment control measures to be utilised for Hinze Dam Stage 3 construction are summarised herein. All measures are designed to:

- minimise the potential for erosion at source; and
- reduce the potential for release of mobilised sediment from the site into the surrounding environment and ensure no adverse environmental impact beyond the site boundaries, or into the water supply draw-off from the reservoir (i.e. intake towers).

The selection of ESC measures for specific working areas will typically utilise a number of measures to provide a “multiple lines of defence” approach to erosion and sediment management for this project.

Overview of Erosion and Sedimentation Control Measures

Control measures to manage sediment and erosion will include:

- an erosion risk management plan checklist to assess and confirm erosion risk and control measure requirements prior to disturbance. The checklist will assist to identify that all risks have been identified, ESC measures are planned and adequate, and to define the need for monitoring of ESC measures and associated contingency actions;
- areas of vegetation clearing and ground disturbance will be minimised to areas necessary to undertake the construction works. All working areas required for construction and associated extents of ground disturbance will be documented in detailed design prior to commencement of each package of works;
- the rock quarry and clay borrow areas (where practical) will be designed to be internally draining to contain runoff from these active working areas. Runoff will be collected in sumps and pumped to sediment retention dams prior to discharge;
- vegetated Filter Strips (strips of natural groundcover vegetation will be retained and the strips will be aligned parallel with contours) as to function as sediment filters to minimise erosion and sediment mobilisation as close as possible to the source of erosion;
- cleared vegetation will be selectively used to form vegetation small height windrows (parallel with contours) downslope of disturbed areas to slow flow velocities and trap sediment. These measures are mainly applicable where runoff occurs as broad shallow overland flow, and would mainly be used for the reservoir clearing activities;
- diversion drains or bunds will be constructed upslope of disturbed areas where practical to divert clean upslope runoff around working areas (disturbed area) and stockpile areas;
- drains will be used to collect “dirty” runoff from working areas and stockpiles and direct the runoff to treatment measures such as ponds and rock check dams;
- sediment retention ponds (SRPs) will be used to contain sediment prior to discharge. Sediment retention ponds will remove sediment either by settling or active chemical treatment (dosing) to facilitate flocculation and enhance setline. Dosing and flocculation will be required where colloidal (dispersive) soil particles occur in the disturbed areas draining to the ponds;
- exposed excavation and fill areas may require protection (stabilisation) with chipped mulch, hydro-mulch, or erosion matting, when these disturbed areas are not been actively worked to limit erosion at the source;

- rock check dams and silt fences will be installed downslope of active working areas to capture sediment. These measures will be used when the disturbed areas is relatively small (less than 0.5 ha) where installation of sediment retention ponds would not be practical;
- floating silt curtains will be installed in the reservoir to contain and prevent the spread of turbid waters into the intake towers used to draw-off water for GCCC water supply. Silt curtains will not be practical to contain potential turbid runoff from the reservoir clearing activities. Silt curtains will mainly be used around the intake towers and working areas near the main embankment, saddle dam and quarry;
- water quality monitoring will be undertaken within the reservoir (several locations for adequate spatial coverage), upstream of the reservoir, in small creeks and gullies around the main dam area upstream of working areas, and in the downstream receiving waters including Nerang River and tributaries. For the purposes of erosion and sediment control, the water quality monitoring will focus on turbidity, and other parameters may need to be monitored subject to the requirements of the EIS;
- the structural integrity of erosion and sediment control measures will be monitored visually and with photographic records. Monitoring will be undertaken fortnightly in dry weather, weekly during the wet season, and at least daily during rainfall events (during and after rainfall); and
- reviews of water quality monitoring data and monitoring results will be used to identify the need to repair, upgrade, and revise ESC measures and strategies. Reviews will be undertaken at least monthly and after any significant rainfall event (>20mm in one day).

Performance Criteria

The proposed performance objectives of the ESC plan will be:

- to ensure all areas of disturbance and potential sediment sources have ESC measures in place prior to construction, remain functional during the entire construction period, and are monitored. It can be expected that damage to some ESC measures may occur from very heavy rainfall events, and it will be expected that all damaged ESC measures are repaired immediately after the rainfall event;
- to ensure that runoff leaving the site into downstream receiving waters does not detrimentally impact the quality of receiving waters. The criterion will be that the turbidity readings of at least 80% of all water quality monitoring results (80th percentile) are less than the turbidity water quality objective defined by the EIS; and
- the turbidity of reservoir water drawn into the intake towers meets GCCC requirements for acceptable maximum turbidity that can be treated by the Molendinar and Mudgeeraba water treatment plants. The turbidity criteria for the bulk water supply to the water treatment plants will be defined in the EIS. Additional criteria may apply for reservoir water quality for the protection of aquatic fauna in the reservoir.

It can be expected that slightly elevated turbidity and discolouration of the reservoir may inevitably occur as a result of the reservoir clearing activities. Such occurrence will not necessarily pose a risk to bulk water supply as silt curtains around the intake towers will provide additional protection for the quality of water drawn from the reservoir. Monitoring of the broader reservoir area “upstream” of the silt curtains will be undertaken to provide early warning of potential impending risk to water supply quality. Careful management of stakeholder perceptions regarding potential temporary discolouration of the reservoir will also be necessary.

General Erosion and Sediment Control Design Criteria

It is noted that design of ESC measures cannot be readily linked to performance objectives for water quality because the influence of soils types and associated erosion risks, topography, groundcover, rainfall, and effectiveness of ESC measures vary significantly. Hence it cannot be guaranteed that appropriate design of ESC

measures will ensure compliance with the water quality performance criteria nominated above. Nonetheless, design criteria for ESC measures are applicable to prepare ESC measures, and ongoing monitoring of performance criteria should be used to adaptively refine the ESC plan during construction.

Design criteria for Erosion and Sediment are based on:

- Institution of Engineers Australia (Qld Division) – Erosion and Sediment Control Guidelines (1996); and
- Brisbane City Council – Sediment Basin Design, Construction, and Maintenance Guidelines (2000). These guidelines are widely recognised and applied for sediment basin design across South East Queensland.

Silt Fences

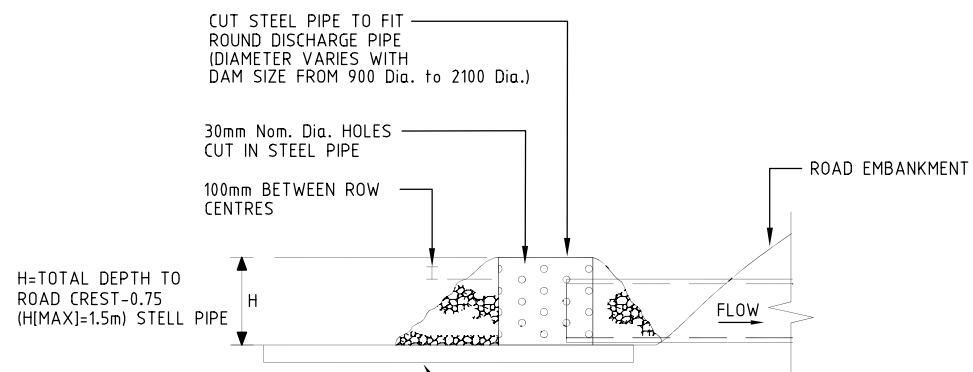
Silt fences, can have limited effectiveness on large construction sites. They are primarily intended to trap sediments in overland flow from small catchments. Silt fences will be placed parallel to contours in small areas of overland flow. Silt fences are also proposed along the edges of cleared areas where other forms of sediment control are not practical due to topographic constraints.

The following factors are important for the effectiveness of silt fences:

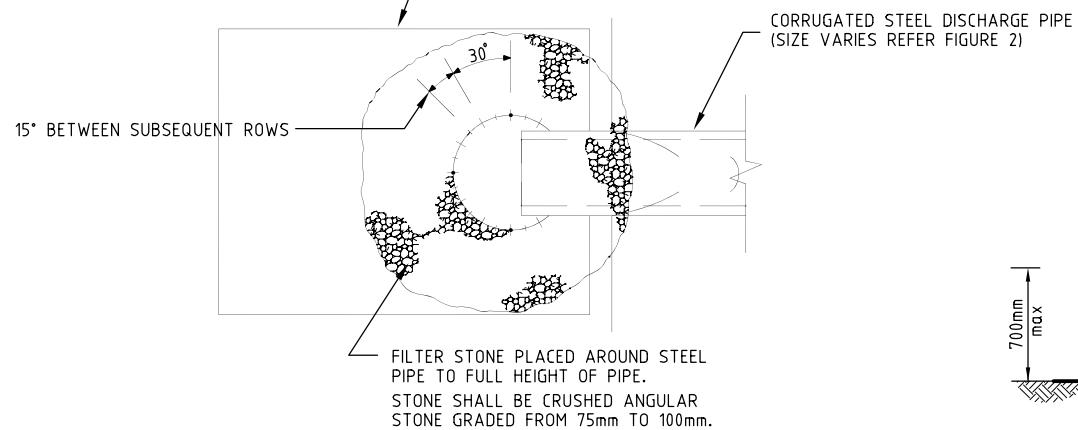
- adequate anchoring of the silt fence fabric into the ground to prevent undermining of the fabric by surface water flow;
- appropriate spacing of support posts to prevent toppling of the structure under heavy water flows and / or sediment accumulations; and
- regular maintenance of sediment fences to repair fabric, support posts and to remove accumulated sediment.

Figure 2 demonstrates the requirements for a typical silt fence installation.

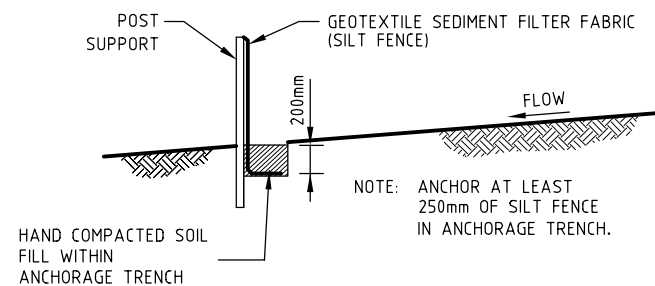
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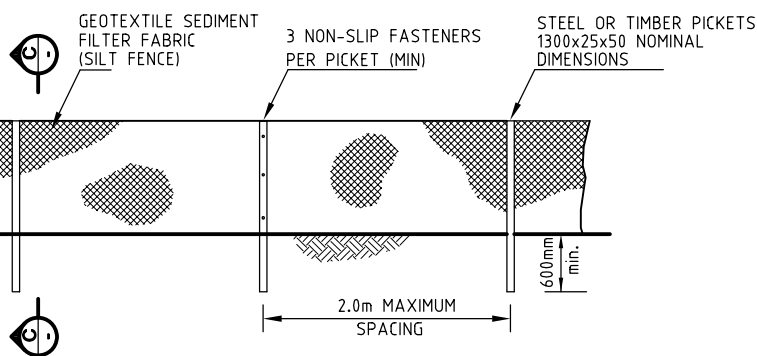
1 RENO[®] MATTRESS @2M x 3M x 150MM



TEMPORARY SEDIMENT TRAP AT DRAIN CROSSING UNDER ROAD / ACCESS TRACK

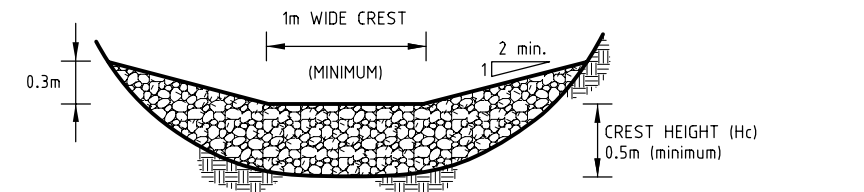


SECTION C

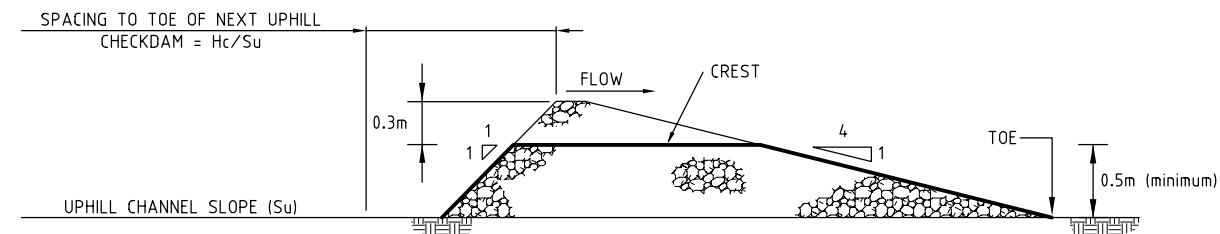


SILT FENCE TYPICAL DETAIL - PROFILE

NOTE:
WIRE OR STEEL MESH MIGHT BE REQUIRED TO SUPPORT SILT FENCE FABRIC IN AREAS OF CONCENTRATED FLOW

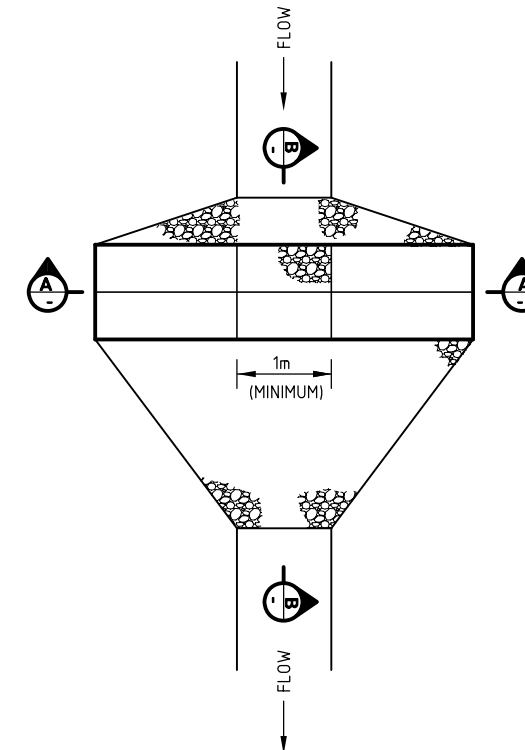


CROSS SECTION A



NOTE: ALL ROCKS TO BE HARD ANGULAR ROCK OF SIZE RANGE 20 TO 25kg NOMINAL MASS. NO ROCKS LESS THAN 15kg.

CROSS SECTION B



ROCK CHECK DAM DETAIL - PLAN VIEW

Client 	Project HINZE DAM STAGE 3 UPGRADE		Title TEMPORARY SEDIMENT TRAP AT DRAIN CROSSING UNDER ROAD/ACCESS TRACK CROSS SECTIONS AND SILT FENCE DETAIL	
	Drawn: TN	Approved: MFH	Date: 03-05-2007	Rev. A
 	Job No.: 4262 6000	File No.: 42626000-g-034.dwg	Figure: 13.2	A3

Surface Stabilisation

After earthworks and other soil-disturbing activities are completed in an area, stabilisation should be undertaken as soon as practical to reduce the potential for soil erosion. Soil surface stabilisation will be provided with erosion mat, hydro-mulch or natural mulch.

The operational requirements of active stockpiles will limit practical stabilisation. If a small stockpile or a substantial part (say 5000 square metres or more) of a large stockpile will remain undisturbed for more than sixty days, that stockpile, or portion thereof should be stabilised.

Erosion mat should be used on the cleared areas where access limits the potential to apply mulch. Matting will be placed across the slope and parallel to contours. Intimate contact between the erosion mat product and the soil is crucial to the effectiveness of the product and the matting will need to be held in place with steel U-shaped pins.

Hydro-mulch is typically wood / cellulose fibre mulch and water, often in combination with fertilizer, seed, and bonding agents (paper shall not be used in the mulch product mixture). The application rate of wood / cellulose fibre should be dense enough to completely cover the soil surface. A typical application of straw mulch would equate to about 250 to 300 bales (approximately 20 kg/bale) of straw, 25 000 to 30 000 litres of water and about 2000 to 2500 litres of bitumen tack per hectare of area treated. Hydro-mulch will be primarily used on disturbed areas that require stabilisation and that are easily accessed by truck and trailer mounted hydro-mulching equipment. Hydro-mulch is also applicable on flat areas that will not be subjected to further traffic, including foot traffic. Use of a hardy native seed mix that will germinate as water becomes available through rain events is recommended.

Diversion Drains and Bunds

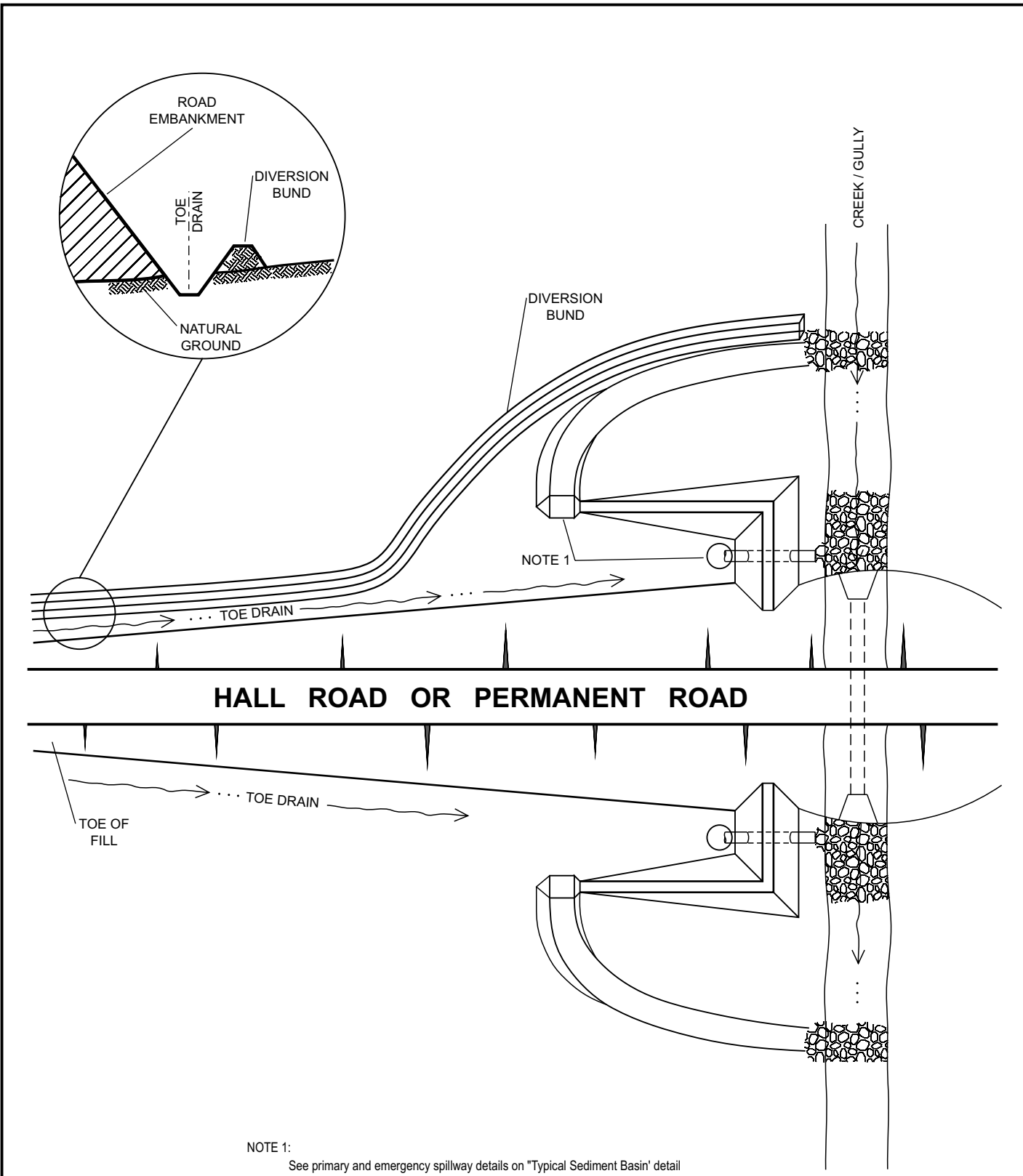
Diversion drains will be effective for:

- diversion of clean surface runoff from undisturbed areas around active construction areas or rehabilitated areas;
- diversion of disturbed area surface runoff into sediment basins; and,
- division of large catchments into smaller sub-catchments; thus, reducing accumulative peak runoff and erosion potential.

Diversion drains and bunds will be oriented slightly skewed downhill from contour lines. An illustration of a typical diversion drain / bund is presented on **Figure 3**.

Diversion drains will be designed using the following criteria:





- sufficient flow capacity to contain 1 in 10 AEP storm event runoff; and
- geometry to ensure that the peak 1 in 10 AEP storm flow velocity in the drain is less than 1.5 m/s to limit the potential for erosion of the drain. Wide, shallow drains are preferred.



NOTE 1:
See primary and emergency spillway details on "Typical Sediment Basin" detail

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Client 	Project HINZE DAM STAGE 3 UPGRADE	Title ROADSIDE SEDIMENT BASIN AND DIVERSION DRAINS		
  	Drawn: TN Job No.: 4262 6000	Approved: MFH File No. 42626000-g-031.cdr	Date: 03-05-2007 Figure: 13.3	Rev. A A4

Rock Check Dams

The primary objective of rock check dams is to dissipate the kinetic energy of flowing water. Check dams will be used in drainage channels that are susceptible to erosion. The maximum spacing of check dams will be 50 m or less. The crest of each dam will be designed to be lower than the edges of the dam at the batters of the drain to prevent flow around the structures.

