



Chapter 2: Environmental Considerations

Table of Contents – Chapter 2: Environmental Considerations

2.1. Introduction.....	3
2.1.1 Application.....	3
2.1.2 Relationship to other Chapters.....	3
2.1.3 How to use this Chapter.....	4
2.1.4 Intent of this Chapter.....	4
2.2. Environmental Management	5
2.2.1 Biodiversity.....	5
2.2.2 Waterways and Riparian Corridors.....	8
2.2.3 Green and Blue Grid.....	12
2.3. Vegetation Management	14
2.3.1 Tree and Vegetation Management.....	14
2.3.2 Street Trees and Canopy Cover	21
2.3.3 Vegetation Management Plans.....	23
2.4. Flood and Floodplain Management.....	24
2.4.1. General Flood Risk Management Prescriptive Controls.....	28
2.4.2. Floor Levels.....	31
2.4.3. Flood Resilient Construction	32
2.4.4. Structural Soundness	32
2.4.5. Car Parking and Driveway Access.....	33
2.4.6. Emergency Management	34
2.4.7. Management and Design.....	35
2.4.8. External and Cumulative Flood Impacts Controls	36
2.4.9. Off-site Flood Levels	41
2.4.10. Off-site Flood Flow Velocities	42
2.4.11. Adjoining Land Flood Hazard	43
2.5. Environmental Hazard Management.....	44
2.5.1. Bushfire.....	44
2.5.2. Mine subsidence	45
2.5.3. Contamination	46
2.5.4. Acid Sulfate Soils.....	48
2.5.5. Noise and Vibration	49
2.5.6. Air Quality	50
2.5.7. Hazardous and Offensive Land Use Buffers	51

2.1. Introduction

2.1.1. Application

The objectives and controls contained within this Chapter apply to all land to which development is permissible with consent under Maitland Local Environmental Plan 2011 (MLEP 2011).

2.1.2. Relationship to other Chapters

This section is to be read in conjunction with the following chapters and documents:

- Chapter 1: Introduction and Administration
- Chapter 3: Site Requirements
- Chapter 4: Heritage
- Chapter 5: Subdivision
- Chapter 6: Residential Uses
- Chapter 7: Commercial Uses
- Chapter 8: Industrial Uses
- Chapter 9: Rural and Other Land Uses
- Appendix A: Application Requirements – Other Development
- Appendix B: Application Requirements – Minor Development
- Appendix C: Biodiversity Guidelines
- Appendix D: Canopy Cover Guidelines
- Appendix E: Flooding Guidelines
- Glossary

Depending on where the site is located, the following area plans and associated additional development controls may also apply to a development:

- Chapter 10: Special Precincts, Locality Plans and Urban Release Areas

Note: Where no site-specific Chapter or Locality Plan applies to a development site, or the site falls within land marked as an Urban Release Area under the MLEP 2011, Council may require one to be prepared prior to lodgement of development applications in the following cases:

- a. If the land is subject to *Clause 6.3* of the *MLEP 2011*, OR
- b. where the land is subject to environmental constraints and/or more than one land parcel or ownership is involved.

2.1.3. How to use this Chapter

This Chapter is structured into four sections, as follows:

Environmental Management

This section focuses on the conservation and enhancement of Maitland's biodiversity, riparian lands and waterways, as well as the integration of Council's Green and Blue Grid, informed by the Maitland Environmental Sustainability Strategy 2030.

Vegetation Management

This section establishes a framework for tree and vegetation pruning and removal, sets targets and controls to enhance Maitland's tree canopy, and provides direction for Vegetation Management Plans.

Flood and Floodplain Management

This section is to ensure that properties identified as flood liable land undertake the necessary mitigation measures to reduce the impact of flooding to property, in accordance with overarching state and local legislation and flood studies.

Environmental Hazard Management

This section specifies requirements for addressing and mitigating risks associated with hazards such as bushfires, contamination, noise, air quality and buffers for hazardous or offensive development.

Definitions for key terms can be found in the Glossary of the DCP.

2.1.4. Intent of this Chapter

The intent of this DCP Chapter is to:

- Adhere to the goals, targets, and commitments of the Maitland Environmental Sustainability Strategy 2030.
- Support the principles of Ecologically Sustainable Development to provide net positive biodiversity outcomes.
- Facilitate the avoid, minimise, and offset environmental hierarchy.
- Limit adverse impacts on biodiversity and waterways.
- Protect and enhance the green and blue grid including biodiversity corridors.
- Increase canopy cover across Maitland to support urban heat resilience and improved biodiversity
- Maintain and enhance ecological processes necessary for the continued protection of environmentally sensitive land as well as encourage the recovery of threatened species, communities or populations and their habitats.
- Identify environmental hazards and remove development away from risk, or incorporate protective design elements.

2.2. Environmental Management

2.2.1. Biodiversity

The aim of this sub-section is to ensure that, subject to any relevant overarching state or commonwealth legislation, the planning, design, and implementation of new development results in net positive biodiversity outcomes for the long term.

Additionally, this sub-section provides a policy framework of the avoid, minimise, and offset environmental hierarchy, in particular the clearing of vegetated land for medium to large scale development.

The approval process for development which will impact upon vegetation is as follows:

1. Any vegetation clearing on rural zoned land is assessed *by Local Land Services under the Local Services Act 2013*.
2. Any vegetation clearing in any non-rural zone that reaches the [Biodiversity Offset Scheme](#) under the *Biodiversity Conservation Act 2016* will require a Biodiversity Development Assessment Report.
3. Any vegetation clearing in any non-rural zone that does not reach the *Biodiversity Offset Scheme* under the *Biodiversity Conservation Act 2016* may require (at Council discretion) a Flora and Fauna Assessment and/or a Biodiversity Offset Plan per the *Environmental Planning and Assessment Act 1979*.
4. Any other vegetation clearing not falling into these categories is assessed under Section 2.3.1 of this Chapter.

Relevant legislation and policy that may be read in conjunction with this Chapter are listed below:

- *Environmental Planning and Assessment Act 1979*
- *State Environmental Planning Policy (Biodiversity & Conservation) 2021*
- *Fisheries Management Act 1994*
- *Biodiversity Conservation Act 2016*
- *Local Land Services Act 2013*
- *Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*
- *Biosecurity Act 2015*

Objectives

- O.1 To avoid and minimise impacts to biodiversity and native vegetation.
- O.2 To ensure that biodiversity is appropriately considered in the determination of development proposals and land management.
- O.3 To protect and enhance ecologically sensitive areas, of threatened species and ecological communities, native vegetation, habitats, biodiversity corridors and the Green and Blue Grid.