Periodic removal of sediment deposits (> 150mm deep) accumulating upstream of the rock check dams will be required.

Where drains have relatively steep longitudinal slopes (> 10%) rock check dams will not be sufficient, and rock lining of the drainage channel will be required.

An illustration of a typical rock check dam is presented in **Figure 2**.

Drain Crossing Sediment Traps

Several permanent and temporary roads and access tracks will traverse the Hinze Dam construction site. These roads and tracks will require crossings over drainage lines or where there is potential to trap surface drainage. The upstream end of such drainage crossings that include disturbed areas in their catchments are opportune locations for sediment traps for coarse sediments. The erosion and sediment control plan includes sediment traps at each road and access track crossing over drainage channels with upstream disturbed catchment areas.

Drain crossing sediment traps are similar in function to the outlet structures of Type C (dry) sediment basins, as described in the BCC sediment basin guideline (February 2000). The exception to the BCC guideline recommendations is that anti-vortex / trash rack structures will not be fitted to the tops of the risers.

Each sediment trap shall comprise:

- a base of geotextile fabric overlaid by 100 mm (nominal diameter) stone;
- a perforated metal pipe with a diameter at least 1.5-times that of the drainage culvert under the respective road /access track; and
- rock around the edge of the perforated riser.

The height of the riser shall extend approximately 300 mm above the top of the inlet of the drainage culvert, and not less than 500 mm below the lowest point of the road. An illustration of a typical drain crossing sediment trap is presented in **Figure 2**.

Sediment Basins

Sediment basins will provide final treatment for sediment removal from storm water prior to discharge. An illustration of a typical sediment basin is presented in **Figure 4**.

Two types sediment basins (dry basins – Type “C” and wet basins – Types “D” and “F”) can be used depending on soils types in the disturbed catchments draining to the basins.

The Type “C” basin are primarily limited to capture sediments from coarse sediments (<33% passing 0.02 mm). The Type “C” basins remove sediments in a relatively short period of time with physical settling as water flows through the basin. These may be suitable for areas around the quarry, workshops, laydown areas, and concrete batch plant stockpiles.

The Type “D” and “F” basins are designed for dispersive soils or fine-grained soils (<33% passing 0.02 mm). These basins rely on capturing and holding runoff for sufficient time to allow settling of sediments, and Type “F” basins specifically require addition of flocculants to enhance settling. The Type “F” basins comprise a settling zone storage to provide adequate storage time and settling depth for sediments to be removed. Beneath the settling zone, sufficient storage is required for sediment accumulation related to the planned periods of sediment basin cleanout (typically 2 to 3 months depending on frequency and magnitude of storms). Soils particles size distribution data for the site are currently limited to the proposed clay borrow area. Further testing is required to characterise soils in other areas of the site such as near the saddle dam and in areas downstream of the main embankment. At this preliminary design stage, it has been assumed that Type “F” sediment basins will be required for these areas. In some areas topography will limit the practical size of sediment basins, and in such cases, a basin of the greatest practical capacity that fits into the available area should be constructed.

Key design criteria for the sediment basins are:

- settling zone storage volume equal to the volume of runoff from a 1 year ARI – 24 hour rainfall storm;
- sediment storage capacity equal to at least half the settling zone storage capacity, and with a minimum depth of 0.6 metres;
- standpipe and primary discharge outlet with its crest at the top of the settling zone (0.6 m above the sediment storage zone);
- minimum vertical separation from the crest of the primary flow outlet to the crest of the emergency spillway of 0.3 m;
- emergency overflow spillway with sufficient capacity and erosion protection to safely pass the peak flow from a 100-year ARI storm (peak flow to be determined for storm duration equal to the time of concentration for the catchment);
- freeboard depth for spillway to be the maximum of 0.3 m above the 100 year storm depth of flow over the spillway or at least 0.75 m above the crest of the overflow spillway;
- basin embankment crest width of 3 m for ease of maintenance and access; and
- maximum internal and external batters of the basin embankment at a slope of 2 (horizontal) to 1 (vertical).

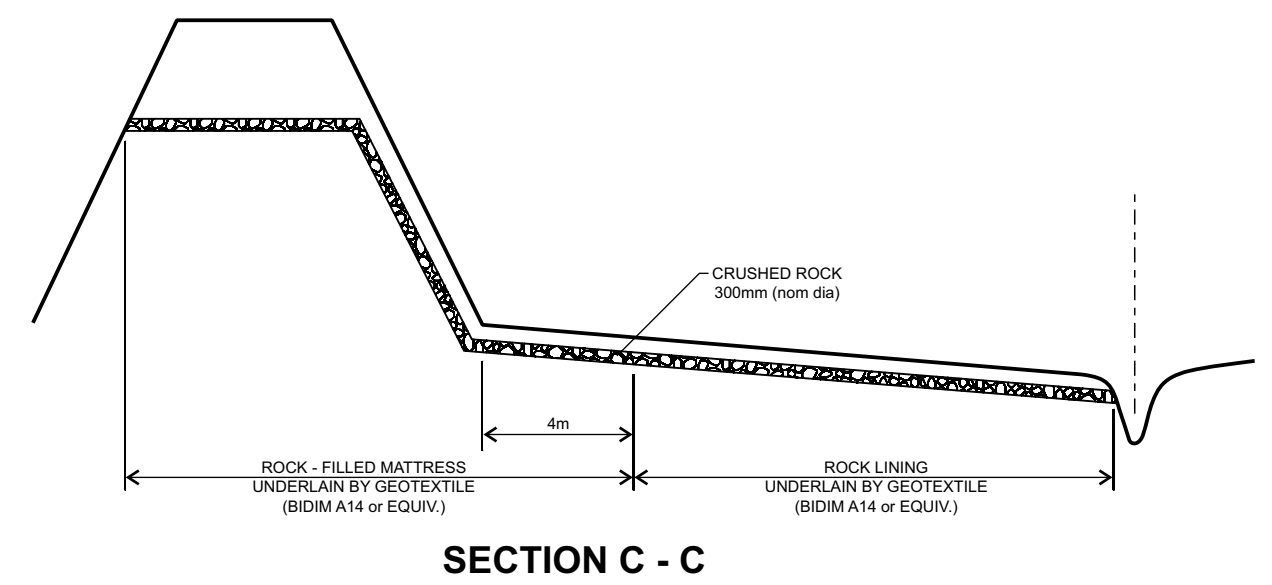
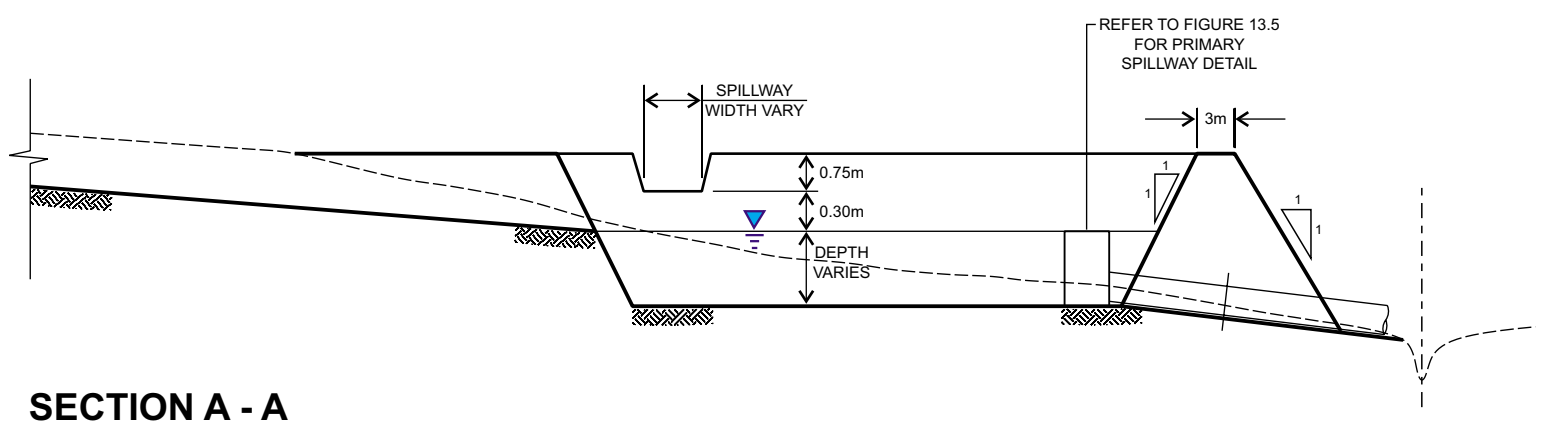
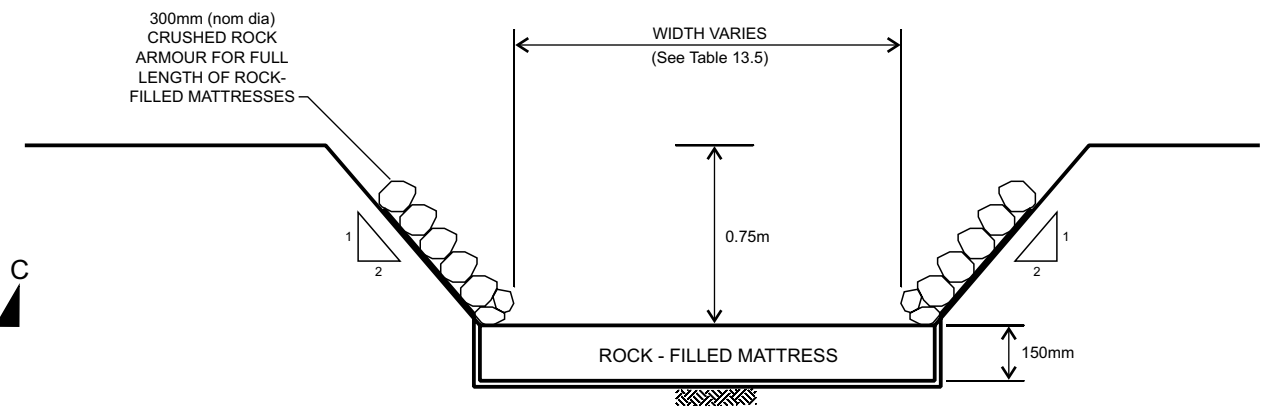
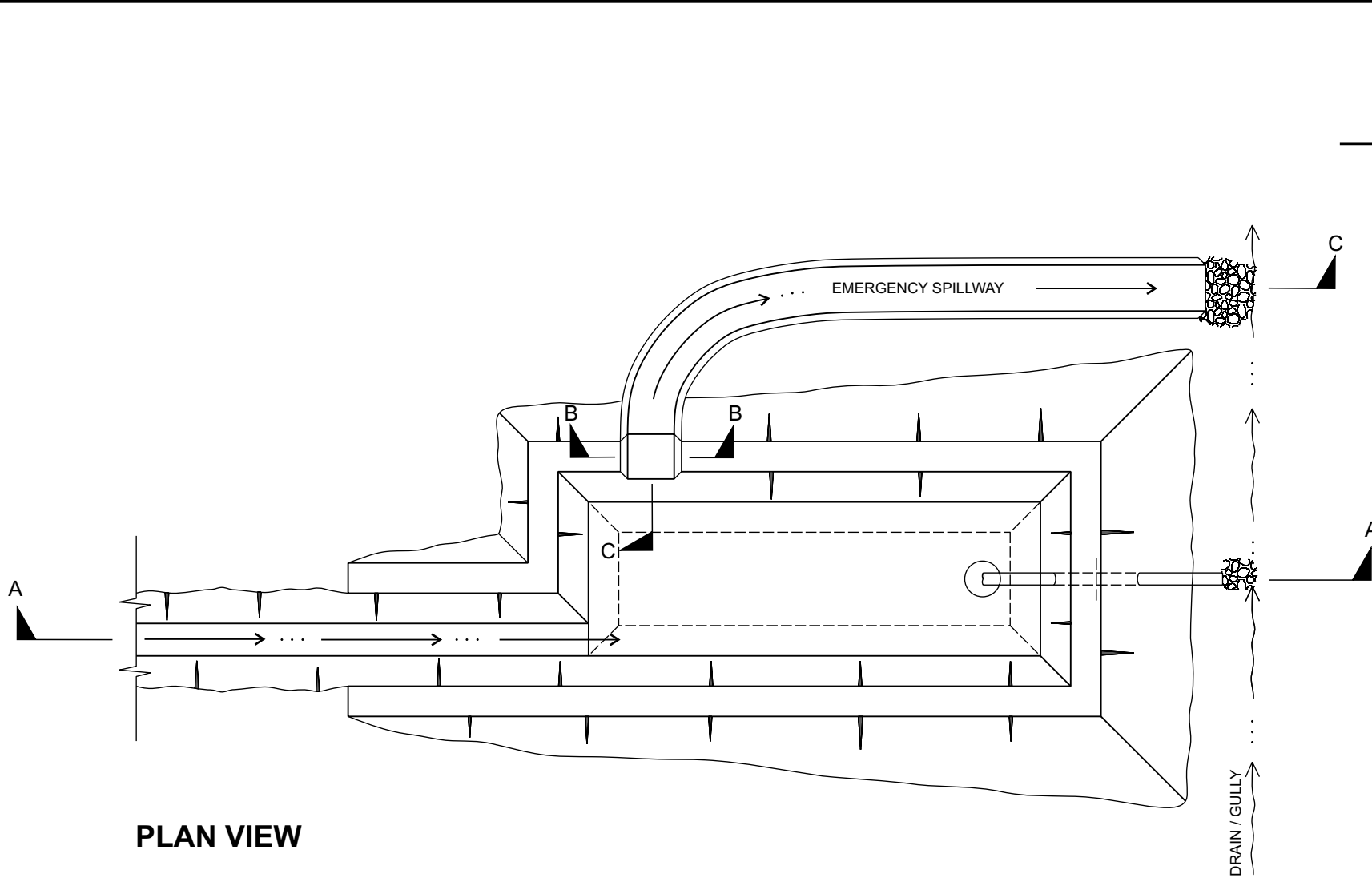
The emergency spillway for each sediment basin will typically comprise a broad-crested weir and discharge channel. The crest of each spillway will be at least 0.3 metres above the crest of the riser. A concept drawing of a typical emergency spillway is presented in **Figure 4**.

Where practical the emergency spillways should be excavated in natural ground. Where this is not practical, the emergency spillways can be constructed over fill with additional armour protection against scour in the form of geotextile overlaid by crushed aggregate and rock-filled mattresses. Energy dissipation (rock-filled gabions) and scour protection (rock-filled mattresses) will also be required at the downstream end of each spillway.

The primary outlet (discharge structure) for each sediment basin will comprise a vertical steel pipe (riser) set in a concrete base with a horizontal outlet pipe supported by a concrete base. The top of the concrete base will be approximately flush with the floor of the sediment basin. The top of the riser will be at the level equivalent to the calculated depth of sediment storage and design storm depth. A concept drawing of the typical primary discharge outlets is presented in **Figure 5**.



Depending on the detailed design arrangement of the Type “C” basins, baffles may be required within the basin. Baffles can be constructed of pickets / posts and silt fence fabric and should cover a depth from the sediment basin floor to the crest of the emergency spillway.

Flocculation will be required for Type "F" basins where dispersive / colloidal soils occur in the catchment draining to the basin. Dispersive soils do not easily settle and require intervention to enhance settlement of the sediments from the water by flocculation. Suitable flocculant agents and application rates will be determined in detailed design.

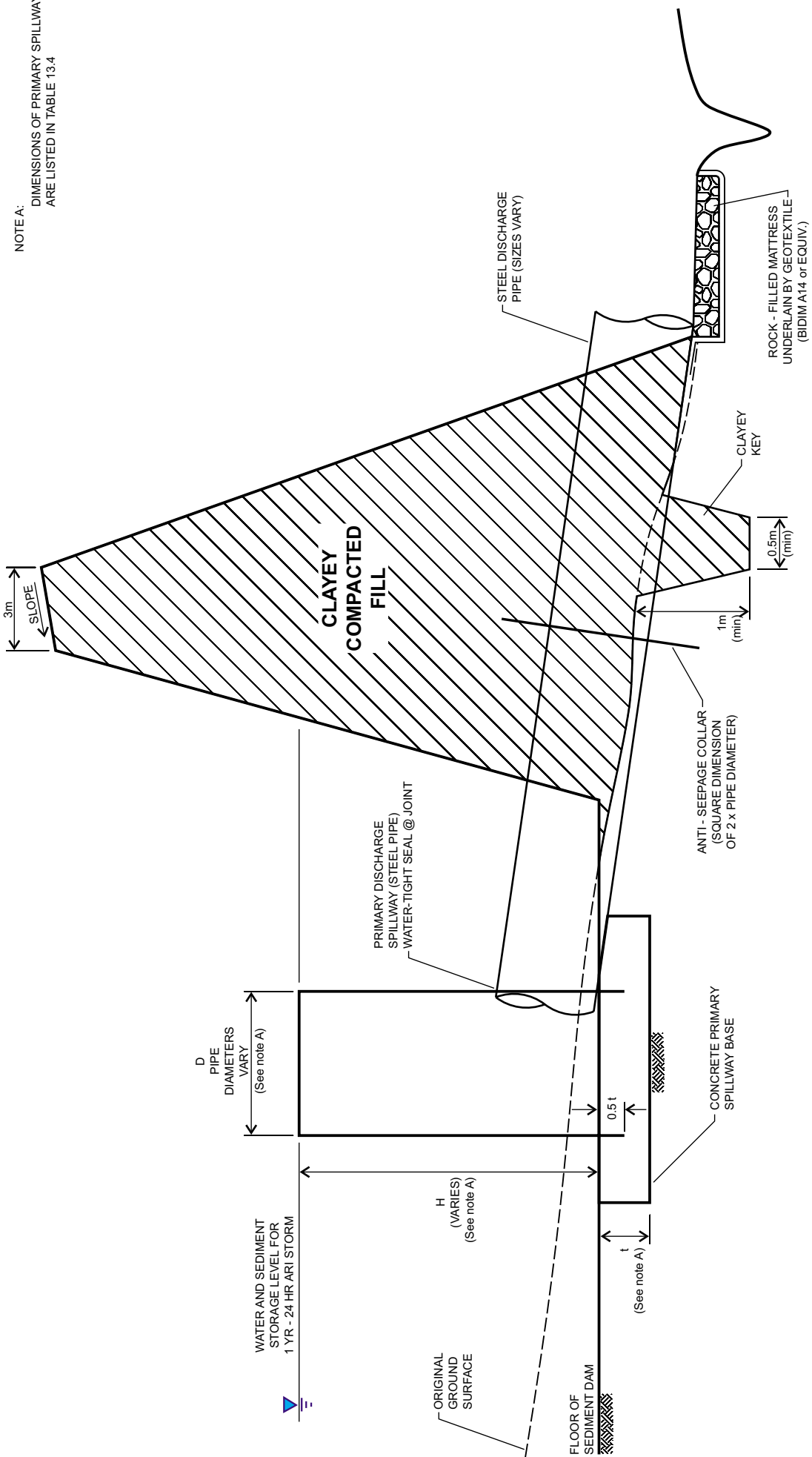


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Client  Gold Coast City Council	Project HINZE DAM STAGE 3 UPGRADE		Title TYPICAL SEDIMENT BASIN	
	Drawn: TN Job No.: 4262 6000	Approved: MFH File No. 42626000-g-032.cdr	Date: 03-05-2007	Figure: 13.4
			Rev. A A3	

NOTE A:
DIMENSIONS OF PRIMARY SPILLWAY
ARE LISTED IN TABLE 13.4



Client			Project HINZE DAM STAGE 3 UPGRADE	Title SEDIMENT BASIN PRIMARY SPILLWAY DETAIL	Rev. A
	Drawn: TN Approved: MFH Date: 03-05-2007	File No. 4262 6000-g-033.cdr Figure: 13.5			A4

Floating Silt Curtains

Floating silt curtains will be required in the Hinze Dam reservoir (Advancetown Lake) to limit the potential for possible turbid water to enter the intake towers when water is drawn off for on-going water supply operations. The silt curtains will not be the only means to protect the reservoir water quality from reservoir clearing operations, embankment works, and quarry development. The silt curtains are intended to provide additional “downstream” protection that supplements ESC measures that are to be implemented to minimise the potential for sediment to enter the reservoir (i.e. supplement to additional at-source controls).

The silt curtains will typically hang from floats or floating booms at water surface to a maximum depth of about 6m or to the lake bottom (in shallower areas). Weights may be required to ensure that curtains are adequately extended to the required depth below the surface. Anchoring or tethering of the curtains may also be required to ensure that the curtain position can be maintained and do not move excessively in windy conditions. Curtains will not be placed in areas accessible to the general public.

The minimum extent of silt curtains should be provided in the following areas:

- around the upper and lower water intake towers;
- parallel to the shore line near the eastern saddle dam extension works and tied to the extending to the shoreline at each end of the curtain; and
- parallel to the shore line adjacent to the rock quarries and tied to the extending to the shoreline at each end of the curtain.

Turbidity monitoring in the reservoir on both sides of the silt curtain will be used to monitor the effectiveness of the silt curtains to protect the intake water quality. If impacts from the upper reservoir clearing activities are shown in reservoir water quality monitoring to potentially affect the water supply quality (to the extent that water treatment may be compromised), additional lines of silt curtains may be required as a contingency measure. Contingency silt curtains should be placed in strategic areas of the eastern and/or western reaches of the reservoir to contain turbid water from the areas contributing to elevated sediment and turbidity.

Vegetated Filter Strips (Green Strips)

Vegetated filter strips will be used as the primary defence against sediment movement from the reservoir clearing activities. Vegetated filter strips can typically be either constructed (planted turf or other groundcover) or natural groundcover vegetation that is retained. Vegetated filter strips are now widely used in urban development, agriculture, and some mine rehabilitation projects and have been shown to be inexpensive, practical, effective for erosion mitigation, and require minimal maintenance.

Vegetated filter strips protect against erosion and filter sediment by:

- protecting the soil surface against erosion from direct rainfall impact;
- “reinforcing” a strip of the soil surface and providing a “cut-off” to mitigate the growth of gully and rill erosion;
- slowing down of shallow overland flow velocities and dissipating flow energy; and
- physical capture of sediments from upslope runoff.

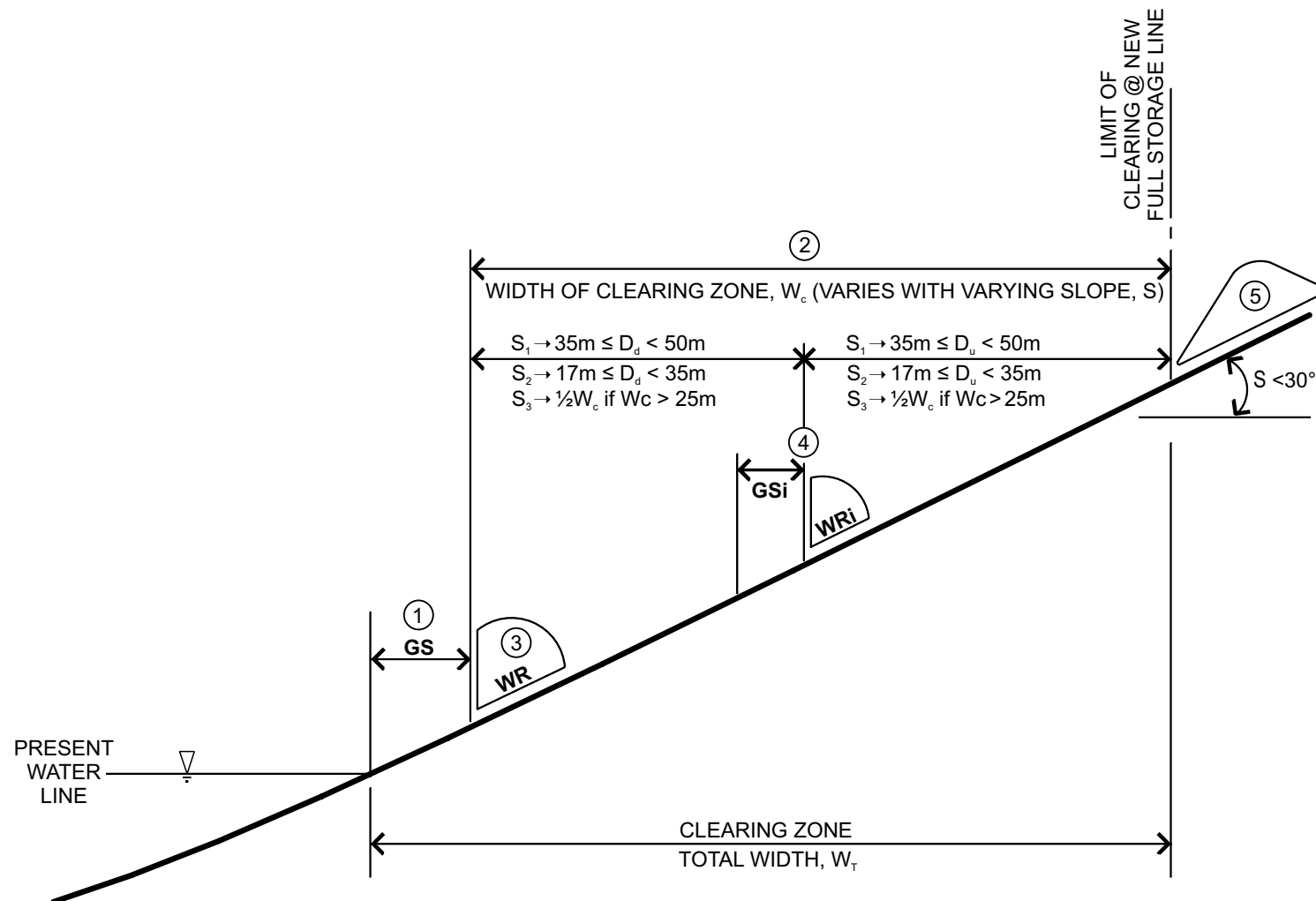
Not all of the inundation area for the Stage 3 Full Supply Level will be cleared. Various ecological factors and visual amenity factors have been considered to optimise the extent of reservoir clearing. The extent and basis of the proposed reservoir clearing extents will be described in the EIS. From initial planning (*Vegetation Clearing Plan*, dated 23 April 2007), the total area of reservoir clearing comprises approximately 300 ha extending around

approximately 420 km of the reservoir shoreline. The width of clearing up the slope to the Stage 3 Full Supply Level varies from about 17 m to more than 100 m.

For the Hinze Dam reservoir clearing between the existing Stage 2 Full Supply Level and proposed Stage 3 Full Supply Level, vegetated filter strips will comprise strips of natural groundcover vegetation to be retained and protected from the clearing activities. Groundcover, small shrubs and small trees will be retained undisturbed in the strips, with the exception that trees greater than 100 mm in diameter at DBH shall be cut at a height of no greater than one metre above ground level. Machinery and other equipment shall be prevented from operating on the strips. Occasional crossing over of the strips by vehicles and machinery may be required for access and material handling, and these occurrences should be minimised to protect the vegetated filter strip. The strips will be approximately 3m wide and positioned parallel to the contour near the existing Stage 2 Full Supply Level and midway along the slope up to the Stage 3 Full Supply Level. A conceptual shoreline section of the reservoir clearing area showing the preferred location of filter strips is shown on **Figure 6**.

NOTE:

- ① 3m UNDISTURBED GREEN STRIP (GS) AS SEDIMENT FILTER AT WATER'S EDGE.
- ② CLEAR VEGETATION OF GREATER DIAMETER THAN 100mm @ 1.3m ABOVE GROUND SURFACE (DBH), OR AS OTHERWISE SPECIFIED, BETWEEN PRESENT WATER LINE AND NEW FULL STORAGE LINE. LEAVE INTERMEDIATE GREEN STRIP, GSi, (AS IN NOTE 1) AND INTERMEDIATE WINDROWS, WRi, SPACED AS DESCRIBED IN NOTE 4.
- ③ DEPOSIT WINDROW OF CLEARED VEGETATION TO A NOMINAL HEIGHT OF 1m. MAXIMUM VEGETATION SIZE TO BE 150mm DIAMETER @ DBH. LAY VEGETATION PARALLEL TO CONTOUR. COMPACT VEGETATION TO MAXIMISE CONTACT BETWEEN VEGETATION AND GROUND SURFACE.
- ④ DEVELOP AN INTERMEDIATE GREEN STRIP AND WINDROW BETWEEN THE EXISTING WATER LINE AND THE NEW FULL STORAGE LINE. TO THE EXTENT PRACTICAL, GSiS AND WRiS SHOULD BE EVENLY SPACED BETWEEN THE PRESENT WATER LINE AND THE NEW FULL STORAGE LINE.
- ⑤ CLEARED VEGETATION THAT IS NOT USED FOR WINDROW SEDIMENT FILTERS SHALL BE REMOVED FROM THE CLEARING ZONE. THE VEGETATION SHOULD BE PLACED ON OTHERWISE UNDISTURBED GROUND UP GRADIENT OF THE LIMIT OF CLEARING.
- ⑥ TREES THAT ARE TOO LARGE TO BE PRACTICALLY REMOVED FROM THE CLEARING ZONE SHALL BE FELLED AND STRIPPED OF BRANCHES. STRIPPED BRANCHES AND THE UPPER TRUNK PORTIONS THAT CAN BE READILY HANDLED BY CLEARING EQUIPMENT SHALL BE REMOVED FROM THE CLEARING ZONE TO UP GRADIENT OF THE CLEARING ZONE. REMAINING TRUNKS SHALL REMAIN IN THE CLEARING ZONE AND SHALL BE ORIENTED PARALLEL WITH CONTOURS.
- ⑦ TO THE EXTENT PRACTICAL, VEHICLE AND EQUIPMENT MOVEMENTS SHALL OCCUR PARALLEL TO CONTOURS. MOVEMENTS ACROSS CONTOURS SHALL OCCUR ONLY AS NECESSARY TO COMPLETE THE WORKS.
- ⑧ ANTICIPATED SLOPE RANGES THROUGH THE CLEARING ZONE ARE AS FOLLOW:
 $0^\circ \leq S_1 < 10^\circ$; $10^\circ \leq S_2 < 20^\circ$; $20^\circ \leq S_3 < 30^\circ$



NOTE: DRAWING NOT TO SCALE - DIAGRAMATIC SKETCH ONLY.

Client 	Project HINZE DAM STAGE 3 UPGRADE		Title TYPICAL LAKE EDGE CLEARING SCHEMATIC	
	Drawn: TN Job No.: 4262 6000	Approved: MFH File No. 42626000-g-035.cdr	Date: 04-05-2007	Figure: 13.6

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Windrow Sediment Filters

Stockpiled windrows of selected cleared vegetation will be placed to supplement vegetated filter strips. Smaller trees and shrubs from the vegetation clearing will be salvaged and shaped into bunds (windrows) parallel and immediately adjacent to, and uphill of, the vegetated filter strips. Stockpiled vegetation should be placed firmly to encourage intimate contact between the ground and the vegetation. The height of the vegetation windrows should not exceed approximately 1.5 m and the width of the windrow should be about 2.5 m to 3 m wide.

The windrows will supplement the function of the vegetated filter strips by assisting to slow flow velocities, dissipate energy, and capture coarse sediment. This function will also assist to mitigate excessive “sediment loading” onto the vegetated filter strips, enhance the vegetated filter strip function to capture finer sediment, and protect the vegetated filter strip against erosion from upslope runoff.

The proposed typical arrangement of vegetation windrows and vegetated filter strips to be used around the shoreline of the reservoir clearing area is presented in **Figure 6**.

Reservoir Clearing Erosion and Sediment Control

The preliminary erosion and sediment control strategy for reservoir clearing is summarised in the **Table 1** below. Further development of this strategy will be undertaken to account for the findings of the EIS studies, further assessment of soils around the reservoir shoreline, and further development of the overall reservoir clearing plan.

Table 1: Summary Reservoir Clearing ESC Strategy

Context and Risks	Broad areas to be cleared poses risk to possible large scale diffuse source sediment load into reservoir. Variable soil types. Steep slope areas will pose higher risk of erosion. Dispersive soils will contribute to elevated turbidity. Reservoir water quality (turbidity) needs to be protected for water supply to levels commensurate with treatment plant performance.
Constraints	Spatial extents not practical for sediment fences. Access constraints limits application of ESC controls requiring importation of significant quantities of materials (e.g. rock). Preference to minimise vehicle numbers and movements required for reservoir clearing activities, as increased traffic will increase erosion and sediment risks. Time required for reservoir clearing activities will need to be planned within overall construction timeframe.
Opportunities	Utilising vegetation (retention and reuse of cleared vegetation) for ESC controls. Periods of dry weather and low water storage levels. Optimised reservoir clearing extents – not all vegetation will need to be cleared.
Operational Controls	Strategic timing of vegetation clearing during extended periods of dry weather. Minimise vehicle and machinery movements into and out of reservoir clearing areas. Avoid clearing steep slopes. Minimise disturbance to topsoil cover.
Structural Controls	Retained vegetation filter strips parallel to contour. Salvaged vegetation windrows upslope of vegetation filter strips. Silt curtains around upper and lower intake towers.
Monitoring	Visual monitoring of integrity of vegetation filter strips and vegetation windrows. Vehicle and machinery movement into working areas. Turbidity monitoring in reservoir – spatially across reservoir area and both sides of intake tower silt curtains.
Contingencies	Additional silt curtains in strategic locations of eastern and western reaches of reservoir in locations identified to pose risk to intake tower water quality. Reinstate or install additional vegetation windrows (or silt fences if necessary) in localised areas showing evidence of persistent or excessive erosion. Temporary perennial grass seeding where necessary to stabilise topsoil cover. On-going optimisation and revision of reservoir clearing plan taking account of soil types, slopes, and progressive results of water quality monitoring.

	<p>Rock check dams may be required in some localised gullies into the reservoir if monitoring identified erosion from concentrated flow.</p> <p>Intensify vehicular and machinery access controls.</p>
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Embankment Works Erosion and Sediment Control

The preliminary erosion and sediment control strategy for embankment works is summarised in **Table 2**. Further development of this strategy will be undertaken to account for the detailed design layouts and further development of the construction plan.

Table 2: Summary Embankment Works ESC Strategy

Context and Risks	<p>Main embankment construction area will drain to downstream side of dam wall and poses minimal risk to reservoir water quality.</p> <p>Saddle dam extension and eastern saddle dam embankment will drain into the reservoir (west) and towards a natural tributary gully of the Nerang River (east). These works will pose potential risk to reservoir water quality and to downstream water quality (via the tributary gully).</p> <p>Eastern saddle dam requires install of seepage drainage system and vegetation clearing on a relatively steep area.</p>
Constraints	<p>Limited space available for land based ESC controls on the reservoir side of the eastern saddle dam embankment works.</p> <p>Steep areas and topography on the eastern side of the saddle dam extension limit the types of ESC controls that can be applied.</p>
Opportunities	<p>Existing recreation area on eastern side of reservoir near saddle dam to accommodate land based ESC controls.</p>
Operational Controls	<p>Where practical, plan works to be undertaken in extended periods of dry weather.</p> <p>Ensure ESC controls implemented prior to, or where necessary immediately after disturbance of new areas.</p> <p>On-going monitoring and ensure ESC controls are appropriately adapted and matched to suit changes in construction work schedule, layouts, designs.</p> <p>Ensure progressive raising of the main embankment crest promotes drainage to the downstream side of the dam.</p>
Structural Controls	<p>Sediment basin downstream of main embankment toe.</p> <p>Silt fences on reservoir side, downslope of saddle dam extension.</p> <p>Sediment basin in existing recreation area to contain runoff from saddle dam works.</p> <p>Floating silt curtains in reservoir parallel to shoreline around saddle dam working area.</p> <p>Surface stabilisation and rock check dams on western side of saddle dam in areas where seepage drainage works are required.</p> <p>Drainage works to ensure all disturbed areas are “captured” by the above ESC controls.</p>
Monitoring	<p>Record initial installation of ESC controls with photographic record upon installation.</p> <p>Visual monitoring of integrity of all ESC controls periodically and immediately after rainfall events (>5mm/day). Proforma and photographic recording of condition and performance of ESC controls. Deficiencies to be noted and reported to construction management team for rectification.</p> <p>Sediment accumulation in sediment basins and silt fences.</p> <p>Turbidity monitoring in reservoir and downstream waterways.</p>
Contingencies	<p>Rectify and intensify ESC controls where necessary.</p> <p>Install additional line of floating silt curtain to contain saddle dam working area.</p> <p>Cleanout sediment basins and silt fences. Enlarge basins if necessary. Install additional silt fences as necessary.</p> <p>Intensify spatial extents and frequency of water quality monitoring in the event of persistent non-conformances.</p>

Rock Quarry Erosion and Sediment Control

The preliminary erosion and sediment control strategy for quarry works is summarised in **Table 3**. Further development of this strategy will be undertaken to account for the detailed quarry layouts and further development of the construction plan and proposed final recreation area design.

Table 3: Summary Quarry Area ESC Strategy

Context and Risks	Existing quarry area is connected to main reservoir when storage level is high. Sediment loss from quarry area poses risk to intake tower water quality.
Constraints	Quarry activities will continually disturb surfaces in the quarry area. Quarry area will enlarge as rock material and aggregate is extracted. Steep slopes above quarry faces. Operational H&S controls.
Opportunities	Potential to isolate quarry area from reservoir with bunds.
Operational Controls	Continually monitor and adapt quarry area ESC plan to match quarry development. Monitor water accumulating in the quarry area and adapt water transfers to external sediment ponds where necessary. Develop quarry to promote internal drainage into the quarry area. Ensure adequate pumps available and function for water transfers if necessary.
Structural Controls	Install bunds to isolate quarry area from main reservoir. Ensure haul roads into / out of quarry area have drainage that prevents direct inflow into reservoir. Collection drains around southern end of quarry to direct disturbed area runoff into quarry area. Sediment dams in quarry area, or collection sumps for water transfer to external sediment dams. Silt fences between quarry area and main reservoir. Floating silt curtains in reservoir around outlets of sediment dams. Diversion drains to direct clean runoff area directly into reservoir. Collection drains to direct dirty water runoff to sediment dams.
Monitoring	Record initial installation of ESC controls with photographic record upon installation. Visual monitoring of integrity of all ESC controls periodically and immediately after rainfall events (>5mm/day). Proforma and photographic recording of condition and performance of ESC controls. Deficiencies to be noted and reported to construction management team for rectification. Sediment accumulation in sediment basins and silt fences. Turbidity monitoring in reservoir.
Contingencies	Rectify and intensify ESC controls where necessary. Install additional line of floating silt curtain to contain quarry working area. Cleanout sediment basins and silt fences. Enlarge basins if necessary. Install additional silt fences as necessary. Intensify spatial extents and frequency of water quality monitoring in the event of persistent non-conformances.

Haul Roads, Stockpiles, and Laydown Areas Erosion and Sediment Control

The preliminary erosion and sediment control strategy for construction facilities (haul roads, stockpile areas and laydown areas) is summarised in **Table 4**. Further development of this strategy will be undertaken to account for the detailed construction haul road and working layouts and further development of the construction plan.

Table 4: Summary Construction Facilities ESC Strategy

Context and Risks	Dispersed locations of construction working areas, requires all areas to be identified and ESC plans prepared. Haul roads extending across the work site can collect excessive catchments (drainage
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	volumes) and if not adequately planned, pose potential risk of failure of ESC devices. Fishway and weir construction within the Nerang River channel.
Constraints	Relatively steep slopes on the western side of the Nerang River channel. Available space within the CID boundary. Proximity of some working areas to Nerang River channel limits space available for sediment loss intervention.
Opportunities	Isolation of some work areas provides opportunities for compact contained ESC control measures. Utilise haul roads to optimise drainage layout, clean water diversions, and installation of ESC controls at practical low points. Cofferdams required for fishway construction can be used to contain runoff from the fishway working area.
Operational Controls	Continually monitor and adapt each construction area ESC plan to match construction development and progress. Addition of flocculation agents to type "F" sediment basins (where applicable) after each rainfall event (>5mm /day). Apply surface stabilisation to stockpiles not in active use.
Structural Controls	Clean water diversion drains upslope of stockpiles. Dirty water collection drains directed to sediment basins downslope of stockpiles. Silt fences downslope of stockpiles (where not draining to a sediment basin). Silt fences downslope of localised compact disturbed areas where application of sediment basins and rock check dams is not practical. Sediment basins (Type "C", "D", or "F") as required to match soil types and extent of catchment areas. Sediment trap drain crossings at low points along haul roads. Minimise length of longitudinal drainage along sides of haul roads. Rock check dams in drainage gullies downstream of disturbed areas. Shake down grids, or similar devices, at construction site vehicle access points to minimise movement of sediments on vehicles leaving the construction site. Cofferdams upstream and downstream of the fishway working area to contain runoff. Collected runoff should be pumped to an external sediment basin.
Monitoring	Record initial installation of ESC controls with photographic record upon installation. Visual monitoring of integrity of all ESC controls periodically and immediately after rainfall events (>5mm/day). Proforma and photographic recording of condition and performance of ESC controls. Deficiencies to be noted and reported to construction management team for rectification. Condition of stockpiles, upslope diversions, and downslope containment systems. Sediment accumulation in sediment basins and silt fences. Turbidity monitoring in Nerang River and tributary gullies.
Contingencies	Rectify and intensify ESC controls where necessary. Cleanout sediment basins and silt fences. Enlarge basins if necessary. Install additional silt fences as necessary. Intensify spatial extents and frequency of water quality monitoring in the event of persistent non-conformances. Redesign of haul roads and/or haul road drainage where identified insufficient capacity, erosion evidence, or inadequate sediment containment.

Clay Borrow Area Erosion and Sediment Control

The preliminary erosion and sediment control strategy for the clay borrow area is summarised in **Table 5**. Further development of this strategy will be undertaken to account for further geotechnical investigation, the optimisation of the borrow layout and further development of the construction plan.