- O.4 To achieve the relevant targets and actions of the Maitland Environmental Sustainability Strategy 2030 (ESS).
- O.5 To retain and protect threatened species and ecological communities and their habitats.
- O.6 To compensate for unavoidable biodiversity impacts in accordance with applicable legislation, or in the absence of such legislation, contemporary industry standards.
- O.7 To ensure that habitats and fauna are made more resilient into the future through effective management of the natural environment.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS	
AS.1 <ul style="list-style-type: none"> • O.1 • O.2 • O.3 	<p>Development should be sited, designed and managed to ensure adverse impacts to biodiversity values, including avoidance of areas identified in the Council's Green and Blue Grid, and Council's Biodiversity Corridors.</p> <p>Genuine and robust exploration of reasonable avoidance measures must be presented and submitted as part of a development application where native vegetation has the propensity to be affected. Where avoidance is not possible, measures to minimise and mitigate impacts must be demonstrated. Only after avoid and minimise measures are suitably addressed will biodiversity offsetting be considered. Specific controls relating to avoidance of the Green and Blue Grid are provided in Section 2.2.3 of this DCP.</p>
PC.1 <ul style="list-style-type: none"> • O.1 • O.2 • O.3 • O.5 	<p>If the development application is not required to be accompanied by a Biodiversity Development Assessment Report (BDAR), and is required to be assessed under the <i>Environmental Planning and Assessment Act 1979</i>, a Flora and Fauna Assessment (FFA) prepared by a suitably qualified ecologist in accordance with Appendix C: Biodiversity Guidelines, is required under the following circumstances:</p> <ol style="list-style-type: none"> a. development involves significant disturbance or removal of native vegetation (i.e., removal of more than five (5) native trees,) or is likely to impact upon threatened species habitat, threatened ecological communities or important habitat features such as hollow bearing trees, watercourses, wetlands, or dams. b. development involves clearing or disturbance of native vegetation overlapping Council's Green and Blue Grid or within Council's Biodiversity Corridors. c. potential significant biodiversity impacts are identified by Council following a site inspection. <p>Note: For development applications required to be assessed under the <i>Environmental Planning and Assessment Act 1979</i> and the <i>Biodiversity Conservation Act</i>, a Biodiversity Development Assessment Report (BDAR) must be prepared in accordance with the Biodiversity Assessment Method (BAM).</p>
PC.2 <ul style="list-style-type: none"> • O.1 • O.2 • O.3 • O.5 	<p>A Biodiversity Management Plan (BMP) is required in accordance with Appendix C: Biodiversity Guidelines in circumstances where:</p> <ol style="list-style-type: none"> a. a FFA is required, and Council deems that a BMP is necessary for managing biodiversity impacts, OR b. the Biodiversity Offset Scheme applies, OR c. a Council inspection determines that land with high biodiversity value will likely be impacted by development and requires ongoing management.

PREScriptive CONTROLS AND ACCEPTABLE SOLUTIONS

	<p>Note: Council's Natural Environment & Resilience team may choose to require the preparation of a BMP prior to issuance of a Construction Certificate or a Subdivision Works Certificate, rather than as part of a Development Application.</p>
<p>PC.3</p> <ul style="list-style-type: none"> • O.1 • O.3 • O.5 	<p>Where development results in removal or significant impacts to hollow-bearing trees or existing artificial hollows, removed hollows are to be offset in accordance with Appendix C: Biodiversity Guidelines. Unless adequately justified to the satisfaction of Council, installation of salvaged and augmented hollows is to occur whenever possible. All artificial hollows must be installed within retained trees on site.</p>
<p>PC.4</p> <ul style="list-style-type: none"> • O.1 • O.3 • O.4 • O.5 	<p>Development within 50m of environmentally significant features must provide for, and ensure the management of, an ecological buffer to minimise adverse impacts on biodiversity values. Identification and management of ecological buffers should be included within a Biodiversity Management Plan (BMP) for the site, prepared in accordance with Appendix C: Biodiversity Guidelines and Council input.</p> <p>Areas that require ecological buffers include:</p> <ul style="list-style-type: none"> • Threatened Ecological Communities (TECs), • pre-existing protected habitat, • species polygons for threatened flora or fauna known to occur on site, • Koala habitat (including core koala habitat, isolated or scattered primary koala food trees with evidence of koala activity, and any other areas where koalas are present, • year round or intermittently occupied flying fox camp, • hollow-bearing trees, and • Raptor nests. <p>Note: The requirements for management of ecological buffers will depend on the type and scale of the development with management obligations being less restrictive for small developments.</p>
<p>AS.3</p> <ul style="list-style-type: none"> • O.3 	<p>Where appropriate, suitable fencing, barriers or other measures are to be used to limit or control human access (e.g. motor vehicles) to environmentally sensitive areas.</p>
<p>PC.5</p> <ul style="list-style-type: none"> • O.1 • O.3 • O.6 	<p>Development on land adjoining an area that is of biodiversity value and/or forms a part of the Green and Blue Grid is to adhere to the following design criteria for lighting:</p> <ol style="list-style-type: none"> a. adherence to the principles and guidance of the National Light Pollution Guidelines for Wildlife (DCCEEW, 2023) (or as amended), b. high intensity lighting including industrial or commercial lighting, sports field lighting, lighting within carparking areas and associated with any industrial or commercial-scale retail development will be designed to avoid light spill into adjoining biodiversity areas (per <i>AS 4282 Control of the Obtrusive Effects of Outdoor Lighting</i>, or updates to that standard), c. install warm coloured LED street lighting where a development footprint contains or is within 100m of known microbat colonies or habitat likely to support microbat colonies to deter insects, d. manage light spill and noise producing activities where wildlife impacts are likely to arise from the proposed development and where development is adjacent to avoided land. Measures are to include appropriate noise treatment barriers along major roads and other light and noise attenuation mitigation measures, and e. ensure that any residual noise impacts from installed lighting on wildlife are appropriately mitigated.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.6

- O.1
- O.3
- O.6

Where the flow chart in Figure 2-1 indicates that squirrel glider survey is required, the Squirrel Glider Considerations outlined in Appendix C: Biodiversity Guidelines must be followed.

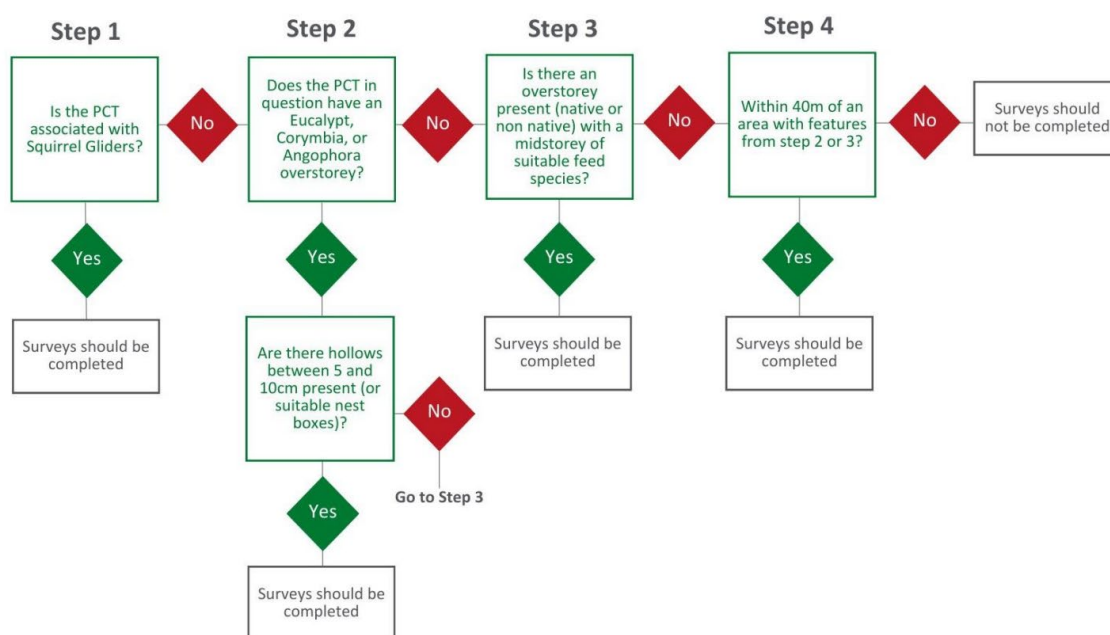


Figure 2-1: Squirrel Glider Survey Requirement Framework

2.2.2. Waterways and Riparian Corridors

The aim of this sub-section is to ensure that, subject to any relevant overarching state or commonwealth legislation, the planning, design, and implementation of new development results in net positive outcomes for waterways and riparian corridors for the long term.