Table 5: Summary Clay Borrow Area ESC Strategy

Context and Risks	The clay borrow area is located on relatively steep ground and a significant drainage tributary of the Nerang River is close to the eastern side of the borrow pit. The clay soils will
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	contain fine grained sediments that would pose risk to downstream water quality if adequate controls are not implemented.
Constraints	<p>Steep slopes may require temporary stabilisation works until the final landform rehabilitation is developed. Steep slopes may also limit potential for drainage works.</p> <p>Potential need to maintain several active working faces to achieve an appropriate blend of clay materials to meet engineering specifications for the embankment core.</p> <p>Need to maintain, free draining and dry working conditions within the pit to maintain clay production rates.</p>
Opportunities	<p>If practical, could prioritise clay excavation in the lowest area to create a sump for runoff collection and treatment.</p> <p>Develop the clay borrow pit as an internal draining landform to a sump providing that a dry working area in the broader pit can be maintained. Bunding along the low edges of the borrow pit could assist to contain runoff within the borrow pit.</p> <p>Develop perimeter batters of clay borrow pit to final landform early (if practical) and apply surface stabilisation to minimise sediment loss from batters during construction.</p>
Operational Controls	<p>Continually monitor and adapt each construction area ESC plan to match borrow pit development and progress.</p> <p>Addition of flocculation agents to type "F" sediment basins after each rainfall event (>5mm /day).</p> <p>Apply surface stabilisation to batters of borrow pit as early as practical.</p>
Structural Controls	<p>Clean water diversion drains or bunds around the upslope perimeter of the borrow pit.</p> <p>Develop the borrow pit as an internally draining landform, with a low point sump to collect and transfer runoff to sediment basins. Install bunds along the low edges of the borrow pit to contain runoff.</p> <p>Install type "F" sediment basins, within the clay borrow area, or in close proximity to receive sediment laden waters pumped from the clay borrow sump.</p> <p>Rock check dams downstream of the outlets of sediment dams.</p> <p>Silt fences, where practical, at the toe of the borrow pit batters.</p>
Monitoring	<p>Record initial installation of ESC controls with photographic record upon installation.</p> <p>Visual monitoring of integrity of all ESC controls periodically and immediately after rainfall events (>5mm/day). Proforma and photographic recording of condition and performance of ESC controls. Deficiencies to be noted and reported to construction management team for rectification.</p> <p>Condition of batters, upslope diversions, and batter stabilisation measures.</p> <p>Sediment accumulation in sediment basins and silt fences.</p> <p>Turbidity monitoring in the tributary gully of the Nerang River.</p> <p>Records of applied rates of flocculation agents and water volumes to continually improve dosage rates and practices.</p>
Contingencies	<p>Rectify and intensify ESC controls where necessary.</p> <p>Cleanout sediment basins and silt fences. Enlarge basins if necessary. Install additional silt fences as necessary.</p> <p>Rectify and improve upslope drainage diversions where required.</p> <p>Intensify spatial extents and frequency of water quality monitoring in the event of persistent non-conformances.</p> <p>Redesign of borrow pit, sump, and sediment basins where identified to be insufficient capacity, erosion evidence, or inadequate sediment containment.</p>

F.4.3 Geomorphology Assessment Condition Attributes

Flow Condition	Channel Pattern	Habitat Features		Bed		Stability	Controls	Bank		Geomorphic values
		Materials	Stability	Materials	Stability			Stability	Works	
No flow (possibly some wetlands and ponds not connected by surface flow)	<u>Straight</u> <u>Sinuuous</u> <u>Meandering</u> <u>Tortuous</u>	Waterfall (free flowing over a cliff >1m high) Cascade (free flowing over a stepped, cobble, boulder or bedrock substrate)	Heavy clay <u>Mud</u> (silt, clay) <u>Mainly sand</u> <u>Gravel, cobbles</u>	Severe Degradation (recorded evidence of major net decrease in bed levels, and/or visible indicators such as severe headward erosion, evidence of recent deepening, usually accompanied by bank slumping)	Crossing <u>Rock outcrops</u> <u>Fallen Trees</u> <u>Bed Stabilisation</u> <u>Other</u>	Excellent Erosion resistant soils, no undermining, good vegetative cover, no significant damage to bank structure or vegetation)	Trees and other plants <u>Rock protection</u> <u>Fencing</u> <u>Groynes</u> <u>Logs strapped to banks</u> <u>Concrete wall</u> <u>Other</u>	Pristine Good (minor influence from anthropogenic activity)		
Low flow (normal water level)	<u>Braided</u> <u>Discontinuo</u> <u>us</u>	Rapid (standing waves, bedrock or boulder substrate) <u>Riffle</u> (fast flow, water surface broken, gravel-cobble substrate)	<u>Boulders</u> <u>Bedrock</u>	Moderate degradation (recorded evidence of small net decrease in bed levels, and/or visible indicators such as small erosion heads)	<u>Other</u>	Good (Good vegetative cover or erosion resistant solid, some minor isolated erosion, no continuous damage to bank structure)		Moderate (Fluvial form affected by anthropogenic activity, grazing, development)		
Moderate flow (higher than normal, some terrestrial vegetation submerged)	<u>Anabranchin</u> <u>g</u>	Glide (medium to fast flow, smooth water surface) <u>Pool</u> (slow, if any, current. Includes ponds)	<u>D50 [by eye]</u> <u>L/Clast [by eye]</u> <u>Sorting</u>	Minor Degradation (bed showing signs of some minor deepening and narrowing; localized scour holes in unchannelled valleys) Stable <u>Minor Aggradation</u> (sediment accumulations due to filtering effect of bed zone vegetation)		Moderate (banks held by discontinuous vegetation or erosion resistant soils, some obvious damage to bank structure or vegetation)		Poor (Fluvial processes dominated by activities, eg artificial channel, drainage works)		
Bankfull High flow (above bankfull)		Other habitats <u>Off River Water Bodies</u> <u>Dry rocky channel</u>		Moderate Aggradation (recorded evidence of small net increase in bed levels and/or visible indicators such as accumulations of material at obstructions; evidence of minor overbank sedimentation)		Poor (little effective bank vegetation, non cohesive or dispersive soils, recent bank movement, mostly unstable toe)				
Recent Flow History				Severe Aggradation (recorded evidence of major net increase in bed levels, and/or visible indicators such as accumulations of material at obstructions or significant overbank deposits.		Very Poor (rapid unchecked erosion, non-cohesive soils, little effective bank vegetation, unstable toe)				

Conveyance	Channel Alteration	Shading	In stream habitat
<p>This descriptor is aimed at assessing the extent and type of vegetative obstructions to flow. Instances of woody debris (logs, twigs, leaves), or beds of native reeds or other macrophytes, in locations and intensities normally expected to be observed on the relevant stream category are not considered obstructions. However all exotic shrub/tree growth within the channel bedzone would be so considered</p> <p><u>Excellent</u> No significant or un-natural obstructions</p> <p><u>Good</u> Only minor instances of blocking with native snags/reeds/other macrophytes in low flow course, not significantly affecting channel stability</p> <p><u>Moderate</u> Minor instances of blocking growth in low flow course</p> <p><u>Poor</u> More frequent instances of blocking growth or cover of any vegetation affecting much of the channel</p> <p><u>Very poor</u> Virtually continuous blocking growth or cover of any vegetation</p>	<p><u>Excellent</u> Little or no enlargement of islands or point bars and/or no channelisation</p> <p><u>Good</u> Some new increase in bar formation, mostly from coarse gravel; and/or some channelisation present</p> <p><u>Moderate</u> Moderate deposition of new gravel, coarse sand, on old and new bars; pools partly filled w/silt; and/or embankments on both banks</p> <p><u>Poor</u> Heavy deposits of fine materials, increased bar development; most pools filled with silt; and/or pronounced channelisation</p> <p><u>Very poor</u> Extensive deposits of fine materials, pronounced bar development; pools filled or near/filled with silt; and/or extensive channelisation</p>	<p><u>Excellent (>80%)</u> <u>Good (50%-80%)</u> <u>Moderate (20%-50%)</u> <u>Poor (10%-20%)</u> <u>Very poor (negligible)</u></p>	<p><u>Excellent</u> Entire reach contains a full complement of habitat types naturally found in this type of stream (eg., pools, riffles, cobbles, mud, woody debris, macrophytes, rocks, runs/glides)</p> <p><u>Good</u> Majority of reach contains the full complement of habitat types naturally found in this type of stream</p> <p><u>Moderate</u> Less than 50% of reach contains a full complement of habitat types naturally found in this type of stream</p> <p><u>Poor</u> Some habitats naturally found in this type of stream are not represented (eg., total de-snagging, riffle-pool sequence obliterated by sediment input)</p> <p><u>Very Poor</u> Reach contains no examples of habitat suitable for indigenous aquatic life</p>

F.5 Land Contamination

F.5.1 EMR and CLR Searches



Level 16, 288 Edward St • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA
Telephone (07) 32251827 • Facsimile (07) 3247 3278 •
www.epa.qld.gov.au/eoaccess/contaminated_land/

SEARCH RESPONSE ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914144 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368291

This response relates to a search request received for the site:
Lot: 4 Plan: SP164198
null GILSTON ROAD
ADVANCETOWN

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

Note: Searches may be conducted online through the State Government Website
www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit



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SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914145 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368291

This response relates to a search request received for the site:
Lot: 702 Plan: AP6298
116 LITTLE NERANG DAM ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

**Note: Searches may be conducted online through the State Government Website
www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.**

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit



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SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914146 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368291

This response relates to a search request received for the site:
Lot: 274 Plan: W312359
1794 NERANG MURWILLUMBAH ROAD
NUMINBAH VALLEY

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

**Note: Searches may be conducted online through the State Government Website
www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.**

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit



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Telephone (07) 32251827 • Facsimile (07) 3247 3278 •
www.epa.qld.gov.au/eoaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914147 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368291

This response relates to a search request received for the site:
Lot: 11 Plan: WD2914
1827 NERANG MURWILLUMBAH ROAD
NUMINBAH VALLEY

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914148 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368291

This response relates to a search request received for the site:
Lot: 275 Plan: W312359
mull NERANG MURWILLUMBAH ROAD
NUMINBAH VALLEY

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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www.epa.qld.gov.au/eoaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914149 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368291

This response relates to a search request received for the site:
Lot: 15 Plan: WD5152
269 POCKET ROAD
NUMINBAH VALLEY

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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www.epa.qld.gov.au/ecoaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914150 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368291

This response relates to a search request received for the site:
Lot: 11 Plan: RP842006
94 POCKET ROAD
NUMINBAH VALLEY

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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Telephone (07) 32251827 • Facsimile (07) 3247 3278 •
www.epa.qld.gov.au/ecoaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914162 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 1 Plan: RP204623
890 GOLD COAST SPRINGBROOK ROAD
MUDGEERABA

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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www.epa.qld.gov.au/ecoaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914163 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 2 Plan: RP49670
998 GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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Telephone (07) 32251827 • Facsimile (07) 3247 3278 •
www.epa.qld.gov.au/eoaccess/contaminated_land/

**SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)**

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914164 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 2 Plan: RP166736
1000 GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.**

If you have any queries in relation to this search please phone (07) 3227 7370.

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Telephone (07) 32251827 • Facsimile (07) 3247 3278 •
www.epa.qld.gov.au/eoaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914165 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 234 Plan: WD4207
989 GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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Telephone (07) 32251827 • Facsimile (07) 3247 3278 •
www.epa.qld.gov.au/econaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914166 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 2 Plan: RP844804
969 GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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www.epa.qld.gov.au/eoaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914167 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 1 Plan: RP198903
971 GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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**SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)**

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914168 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 1 Plan: RP137972
1001 GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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www.epa.qld.gov.au/ecoaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914169 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 11 Plan: RP807069
1024 GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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www.epa.qld.gov.au/eoaccess/contaminated_land/

**SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)**

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914170 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 12 Plan: RP807069
1050 GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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www.epa.qld.gov.au/eoaccess/contaminated_land/

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914171 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 1 Plan: RP126252
1053 GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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Telephone (07) 32251827 • Facsimile (07) 3247 3278 •
www.epa.qld.gov.au/eoaccess/contaminated_land/

**SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)**

Peter McCormick
SKM
369 Ann St
Brisbane QLD 4000

Transaction ID: 914172 EMR Site Id: 08 March 2007
Cheque Number:
Client Reference: 8368408

This response relates to a search request received for the site:
Lot: 8 Plan: SP141079
null GOLD COAST SPRINGBROOK ROAD
AUSTINVILLE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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Lindi Bowen
Registrar, Contaminated Land Unit

F.6 Land Use and Infrastructure

No appendices

F.7 Surface Water Resources and Water Quality

F.7.1 Gold Coast WRP Environmental Flow Performance Indicators

The following table gives a brief description of the performance indicators specified for the Nerang River Estuary in the Gold Coast WRP.

Performance Indicator Objectives (DNRMW 2006c)

Performance indicator	Description	Key ecological and geomorphologic functions
Low Flow		
50% and 90% daily flow	A statistical measure of low flow into estuaries	Maintaining ambient and hydrodynamic conditions in the estuaries, maintaining connectivity between non-tidal reaches and estuaries
Daily flow less than 1 ML	An indicator of no flow (1 ML is the minimum flow able to be displayed by the Integrated Quantity and Quality Model). The percentage of days in the simulation period when the daily flow is less than 1 ML	Dewatering of aquatic habitats, isolation of pools, no fluvial transport of organic matter or sediment, dominance of marine influence in estuaries
Number of periods of no flow (for example, of at least 1 month but less than 3 months)	Indicator of drying spells and measure of difference between pre-development and scenario case	Dewatering of aquatic habitats, isolation of pools, no fluvial transport of organic matter or sediment, dominance of marine influence in estuaries
Medium to high flow		
Mean annual flow (MAF)	A general indicator to quickly indicate volumes of water removed from the system. Mean annual flow does not take into account flow variability.	An important determinant of water availability in riverine systems and overall freshwater input to estuarine and marine areas
Seasonal flow patterns		
Flow regime class	An indicator of the seasonality of flows, and when large flows normally start occurring	Lifecycles of riverine, estuarine and marine biota. Trigger flows for ecological processes should reflect timing.
Annual proportional flow deviation (APFD)	A measure of variability of flow	Significant because native in-stream flora and fauna have adapted to variable flow patterns.

F.7.2 Analytical Tables

Golders Particle Size Analysis Results from SKM Sediment Sampling Program, February 2007

Site	% Gravel	% Sand	% Silt	% Clay	% Colloidal fraction
C1	40	49	6	1	4
C2	2	34	38	6	20
C3	0	15	45	5	35
C4	29	27	30	4	10
C5	41	26	22	3	8
C6	6	16	41	11	26
Average	19.7	27.8	30.3	5.0	17.2

ALS Results of SKM Sediment Sampling Program, February 2007

Bioavailable P (Bicarbonate Extractable Phosphorous) (mg/kg)	C1	7
	C2	<2
	C3	217
	C4	15
	C5	29
	C6	29
	site 1	2
	site 2	<2
	site 3	3
Total Organic Carbon (%)	C1	0.54
	C2	0.28
	C3	2.16
	C4	1.75
	C5	0.79
	C6	1.44
	site 1	1.84
	site 2	3.45
	site 3	3.96
Total Kjeldahl Nitrogen as N mg/kg	C1	640
	C2	460
	C3	3400
	C4	1690
	C5	1060
	C6	2540
	site 1	1150
	site 2	1890
	site 3	3280
Ammonia as N mg/kg	C2	<20
	C3	50
	C4	<20
	C5	<20
	C6	50
	site 1	<20
	site 2	<20
	site 3	<20

ALS Results of SKM Water Sampling Program, February 2007

Chlorophyll a (mg/m3)	C1	<5
	C2	<5
	C3	13
	C4	<5
	C5	6
	C6	<5

F.8 Groundwater Resources

No Appendices

F.9 Terrestrial Ecology

F.9.1 Terrestrial Flora Species Recorded from the Study Area Table F.9.1.1 EVR Flora Species recorded from Field Surveys

Botanical Name	Common Name	Status	Regional Ecosystem						Regrowth
			12.3.2	12.3.11	12.11.1	12.11.3	12.11.5		
<i>Acacia orites</i>	Mountain Wattle	R (Q)		u	x				
<i>Archidendron muellerianum</i>	Veiny Lace Flower, Small-flower Laceflower	R				x			
<i>Argophyllum nullamense</i>	Silverleaf	R (Q)	x		x		x		
<i>Beyeria lasiocarpa</i>		R			x				
<i>Bosistoia transversa</i>		V(A)			X				
<i>Brunoniella spiciflora</i>			x		X		x		
<i>Cassia markiana</i>	Native Laburnum	R (Q)					x		
<i>Cupaniopsis newmanii</i>	Long-leaved Tuckeroo	R(Q) 2RCi			X		x		
<i>Helicia ferruginea</i>	Rusty Oak	R			X				
<i>Lepiderema pulchella</i>	Fine-leaved Tuckeroo	R – range extension				x			
<i>Macadamia tetraphylla</i>	Macadamia Nut	V (Q and A)							x
<i>Macadamia integrifolia</i>	Queensland Nut	V (Q and A)							x
<i>Marsdenia hemiptera</i>	Rusty vine	R (Q)			x				
<i>Owenia cepiodora</i>	Onionwood	V (Q and A)				x			
<i>Pararistolochia praevenosa</i>	Richmond Birdwing Vine	R (Q)			x				
<i>Randia moorei</i>	Spiny Gardenia	E (Q and A)				x			
<i>Rhodammia maideniana</i>	Smooth-scrub Turpentine	R (Q)							
<i>Senna acclinis</i>	Rainforest Cassia	2RC-	x		x		x		
<i>Symplocos haroldii</i>	Hairy Hazelwood	R (Q) - range extension]				x			x

Botanical Name	Common Name	Status	Regional Ecosystem					Regrowth
			12.3.2	12.3.11	12.11.1	12.11.3	12.11.5	
<i>Tinospora tinosporoides</i>		V(Q)						

Table F-9.1.2 Species Inventory for the Study Area

Botanical Name Weed Species	Regional Ecosystem				Conservation Status				SEQ Env Weeds		
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score
* <i>Ageratina adenophora</i>	y	y		y	y					17	4.6
* <i>Ageratina riparia</i>	y	y	y	y	y	y				25	4.6
* <i>Ageratum houstonianum</i>	y	y		y	y	y				115	3.8
* <i>Ambrosia artemisiifolia</i> C2		y									
* <i>Anredera cordifolia</i> C3		y								5	4.9
* <i>Ardisia crenata</i>		y	y								
* <i>Aristolochia elegans</i>		y				y				39	4.3
* <i>Araujia sericifera</i>		y		y		y				26	4.4
* <i>Asclepias curassavica</i>		y		y		y				126	3.6
* <i>Asparagus plumosus</i>		y								57	4.1
* <i>Baccharis halimifolia</i> C2				y	y					2	4.8
* <i>Bidens pilosa</i>		y								110	3.5
* <i>Chloris gayana</i>		y								46	4.3
* <i>Cinnamomum camphora</i> C3	y	y		y		y				8	4.8
* <i>Cirsium vulgare</i>				y	y						
* <i>Citrus limon</i>		y									

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
* <i>Conyza canadensis</i>				y	y	y						
* <i>Crassocephalum crepioides</i>	y	y				y						
* <i>Crotalaria sp.</i>					y							
* <i>Cyperus eragrostoides</i>												
* <i>Desmodium uncinatum</i>		y								64	4	
* <i>Digitaria ciliaris</i>		y										
* <i>Drymaria cordata ssp. diandra</i>						y						
* <i>Echinochloa crus-galli</i>		y								146	3.7	
* <i>Echinochloa telmatophila</i>		y										
* <i>Egeria densa</i>										43	4.4	
* <i>Erechtites valerianifolia</i>			y									
* <i>Erythrina X sykesii</i>		y										
* <i>Galinsoga parviflora</i>		y			y							
* <i>Glyceria maxima</i>		y										
* <i>Gomphocarpus fruticosus</i>				y	y							
* <i>Helixine soleirolii</i>		y										
* <i>Hypochoeris radicata</i>						y						
* <i>Hypoestes phyllostachya</i>		y	y							172	3.5	

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
*Ipomoea indica		y								40	4.3		
*Jacaranda mimosaeifolia			y							156	3.4		
*Lantana camara var. camara C3	y	y	y	y	y	y				1	5		
*Lophospermum erubescens				y									
*Macfadyena unguis-cati C3		y		y		y				4	4.9		
*Melinis minutiflora		y			y					38	4.5		
*Morus alba		y								162	3.4		
*Murraya paniculata			y							139	3.6		
*Nasturtium officinale										97	3.7		
*Neonotonia wightii		y								19	4.7		
*Nymphaea caerulea ssp. zanzibarensis						y (water)				66	4		
*Ochna serrulata		y	y							22	4.5		
*Oxalis pes-caprae		y											
*Panicum maximum		y								20	4.6		
*Paspalum mandiocanum		y								72	4		
*Passiflora edulis				y		y				193	3.2		
*Passiflora suberosa		y								37	4.2		
*Passiflora subpeltata		y		y						63	3.9		

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
* <i>Pellaea viridis</i>				y								
* <i>Phytolacca octandra</i>		y				y				125	3.4	
* <i>Ptilyogramma austroamericana</i>				y								
* <i>Prunus persica</i>		y										
* <i>Schefflera actinophylla</i> (Nth Qld)		y		y								
*<i>Senecio madagascariensis</i> C2					y					82	3.8	
* <i>Senna pendula</i> var. <i>glabrata</i>	y			y	y	y				45	4.2	
* <i>Senna septemtrionalis</i>						y						
* <i>Setaria sphacelata</i>	y				y	y				85	3.8	
* <i>Sida rhombifolia</i>		y								153	3.6	
* <i>Solanum capsicastrum</i>				y								
* <i>Solanum capsicoides</i>	y			y								
* <i>Solanum chrysothrichum</i> (<i>hispidum</i>)		y		y		y				135	3.6	
* <i>Solanum mauritianum</i>	y			y		y				61	4	
* <i>Solanum nigrum</i>		y										
* <i>Solanum seaforthianum</i>		y	y							55	4	
* <i>Solidago canadensis</i>		y								147	4	
* <i>Sorghum halepense</i>		y										