Waterways are important features of Maitland, with riparian areas are the interface between land-based and waterway ecosystems. Riparian corridors provide a variety of functions within urban landscapes. They contribute to bank stabilisation, reducing erosion scour and sedimentation issues within rivers and creeks. Vegetated areas along the creek lines are used to filter nutrients, pollutants, and sediments before they reach the creek and degrade the quality of water.

Definition of riparian corridor

- The channel which comprises the bed and banks of the watercourse (to the highest bank), and
- The Vegetated Riparian Zone (VRZ) adjoining the channel.

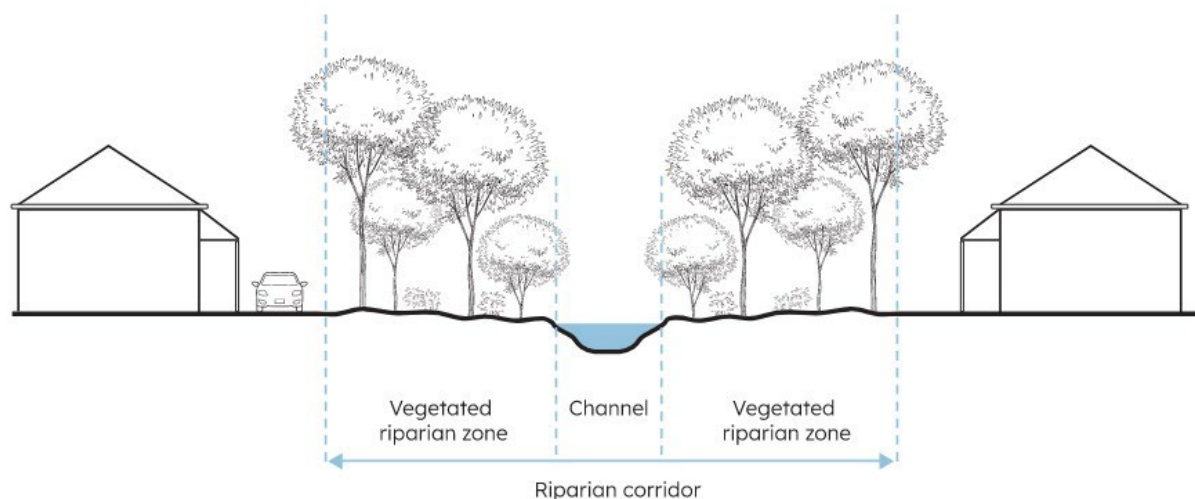


Figure 2-2: Riparian corridor zones

Required State Agency approvals

Controlled activities carried out in, on or under waterfront land are regulated by the *Water Management Act 2000*. The Department of Industry - Water administers the *Water Management Act 2000* and is required to assess the impact of any proposed controlled activity to ensure that no more than minimal harm will be done to waterfront land as a consequence of carrying out the controlled activity.

Waterfront land includes the bed and bank of any river, lake or estuary and all land within 40 metres of the highest bank of the river, lake or estuary.

If you are planning any work / development, in, on or under waterfront land, approval must be obtained from the Department of Industry - Water (or their equivalent agency) before commencing the controlled activity.

Relevant legislation and policy that should be read in conjunction with this Chapter are listed below:

- *Water Management Act 2000*
- *Protection of the Environment Operations Act 1997*
- *Clause 7.4 Riparian land and watercourses and Watercourse Maps of Maitland Local Environmental Plan 2011*
- *NRAR Guidelines for waterfront land*
- [Controlled activities – Guidelines for riparian corridors on waterfront land – Department of Planning and Environment – Water](#)
- *Council's Manual of Engineering Standards (MoES)*

Objectives

- O.8 To protect and restore native and riparian vegetation to improve the connectivity, ecological condition, and function of ecosystems.
- O.9 To ensure that development does not adversely affect aquatic fauna.
- O.10 To effectively manage indirect and ongoing impacts of development adjacent to waterways to ensure vegetation in the riparian area, aquatic fauna, water quality and quantity is protected and maintained.
- O.11 To reinstate more natural conditions in highly modified waterways and riparian land while not increasing flood risk.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS	
PC.1 <ul style="list-style-type: none"> O.8 O.10 O.11 	<p>Where a development proposal disputes the presence, location or Strahler order of a watercourse or waterbody specified in hydro line spatial data, the proponent must provide adequate justification. Justification must include ground-truthing by a suitably qualified professional and supporting evidence such as field survey data, hydrological assessments, or site photographs.</p> <p>Note: Despite this control, any watercourses mapped under <i>Clause 7.4</i> of the <i>MLEP 2011</i> must be appropriately assessed in line with the Clause.</p>
PC.2 <ul style="list-style-type: none"> O.8 O.10 O.11 	<p>Waterways of Strahler Order 2 and higher are to be maintained in a natural or naturalised (i.e. vegetated) state, including the maintenance and restoration of riparian area and habitat such as fallen debris, in accordance with Council's MoES.</p>
PC.3 <ul style="list-style-type: none"> O.8 O.11 	<p>Naturalised (i.e. vegetated) open channel drainage paths are to be provided when the contributing catchment exceeds 15 hectares or when 1% AEP overland flows cannot be safely conveyed overland as described in Australian Rainfall and Runoff Guidelines. These drainage paths are to be designed to safely convey overland flows and contribute to biodiversity, public amenity and safety.</p>
PC.4 <ul style="list-style-type: none"> O.10 O.11 	<p>Where a development is associated with or will affect a waterway of Strahler Order 2 or higher, rehabilitation will occur to return that waterway to a natural state.</p>
PC.5 <ul style="list-style-type: none"> O.10 	<p>Disturbances within the Vegetated Riparian Zone (VRZ) are to be avoided.</p>
AS.2 <ul style="list-style-type: none"> O.10 	<p>Asset Protection Zones (APZs) are not to be located within riparian areas.</p>
PC.6	<p>Fencing within riparian areas must be minimised and, where necessary to be provided, be of open design in order to allow for the free passage of water, fauna and flora.</p>

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

<ul style="list-style-type: none"> • O.10 • O.11 	
PC.7 <ul style="list-style-type: none"> • O.8 • O.10 	Bridges and crossings over waterways must not interfere with the connectivity of vegetation, alignment or profile of stream banks, and must not restrict flow during flood events.
PC.8 <ul style="list-style-type: none"> • O.8 • O.10 	Soil disturbance within riparian areas is to be avoided. An exception applies where soil disturbance is for the purposes of providing critical infrastructure and remediation activities associated with improving flood mitigation and health of waterways.
PC.9 <ul style="list-style-type: none"> • O.8 	Development is to be designed to preserve the continuity of riparian vegetation and habitat or interfere with hydrological flows within waterways or riparian areas.
PC.10 <ul style="list-style-type: none"> • O.8 • O.9 • O.10 	Development on land that drains into, or involves, watercourses that are mapped as Key Fish Habitat are to provide a Riparian Land Assessment in accordance with Appendix A: Application Requirements – Other Development or Appendix B: Application Requirements – Minor Development, whichever is applicable.
PC.11 <ul style="list-style-type: none"> • O.8 • O.10 • O.11 	<p>Stormwater detention areas and infrastructure are to maintain appropriate engineering design and mechanisms to ensure that all stormwater is treated prior to entering riparian waterways, whilst ensuring that such engineering and the location of stormwater devices does not compromise the connectivity and functioning of riparian vegetation, waterways and wildlife habitat.</p> <p>Note: Relevant documents pertaining to this control include the following:</p> <ul style="list-style-type: none"> • <i>NRAR Guidelines for waterfront land</i> • Controlled activities – Guidelines for riparian corridors on waterfront land – Department of Planning and Environment – Water • <i>Council's Manual of Engineering Standards</i>
PC.12 <ul style="list-style-type: none"> • O.10 	<p>Access roads, pathways, cycleways, and public open space are to adhere to the following design criteria:</p> <ol style="list-style-type: none"> pedestrian paths and cycleways are not to interfere with the connectivity or functions of riparian land, but they may be located in such a way that they contribute to management of edge effects and have minimal impact on riparian land, riparian waterways will allow for public access and integration where appropriate and practical, access paths must not unnecessarily impact upon the VRZ, public open space is to integrate adjacent to riparian waterways to enable good urban design and must not be within or unnecessarily impact upon the VRZ, and perimeter roads are to be incorporated in subdivisions adjacent to riparian land.
PC.13 <ul style="list-style-type: none"> • O.10 	<p>In cases where community title is proposed that involves riparian corridors, environmental land or areas of the Green and Blue Grid, the following requirements are to be met:</p> <ol style="list-style-type: none"> the configuration, footprint and layout of the development are to avoid damaging existing vegetation links along riparian corridors, and under Appendix A: Application Requirements