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
* <i>Tagetes minuta</i>		y								176	3.3	
* <i>Tradescantia fluminensis</i>		y								58	4.1	
* <i>Trifolium repens</i>		y										
* <i>Verbena bonariensis</i>		y		y		y						
Native Species												
<i>Abrophyllum ornans</i>	y		y	y								
<i>Abutilon oxycarpum</i>			y	y								
<i>Acacia disparima</i>	y	y		y	y	yyy						
<i>Acacia irrorata</i>				y								
<i>Acacia falcata</i>					y							
<i>Acacia fimbriata</i>				y								
<i>Acacia maidenii</i>		y		y	y							
<i>Acacia melanoxylon</i>	y	y		y		yyy						
Acacia orites			y					R				
<i>Acalypha callipes</i>			y									
<i>Acalypha nemorum</i>			y	y					cws			
<i>Acronychia laevis</i>	y	y	y	y	y							

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
<i>Acronychia oblongifolia</i>			y									
<i>Acronychia pubescens</i>			y	y								
<i>Acrotriche aggregata</i>				y	y							
<i>Actephila lindleyi</i>	y	y	y	y								
<i>Adiantum atroviride</i>			y									
<i>Adiantum diaphanum</i>			y									
<i>Adiantum formosum</i>		y	y									
<i>Adiantum hispidulum</i> var. <i>hispidulum</i>	y	y	y	y	y							
<i>Allanthus triphysa</i>			y	y								
<i>Akania bidwillii</i>			y									
<i>Alchornea ilicifolia</i>	y	y	y	y								
<i>Alectryon connatus</i>			y									
<i>Alectryon reticulatus</i>			y									
<i>Alectryon subcinerius</i>	y	y	y	y					CWS			
<i>Alectryon tomentosa</i>	y	y	y	y								
<i>Allangium villosum</i> ssp. <i>polyosmoides</i>			y									
<i>Allocauarina littoralis</i>				y	y							
<i>Allocauarina torulosa</i>				y	y							

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Alocasia brisbanensis</i>	y	y	y	y									
<i>Alphitonia excelsa</i>		y		y	y								
<i>Alpinia arundelliana</i>	y		y						cws				
<i>Alpinia caerulea</i>	y	y	y	y									
<i>Altemanthera denticulata</i>		y		y		y							
<i>Alyxia ruscifolia</i>			y	y	y								
<i>Amyema congener</i> ssp. <i>congener</i>		y											
<i>Amylotheca dictyophleba</i>			y										
<i>Aneilema acuminatum</i>	y	y	y	y									
<i>Aneilema biflorum</i>			y										
<i>Anthocarapa nitidula</i>			y	y									
<i>Aphananthe philippinensis</i>	y	y	y	y									
<i>Aphanopetalum resinosum</i>		y		y									
<i>Arachniodes aristata</i>			y										
<i>Araucaria cunninghamii</i>	y		y	y									
<i>Archidendron grandiflorum</i>	y		y	y	y								
Archidendron muellerianum				y						R			
<i>Archirhodomyrtus beckleri</i>			y	y									

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Archontophoenix cunninghamiana</i>	y	y	y	y									
<i>Argophyllum nullumense</i>	y	y	y	y				R					
<i>Argyrodendron actinophyllum</i>			y										
<i>Argyrodendron trifoliatum</i>			y										
<i>Artanema fimbriatum</i>			y	y					CWS				
<i>Arthropteris tenella</i>	y		y	y									
<i>Arytera distylis</i>			y	y									
<i>Arytera divaricata</i>	y		y										
<i>Asplenium attenuatum</i> var. <i>individuum</i>			y	y					CWS				
<i>Asplenium australasicum</i>		y	y	y									
<i>Asplenium polyodon</i>													
<i>Astrotricha latifolia</i>					y								
<i>Atalya multiflora</i>			y	y					CWS				
<i>Atractocarpus benthamianus</i>			y										
<i>Atractocarpus chartaceus</i>			y	y									
<i>Auranticarpa rhombifolia</i>			y										
<i>Austrosteenisia blackii</i>		y	y	y	y	y							
<i>Austrosteenisia glabristyla</i>			y						CWS				

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Azolla pinnata</i>													
<i>Babingtonia similis</i>				y	y								
<i>Backhousia myrtifolia</i>		y		y	y								
<i>Baloghia inophylla</i>			y	y									
<i>Baumea articulata</i>		y											
<i>Beilschmeidia elliptica</i>			y										
<i>Beilschmeidia obtusifolia</i>			y	y									
<i>Beyeria lasiocarpa</i>			y	y				R					
<i>Billardiera scandens</i> var. <i>scandens</i>	y			y	y				cws				
<i>Blechnum cartilagineum</i>	y	y	y	y									
<i>Blechnum indicum</i>		y											
<i>Bosistoa pentacocca</i>			y						cws				
<i>Bosistoa transversa</i>			y				V						
<i>Bouchardia neurococca</i>			y						cws				
<i>Brachychiton acerifolius</i>			y										
<i>Breynia oblongifolia</i>	y		y	y	y								
<i>Bridelia exaltata</i>		y	y	y									
<i>Brunoniella spiciflora</i>	y		y	y				Nt	cws				

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
<i>Bulbophyllum exilis</i>			y									
<i>Bursaria spinosa</i>				y	y							
<i>Caesalpinia subtropica</i>			y	y								
<i>Calamus muelleri</i>		y	y	y								
<i>Calanthe triplicata</i>		y	y	y					cws			
<i>Calcluvia paniculosa</i>			y	y								
Callerya australis			y	y				R				
<i>Callerya megasperma</i>	y		y	y								
<i>Callicarpa pedunculata</i>				y					cws			
<i>Callistemon salignus</i>	y			y								
<i>Callistemon viminalis</i>					y							
<i>Calochlaena dubia</i>	y			y								
<i>Calyptegia marginata</i>				y								
<i>Canarium austrasicum</i>			y	y								
<i>Canthium odoratum</i>			y	y								
<i>Capparis arborea</i>			y	y								
<i>Carex appressa</i>		y										
<i>Carex brunnea</i>		y	y	y								

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
<i>Carissa ovata</i>			y	y								
<i>Carronia multiseepala</i>			y									
Cassia marksiana				y				R				
<i>Cassinia subtropica</i>				y	y							
<i>Cassytha glabella</i>					y							
<i>Castanospermum australe</i>	y	y	y	y								
<i>Castanospora alphanthii</i>		y	y									
<i>Casuarina cunninghamiana</i>		y										
<i>Cayratia clematidea</i>	y	y	y	y	y							
<i>Celastrus subspicatus</i>			y									
<i>Celtis paniculata</i>			y									
<i>Centella asiatica</i>		y			y							
<i>Cephalaria cephalobotrys</i>			y									
<i>Ceratopetalum apetalum</i>			y									
<i>Cheilanthes sieberi</i>					y							
<i>Chloris ventricosa</i>												
<i>Choricarpia leptopetala</i>		y	y	y								
<i>Christella dentata</i>		y	y	y	y							

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
<i>Chrysopogon sylvatica</i>												
<i>Cissus antarctica</i>	y	y	y	y								
<i>Cissus hypoglauca</i>			y	y								
<i>Cissus opaca</i>				y	y							
<i>Cissus sterculifolia</i>			y									
<i>Citronella moorei</i>			y									
<i>Citrus australasica</i>			y	y					CWS			
<i>Claoxylon australe</i>			y	y								
<i>Cleistanthus cunninghamii</i>		y	y	y								
<i>Clematis glycinoides</i>				y								
<i>Clerodendrum floribundum</i>	y			y								
<i>Coelospermum paniculatum</i>			y									
<i>Commelina cyanea</i>	y			y		y						
<i>Commersonia bartramia</i>	y	y		y	y							
<i>Cordylone congesta</i>		y	y	y	y				CWS			
<i>Cordylone petiolaris</i>			y	y								
<i>Cordylone rubra</i>			y	y								
<i>Corymbia citriodora var. variegata</i>					y							

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Corymbia intermedia</i>	y			y	y								
<i>Crotalaria montana</i>					y								
<i>Croton stigmatosus</i>			y	y									
<i>Croton verreauxii</i>			y	y									
<i>Cyanthillium cinereum</i>					y								
<i>Cyathea leichhardtiana</i>													
<i>Cryptocarya bidwillii</i>			y										
<i>Cryptocarya erythroxylon</i>			y										
<i>Cryptocarya glaucescens</i>		y	y	y									
<i>Cryptocarya laevigata</i>		y	y	y									
<i>Cryptocarya microneura</i>		y	y	y									
<i>Cryptocarya obovata</i>			y	y									
<i>Cryptocarya sclerophylla</i>				y									
<i>Cryptocarya triplinervis</i> var. <i>pubens</i>		y	y	y									
<i>Cryptocarya triplinervis</i> var. <i>triplinervis</i>		y											
<i>Cupaniopsis newmanii</i>		y	y	y				R					
<i>Cupaniopsis parviflora</i>			y	y									
<i>Cupaniopsis serrata</i>			y								cws		

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Cyanthillium cinereum</i>				y	y								
<i>Cyathea cooperi</i>				y									
<i>Cyathea leichhardtiana</i>	y			y									
<i>Cyclophyllum comprosmoides var comprosmoides</i>			y	y									
<i>Cyclophyllum longipetalum</i>		y	y										
<i>Cymbidium madidum</i>				y									
<i>Cymbidium suave</i>				y	y								
<i>Cymbopogon refractus</i>					y								
<i>Cyperus disjunctus</i>				y									
<i>Cyperus enervis</i>				y									
<i>Cyperus exaltatus</i>		y											
<i>Cyperus haspan</i>		y	y	y									
<i>Cyperus laevis</i>				y									
<i>Cyperus lucidus</i>				y									
<i>Cyperus rupicola</i>				y									
<i>Cyperus tetraphyllus</i>			y	y									
<i>Cyperus vaginatus</i>													

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Daphnandra micrantha</i>			y										
<i>Davallia pyxidata</i> var. <i>solida</i>	y		y	y									
<i>Daviesia arborea</i>				y					cws				
<i>Daviesia ulicifolia</i>					y								
<i>Dawsonia longisetata</i>			y	y									
<i>Decaspermum humile</i>				y									
<i>Deeringia arborescens</i>													
<i>Dendrobium aemulum</i>			y	y	y								
<i>Dendrobium gracilicaule</i>			y										
<i>Dendrobium kingianum</i>				y									
<i>Dendrobium speciosum</i>			y										
<i>Dendrobium tetragonum</i>			y										
<i>Dendrocnide moroides</i>	y		y	y		y							
<i>Dendrocnide photinophylla</i>	y		y	y		y							
<i>Denhamia celastroides</i>				y	y								
<i>Derris involuta</i>		y	y	y									
<i>Desmodium brachypodium</i>					y								
<i>Desmodium gunnii</i>				y									

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Desmodium nemorosum</i>			y										
<i>Desmodium rhytidophyllum</i>				y	y								
<i>Dianella caerulea</i>	y	y	y	y									
<i>Dianella longifolia</i>					y								
<i>Dictymia brownii</i>		y											
<i>Dioscorea transversa</i>		y	y	y	y								
<i>Diospyros fasciculosa</i>			y										
<i>Diospyros pentamera</i>			y	y									
<i>Diplatia furcata</i>		y											
<i>Diplocyclos palmatus</i>				y									
<i>Diploglottis australis</i>	y	y	y	y									
<i>Dipodium variegatum</i>				y									
<i>Dissiliaria baloghioides</i>			y	y									
<i>Dockrillia linguiformis</i>			y	y									
<i>Dockrillia bowmanii</i>			y										
<i>Dodonaea triquetra</i>				y	y								
<i>Doodia aspera</i>		y	y	y	y								
<i>Doodia caudata</i>	y	y	y	y									

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Doryopteris concolor</i>				y									
<i>Doryphora sassafras</i>			y										
<i>Drynaria rigidula</i>				y									
<i>Drypetes deplanchei</i>			y	y									
<i>Duboisia myoporoides</i>				y									
<i>Dysoxylum fraserianum</i>			y	y									
<i>Dysoxylum mollissimum ssp. molle</i>		y	y	y									
<i>Dysoxylum rufum</i>		y	y	y									
<i>Echinochloa colona</i>		y											
<i>Echinostephia aculeata</i>			y	y	y				cws				
<i>Eclipta prostrata</i>		y											
<i>Ehretia acuminata</i>		y											
<i>Elaeocarpus grandis</i>		y	y										
<i>Elaeocarpus kirtonii</i>			y										
<i>Elaeocarpus obovatus</i>		y	y	y	y								
<i>Elaeodendron australe var. australe</i>			y										
<i>Eleocharis dulcis</i>		y											
<i>Ellatostachys nervosa</i>		y	y										

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Elliotostachys xylocarpa</i>			y										
<i>Embelia australiana</i>			y	y									
<i>Emilia sonchifolia</i>				y	y	y							
<i>Endiandra discolor</i>	y		y										
<i>Endiandra microneura - Cryptocarya ?</i>	y		y	y									
<i>Endiandra muelleri</i> spp. <i>muelleri</i>		y	y										
<i>Endiandra muelleri</i> spp. <i>bracteata</i>		y	y	y									
<i>Endiandra pubens</i>			y	y									
<i>Endiandra virens</i>			y										
<i>Entolasia stricta</i>	y	y	y	y	y	y							
<i>Epaltes australis</i>					y								
<i>Erythrorchis cassythoides</i>			y										
<i>Eucalyptus acmenoides</i>				y	y								
<i>Eucalyptus carnea</i>					y								
<i>Eucalyptus grandis</i>	y	y		y									
<i>Eucalyptus microcorys</i>	y	y		y	y								
<i>Eucalyptus proprinqua</i>				y	y								
<i>Eucalyptus siderophloia</i>				y	y								

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
<i>Eupomatia bennettii</i>			y	y					cws			
<i>Eupomatia laurina</i>		y	y	y								
<i>Euroschinus falcata</i>		y	y	y								
<i>Eustrephus latifolius</i>		y		y	y							
<i>Exocarya scleroides</i>			y									
<i>Ficus coronata</i>	y	y	y	y								
<i>Ficus fraseri</i>		y	y	y								
<i>Ficus macrophylla</i>		y	y									
<i>Ficus obliqua</i>												
<i>Ficus superba</i> var. <i>henneana</i>		y	y									
<i>Ficus virens</i> var. <i>sublanceolata</i>		y										
<i>Ficus watkinsiana</i>			y	y								
<i>Fimbristylis dichotoma</i>				y	y							
<i>Fimbristylis ferruginea</i>				y		y						
<i>Flagellaria indica</i>	y	y	y	y								
<i>Flindersia australis</i>		y	y	y	y							
<i>Flindersia bennettiana</i>			y	y	y							
<i>Flindersia schottiana</i>		y	y	y								

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Gahnia aspera</i>				y	y								
<i>Geijera salicifolia</i> var. <i>latifolia</i>			y	y									
<i>Geissois benthamii</i>			y	y									
<i>Geitonoplesium cymosum</i>			y	y									
<i>Georum densiflorum</i>					y								
<i>Geranium solanderi</i> var. <i>solanderi</i>				y									
<i>Glochidion ferdinandi</i> var. <i>ferdinandi</i>	y	y	y	y	y	y							
<i>Glycine tabacina</i>				y	y								
<i>Gmelina leichhardtii</i>			y	y									
<i>Gompholobium pinnatum</i>					y								
<i>Gonocarpus teucrioides</i>					y								
<i>Goodenia rotundifolia</i>					y								
<i>Gossia acmenoides</i>			y										
<i>Gossia bidwillii</i>			y										
<i>Gossia hillei</i>	y		y	y									
<i>Gossia punctata</i>			y										
<i>Grevillea robusta</i>	y	y	y	y									
<i>Guilfoylea monostylis</i>			y									cws	

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Guioa semiglauca</i>		y	y	y									
<i>Gymnema pleiadenium</i>			y										
<i>Gymnostachys anceps</i>		y	y	y									
<i>Hakea florulenta</i>				y	y								
<i>Hardenbergia violacea</i>				y	y								
<i>Harpullia alata</i>			y						CWS				
<i>Harpullia hillii</i>			y	y									
<i>Harpullia pendula</i>			y	y									
<i>Hedraianthera porphyropetala</i>		y	y	y									
<i>Helicia ferruginea</i>			y	y				R					
<i>Helicia glabrifolia</i>			y										
<i>Hibbertia aspera</i>					y								
<i>Hibbertia dentata</i>				y	y								
<i>Hibiscus heterophyllus</i>	y	y	y	y									
<i>Hippocratea barbata</i>			y	y									
<i>Hodgkinsonia ovatiflora</i>			y		y								
<i>Homolanthus nutans</i>	y	y	y	y									
<i>Homolanthus stilingifolius</i>		y		y					CWS				

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Hypericum gramineum</i>					y								
<i>Hovea acutifolia</i>		y		y	y								
<i>Hoya australis</i>			y										
<i>Hybanthus stellarioides</i>				y	y								
<i>Hydrilla verticillata</i>													
<i>Hydrocoryle pdeicellosa</i>				y									
<i>Hydrocoryle verticillata</i>				y									
<i>Hymenosporum flavum</i>		y	y	y									
<i>Hypolepis glandulifera</i>		y											
<i>Imperata cylindrica</i>				y	y								
<i>Indigofera australis</i>				y	y								
<i>Ixora beckleri</i>			y										
<i>Jacksonia scoparia</i>				y									
<i>Jagera psuedorhus</i>	y	y	y	y	y								
<i>Jasminum dallachii</i>			y										
<i>Juncus continuus</i>													
<i>Juncus usitatus</i>		y	y	y		y							
<i>Kennedia rubicunda</i>		y		y	y								

Botanical Name	Regional Ecosystem					Conservation Status					SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
<i>Lastreopsis acuminata</i>		y	y									
<i>Lastreopsis decomposita</i>		y										
<i>Lastreopsis marginans</i>			y									
<i>Lastreopsis microsora</i>			y									
<i>Lastreopsis munita</i>			y									
<i>Latreopsis decomposita</i>			y									
<i>Legnephora moorei</i>		y	y									
<i>Lepiderema pulchella</i>			y	y				R				
<i>Lepidosperma laterale</i>					y							
<i>Leptospermum polygalifolium</i>		y			y							
<i>Leptothamnus moorei</i>			y									
<i>Leucopogon juniperinus</i>				y	y							
<i>Lindsea microphylla</i>				y								
<i>Linospadix monostachya</i>			y									
<i>Litsea australis</i>			y	y								
<i>Litsea reticulata</i>												
<i>Livistona australis</i>			y	y					CWS			
<i>Lobelia purpurascens</i>		y			y							

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Lobelia trigonocaulis</i>			y	y									
<i>Lomandra confertifolia</i> ssp. <i>pallida</i>				y	y				cws				
<i>Lomandra filiformis</i>				y	y								
<i>Lomandra hystrix</i>		y	y		y								
<i>Lomandra longifolia</i>				y	y								
<i>Lomandra multiflora</i>				y									
<i>Lomandra spicata</i>			y										
<i>Lomatia silaifolia</i>				y	y								
<i>Lophostemon confertus</i>	y	y	y	y	y	y							
<i>Ludwigia octovalvis</i>		y				y							
<i>Macadamia integrifolia</i>		y					V	V					
<i>Macadamia tetraphylla</i>		y		y		y	V	V					
<i>Macaranga tanarius</i>		y	y		y	y							
<i>Maclura cochichinensis</i>	y	y	y	y		y							
<i>Macrozamia lucida</i>				y									
<i>Mallotus discolor</i>			y	y									
<i>Mallotus philippensis</i>		y	y	y	y	y							
<i>Marsdenia flavescens</i>			y										

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
Marsdenia hemiptera			y					R					
<i>Marsdenia rostrata</i>			y	y									
<i>Maytenus silvestris</i>				y									
<i>Medicosma cunninghamii</i>			y						CWS				
<i>Meiogyne stenopetala</i>		y	y	y									
<i>Melia azedarach</i>			y	y	y								
<i>Melicope micrococca</i>			y										
<i>Melodinus acutiflorus</i>			y										
<i>Melodinus australis</i>			y	y									
<i>Melodorum leichhardtii</i>			y	y									
<i>Microcorum scandens</i>			y										
<i>Mischocarpus anodontus</i>			y						CWS				
<i>Mischocarpus pyriformis</i>		y	y	y									
<i>Monotoca scoparia</i>					y								
<i>Morinda canthoides</i>			y										
<i>Morinda jasminoides</i>			y	y									
<i>Myrsine howittiana</i>					y				CWS				
<i>Myrsine subsessilis</i>			y	y									

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Myrsine variabilis</i>			y	y	y								
<i>Neolitsea dealbata</i>		y	y	y									
<i>Nephrolepis cordifolia</i>				y									
<i>Notelaea johnsonii</i>			y						CWS				
<i>Notelaea longifolia</i> var. <i>glabra</i>		y	y	y	y								
<i>Notelaea ovata</i>				y									
<i>Notothixos subaureus</i>		y											
<i>Nymphoides indica</i>						y (o/w)							
<i>Oberonia complanata</i>			y						CWS				
<i>Olea paniculata</i>		y	y	y									
<i>Oplismenus aemulus</i>	y	y	y	y									
<i>Oplismenus imbecillis</i> ssp. <i>hirtellus</i>		y	y		y								
<i>Oplismenus undulatifolius</i>	y	y	y	y									
<i>Ottochloa gracillima</i>		y	y	y									
<i>Ottochloa nodosa</i>			y										
Owenia cepiodora			y				V	V					
<i>Oxalis chnoodes</i>				y									
<i>Ozothamnus diosmifolius</i>				y	y								