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

- Other Development or Appendix B: Application Requirements - Minor Development, whichever is applicable.
- b. submission of a Vegetation Management Plan in line with the details under to demonstrate maintenance and enhancement of biodiversity and riparian corridor values.

2.2.3. Green and Blue Grid

Council's adopted Environmental Sustainability Strategy 2030 established a Green and Blue Grid which incorporates native vegetation, waterways (wetlands, riparian corridors, rivers etc), habitat and fauna movement. When protected the Green and Blue Grid can:

- protect biodiversity and provide wildlife movement corridors
- help the urban environment to cool
- contribute to cleaner air and waterways
- provide new opportunities for community recreation and
- support improved physical, social and psychological health.

The Green and Blue Grid includes a hierarchy of 'biodiversity corridors', which connects across the landscape linking habitat areas. These biodiversity corridors are defined as:

1. Local significance - i.e. linkages facilitating wildlife movement within the Local Government Area (LGA).
2. Sub regional significance - i.e. linkages enabling movement into, or out of the LGA.
3. Regional significance - i.e. where the LGA forms a critical role in connecting external core habitat areas, enabling wildlife to move across Maitland.

Objectives

- O.12 To enhance the Green and Blue Grid.
- O.13 To provide functional biodiversity corridors through reductions in native clearing and improved water quality.
- O.14 To maintain and enhance connectivity for development in the vicinity of a biodiversity corridor.
- O.15 To connect biodiversity corridors between larger areas of habitat in Maitland and neighbouring Local Government Areas.
- O.16 To recreate the native vegetation that would have occurred prior to disturbance.
- O.17 To re-establish landscape connectivity and provide functional biodiversity corridors.
- O.18 To manage the impact of Asset Protection Zones (APZs) on Vegetation Rehabilitation Zones (VRZ).

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

<p>AS.1</p> <ul style="list-style-type: none"> • O.12 • O.13 • O.14 	<p>The avoid, minimise, offset hierarchy is to be applied to the Green and Blue Grid. Development that compromises the functionality of the Green and Blue Grid, including mapped biodiversity corridors will generally not be supported.</p> <p>Minor variations to the Green and Blue Grid may be considered to achieve practical outcomes. Some examples include:</p> <ol style="list-style-type: none"> a. minor incursions where clearing does not result in a significant decrease in habitat connectivity and biodiversity outcomes are maintained or improved. b. minor alteration to Council's Biodiversity Corridor location where functional connectivity can be maintained or improved nearby. c. retention of a tree is likely to cause immediate or short-term impacts to human health and safety, or property. This variation must be substantiated by a report prepared by an arborist with AQF Level 5 (or higher) qualifications. d. local offsetting within or nearby to the site which achieves net positive outcomes for biodiversity and connectivity. <p>A minor variation such as that referred to above must not conflict with any statutory consideration that would require the retention of the area. Variations to the Green and Blue Grid made on these grounds are to demonstrate layouts that have been considered, and that functionality of the Green and Blue Grid has been maintained or improved.</p>
<p>AS.2</p> <ul style="list-style-type: none"> • O.15 • O.16 • O.17 • O.18 	<p>Where Council's Biodiversity Corridors occur within or adjacent to a subject site, a selection of the following mitigation measures are to be provided:</p> <ol style="list-style-type: none"> a. demonstrate that development, services and landscaping associated activities do not create barriers to the movement of fauna along and within biodiversity corridors, b. install connectivity structures to facilitate native fauna movement where development has the potential to impact connectivity, such as culverts, overpasses, bridges, and glide poles, c. enhance biodiversity corridors through restoration and revegetation that improves functional connectivity. Enhancements should prioritise locations and treatments identified in Council's Green and Blue Grid map, d. weed management to restore habitat quality and enable fauna to utilise the corridor effectively for movement, foraging, and reproduction, e. provide suitable ecological buffers to mitigate edge effects and impacts from noise and light spill, f. provide sufficient and consolidated areas of deep soil that allow for vegetation growth, g. where appropriate, install fencing, barriers or other measures to limit or control access by humans and vehicles, and h. incorporate Water Sensitive Urban Design (WSUD) features, such as constructed wetlands, where required within or adjacent to the Green and Blue Grid.

2.3. Vegetation Management

2.3.1. Tree and Vegetation Management

This section applies to all land in the Maitland Local Government Area to which Chapter 2 of the [State Environmental Planning Policy \(Biodiversity and Conservation\) 2021](#) (*Biodiversity and Conservation SEPP 2021*) applies. Council manages approval for clearing of vegetation on all land other than land in RU1 Primary Production or RU2 Rural Landscape zones. Clearing of vegetation in these rural land use zones is administered through the *Local Land Services Act 2013*.

Where clearing exceeds the Biodiversity Offset Scheme Threshold (BOST) provided under the *Biodiversity Conservation Act 2016*, an approval is required from the Native Vegetation Panel. Council cannot issue a Council permit in these cases.

For clearing of land below the BOST, Council requires a Council permit to be issued for the clearing of vegetation under *Part 2.3* of the *Biodiversity Conservation SEPP*.

Vegetation is the same meaning as ‘vegetation’ under Chapter 2, Part 2.1 of the *Biodiversity and Conservation SEPP 2021*, being “a tree or other vegetation, whether or not it is native vegetation”. **Tree and vegetation removal is to be carried out through the relevant pathway identified in Table 2-1 below.**

Note:

1. Maitland City Council utilises the NSW Government’s [Planning Portal](#) Tree Permit application option to process Tree Permits.
2. The *Biodiversity and Conservation SEPP* prohibits Council from approving a development application for the clearing of native vegetation that exceeds the BOST. Refer to Table 2-1 for the approval pathway under the *Biodiversity Conservation Act 2016*.
3. Tree and vegetation management definitions are provided within the DCP Glossary.
 - Detailed application requirements for pruning or removing trees and vegetation is provided within Appendix A: Application Requirements – Other Development or Appendix B: Application Requirements – Minor Development, whichever is applicable.