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
<i>Palmeria scandens</i>			y	y								
<i>Pandorea jasminoides</i>	y	y	y	y	y							
<i>Pandorea pandorana</i>	y	y	y	y	y							
<i>Panicum effusum var. simile</i>												
<i>Panicum lamprophyllum</i>			y									
<i>Panicum pygmaeum</i>												
<i>Pararchidendron pruinosum</i>			y	y								
<i>Pararistolochia praevenosa</i>			y					R				
<i>Parsonsia fulva</i>			y	y								
<i>Parsonsia leichhartii</i>												
<i>Parsonsia straminea var. straminea</i>		y		y								
<i>Parsonsia ventricosa</i>				y								
<i>Paspalidium distans</i>				y								
<i>Paspalum distichum</i>		y										
<i>Passiflora aurantia</i>			y	y								
<i>Passiflora herbertiana</i>			y						CWS			
<i>Pavetta australasica</i>			y									
<i>Pellaea falcata</i>			y									

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
<i>Pellaea nana</i>			y									
<i>Pellaea paradoxa</i>		y	y	y								
<i>Pentaceras australe</i>	y		y	y								
<i>Peperomia blanda var. floribunda</i>		y	y	y								
<i>Peripleura hispidula</i>				y	y							
<i>Persicaria decipiens</i>		y										
<i>Persicaria hygropiper</i>												
<i>Persicaria strigosa</i>		y										
<i>Persoonia media</i>					y							
<i>Persoonia sericea</i>					y							
<i>Persoonia stradbrokeensis</i>												
<i>Phyllanthus microcladus</i>		y							CWS			
<i>Phyllanthus sauropusoides</i> ??				y								
<i>Phyllanthus similis</i>				y								
<i>Physalis minima</i>				y								
<i>Ptilidostigma glabrum</i>		y	y									
<i>Pimelea latifolia ssp. altior</i>	y			y								
<i>Pimelea linifolia ssp. linifolia</i>					y							

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Piper novae-hollandiae</i>		y	y										
<i>Pipturus argenteus</i>			y	y									
<i>Pitiosporum multiflorum</i>		y	y	y	y								
<i>Pitiosporum revolutum</i>			y	y	y								
<i>Pitiosporum undulatum</i>		y											
<i>Platycerium bifurcatum</i>			y	y									
<i>Platycerium superbum</i>		y	y	y									
<i>Plectorrhiza tridentata</i>			y	y									
<i>Plectranthus nitidus</i>	y						E	E					
<i>Plectranthus parviflorus</i>				y	y								
<i>Podocarpus elatus</i>			y										
<i>Pollia crispata</i>		y	y	y		y							
<i>Pollia macrophylla</i>			y										
<i>Polyosma cunninghamii</i>			y										
<i>Polyscias elegans</i>			y	y		y							
<i>Polyscias murrayi</i>			y										
<i>Polyscias sambucifolius</i>				y									
<i>Pomax umbellata</i>					y								

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Potamogeton crispus</i>													
<i>Potamogeton ochreateus</i>													
<i>Pothos longipes</i>			y										
<i>Pouteria australis</i>		y	y										
<i>Pouteria cotinifolia</i>			y						cws				
<i>Pouteria myrsinoides</i>			y										
<i>Pouteria pohimanniana</i>			y										
<i>Pouteria queenslandica</i>			y										
<i>Proiphys cunninghamii</i>			y										
<i>Prostanthera ovalifolia</i>				y	y								
<i>Psuederanthemum variabile</i>	y	y	y	y	y								
<i>Pseudovanilla foliata</i>				y									
<i>Pseudoweinmannia lachnocarpa</i>		y	y	y									
<i>Psychotria daphnoides</i>			y	y									
<i>Psychotria loniceroides</i>		y	y	y	y								
<i>Psychotria simmondsiana</i> var. <i>simmondsiana</i>			y										
<i>Psydrax lamprophyllum</i>			y	y									

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Pteridium esculentum</i>	y	y		y	y								
<i>Pultenaea retusa</i>				y	y								
<i>Pultenaea villosa</i>					y								
<i>Pyrosia confluens</i>		y	y										
<i>Pyrosia rupestris</i>		y	y	y									
<i>Quintinia verdonii</i>			y	y									
<i>Randia moorei</i>			y				E	E					
<i>Rapanea sp. Mt. Ballou</i>				y									
<i>Rhodamnia argentea</i>			y	y									
<i>Rhodamnia maideniana</i>	y		y	y				R					
<i>Rhodamnia rubescens</i>		y		y	y								
<i>Rhodomyrtus psidioides</i>			y										
<i>Rhodosphaera rhodanthema</i>		y	y	y									
<i>Ripogonum album</i>		y	y										
<i>Ripogonum brevifolium</i>			y										
<i>Ripogonum elseyanum</i>		y	y										
<i>Rostellularia obtusa</i>				y									
<i>Rubus moluccanus</i>	y	y		y	y	y							

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Rubus rosifolius</i>	y	y		y		y							
<i>Sacciolepis indica (exotic?)</i>													
<i>Sambucus australasica</i>			y										
<i>Sarcamelicope simplicifolia</i>			y										
<i>Sarcopetalum harveyanum</i>			y	y									
<i>Sarcopfenyx stipata</i>		y	y	y									
<i>Sauropus albiflorus</i>			y										
<i>Schizomeria ovata</i>	y		y	y									
<i>Schoenoplectus mucronatus</i>		y											
<i>Schoenoplectus validus</i>		y				y							
<i>Scolopia braunii</i>			y										
<i>Senecio amygdalifolius</i>				y									
<i>Senna acclinis</i>				y				R					
<i>Seringia arborescens</i>				y									
<i>Siphonodon australis</i>			y										
<i>Sloanea australis</i>		y	y										
<i>Sloanea woolsii</i>			y	y									
<i>Smilax australis</i>	y	y	y	y	y	y							

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Smilax glycyphylla</i>				y									
<i>Solanum americanum</i>		y							cws				
<i>Solanum corifolium</i>			y						cws				
<i>Solanum serpens</i>			y	y									
<i>Solanum shirleyanum</i>													
<i>Solanum stelligerum</i>			y	y									
<i>Spirodella punctata</i>													
<i>Stenocarpus salignus</i>			y										
<i>Stenocarpus sinuatus</i>			y	y									
<i>Stenocarpus sp. aff. salignus</i>			y										
<i>Stephania japonica</i>	y	y	y	y									
<i>Sterculia quadrifida</i>	y	y	y	y									
<i>Streblus brunonianus</i>		y	y	y									
<i>Swainsonia galegifolia</i>					y								
<i>Symplocos harroidii</i>			y	y				R					
<i>Symplocos thwaitesii</i>			y	y					cws				
<i>Syncarpia glomulifera</i>				y	y				cws				
<i>Synoum glandulosum</i>	y	y	y	y									

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Syzygium australe</i>	y	y		y									
<i>Syzygium corynanthum</i>			y										
<i>Syzygium crebrinerve</i>			y										
<i>Syzygium francisii</i>		y	y	y									
<i>Syzygium hemilamprum</i>			y										
<i>Syzygium oleosum</i>		y	y	y									
<i>Syzygium smithii</i> (broad forma)		y	y										
<i>Syzygium smithii</i> (minor forma)	y		y	y	y								
<i>Tabernaemontana pandacaqui</i>		y	y	y									
<i>Tasmannia insipida</i>			y	y								cws	
<i>Tetragigma nitens</i>		y	y										
<i>Thelymitra pauciflora</i>		y											
<i>Themeda triandra</i>				y	y								
<i>Tinospora inosporoides</i>			y									v	
<i>Toechima tenax</i>		y	y	y									
<i>Toona ciliata</i>		y	y	y									
<i>Trachymene incisa</i>					y								
<i>Tragla novae-hollandiae</i>		y		y		y							

Botanical Name	Regional Ecosystem							Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score		
<i>Trema tomentosa</i> var. <i>viridis</i>				y	y	y							
<i>Tripladenia cunninghamii</i>				y									
<i>Tristaniopsis laurina</i>	y	y	y	y	y								
<i>Trochocarpa laurina</i>			y	y	y								
<i>Trophis scandens</i>	y	y	y	y									
<i>Tylophora grandiflora</i>			y										
<i>Urtica incisa</i>		y				y							
<i>Veronica plebia</i>			y	y		y							
<i>Viola hederacea</i>				y									
<i>Viscum articulatum</i>		y								cws			
<i>Vitex lignum-vitae</i>		y	y	y									
<i>Wahlenbergia gracilis</i>					y								
<i>Wikstroemia indica</i>	y		y	y	y								
<i>Wilkea austroqueenslandica</i>			y										
<i>Wilkea huegeliana</i>		y	y	y									
<i>Xanthorrhoea macronema</i>					y								
<i>Xylosma terrae-reginae</i>		y	y	y									
<i>Zehneria cunninghamii</i>			y										

Botanical Name	Regional Ecosystem						Conservation Status				SEQ Env Weeds	
	12.3.2	12.3.7/dist	12.11.1	12.11.3	12.11.5	Regrowth	EPBC	NCA	GCCC	Rank	Score	
<i>Zieria smithii</i>				y	y							
Legend												
<i>E = Endangered</i>												
<i>V = Vulnerable</i>												
<i>R = Rare</i>												
<i>cws = Citywide Significance</i>												

Table F.9.1.3 Flora Species recorded from Queensland Herbarium database

Species name	Status
<i>Abutilon oxycarpum</i>	
<i>Acacia concurrens</i>	
<i>Acacia decora</i>	
<i>Acacia irrorata</i>	
<i>Acacia longissima</i>	
<i>Acacia maidenii</i>	
<i>Acacia melanoxylon</i>	
<i>Acacia obtusifolia</i>	
<i>Acacia orites</i>	R (Q)
<i>Acacia suaveolens</i>	
<i>Acacia viscidula</i>	
<i>Acalypha nemorum</i>	
<i>Acianthus fornicatus</i>	
<i>Acmena smithii</i>	
<i>Acronychia baeuerlenii</i>	R (Q)
<i>Acrotriche aggregata</i>	
<i>Adenostemma lavenia</i>	
<i>Adiantum atroviride</i>	
<i>Adiantum diaphanum</i>	
<i>Adiantum hispidulum</i>	
<i>Adiantum silvaticum</i>	
<i>Ageratina adenophora</i>	
<i>Ageratina riparia</i>	
<i>Akania bidwillii</i>	
<i>Alectryon subcinereus</i>	
<i>Allocasuarina littoralis</i>	
<i>Alphitonia excelsa</i>	
<i>Alyxia ruscifolia</i>	

Species name	Status
<i>Amaranthus spinosus</i>	
<i>Ambrosia artemisiifolia</i>	
<i>Anagallis arvensis</i>	
<i>Aneilema acuminatum</i>	
<i>Angophora leiocarpa</i>	
<i>Aphanopetalum resinosum</i>	
<i>Arachniodes aristata</i>	
<i>Archidendron grandiflorum</i>	
<i>Argophyllum nullumense</i>	R (Q)
<i>Argyrodendron actinophyllum</i>	
<i>Arthroxon hispidus</i>	V (Q and A)
<i>Arthropodium paniculatum</i>	
<i>Arthropteris beckeri</i>	
<i>Arthropteris tenella</i>	
<i>Arytera distylis</i>	
<i>Arytera divaricata</i>	
<i>Asplenium attenuatum</i>	
<i>Asplenium attenuatum</i>	
<i>Asplenium polyodon</i>	
<i>Astrotricha latifolia</i>	
<i>Atalaya multiflora</i>	
<i>Auranticarpa rhombifolia</i>	
<i>Austrocynoglossum latifolium</i>	
<i>Austrodanthonia induta</i>	
<i>Austrostipa ramosissima</i>	
<i>Babingtonia similis</i>	
<i>Banksia integrifolia</i> subsp. <i>compar</i>	
<i>Banksia spinulosa</i> var. <i>collina</i>	
<i>Beilschmiedia elliptica</i>	
<i>Beyeria lasiocarpa</i>	
<i>Billardiera scandens</i>	

Species name	Status
<i>Blechnum cartilagineum</i>	
<i>Blechnum nudum</i>	
<i>Boehmeria macrophylla</i>	
<i>Boronia polygalifolia</i>	
<i>Bosistoa pentacocca</i>	
<i>Bosistoa transversa</i>	V (A)
<i>Bouchardatia neurococca</i>	
<i>Brachychiton discolor</i>	
<i>Bridelia exaltata</i>	
<i>Brunoniella australis</i>	
<i>Brunoniella spiciflora</i>	
<i>Buddleja madagascariensis</i>	
<i>Bulbophyllum bracteatum</i>	
<i>Bulbophyllum exiguum</i>	
<i>Bulbophyllum shepherdii</i>	
<i>Caesalpinia subtropica</i>	
<i>Calamus muelleri</i>	
<i>Calandrinia pickeringii</i>	
<i>Calcluvia paniculosa</i>	
<i>Caleana major</i>	
<i>Callerya australis</i>	R (Q)
<i>Callerya megasperma</i>	
<i>Callistemon comboynensis</i>	
<i>Callistemon salignus</i>	
<i>Callitris macleayana</i>	
<i>Calochlaena dubia</i>	
<i>Cardamine flexuosa</i>	
<i>Carduus pycnocephalus</i>	
<i>Carex brunnea</i>	
<i>Carex hubbardi</i>	
<i>Carex polyantha</i>	

Species name	Status
<i>Carronia multisepealea</i>	
<i>Cassia brewsteri</i> var. <i>marksiana</i>	R (Q)
<i>Cassinia subtropica</i>	
<i>Cassytha filiformis</i>	
<i>Cassytha pubescens</i>	
<i>Castanospermum australe</i>	
<i>Casuarina cunninghamiana</i>	
<i>Casuarina torulosa</i>	
<i>Cayratia acris</i>	
<i>Cayratia clematidea</i>	
<i>Centratherum australianum</i>	
<i>Cephalomanes caudatum</i>	
<i>Cephalomanes obscurum</i>	
<i>Ceratopteris thalictroides</i>	
<i>Cestrum parqui</i>	
<i>Chiloglottis reflexa</i>	
<i>Chiloglottis sylvestris</i>	
<i>Chloris ventricosa</i>	
<i>Choricarpia leptopetala</i>	
<i>Chorizema panviflorum</i>	
<i>Christella dentata</i>	
<i>Cissium vulgare</i>	
<i>Cissus opaca</i>	
<i>Citrus australasica</i>	
<i>Clematis aristata</i>	
<i>Clematis glycinoides</i>	
<i>Codonocarpus attenuatus</i>	
<i>Comesperma esulifolium</i>	
<i>Comesperma hispidulum</i>	
<i>Comesperma sphaerocarpum</i>	
<i>Commersonia bartramia</i>	

Species name	Status
<i>Conium maculatum</i>	
<i>Cordyline congesta</i>	R (Q)
<i>Cordyline manners-suttoniae</i>	
<i>Coreopsis lanceolata</i>	
<i>Corybas aconitiflorus</i>	
<i>Corymbia citriodora</i> ssp. <i>Variegata</i>	
<i>Corymbia gummifera</i>	
<i>Corymbia henryi</i>	
<i>C. intermedia</i>	
<i>Crassocephalum crepidioides</i>	
<i>Crassula sieberiana</i>	
<i>Crocosmia x crocosmiiflora</i>	
<i>Crotalaria montana</i>	
<i>Croton acronychioides</i>	
<i>Croton stigmatosus</i>	
<i>Croton verreauxii</i>	
<i>Cryptandra rigida</i>	
<i>Cryptocarya triplinervis</i>	
<i>Cupaniopsis newmanii</i>	R (Q)
<i>Cupaniopsis parvifolia</i>	
<i>Cuphea carthagenensis</i>	
<i>Cuscuta campestris</i>	
<i>Cuttsia viburnea</i>	
<i>Cyanthillium cinereum</i>	
<i>Cyathea cooperi</i>	
<i>Cyclophyllum longipetalum</i>	
<i>Cymbidium madidum</i>	
<i>Cymbidium suave</i>	
<i>Cymbopogon refractus</i>	
<i>Cyperus aggregatus</i>	
<i>Cyperus bifax</i>	

Species name	Status
<i>Cyperus brevifolius</i>	
<i>Cyperus disjunctus</i>	
<i>Cyperus enervis</i>	
<i>Cyperus laevis</i>	
<i>Cyperus mirus</i>	
<i>Cyperus polystachyos</i>	
<i>Cyperus rupicola</i>	R (Q)
<i>Cyperus tetraphyllus</i>	
<i>Cyperus trinervis</i>	
<i>Daphnandra</i> sp.	
<i>Davallia pyxidata</i>	
<i>Davidsonia johnsonii</i>	E (Q and A)
<i>Daviesia arborea</i>	
<i>Daviesia mimosoides</i>	
<i>Daviesia ulicifolia</i> subsp. <i>stenophylla</i>	
<i>Daviesia villifera</i>	
<i>Decaspermum humile</i>	
<i>Deeringia amaranthoides</i>	
<i>Dendrobium aemulum</i>	
<i>Dendrobium kingianum</i>	
<i>Dendrobium monophyllum</i>	
<i>Dendrocnide moroides</i>	
<i>Denhamia celastroides</i>	
<i>Dennstaedtia davallioides</i>	
<i>Deparia petersenii</i> subsp. <i>congrua</i>	
<i>Derris involuta</i>	
<i>Desmodium rhytidophyllum</i>	
<i>Desmodium uncinatum</i>	
<i>Dianella caerulea</i>	
<i>Dicksonia antarctica</i>	
<i>Dicksonia youngiae</i>	

Species name	Status
<i>Digitaria parviflora</i>	
<i>Digitaria violascens</i>	
<i>Dioscorea transversa</i>	
<i>Diospyros pentamera</i>	
<i>Diplazium assimile</i>	
<i>Diplazium dilatatum</i>	
<i>Diploglottis australis</i>	
<i>Diploglottis campbellii</i>	E (Q and A)
<i>Dipodium variegatum</i>	
<i>Dodonaea megazyga</i>	
<i>Doodia aspera</i>	
<i>Doodia australis</i>	
<i>Doodia caudata</i>	
<i>Doryphora sassafras</i>	
<i>Dysoxylum fraserianum</i>	
<i>Dysoxylum rufum</i>	
<i>Echinopogon ovatus</i>	
<i>Echinostephia aculeata</i>	
<i>Ehretia acuminata</i>	
<i>Einadia trigonos subsp. stellulata</i>	
<i>Elaeagnus triflora</i>	
<i>Elaeocarpus reticulatus</i>	
<i>Elatine gratioides</i>	
<i>Elatostachys nervosa</i>	
<i>Elatostachys xylocarpa</i>	
<i>Emmenosperma alphitonioides</i>	
<i>Endiandra pubens</i>	
<i>Enneapogon robustissimus</i>	
<i>Entolasia stricta</i>	
<i>Entolasia marginata</i>	

Species name	Status
<i>Epilobium billardierianum</i> subsp. <i>cinereum</i>	
<i>Eragrostis brownii</i>	
<i>Eragrostis pilosa</i>	
<i>Eragrostis sororia</i>	
<i>Eragrostis spartinooides</i>	
<i>Erechtites valerianifolius</i>	
<i>Eremochloa binaculata</i>	
<i>Eremophila debilis</i>	
<i>Eriachne rara</i>	
<i>Eucalyptus acmenoides</i>	
<i>Eucalyptus campanulata</i>	
<i>Eucalyptus carnea</i>	
<i>Eucalyptus crebra</i>	
<i>Eucalyptus eugenioides</i>	
<i>Eucalyptus fusiformis</i>	
<i>Eucalyptus grandis</i>	
<i>Eucalyptus microcorys</i>	
<i>Eucalyptus propinqua</i>	
<i>Eucalyptus racemosa</i>	
<i>Eucalyptus resinifera</i>	
<i>Eucalyptus seeana</i>	
<i>Eucalyptus siderophloia</i>	
<i>Eucalyptus tereticornis</i>	
<i>Eucalyptus tindaliae</i>	
<i>Eupomatia bennettii</i>	
<i>Eustrephus latifolius</i>	
<i>Exocarya scleroides</i>	
<i>Fimbristylis dichotoma</i>	
<i>Flindersia bennettiana</i>	
<i>Fumaria officinalis</i>	

Species name	Status
<i>Gahnia melanocarpa</i>	
<i>Galium aparine</i>	
<i>Geijera salicifolia</i>	
<i>Glycine clandestina</i>	
<i>Glycine microphylla</i>	
<i>Glycine sp</i>	
<i>Gomphocarpus physocarpus</i>	
<i>Gompholobium latifolium</i>	
<i>Gompholobium pinnatum</i>	
<i>Gonocarpus oreophilus</i>	
<i>Goodenia bellidifolia</i> subsp. <i>Argentea</i>	
<i>Goodia lotifolia</i>	
<i>Gossia acmenoides</i>	
<i>Gossia bidwillii</i>	
<i>Grevillea robusta</i>	
<i>Grewia latifolia</i>	
<i>Guioa semiglauc</i>	
<i>Gynura drymophila</i>	
<i>Gyrostemon osmus</i>	
<i>Hakea florulenta</i>	
<i>Hardenbergia violacea</i>	
<i>Harpullia alata</i>	
<i>Harpullia hillii</i>	
<i>Hedraianthera porphyropetala</i>	
<i>Helichrysum elatum</i>	
<i>Helicia ferruginea</i>	R (Q)
<i>Helicia glabriflora</i>	
<i>Helmholtzia glaberrima</i>	R (Q)
<i>Hibbertia dentata</i>	
<i>Hibiscus heterophyllus</i>	
<i>Hibiscus splendens</i>	