Table 2-1: Tree and Vegetation Removal Pathways

PATHWAY TYPE ¹	TREE AND VEGETATION MANAGEMENT ACTIVITY
Council issued development consent (Development Application required)	<p>Development consent issued by Council is required for the removal or pruning of a tree or vegetation that is ancillary to other development proposed, or is, or is part of:</p> <ol style="list-style-type: none">a heritage item,a heritage conservation area,an Aboriginal object,an Aboriginal place of significance, or <p>and that being which Council is not satisfied that the removal or pruning is:</p>

PATHWAY TYPE ¹	TREE AND VEGETATION MANAGEMENT ACTIVITY
	<ul style="list-style-type: none"> • of a minor nature or is for the maintenance of the applicable item, area, object or place, AND • Council considers that the removal or pruning will not adversely affect the significance of the applicable item, area, object or place.
Council issued tree permit (declared vegetation)	<p>A council issued tree permit is required for the removal or pruning of 10% or greater of a tree or other vegetation in cases where:</p> <ul style="list-style-type: none"> • height exceeds 3m, AND/OR • diameter exceeds 100mm (at 1.3m from the ground), AND • the tree or vegetation poses no immediate risk to life or property. <p>Additionally, a council issued tree permit is required no matter the dimensions, location or risk the tree and/or vegetation poses in the following circumstances for:</p> <ol style="list-style-type: none"> vegetation that is considered a TEC or a threatened plant species listed under the <i>Biodiversity Conservation Act 2016</i> or the <i>Fisheries Management Act 1994</i>,² OR a tree or vegetation that is required to be retained or planted as a condition of a Complying Development Certificate or development consent, OR a tree or vegetation that was planted to offset other tree and vegetation removal, OR trees or vegetation that lie within Council's identified Green and Blue Grid and Council's identified Biodiversity Corridors,² OR the tree or vegetation is part of a heritage item, heritage conservation area, Aboriginal object or Aboriginal place of significance, where Council is satisfied that: <ul style="list-style-type: none"> • the removal or pruning is of a minor nature or is for the maintenance of that item, area, object or place, AND • will not have an adverse impact on the heritage significance of that item, area, object or place. the tree is listed in under the Significant Tree Register on Council's website and is not: <ul style="list-style-type: none"> • on land that is a heritage item, or • in a heritage conservation area and visible from the street or other public areas.
Native Vegetation Panel approval	<p>Clearing of native vegetation that is subject to the biodiversity offset scheme, as specified in the <i>Biodiversity Conservation Act 2016</i>.</p>
Exempt from consent, permit, or approval (no notice to Council required) ⁵	<p>No permit, development consent, or approval is required for tree and vegetation removal on private land if landowners' consent has been obtained and one of the following is true:</p> <ol style="list-style-type: none"> the clearing is authorised to occur under other legislation³, such as the <i>Rural Fires Act 1997</i>, OR

PATHWAY TYPE ¹	TREE AND VEGETATION MANAGEMENT ACTIVITY
	<ul style="list-style-type: none"> b. the tree trunk or shrub is located within 3m of the wall of an existing principal building (excluding carports, detached garages, pergolas, fences, retaining walls and the like)⁴, and is not: <ul style="list-style-type: none"> • on land that is a heritage item, or • in a heritage conservation area and visible from the street or other public areas (other than a lane), or part of an Aboriginal object, or within an Aboriginal place of heritage significance, OR c. the tree or shrub is less than 3m in height, and/or is less than 100mm in diameter at 1.3m above ground level, OR d. pruning is proposed, being maintenance of recent (past 12 months) growth or 10% of foliage, undertaken in accordance with <i>AS 4373 – Pruning of amenity trees</i>, OR e. the tree or vegetation is listed as a Priority Weed for the Hunter Region, Weed of National Significance, OR f. the tree or vegetation is listed under the Undesirable Tree and Vegetation Register in Table 2-2.
Notification to Council⁵	<p>Unless otherwise exempt, notification to Council that tree and/or vegetation removal has or will occur is to be carried out in the following circumstances:</p> <ul style="list-style-type: none"> a. Where the tree or vegetation poses an immediate risk to life or property due to a demonstrated sudden change to its structure as a direct result of a severe storm or wind events, Council is to be notified within 10 days of removal, OR b. Where the tree or vegetation is dead or storm damaged and is not: <ul style="list-style-type: none"> c. an immediate threat to life, or d. a habitat tree, or e. on land that is a heritage item, or f. in a heritage conservation area and visible from the street or other public areas (other than a lane), or g. part of an Aboriginal object, or within an Aboriginal place of heritage significance, <p>Council is to be notified 10 days before removal occurs.</p>
Threatened Species Licence	<p>Removal or pruning of any tree and vegetation that poses no risk to life or property and is likely to result in:</p> <ul style="list-style-type: none"> • harm to an animal that is a threatened species or part of a threatened ecological community, OR • picking a plant that is a threatened species or part of a threatened ecological community, OR • damage to the habitat of a threatened species or threatened ecological community, OR • damage to a declared area of outstanding biodiversity value. <p>Requires a Threatened Species Licence issued under the <i>Biodiversity Conservation Act 2016</i>.</p>

PATHWAY TYPE ¹	TREE AND VEGETATION MANAGEMENT ACTIVITY
Fisheries permits	Removal or pruning of any marine vegetation (e.g. saltmarsh) requires a Fisheries permit under Part 7 of the <i>Fisheries Management Act 1994</i> .

Notes:

1. All trees and shrubs within Council's road reserve or located on land owned or managed by Council is declared vegetation. The maintenance and removal of these trees and shrubs can only be undertaken by Council. If a tree or shrub on land managed by Council appears to be damaged by a storm, it must be referred to Council who will carry out the required works.
2. Council staff are able to assist applicants to identify whether trees and vegetation on their land could be a Threatened Ecological Community or is in proximity to Council's Green and Blue Grid or Council's Biodiversity Corridors.
3. Applicants for tree and vegetation removal will, in addition to this table and the Prescriptive Controls and Acceptable Solutions under this section, need to also consider the following legislation:
 - *Water Management Act 2000*: Vegetation clearing on **waterfront land** may require a controlled activity approval. See the [NSW Government Water](#) website for further information.
 - *Environment Protection and Biodiversity Conservation Act 1999 (Cwth)*: Provides protections and schedules relating to the management of nationally and internationally important flora, fauna, ecological communities, and places of natural heritage.
 - *Biodiversity Conservation Act 2016*: Additional licences may be required if tree or vegetation removal would also harm the animals listed under the Act.
 - *Biosecurity Act 2015*: manages the clearing of weeds.
 - *Heritage Act 1977*: regulates works undertaken on sites under conservation orders, relics, heritage items, and the like.
 - *Local Land Services Act 2013*: manages the clearing of native vegetation, regional vegetation management plans, property agreements within rural areas.
 - *National Parks and Wildlife Act 1974*: Further regulates works undertaken in Aboriginal places or works that impact Aboriginal objects.
 - *Rural Fires Act 1997*: [10/50 Vegetation Clearing Code of Practice for NSW](#), as well as the authorised removal of fire hazards.
4. The 3m distance is measured from the closest point of the trunk to the wall/gutter line of the building.
5. For clearing undertaken as exempt or exempt with notification to Council, the onus of proof is on the landowner to take and retain photos of the condition of the tree or vegetation pre- and post-removal. Landowners are encouraged to seek the advice of a qualified arborist to determine condition and risk of any tree.

Objectives

- O.19 To assist in achieving tree canopy targets within the Maitland Environmental Sustainability Strategy 2030.
- O.20 To manage and care for the tree canopy, Green and Blue Grid and maximise urban greening, resulting in a healthy, green and biodiverse Maitland that provides economic, ecological and social benefits.

- O.21 To provide clarity on the approval pathway for tree and other vegetation clearing or pruning.
- O.22 To identify declared vegetation under the Biodiversity and Conservation SEPP.
- O.23 To avoid any negative impact of pruning on trees.
- O.24 To provide guidance for compensatory measures to replace any vegetation proposed to be removed.
- O.25 To ensure retention of trees on existing lots is undertaken in a responsible manner.
- O.26 To retain and protect vegetation identified within the significant tree register.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS	
PC.1 <ul style="list-style-type: none"> • O.20 • O.21 • O.22 • O.23 • O.25 	<p>An application for a Council issued tree permit or Development Application for tree or vegetation removal or pruning is to include a completed <i>Permit for Tree and Vegetation Pruning or Removal Application Form</i>. The following details are to be prepared and justified, to the satisfaction of Council, as part of a Tree Permit Application:</p> <ol style="list-style-type: none"> whether a tree is likely to cause immediate or short-term impacts to persons health and safety or property, supported by a report prepared by an AQF Level 5 qualified arborist, whether the tree obstructs or is likely to obstruct accessways, footpaths, roads, utility services, drainage lines or similar movement ways, the extent to which tree impacts solar access, suitability and function of the tree to the site, consideration matters could include slope, waterfront land, soil instability, urban heat mitigation, potential impacts on threatened species, populations or ecological communities and their habitats, cumulative impact from previous authorised and unauthorised vegetation removal, and whether the tree or site is under a land use restriction i.e. 88b instrument. <p>This is to be submitted to Council through the ‘Tree Permit’ application on the NSW Planning Portal.</p> <p>If the requested details have been inadequately justified in Council’s view, an Arborist Report prepared by a qualified Arborist of AQF Level 3 (for pruning) or AQF Level 5 (for removal) is to be prepared in accordance with Appendix A: Application Requirements – Other Development or Appendix B: Application Requirements – Minor Development, whichever is applicable.</p>
AS.1 <ul style="list-style-type: none"> • O.21 • O.22 • O.23 • O.25 • O.26 	<p>An Arborist Report prepared by a suitably qualified Arborist is also required in the following specific circumstances:</p> <ol style="list-style-type: none"> the tree or other vegetation is listed on Council’s Significant Tree Register available on Council’s website, to assess the impact on existing trees as part of a Development Application or Driveway Application in accordance with the requirements of <i>AS 4970 – Protection of trees on development sites</i> where: <ul style="list-style-type: none"> the existing trees are within 5m of the development footprint, inclusive of all works, or more than five trees over 3m in height and/or over 100mm in diameter at 1.3m above ground level are proposed to be removed as part of the development,

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

	<ul style="list-style-type: none"> c. to support the release of a tree bond related to other development, or d. Council determines the removal of the tree or vegetation may cause significant impacts on native trees or native vegetation, landscape connectivity or threatened fauna habitat.
PC.2 <ul style="list-style-type: none"> • O.21 • O.23 • O.25 	<p>An application for the removal of a tree or vegetation that is, or is part of, a Heritage Item is required to be accompanied with a Statement of Heritage Impact (SoHI) prepared by a suitably qualified Heritage Consultant that addresses, at a minimum, the requirements for a SoHI under Appendix A: Application Requirements – Other Development or Appendix B: Application Requirements – Minor Development, whichever is applicable.</p>
PC.3 <ul style="list-style-type: none"> • O.21 • O.23 • O.25 	<p>An application for the removal of a tree or vegetation that is identified as, or is part of, an Aboriginal site or place, is required to be accompanied by an Aboriginal Cultural Heritage Assessment (ACHA) prepared by a suitably qualified Heritage Consultant that addresses, at a minimum, the requirements for a ACHA under Appendix A: Application Requirements – Other Development or Appendix B: Application Requirements – Minor Development, whichever is applicable.</p>
PC.4 <ul style="list-style-type: none"> • O.19 • O.20 • O.21 • O.22 	<p>A hollow-bearing tree assessment prepared by a suitably qualified ecologist will be required in cases where the removal of a hollow-bearing tree is proposed.</p>
PC.5 <ul style="list-style-type: none"> • O.21 • O.23 	<p>All pruning, including that which is undertaken as part of removal, must be conducted in accordance with <i>Australian Standard AS4737-2007</i>.</p>
AS.2 <ul style="list-style-type: none"> • O.19 • O.24 	<p>Compensatory planting for the removal of a tree or vegetation may be required, up to 4 trees for every 1 tree removed. Compensatory planting is to have a minimum 45 litre pot size and must consider the location of utilities on the site.</p>
AS.3 <ul style="list-style-type: none"> • O.20 	<p>Where the removal of trees or vegetation is being undertaken ancillary to development that requires consent (a Development Application), the following design criteria is to be considered:</p> <ul style="list-style-type: none"> a. the location of proposed compensatory trees are encouraged to be placed within the front of the property. Planting should be offset a minimum of 1.5m from the front property boundary and should consider existing trees mature canopy cover, and b. the location of driveways are encouraged to avoid existing trees declared as requiring a development consent or Council Tree Permit under this section.

Table 2-2: Undesirable Tree and Vegetation Register

The following is a register of common undesirable tree and vegetation species that are exempt from notification to Council, except where the tree height exceeds 10m or the trunk diameter, at 1.3m above ground level, exceeds 30cm.

SCIENTIFIC NAME	COMMON NAME
<i>Acacia baileyana</i>	<i>Cootamundra wattle</i>
<i>Acacia salignus</i>	<i>golden wattle</i>
<i>Ailanthus altissima</i>	<i>tree of heaven</i>
<i>Albizia lophantha</i>	<i>cape wattle</i>
<i>Celtis sinensis</i>	<i>hackberry</i>
<i>Chamaecytisus palmensis</i>	<i>tree lucerne</i>
<i>Chrysanthemoides monnifolius</i>	<i>bitou bush</i>
<i>Cinnamomum camphora</i>	<i>camphor laurel</i>
<i>Cotoneaster</i> spp.	<i>cotoneaster</i>
<i>Erythrina x-sykesii</i>	<i>coral tree</i>
<i>Ficus elastica</i>	<i>rubber tree</i>
<i>Gleditsia triacanthos</i>	<i>honey locust</i>
<i>Lagunaria patersonia</i>	<i>Norfolk Island hibiscus</i>
<i>Ligustrum</i> spp.	<i>privet</i>
<i>Lucium ferocissimum</i>	<i>African boxthorn</i>
<i>Nerium oleander</i>	<i>oleander</i>
<i>Olea europaea</i> subsp. <i>cuspidata</i>	<i>African olive</i>
<i>Phoenix canariensis</i>	<i>Canary Island date palm</i>
<i>Pyracantha</i> spp.	<i>firethorn</i>
<i>Salix</i> spp.	<i>willow</i>
<i>Sapium sebiferum</i> syn. <i>Triadica sebifera</i>	<i>Chinese tallow</i>
<i>Schinus terebinthifolius</i>	<i>Brazilian mastic</i>
<i>Syagrus romanzoffianum</i>	<i>cocos palm</i>

2.3.2. Street Trees and Canopy Cover

The aim of this sub-section seeks to enable increased tree canopy cover across the Maitland LGA and to establish, restore and enhance the green and blue grid and its functionality. For clarity, this section is to be directly considered in any undertaking of subdivision under Chapter 5: Subdivision.