Species name	Status
<i>Homalanthus stillingifolius</i>	
<i>Homoranthus virgatus</i>	
<i>Hovea acutifolia</i>	
<i>Hovea acutifolia</i>	
<i>Hovea similis</i>	
<i>Hybanthus stellarioides</i>	
<i>Hydrilla verticillata</i>	
<i>Hydrocotyle pedicellosa</i>	
<i>Hymenophyllum australe</i>	
<i>Hymenophyllum cupressiforme</i>	
<i>Hymenosporum flavum</i>	
<i>Hyparrhenia filipendula</i>	
<i>Hypochoeris microcephala</i> var. <i>albiflora</i>	
<i>Hypolepis muelleri</i>	
<i>Imperata cylindrica</i>	
<i>Indigofera australis</i>	
<i>Isotoma axillaris</i>	
<i>Jacksonia scoparia</i>	
<i>Jasminum jenniae</i>	
<i>Jasminum singuliflorum</i>	
<i>Kennedia rubicunda</i>	
<i>Kummerowia striata</i>	
<i>Lachnagrostis filiformis</i>	
<i>Lantana camara</i>	
<i>Lastreopsis decomposita</i>	
<i>Lastreopsis marginans</i>	
<i>Lastreopsis microscora</i>	
<i>Lastreopsis munita</i>	
<i>Lastreopsis smithiana</i>	
<i>Laxmannia gracilis</i>	

Species name	Status
<i>Lemna aequinoctialis</i>	
<i>Lenwebbia prominens</i>	
<i>Lepidosperma clipeicola</i>	
<i>Lepidosperma laterale</i>	
<i>Lepidozamia peroffskyana</i>	
<i>Leptinella longipes</i>	
<i>Leptospermum petersonii</i>	
<i>Leptospermum trinervium</i>	
<i>Leptospermum variabile</i>	
<i>Lespedeza juncea</i> subsp. <i>Sericea</i>	
<i>Leucopogon juniperinus</i>	
<i>Lindsaea microphylla</i>	
<i>Liparis swenssonii</i>	
<i>Litsea australis</i>	
<i>Lobelia gibbosa</i>	
<i>Lobelia gibbosa</i> var. <i>browniana</i>	
<i>Lobelia purpurascens</i>	
<i>Lobelia trigonocaulis</i>	
<i>Lomandra confertifolia</i>	
<i>Lomandra laxa</i>	
<i>Lomandra multiflora</i>	
<i>Lomandra spicata</i>	
<i>Lomatia silaifolia</i>	
<i>Lophostemon confertus</i>	
<i>Lythrum salicaria</i>	
<i>Macadamia integrifolia</i>	V (Q and A)
<i>Macadamia tetraphylla</i>	V (Q and A)
<i>Mallothus claoxyloides</i>	
<i>Marsdenia hemiptera</i>	R (Q)
<i>Maytenus silvestris</i>	
<i>Meiogyne stenopetala</i>	

Species name	Status
<i>Melaleuca bracteata</i>	
<i>Meila azedarach</i>	
<i>Melinis minatiflora</i>	
<i>Melodinus acutiflorus</i>	
<i>Melodinus australis</i>	
<i>Mentha diemenica</i>	
<i>Microlane stipoides</i>	
<i>Microsorium scandens</i>	
<i>Mischocarpus anodontus</i>	
<i>Mischocarpus pyriformis</i>	
<i>Morinda jasminoides</i>	
<i>Myoporum acuminatum</i>	
<i>Myoporum montanum</i>	
<i>Myrsine angusta</i>	
<i>Neolitsea dealbata</i>	
<i>Nicotiana forsteri</i>	
<i>Notelaea ovata</i>	
<i>Nothofagus moorei</i>	
<i>Notodanthonia longifolia</i>	
<i>Notothixos cornifolius</i>	
<i>Notothixos subaureus</i>	
<i>Nyssanthes diffusa</i>	
<i>Oberonia titania</i>	
<i>Olea paniculata</i>	
<i>Olearia nernstii</i>	
<i>Olearia oppositifolia</i>	
<i>Oplismenus aemulus</i>	
<i>Oplismenus imbecillis</i>	
<i>Ottochloa gracillima</i>	
<i>Oxalis corniculata</i>	
<i>Palmeria scandens</i>	

Species name	Status
<i>Pandorea</i> sp.	
<i>Panicum bisulcatum</i>	
<i>Panicum effusum</i>	
<i>Panicum lachnophyllum</i>	
<i>Panicum miliaceum</i>	
<i>Panicum pygmaeum</i>	
<i>Panicum simile</i>	
<i>Pararchidendron pruinatum</i>	
<i>Pararistolochia praevenosa</i>	R (Q)
<i>Parsonia lanceolata</i>	
<i>Parsonia straminea</i>	
<i>Paspalidium disjunctum</i>	
<i>Paspalidium gaussum</i>	
<i>Paspalidium gracile</i>	
<i>Paspalum mandiocanum</i>	
<i>Paspalum urvillei</i>	
<i>Passiflora subpeltata</i>	
<i>Pellaea falcata</i>	
<i>Pellaea nana</i>	
<i>Pennantia cunninghamii</i>	
<i>Peperomia blanda</i> var. <i>floribunda</i>	
<i>Persoonia adenantha</i>	
<i>Persoonia media</i>	
<i>Phaleria chermideana</i>	
<i>Phyllanthus gunnii</i>	
<i>Physalis peruviana</i>	
<i>Phytolacca americana</i>	
<i>Picris angustifolia</i> subsp. <i>carolorum-henricorum</i>	
<i>Piliostigma glabrum</i>	
<i>Pimelea latifolia</i>	

Species name	Status
<i>Pimelea neoanglica</i>	
<i>Pittosporum multiflorum</i>	
<i>Pittosporum undulatum</i>	
<i>Platysace lanceolata</i>	
<i>Plectorrhiza tridentata</i>	
<i>Plectranthus graveolens</i>	
<i>Plectranthus nitidus</i>	E (Q and A)
<i>Plectranthus parviflorus</i>	
<i>Poa labillardieri</i>	
<i>Poa sieberiana</i>	
<i>Podocarpus elatus</i>	
<i>Podolobium ilicifolium</i>	
<i>Polyosma cunninghamii</i>	
<i>Pomaderris lanigera</i>	
<i>Pomax umbellata</i>	
<i>Poranthera microphylla</i>	
<i>Potamogeton ochreatus</i>	
<i>Pouteria australis</i>	
<i>Prostanthera ovalifolia</i>	
<i>Prostanthera phycifolia</i>	
<i>Prunus munsoniana</i>	
<i>Prunus persica</i>	
<i>Pseuderanthemum variabile</i>	
<i>Psychotria daphnoides</i> var. <i>pubescens</i>	
<i>Psychotria simmondsiana</i>	
<i>Pteridium esculentum</i>	
<i>Pteris umbrosa</i>	
<i>Pterostylis daintreana</i>	
<i>Pterostylis nutans</i>	
<i>Pueraria montana</i> var. <i>lobata</i>	

Species name	Status
<i>Pultenaea flexilis</i>	
<i>Pultenaea petolaris</i>	
<i>Pultenaea retusa</i>	
<i>Pultenaea villosa</i>	
<i>Pyrosia confluens</i>	
<i>Pyrosia rupestris</i>	
<i>Quintinia verdonii</i>	
<i>Randia moorei</i>	E (Q and A)
<i>Ranunculus lappaceus</i>	
<i>Ranunculus sessiliflorus</i>	
<i>Rhodamnia argentea</i>	
<i>Rhodamnia maideniana</i>	R (Q)
<i>Rhodospaera rhodanthema</i>	
<i>Ricinocarpus speciosus</i>	V (Q)
<i>Rorippa eustylis</i>	
<i>Rorippa palustris</i>	
<i>Rubus moluccanus</i> var. <i>trilobus</i>	
<i>Rubus rosifolius</i>	
<i>Rulingia salviifolia</i>	R (Q)
<i>Salvia reflexa</i>	
<i>Sarcophilus ceciliae</i>	
<i>Sarcopteryx stipata</i>	
<i>Sarcostemma viminale</i> subsp. <i>Brunonianum</i>	
<i>Sarga leiocladium</i>	
<i>Schizomeria ovata</i>	
<i>Schoenoplectus mucronatus</i>	
<i>Schoenoplectus validus</i>	
<i>Senecio amygdalifolius</i>	
<i>Senecio madagascariensis</i>	
<i>Senecio pinnatifolius</i> var. <i>serratus</i>	

Species name	Status
<i>Senecio tamoides</i>	
<i>Setaria italica</i>	
<i>Setaria pumila</i>	
<i>Setaria sphacelata</i>	
<i>Siphonodon australis</i>	
<i>Solanum capsicoides</i>	
<i>Solanum mentiens</i>	
<i>Solanum semiarmatum</i>	
<i>Solanum serpens</i>	
<i>Solanum shirleyanum</i>	
<i>Solanum stelligerum</i>	
<i>Sonchus asper</i> subsp. <i>glaucescens</i>	
<i>Sparganium erectum</i> subsp. <i>stoloniferum</i>	
<i>Sparganium subglobosum</i>	
<i>Spermacoce brachystema</i>	
<i>Spirodela punctata</i>	
<i>Sporobolus creber</i>	
<i>Sporobolus fertilis</i>	
<i>Sporobolus pyramidalis</i>	
<i>Stenocarpus sinuatus</i>	
<i>Streblus brunonianus</i>	
<i>Styidium graminifolium</i>	
<i>Swainsona galegifolia</i>	
<i>Symplocos thwaitesii</i>	
<i>Syncarpia glomulifera</i>	
<i>Syzygium luehmannii</i>	
<i>Syzygium oleosum</i>	
<i>Tetradlea thymifolia</i>	
<i>Themede triandra</i>	
<i>Tmesipteris truncata</i>	

Species name	Status
<i>Trachymene procumbens</i>	
<i>Tragia novae-hollandiae</i>	
<i>Trichosanthes subvelutina</i>	
<i>Trifolium campestre</i>	
<i>Tripladenia cunninghamii</i>	
<i>Tristaniopsis laurina</i>	
<i>Triumfetta rhomboidea</i>	
<i>Triunia youngiana</i>	
<i>Trochocarpa laurina</i>	
<i>Trophis scandens</i>	
<i>Velleia spathulata</i>	
<i>Verbena rigida</i>	
<i>Veronica plebeia</i>	
<i>Vicia hirsuta</i>	
<i>Viola banksii</i>	
<i>Viola betonicifolia</i>	
<i>Wahlenbergia glabra</i>	R (Q)
<i>Wedelia spilanthisoides</i>	
<i>Westringia blakeana</i>	R (Q)
<i>Westringia rupicola</i>	V (Q and A)
<i>Wilkiea austroqueenslandica</i>	
<i>Xanthorrhoea glauca</i>	
<i>Xanthorrhoea latifolia subsp. maxima</i>	
<i>Xanthosia pilosa</i>	
<i>Xerochrysum bracteatum</i>	
<i>Zanthoxylum brachyacanthum</i>	

Species name	Status
<p><i>Zieria smithii</i></p> <p>Status:</p> <p>E – endangered</p> <p>V – vulnerable</p> <p>R – rare</p> <p>Listing:</p> <p>Q – Queensland Nature Conservation Wildlife Regulation 1994</p> <p>A – Commonwealth Environment Protection and Biodiversity Conservation Act 1999</p>	

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites															
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O P P			
	<i>Litoria rubella</i>	Desert Tree Frog																								
	<i>Litoria tyleri</i>	Laughing Tree Frog																								
	<i>Litoria wilcoxii</i>	Stony Creek Frog	X																							
Bufonidae	<i>Bufo marinus</i>	Cane Toad		X						X															X	
Reptiles																										
Cheloniidae	<i>Elseya latisternum</i>	Saw-shelled Turtle																								
Gekkonidae	<i>Hemidactylus frenatus</i>	Asian House Gecko																							X	
Pygopodidae	<i>Pygopus lepidopodus</i>	Common Scalyfoot																							X	
Scincidae	<i>Calyptotis scutirostrum</i>	Scute-snouted Calyptotis																								
	<i>Carlia folorium</i>																									
	<i>Carlia pectoralis</i>																									
	<i>Cryptoblepharus virgatus</i>	Wall Skink												X												
	<i>Ctenopus robustus</i>	Eastern Striped Skink																								
	<i>Eulamprus quoyii</i>	Eastern Water Skink																								
	<i>Eulamprus tenuis</i>	A Bar-sided Skink																								
	<i>Lampropholis amicula</i>																									
	<i>Lampropholis delicata</i>																									
	<i>Saiphos equalis</i>	Three-toed Skink																								

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites															
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O	P	P	
Agamidae	<i>Diporiphora australis</i>	Eastern Two-lined Dragon																								
	<i>Pogona barbata</i>	Bearded Dragon																								
	<i>Physignathus lesueurii</i>	Eastern Water Dragon																		X						
Varanidae	<i>Varanus varius</i>	Lace Monitor																								
Colubridae	<i>Boiga irregularis</i>	Brown Tree Snake																								
Elapidae	<i>Cacophis squamulosus</i>	Golden-crowned Snake																							X	
	<i>Cryptophis nigrescens</i>	Eastern Small-eyed Snake										X														X
	<i>Tropidechis carinatus</i>	Rough-scaled Snake																								X
Birds																										
Megapodidae	<i>Alectura lathami</i>	Australian Brush-turkey																								
Phasianidae	<i>Coturnix ypsilophora</i>	Brown Quail																								
	<i>Coturnix chinensis</i>	King Quail																								X
Anatidae	<i>Dendrocygna eytoni</i>	Plumed Whistling-Duck																		X						
	<i>Cygnus atratus</i>	Black Swan																								

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites											
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L
	<i>Ardea ibis</i>	Cattle Egret	M, Ma (EPBC)																			X
	<i>Nycticorax caledonicus</i>	Nankeen Night Heron																				X
Threskiornithidae	<i>Threskiornis molucca</i>	Australian White Ibis	Ma (EPBC)																			
	<i>Threskiornis spinicollis</i>	Straw-necked Ibis	Ma (EPBC)																			
	<i>Platalea flavipes</i>	Yellow-billed Spoonbill																				
Accipitridae	<i>Pandion haliaetus</i>	Osprey	M, Ma (EPBC)																			
	<i>Elanus axillaris</i>	Black-shouldered Kite																				
	<i>Haliaeetus sphenurus</i>	Whistling Kite	Ma (EPBC)																			X
	<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	M, Ma (EPBC)						X													
	<i>Circus approximans</i>	Swamp Harrier	Ma (EPBC)																			
	<i>Accipiter novaehollandiae</i>	Grey Goshawk	R (NCA)																			X
Falconidae	<i>Aquila audax</i>	Wedge-tailed Eagle																				X
	<i>Falco cenchroides</i>	Nankeen Kestrel	Ma (EPBC)																			
Rallidae																						

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites													
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O P P	
	<i>Gallinulus philippensis</i>	Buff-banded Rail	Ma (EPBC)			X																		
	<i>Amaurornis olivaceus</i>	Bush-hen	Ma (EPBC)																					
	<i>Porphyrrio porphyrio</i>	Purple Swamphen	Ma (EPBC)																					
	<i>Gallinula tenebrosa</i>	Dusky Moorhen																						
	<i>Fulica atra</i>	Eurasian Coot																						
Recurvirostridae	<i>Himantopus himantopus</i>	Black-winged Stilt																						
Charadriidae	<i>Eiseyornis melanops</i>	Black-fronted Dotterel																						
	<i>Vanellus miles</i>	Masked Lapwing																						X
Columbidae	<i>Columba leucomela</i>	White-headed Pigeon																						
	<i>Macropygia amboinensis</i>	Brown Cuckoo-Dove				X																		
	<i>Chalcophaps indica</i>	Emerald Dove																						
	<i>Phaps chalcoptera</i>	Common Bronzewing																						X
	<i>Ocyphaps lophotes</i>	Crested Pigeon																						X
	<i>Geopelia striata</i>	Peaceful Dove																						
	<i>Geopelia humeralis</i>	Bar-shouldered Dove																						X
	<i>Leucosarcia melanoleuca</i>	Wonga Pigeon																						
	<i>Ptilinopus magnificus</i>	Wompoo Fruit-Dove																						

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites												
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O P P
	<i>Ptilinopus regina</i>	Rose-crowned Fruit-Dove							X														
Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V (NCA)																				
	<i>Calyptorhynchus funereus</i>	Yellow-tailed Black-Cockatoo																					X
	<i>Cacatua roseicapilla</i>	Galah																					X
	<i>Cacatua galerita</i>	Sulphur-crested Cockatoo																					
Psittacidae	<i>Trichoglossus haematodus</i>	Rainbow Lorikeet							X														X
	<i>Trichoglossus chlorolepidotus</i>	Scaly-breasted Lorikeet		X					X														X
	<i>Glossopsitta pusilla</i>	Little Lorikeet								X													
	<i>Platycercus adscitus</i>	Pale-headed Rosella																					
Cuculidae	<i>Cacomantis variolosus</i>	Brush Cuckoo																					
	<i>Chrysococcyx minutillus</i>	Little Bronze-Cuckoo	Ma (EPBC)																				
	<i>Eudynamys scolopacea</i>	Common Koel	Ma (EPBC)																				
	<i>Scythrops novaehollandiae</i>	Channel-billed Cuckoo	Ma (EPBC)																				
Centropodidae	<i>Centropus phasianinus</i>	Pheasant Coucal																					

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites																
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O	P	P		
Strigidae																											
	<i>Ninox novaeseelandiae</i>	Southern Boobook																									
Tytonidae																											
	Tyto tenebricosa	Sooty Owl	R (NCA)								X																
	<i>Tyto alba</i>	Barn Owl																									X
Podargidae																											
	<i>Podargus strigoides</i>	Tawny Frogmouth									X																
Caprimulgidae																											
	<i>Eurostopodus mystacalis</i>	White-throated Nightjar	Ma (EPBC)			X																					X
Aegothelidae																											
	<i>Aegotheles cristatus</i>	Australian Owlet-nightjar				X																					
Alcedinidae																											
	<i>Alcedo azurea</i>	Azure Kingfisher				X																					
Halcyonidae																											
	<i>Dacelo novaeguineae</i>	Laughing Kookaburra							X																		X
	<i>Todiramphus macleayii</i>	Forest Kingfisher	Ma (EPBC)																								
	<i>Todiramphus sanctus</i>	Sacred Kingfisher	Ma (EPBC)									X															
Meropidae																											
	<i>Merops ornatus</i>	Rainbow Bee-eater	M (EPBC)																								X
Coraciidae																											
	<i>Eurystomus orientalis</i>	Dollarbird	Ma (EPBC)																								
Pittidae																											

Family	Scientific Name	Common Name	Status	Systematic Survey Sites										Opportunistic Survey Sites											
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O	P	P
	<i>Pitta versicolor</i>	Noisy Pitta	Ma (EPBC)																						
Climacteridae	<i>Cormobates leucophaeus</i>	White-throated Treecreeper		X				X		X															
	<i>Climacteris erythrops</i>	Red-browed Treecreeper	R (NCA)	X					X																
Maluridae	<i>Malurus lamberti</i>	Variegated Fairy-wren																							
	<i>Malurus melanocephalus</i>	Red-backed Fairy-wren		X							X														
Pardalotiidae	<i>Pardalotus punctatus</i>	Spotted Pardalote																							
	<i>Pardalotus striatus</i>	Striated Pardalote		X						X															
	<i>Sericornis frontalis</i>	White-browed Scrubwren			X						X														
	<i>Sericornis magnirostris</i>	Large-billed Scrubwren										X													
	<i>Gerygone olivacea</i>	White-throated Gerygone										X													X
	<i>Acanthiza lineata</i>	Striated Thornbill																							
	<i>Acanthiza pusilla</i>	Brown Thornbill		X							X											X			
Meliphagidae	<i>Philemon corniculatus</i>	Noisy Friarbird		X								X													
	<i>Philemon citreogularis</i>	Little Friarbird									X														

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites														
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O P P		
	<i>Entomyzon cyanotis</i>	Blue-faced Honeyeater																						X	
	<i>Manorina melanocephala</i>	Noisy Miner		X																					
	<i>Meliphaga lewinii</i>	Lewin's Honeyeater			X																				
	<i>Lichenostomus chrysops</i>	Yellow-faced Honeyeater				X																			X
	<i>Melithreptus albogularis</i>	White-throated Honeyeater						X																	
	<i>Melithreptus lunatus</i>	White-naped Honeyeater							X																
	<i>Lichmera indistincta</i>	Brown Honeyeater								X															
	<i>Acanthorhynchus tenuirostris</i>	Eastern Spinebill																							
	<i>Myzomela sanguinolenta</i>	Scarlet Honeyeater																							
Petroicidae																									
	<i>Eopsaltria australis</i>	Eastern Yellow Robin								X															
Cinclosomatidae																									
	<i>Psophodes olivaceus</i>	Eastern Whipbird									X														
Neositidae																									
	<i>Daphoenositta chrysoptera</i>	Varied Sittella																							
Pachycephalidae																									
	<i>Pachycephala pectoralis</i>	Golden Whistler		X																					
	<i>Pachycephala rufiventris</i>	Rufous Whistler			X																				
	<i>Colluricincla harmonica</i>	Grey Shrike-thrush									X														