Relevant legislation and policy that may be read in conjunction with this Chapter are listed below:

- *Environmental Planning and Assessment Act 1979*
- *State Environmental Planning Policy (Biodiversity & Conservation) 2021*
- *Maitland Environmental Sustainability Strategy 2030*
- *Appendix D: Technical Guide Street Trees and Canopy Cover*
- *Council's Manual of Engineering Standards (MoES)*

Objectives

- O.27 To assist in achieving tree canopy cover targets within the Maitland Environmental Sustainability Strategy 2030.
- O.28 To ensure that new and existing streets provide street trees and canopy cover to reduce the urban heat island effect.
- O.29 To provide de-compacted deep soil zones, giving sufficient space for sustainable tree growth to increase the private and public tree canopy cover across Maitland.
- O.30 To ensure existing public trees are retained except where it can be demonstrated that no practical alternative is available.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.1 <ul style="list-style-type: none">• O.27• O.28	<p>Street tree provision is to form a component of the road reserve for all of the following new subdivision types:</p> <ul style="list-style-type: none">a. residential subdivisionsb. commercial subdivisionsc. industrial subdivisions <p>All street trees are to be provided in accordance with Appendix D: Canopy Cover Guidelines, Maitland Council's Tree Species List, and Technical Document – Street Trees of Council's MoES.</p>
AS.1 <ul style="list-style-type: none">• O.27• O.28• O.30	<p>Tree retention is encouraged at subdivision stage. Mature trees should be retained and incorporated into the subdivision and public domain design and retained to contribute to the mature tree canopy cover in the neighbourhood, to provide visually interesting streetscapes, improve public amenity and improve air quality.</p>

PREScriptive CONTROLS AND ACCEPTABLE SOLUTIONS

PC.2 <ul style="list-style-type: none"> • O.30 	<p>In cases where streets trees are needed to be removed to facilitate development, they are to be replaced in a suitable location, in line with <i>Appendix D: Technical Guide Street Trees and Canopy Cover</i>.</p>
PC.3 <ul style="list-style-type: none"> • O.28 	<p>Appropriate plant species are to be selected for the site conditions with consideration given to trees providing shade in summer and allowing sunlight in winter, or to provide habitat.</p>
PC.4 <ul style="list-style-type: none"> • O.27 • O.28 • O.29 	<p>Tree canopy and deep soil is to be provided in accordance with <i>Appendix D: Technical Guide Street Trees and Canopy Cover</i>.</p>
AS.2 <ul style="list-style-type: none"> • O.28 • O.29 	<p>Deep soil areas should be consolidated by establishing them against abutting boundary walls and fence lines.</p>
AS.3 <ul style="list-style-type: none"> • O.28 • O.29 	<p>Deep soil areas are encouraged within setbacks and should be located with adjoining deep soil areas in adjoining properties.</p>
PC.5 <ul style="list-style-type: none"> • O.28 • O.29 	<p>Deep soil planting areas are to be de-compacted before planting, with no services or utilities to be installed within these zones.</p>

2.3.3. Vegetation Management Plans

The aim of this sub-section seeks to outline the requirements for a Vegetation Management Plan (VMP) to program the maintenance of native vegetation on a development site, including trees, shrubs, and ground cover.

Relevant legislation and policy that should be read in conjunction with this Chapter are:

- *Water Management Act 2000*
- *Local Land Services Act 2013*
- *Biodiversity Conservation Act 2016*
- *State Environmental Planning Policy (Biodiversity & Conservation) 2021*
- *Maitland Environmental Sustainability Strategy 2030*

Objectives

O.31 A vegetation management plan for all conservation areas and biodiversity offsets must be prepared, with a suitable endowment fund or similar arrangement established to implement the plan and provide for ongoing maintenance in perpetuity.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.1

Where retention or rehabilitation of native vegetation and/or habitat is required within:

- O.31
 - a. Council's Green and Blue Grid,
 - b. Council's Biodiversity Corridor, or
 - c. where works subject to a Controlled Activity Approval will be undertaken within 40m of the top-of-bank of a mapped watercourse,

A Vegetation Management Plan (VMP) is to be prepared and implemented, in accordance with Appendix C: Biodiversity Guidelines, to restore, protect, and manage areas identified for rehabilitation and preservation for a minimum period of 5 years.

2.4. Flood and Floodplain Management

This section is to be read with direct reference given to *Appendix E: Flooding Guidelines*.

Parts of Central Maitland and Lorn are excluded from the controls provided in this section and are affected by separate controls. These controls, and the associated areas, are provided in the Flood and Floodplain Management – Central Maitland and Lorn Exclusion Zone in Appendix E: Flooding Guidelines.

Relevant legislation and policy that may be read in conjunction with this Chapter are listed below:

- *Environmental Planning and Assessment Act 1979*
- *Water Management Act 2000*
- *Clause 5.21 Flood Planning of Maitland Local Environmental Plan 2011*
- *NSW Flood Risk Management Manual*
- *Hunter River Floodplain Risk Management Study and Plan (2015)*
- [*Wallis and Swamp-Fishery Creek Flood Study \(2019\)*](#)
- [*Paterson River Flood Study Vacy to Hinton \(2017\)*](#)
- [*Hunter River Branxton to Green Rocks flood study \(2010\)*](#)
- [*Lochinvar Flood Study \(2019\)*](#)
- [*Greta Flood Study \(2019\)*](#)
- [*Williamstown Salt Ash Flood Plain Risk Management Study \(2017\)*](#)

Further information can be found at [Flood planning](#) at Council's website, [Council's Mapping webpage](#), or the [NSW Planning Portal Spatial Viewer](#).

Application

All Development Applications are to have regard to the general controls applicable to the proposed land use category and **flood risk precinct** (FRP), and cumulative impact specific controls. The procedure to determine which controls apply to proposed development involves the following steps:

- Step 1:** Determine whether the property is **flood liable land** and which FRPs apply to the land (refer to [Council's online mapping, obtain a Flood Certificate from Council](#), or carry out flood modelling as required by Council).
- Step 2:** Identify the land use category of the development from Section 2 of Appendix E: Flooding Guidelines.
- Step 3:** Apply the relevant general controls outlined in the Flood Planning Matrix (Table 2-4) and sub-sections 2.4.1.1 – 2.4.1.7, as applicable to the FRP and land use category.

Step 4: Apply the relevant external and cumulative flood impact controls outlined in sub-sections 2.4.1.8 – 2.4.1.11 and Table 2-5, as applicable to the type of development described in Table 2-4.

DRAFT

Flood Risk Precincts (FRPs)

Flood liable land is categorised into the following three different levels of potential flood risk for the purposes of the DCP: High, Medium, and Low. Table 2-3 below provides the criteria that have been used for determining Flood Risk Precincts.

Table 2-3: Flood Risk Precincts (FRP)

FRP	DESCRIPTION	TECHNICAL DEFINITION
High	<p>Land within the 1% AEP flood extent with a high hazard classification. There is a high potential for damage to property, risk to life or evacuation difficulty.</p> <p>Note: Most development is restricted in this precinct. In this precinct there is a significant risk of flood damages without compliance with flood related building and planning controls.</p>	<ul style="list-style-type: none"> Land classified as “H5 - H6” in the 1% AEP event, and Any areas identified within a Floodplain Risk Management Study and Plan as subject to significant evacuation constraints.
Medium	<p>Land below the 1% AEP flood (plus freeboard) that is not subject to high hazard classification and where there are no significant evacuation difficulties.</p> <p>Note: In this precinct there would be significant risk of flood damage, however these potential risks of damage can be minimised by the application of appropriate development controls.</p>	Land in the extent of the 1% AEP event plus freeboard that is not within a High Flood Risk Precinct
Low	<p>All other land within the floodplain (i.e. within the extent of the probable maximum flood (PMF), that is not classified as a High or Medium Flood Risk Precinct.</p> <p>Note: The Low Flood Risk Precinct is where the risk of damages is low for most land uses. The Low Flood Risk Category is that area above the 1% AEP flood, and most land uses would be permitted in this category. Development controls may apply to special land uses with critical functions or vulnerable occupants.</p>	Land between the PMF and Medium Flood Risk Precinct.