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites															
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O p p			
Dicruridae	<i>Monarcha melanopsis</i>	Black-faced Monarch	Ma (EPBC)			X																				
	<i>Monarcha leucotis</i>	White-eared Monarch				X																				
	<i>Myiagra rubecula</i>	Leaden Flycatcher																								
	<i>Grallina cyanoleuca</i>	Magpie-lark	Ma (EPBC)																					X		
	<i>Rhipidura rufifrons</i>	Rufous Fantail	Ma (EPBC)						X													X				
	<i>Rhipidura leucophrys</i>	Willie Wagtail																							X	
	<i>Dicrurus bracteatus</i>	Spangled Drongo	Ma (EPBC)	X					X																	
Campephagidae	<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike	Ma (EPBC)						X																X	
	<i>Coracina papuensis</i>	White-bellied Cuckoo-shrike	Ma (EPBC)						X																	
	<i>Coracina tenuirostris</i>	Cicadabird	Ma (EPBC)		X				X													X	X	X		
	<i>Lalage leucomela</i>	Varied Triller									X															
Oriolidae	<i>Oriolus sagittatus</i>	Olive-backed Oriole																								
	<i>Sphetheotes viridis</i>	Figbird																								
Artamidae	<i>Cracticus torquatus</i>	Grey Butcherbird																								
	<i>Cracticus nigrogularis</i>	Pied Butcherbird			X																				X	

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites												
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O p p
	<i>Gymnorhina tibicen</i>	Australian Magpie																					X
	<i>Strepera graculina</i>	Pied Currawong																					X
Corvidae	<i>Corvus orru</i>	Torresian Crow						X															X
Passeridae	<i>Taeniopygia bichenovii</i>	Double-barred Finch						X															
	<i>Neochmia temporalis</i>	Red-browed Finch						X															X
Dicaeidae	<i>Dicaeum hirundinaceum</i>	Mistletoebird																					
Hirundinidae	<i>Hirundo neoxena</i>	Welcome Swallow	Ma (EPBC)																				X
	<i>Hirundo ariel</i>	Fairy Martin																					
Sylviidae	<i>Megalurus timoriensis</i>	Tawny Grassbird																					
	<i>Cisticola exilis</i>	Golden-headed Cisticola								X													
Zosteropidae	<i>Zosterops lateralis</i>	Silvereye	Ma (EPBC)							X													
	<i>Zosterops lateralis</i>	Silvereye																					
Sturnidae	<i>Acridotheres tristis</i>	Common Myna																					X
Mammals																							
Tachyglossidae	<i>Tachyglossus aculeatus</i>	Echidna																					

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites																										
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O P P														
Dasyuridae	<i>Antechinus flavipes</i>	Yellow-footed Antechinus			X			X																													
Peramelidae	<i>Sminthopsis murina</i>	Common Dunnart						X																													
	<i>Isodon macrourus</i>	Northern Brown Bandicoot							X																												
Phascolarctidae	<i>Phascolarctos cinereus</i>	Koala	V (NCA)					X																													
Phalangeridae	<i>Trichosurus caninus</i>	Mountain Brushtail Possum																																			
	<i>Trichosurus vulpecula</i>	Common Brushtail Possum						X				X																									
Petauridae	<i>Petaurus breviceps</i>	Sugar Glider																																			
Pseudocheiridae	<i>Petauroides volans</i>	Greater Glider										X																									
	<i>Pseudocheirus peregrius</i>	Common Ringtail Possum																																			
Acrobatidae	<i>Acrobates pygmaeus</i>	Feather-tail Glider																																			
Macropodidae	<i>Macropus rufogriseus</i>	Red-necked Wallaby																																			
	<i>Wallabia bicolor</i>	Swamp Wallaby										X																									
Pteropidae																																					

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites											
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L
	<i>Nyctimene robinsoni</i>	Eastern Tube-nosed Bat		X																		X
	<i>Pteropus alecto</i>	Black Flying Fox						X														X
	<i>Pteropus poliocephalus</i>	Grey-headed Flying Fox	V (EPBC)				X															
Rhinolophidae																						
	<i>Rhinolophous megaphyllus</i>	Eastern Horseshoe Bat																				
Molossidae																						
	<i>Tadarida australis</i>	White-striped Mastiff Bat						X														X
Vespertilionidae																						
	<i>Chalinobobous gouldi</i>	Gould's Wattled Bat																				
	<i>Miniopterus australis</i>	Little Bentwing Bat				X																X
	<i>Mormopterus norfolkensis</i>	Eastern Freetail Bat																				
	<i>Mormopterus</i> sp. 2																					
	<i>Myotis macropus</i>	Southern Myotis						X														
	<i>Nyctophilus bifax</i>	Eastern Long-eared Bat				X																
	<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat																				
	<i>Vespadelus pumilus/vulturinus</i>																					
Muridae																						

Family	Scientific Name	Common Name	Status	Systematic Survey Sites							Opportunistic Survey Sites														
				1	2	3	4	5	6	7	A	B	C	D	E	F	G	H	I	J	K	L	O P P		
	<i>Hydromys chrysogaster</i>	Water Rat																							
	<i>Melomys cervinipes</i>	Fawn-footed Melomys		X		X																			
	<i>Melomys burtoni</i>	Grassland Melomys			X																				
	<i>Mus musculus</i>	House Mouse																							
	<i>Pseudomys gracilicaudatus</i>	Eastern Chestnut Mouse		X																					
	<i>Rattus fuscipes</i>	Bush Rat		X	X	X	X	X	X																
Canidae																									
Felidae		Dog																							
	<i>Felis catus</i>	Cat																							
Bovidae																									
	<i>Bos taurus</i>	Cattle																							
Leporidae																									
	<i>Oryctolagus cuniculus</i>	Hare																							X

Table F.9.2.2 Terrestrial Fauna Records from Databases

Species Name	Common Name	Status	Source
Birds			
<i>Acanthiza chrysorrhoa</i>	Yellow-rumped thornbill	C	QM
<i>Acanthiza lineata</i>	Striated thornbill		BA
<i>Acanthiza nana</i>	Yellow thornbill		BA
<i>Acanthiza pusilla</i>	Brown thornbill		BA
<i>Acanthiza reguloides</i>	Buff-rumped thornbill		BA
<i>Acanthorhynchus tenuirostris</i>	Eastern Spinebill		BA
<i>Accipiter cirrhocephalus</i>	Collared sparrowhawk	C	QM
<i>Accipiter fasciatus</i>	Brown goshawk	C	QM/BA
<i>Accipiter novaehollandiae</i>	Grey goshawk	R (Q)	QM/BA
<i>Acridotheres tristis</i>	Common myna	Intro	QM/BA
<i>Acrocephalus stentoreus</i>	Calamorous reed-warbler	C	QM
<i>Aegotheles cristatus</i>	Australian Owllet-nightjar		BA
<i>Alcedo azurea</i>	Azure kingfisher	C	QM/BA
<i>Alectura lathamii</i>	Australian brush-turkey	C	QM/BA
<i>Alisterus scapularis</i>	Australian King Parrot		BA
<i>Anas gracilis</i>	Grey teal	C	QM
<i>Anas platyrhynchos</i>	Mallard	Intro	QM/BA
<i>Anas superciliosa</i>	Pacific black duck	C	QM/BA
<i>Ardea alba</i>	Great egret	C, Mig (A)	QM/BA
<i>Ardea ibis</i>	Cattle egret	C, Mig (A)	QM/BA
<i>Ardea intermedia</i>	Intermediate egret		QM
<i>Ardea novaehollandiae</i>	White-faced heron	C	QM
<i>Ardea pacifica</i>	White-necked heron	C	QM
<i>Artamus cyanopterus</i>	Dusky woodswallow	C	QM
<i>Aviceda subcristata</i>	Pacific baza	C	QM/BA
<i>Burhinus grallarius</i>	Bush stone curlew	C	QM
<i>Butorides striatus</i>	Striated heron	C	QM
<i>Cacatua galerita</i>	Sulphur-crested cockatoo	C	QM/BA

Species Name	Common Name	Status	Source
<i>Cacatua roseicapilla</i>	Galah	C	QM/BA
<i>Cacomantis flabelliformis</i>	Fan-tailed Cuckoo		BA
<i>Cacomantis variolosus</i>	Brush Cuckoo	C	QM/BA
<i>Calidris acuminata</i>	Sharp-tailed sandpiper	C	QM
<i>Calidris tenuirostris</i>	Great knot	C	QM
<i>Calyptorhynchus funereus</i>	Yellow-tailed Black-Cockatoo		BA
<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo		BA
<i>Centropus phasianinus</i>	Pheasant coucal	C	QM/BA
<i>Chalcophaps indica</i>	Emerald dove		BA
<i>Charadrius leschenaultii</i>	Greater Sand Plover	C	QM
<i>Charadrius ruficapillus</i>	Red-capped Plover	C	QM
<i>Chenonetta jubata</i>	Australian wood duck	C	QM/BA
<i>Chrysococcyx lucidus</i>	Shining bronze cuckoo	C	QM/BA
<i>Cisticola exilis</i>	Golden-headed cisticola	C	QM
<i>Colluricincla harmonica</i>	Grey Shrike-Thrush	C	QM/BA
<i>Colluricincla megarrhyncha</i>	Little Shrike-thrush		BA
<i>Columba livia</i>	Rock dove	Intro	QM/BA
<i>Columba leucomela</i>	White-headed Pigeon		BA
<i>Coracina novaehollandiae</i>	Black-faced cuckoo-shrike	C	QM
<i>Coracina papuensis</i>	White bellied cuckoo-shrike	C	QM
<i>Coracina tenuirostris</i>	Cicadabird		BA
<i>Cornobates leucophaeus</i>	White-throated Treecreeper		BA
<i>Corvus coronoides</i>	Australian raven	C	QM
<i>Corvus orru</i>	Torresian Crow		BA
<i>Coturnix chinensis</i>	King quail	C	QM
<i>Coturnix ypsilophora</i>	Brown quail	C	QM/BA
<i>Cracticus nigrogularis</i>	Pied butcherbird	C	QM
<i>Cracticus torquatus</i>	Grey Butcherbird		BA
<i>Cygnus atratus</i>	Black swan	C	QM
<i>Dacelo leachii</i>	Blue-winged kookaburra	C	QM

Species Name	Common Name	Status	Source
<i>Dacelo novaeguineae</i>	Laughing kookaburra	C	QM/BA
<i>Dicaeum hirundinaceum</i>	Mistletoe bird	C	QM/BA
<i>Dicurus bracteatus</i>	Spangled drongo	C	QM/BA
<i>Egretta novaehollandiae</i>	White-faced heron	C	QM/BA
<i>Elanus axillaris</i>	Black-shouldered kite	C	QM
<i>Eiseyornis melanops</i>	Black-fronted Dotterel	C	QM/BA
<i>Entomyzon cyanotis</i>	Blue-faced honeyeater	C	QM/BA
<i>Eopsaltria australis</i>	Eastern Yellow Robin		BA
<i>Ephippiorhynchus asiaticus</i>	Black-necked stork	C	QM
<i>Erythronyctes cinctus</i>	Red-kneed Dotterel	C	QM
<i>Eudynamis scolopacea</i>	Common koel	C	QM/BA
<i>Eurystomus orientalis</i>	Dollarbird	C	QM/BA
<i>Falco berigora</i>	Brown Falcon	C	QM
<i>Falco cenchroides</i>	Nankeen kestrel	C	QM
<i>Falco longipennis</i>	Australian hobby	C	QM
<i>Gallinula tenebrosa</i>	Dusky moorhen	C	QM/BA
<i>Gallirallus philippensis</i>	Buff-banded rail	C	QM/BA
<i>Geopelia humeralis</i>	Bar-shouldered Dove		BA
<i>Geopelia striata</i>	Peaceful Dove		BA
<i>Gerygone levigaster</i>	Mangrove gerygone	C	QM
<i>Gerygone olivacea</i>	White-throated Gerygone		BA
<i>Glossopsitta pusilla</i>	Little lorikeet	C	QM/BA
<i>Grallina cyanoleuca</i>	Magpie-lark	C	QM/BA
<i>Gymnorhina tibicen</i>	Australian magpie	C	QM/BA
<i>Gygis alba</i>	White Tern	C	QM
<i>Haliastur indus</i>	Brahminy Kite		BA
<i>Haliaeetus leucogaster</i>	White bellied sea eagle	C	QM/BA
<i>Haliastur sphenurus</i>	Whistling Kite	C	QM/BA
<i>Hirundapus caudacutus</i>	White-throated Needletail		BA
<i>Hirundo neoxena</i>	Welcome swallow	C	QM/BA

Species Name	Common Name	Status	Source
<i>Hypoleucos varius</i>	Pied shag/ pied cormorant	C	QM
<i>Ixobrychus minutus</i>	Little bittern	C	QM
<i>Lalage leucomela</i>	Varied Triller		BA
<i>Larus novaehollandiae</i>	Silver Gull		BA
<i>Leucosarcia melanoleuca</i>	Wonga Pigeon		BA
<i>Lichenostomus chrysops</i>	Yellow-faced Honeyeater		BA
<i>Lichenostomus fasciocularis</i>	Mangrove honeyeater	C	QM
<i>Lichmera indistincta</i>	Brown honeyeater	C	QM/BA
<i>Lonchura castaneothorax</i>	Chestnut-breasted Mannikin		BA
<i>Lopholaimus antarcticus</i>	Topknot Pigeon		BA
<i>Macropygia amboinensis</i>	Brown Cuckoo-Dove		BA
<i>Malurus cyaneus</i>	Superb Fairy-wren		BA
<i>Malurus lamberti</i>	Variiegated fairy wren	C	QM/BA
<i>Malurus melanocephalus</i>	Red-backed Fairy-wren	C	QM/BA
<i>Manorina melanocephala</i>	Noisy Miner		BA
<i>Megalurus timoriensis</i>	Tawny Grassbird		BA
<i>Melithreptus gularis</i>	Black-chinned honey eater	R(Q)	QM
<i>Meliphaga lewinii</i>	Lewin's honeyeater	C	QM/BA
<i>Melithreptus albogularis</i>	White-throated Honeyeater		BA
<i>Merops ornatus</i>	Rainbow Bee-eater		BA
<i>Monarcha leucotis</i>	White-eared Monarch		BA
<i>Monarcha melanopsis</i>	Black-faced monarch	C	QM/BA
<i>Monarcha trivirgatus</i>	Spectacled Monarch		BA
<i>Myiagra inquieta</i>	Restless Flycatcher		BA
<i>Myiagra rubecula</i>	Leaden flycatcher	C	QM/BA
<i>Myzomela sanguinolenta</i>	Scarlet Honeyeater		BA
<i>Neochmia temporalis</i>	Red-browed finch	C	QM/BA
<i>Ninox novaeseelandiae</i>	Southern boobook	C	QM/BA
<i>Nycticorax caledonicus</i>	Nankeen night heron	C	QM
<i>Ocyphaps lophotes</i>	Crested pigeon	C	QM/BA
<i>Oriolus sagittatus</i>	Olive-backed Oriole		BA

Species Name	Common Name	Status	Source
<i>Orthyx temminckii</i>	Logrunner		BA
<i>Pachycephala pectoralis</i>	Golden whistler	C	QM/BA
<i>Pachycephala rufiventris</i>	Rufous whistler	C	QM/BA
<i>Pandion haliaetus</i>	Osprey		BA
<i>Pardalotus punctatus</i>	Spotted Pardalote		BA
<i>Pardalotus striatus</i>	Striated pardalote	C	QM/BA
<i>Passer domesticus</i>	House sparrow	Intro	QM
<i>Pelecanus conspicillatus</i>	Australian pelican	C	QM/BA
<i>Petrochelidon arfel</i>	Fairy Martin	C	QM
<i>Petrochelidon nigricans</i>		C	QM
<i>Petroica boodang</i>	Scarlet Robin		BA
<i>Petroica rosea</i>	Rose Robin		BA
<i>Phalacrocorax carbo</i>	Great Cormorant		BA
<i>Phalacrocorax melanoleucos</i>	Little black cormorant	C	QM/BA
<i>Phalacrocorax sulcirostris</i>	Little black cormorant	C	QM/BA
<i>Phalacrocorax varius</i>	Pied Cormorant		BA
<i>Phaps chalcoptera</i>	Common Bronzewing		BA
<i>Philemon citreogularis</i>	Little Friarbird		BA
<i>Philemon corniculatus</i>	Noisy friarbird	C	QM/BA
<i>Pitta versicolor</i>	Noisy Pitta		BA
<i>Platalea regia</i>	Royal Spoonbill		BA
<i>Platyercus adscitus</i>	Pale-headed rosella	C	QM/BA
<i>Platyercus eximius</i>	Eastern Rosella		BA
<i>Platyercus elegans</i>	Crimson Rosella		BA
<i>Pluvialis dominica</i>	American Golden Plover	C	QM
<i>Pluvialis fulva</i>	American Golden Plover	C	QM
<i>Podargus strigoides</i>	Tawny frogmouth	C	QM/BA
<i>Porphyrio porphyrio</i>	Purple swamphen	C	QM/BA
<i>Porzana pusilla</i>	Baillon's crane	C	QM
<i>Psophodes olivaceus</i>	Eastern whipbird	C	QM/BA
<i>Ptilinopus magnificus</i>	Wompoo fruit dove	C	QM/BA

Species Name	Common Name	Status	Source
<i>Ptilinopus regina</i>	Rose-crowned Fruit-Dove	C	QM/BA
<i>Ptilinopus superbus</i>	Superb fruit dove	C	QM
<i>Puffinus pacificus</i>	Wedge-tailed Shearwater	C	QM
<i>Rallus pectoralis</i>	Lewin's rail	R(Q)	QM
<i>Rhipidura fuliginosa</i>	Grey fantail	C	QM/BA
<i>Rhipidura leucophrys</i>	Willie wagtail	C	QM/BA
<i>Scythrops novaehollandiae</i>	Channel-billed cuckoo	C	QM/BA
<i>Sericornis frontalis</i>	White-browed Scrubwren		BA
<i>Sericornis magnirostris</i>	Large-billed Scrubwren		BA
<i>Sphecothebes viridis</i>	Figbird	C	QMBA
<i>Stercorarius parasiticus</i>	Artic jaeger	C	QM
<i>Sterna bergii</i>	Crested tern	C	QM
<i>Strena caspia</i>	Caspian tern	C	QM
<i>Streptopelia chinensis</i>	Spotted turtle-dove	Intro	QM/BA
<i>Strepera graculina</i>	Pied Currawong	C	BA
<i>Sturnus vulgaris</i>	Common starling	Intro	QM/BA
<i>Tachybaptus novaehollandiae</i>	Australasian Grebe	C	BA
<i>Taeniopygia bichenovii</i>	Owl finch	C	QM
<i>Threskiornis molucca</i>	Australian White Ibis	C	BA
<i>Threskiornis spinicollis</i>	Straw-necked Ibis	C	QM/BA
<i>Todiramphus macleayii</i>	Forest kingfisher	C	QM/BA
<i>Todiramphus sanctus</i>	Sacred kingfisher	C	QM/BA
<i>Tregellasia capito</i>	Pale-yellow Robin		BA
<i>Trichoglossus chlorolepidotus</i>	Scaly-breasted lorikeet	C	QM/BA
<i>Trichoglossus haematodus</i>	Rainbow lorikeet	C	QM/BA
<i>Turnix varia</i>	Painted button-quail	C	QM
<i>Tyto alba</i>	Barn owl	C	QM
<i>Tyto capensis</i>	African Grass Owl	C	QM
<i>Vanellus miles</i>	Masked lapwing (northern subspecies)	C	QM/BA

Species Name	Common Name	Status	Source
<i>Zosterops lateralis</i>	Silvereye	C	QM/BA
<i>Zoothera heinei</i>	Russet-tailed thrush	C	QM
Mammals			
<i>Perameles nasuta</i>	Long-nosed bandicoot	C	QM
<i>Petaurus norfolcensis</i>	Squirrel glider	C	QM
<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale	C	QM
<i>Planigale maculata</i>	Common planigale	C	QM
<i>Pteropus poliocephalus</i>	Grey-headed flying fox	V (A)	QM
<i>Rattus fuscipes</i>	Bush rat	C	QM
<i>Rattus lutreolus</i>	Swamp rat	C	QM
Reptiles			
<i>Acanthophis antarcticus</i>	Common death adder	C	QM
<i>Cacophis krefftii</i>	Dwarf-crowned snake	C	QM
<i>Carlia folicium</i>	Common skink	C	QM
<i>Dendrelaphis punctulata</i>	Common tree snake	C	QM
<i>Egernia frerei</i>	Major skink	C	QM
<i>Hoplocephalus stephensii</i>	Stephen's banded snake	C	QM
<i>Hypsiturus spinipes</i>	Southern angle-headed dragon	C	QM
<i>Lialis burtonis</i>	Burton's legless lizard	C	QM
<i>Lampropholis delicata</i>	Delicate skink	C	QM
<i>Morelia spilota</i>	Carpet python	C	QM
<i>Notechis scutatus</i>	Tiger snake	C	QM
<i>Pseudechis porphyriacus</i>	Red-bellied black snake	C	QM
<i>Saiphos equalis</i>	Three-toed skink	C	QM
<i>Saproscincus challengerii</i>	Challenging shade skink	C	QM
Amphibians			
<i>Adelotus brevis</i>	Tusked frog	V(Q)	QM
<i>Asa darlingtoni</i>	Pouched frog	C	QM
<i>Limnodynastes ornatus</i>	Ornate borrowing frog	C	QM
<i>Mixophyes iteratus</i>	Giant barred frog	E (Q)	QM
<i>Pseudophryne coriacea</i>	Red-backed broodfrog	C	QM

Species Name	Common Name	Status	Source
<i>Pseudophryne major</i>	Great brown broodfrog	C	QM
<i>Litoria fallax</i>	Eastern sedgefrog	C	QM
<i>Litoria peronii</i>	Emerald spotted treefrog, Peron's treefrog	C	QM

F.10 Aquatic Ecology