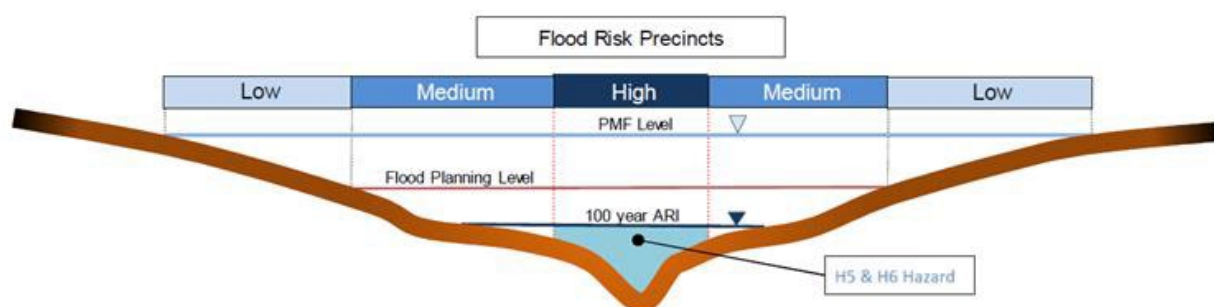


Figure 2-3: Flood Risk Precinct Classifications

Additional Guidance

1. Council's online mapping system on [Council's website](#) provides flood planning maps that identify the Flood Risk Precinct applying to properties where this information has been determined from flood studies and adopted by Council for this purpose. Flood storage, flood way, and flood fringe areas are provided as part of a Flood Certificate, which provides detailed information related to the flood matters affecting particular sites.
2. An application can be made to Council for a Flood Certificate to confirm available information about an individual property. The certificate will outline what Flood Risk Precincts or hydraulic categorisations apply in addition to other key flood risk information or will specify whether Council does not have sufficient information to definitively advise on the flood risk applying to the property.
3. Where sufficient information is not available, but the potential for flood risk issues are evident based on available information, applicants may be required to undertake a site-specific flood assessment. These situations include where:
 - a. Council has knowledge that the property has been previously affected by or impacted upon flooding or an overland flow path,
 - b. A flood certificate, utilising Council's site-specific modelling, has indicated that the site may be flood affected,
 - c. the property is on the low side of the road and/or the boundary levels are below the level of Council's kerb,
 - d. the property is in a natural low point, gully or depression, or
 - e. the property is adjacent to or contains a flow path, open channel, watercourse or drainage line.

Appendix E: Flooding Guidelines specifies the criteria to be applied when undertaking a site-specific flood assessment. The assessment would determine the Flood Risk Precincts in order to apply appropriate controls in addition to any further assessments required by this DCP.

Objectives

- O.32 To minimise risk to life and damage to property by controlling development on flood prone land.
- O.33 To ensure the impacts of the full range of potential floods up to and including the Potential Maximum Flood (PMF) are considered when assessing development, having regard to the sensitivity of different land uses to flooding.
- O.34 To ensure that development does not have an unacceptable impact on flood behaviour, people's safety, surrounding properties and structures, and the natural environment.
- O.35 To ensure the sustainable and equitable development of the floodplain such that long term filling across the Lower Hunter River floodplain does not result in material adverse impacts.
- O.36 To ensure that development is not unacceptably intensified in identified floodways and flood storage areas resulting in material impacts.

O.37 To provide detailed controls that if satisfied would address the considerations required by clause 5.21 of the MLEP 2011.

2.4.1. General Flood Risk Management Prescriptive Controls

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS	
PC.1 <ul style="list-style-type: none">• O.32• O.33• O.34• O.35• O.36• O.37	<p>The Flood Planning Matrix provided in Table 2-4 specifies what general flood risk management Prescriptive Controls (PC) are to be applied to development in each FRP. These are in addition to the external and cumulative flood effect controls contained in Section 2.4.8 AND the Acceptable Solutions (AS) in each section.</p> <p>Note: The Prescriptive Controls of Section 2.4.2 – 2.4.11 that follow Table 2-3 provide the Prescriptive Controls referenced in Table 2-4.</p>
PC.2 <ul style="list-style-type: none">• O.32• O.33• O.34• O.35• O.36• O.37	<p>The Acceptable Solutions (AS) listed in Sections 2.4.2 – 2.4.11 are applied irrespective of the land use or FRP category provided under Table 2-3.</p>

Table 2-4: Flood Planning Matrix – Applicable Prescriptive Controls

Development Type (as defined in Appendix E: Flooding Guidelines)	Flood Risk Precincts (FRPs)														
	High Flood Risk					Medium Flood Risk					Low Flood Risk				
	Land Use Categories														
	Sensitive & Hazardous Development	Residential	Commercial & Industrial	Recreation & Non-Urban	Concessional Development	Sensitive & Hazardous Development	Residential	Commercial & Industrial	Recreation & Non-Urban	Concessional Development	Sensitive & Hazardous Development	Residential	Commercial & Industrial	Recreation & Non-Urban	Concessional Development
Section of this Chapter															
2.4.2 Floor Levels	PC.3,4	PC.2,4, 6,7	PC.2,4, 6,7	PC.1	PC.5, 6,7	PC.3	PC.2,4, 6,7	PC.2, 6,7	PC.1	PC.5, 6,7	PC.3,4	N/A	N/A	N/A	N/A
2.4.3 Flood Resilient Construction	PC.2	PC.1	PC.1	PC.1	PC.1	PC.2	PC.1	PC.1	PC.1	PC.1	PC.2	N/A	N/A	N/A	N/A
2.4.4 Structural Soundness	PC.3	PC.1 or 2	PC.1 or 2	PC.1	PC.1	PC.3	PC.1 or 2	PC.1	PC.1	PC.1	PC.3	N/A	PC.1 or 2	N/A	N/A
2.4.5 Car Parking and Driveway Access	PC.1,3, 4,5,6	PC.1,3, 4,5,6	PC.1,4, 5,6	PC.4,5, 6	PC.4,5, 6	PC.1,2, 3,4,5,6	PC.1,2, 4,5,6	PC.1,2, 4,5,6	PC.4, 5,6	PC.4, 5,6	PC.1,2, 3,4,5,6	N/A	PC.1,2, 4,5,6	N/A	N/A
2.4.6 Emergency Management	PC.1,3, 4,5,6,	PC.1,4, 5,6	PC.1,3, 4,5	PC.3,4, 5,6	PC.1,4, 5	PC.1,3, 4,5,6	PC.1, 4,5,6	PC.1, 4,5	PC.3,4, 5,6	PC.1,4, 5,6	PC.1, 4,5	PC.1,4, 5	PC.1, 5	PC.2,5, 6	PC.1, 4,5
2.4.7 Management and Design	PC.2,3	PC.1	PC.3	PC.3	PC.3	PC.2,3	PC.1	PC.3	PC.3	PC.3	PC.2,3	N/A	N/A	N/A	N/A
 = Significantly constrained land										N/A = No applicable controls.				

Notes:

- a. Significantly Constrained Land:** Where development types are likely to be incompatible with the hazards existing within the nominated part of the floodplain without substantial mitigation measures. Generally, these **development types are not supported by Council**, unless the design of the development together with the mitigation measures can address any potential unacceptable amenity or environmental impacts. It may also require a reduction in the anticipated development intensity for the land.
 - b. Filling:** Proposed filling of a site that is partially affected by flooding, where supported by Council, may change the flood risk precinct, and the associated development controls that apply to development on the site. In this case, proposed filling must form part of the same DA for other development.
 - c. Multiple FRPs:** Development controls relate to the FRP identified for the land upon which development is proposed. Where the land has two or more FRPs the relevant sets of controls apply to each risk precinct, however for practical purposes the stricter controls would normally apply across the whole development.
 - d. Fencing:** Refer to Chapters 3, 6, 7, 8, and 9 of the DCP for planning considerations involving only the erection of a fence. Any fencing that forms part of a proposed development is subject to the relevant flood effect and structural soundness considerations of the relevant category.
 - e. Freeboard:** Where required the following **freeboard** heights apply:
 - a. Areas subject to riverine flooding: 500mm
 - b. Areas subject to only overland flow flooding: 300mm
 - f. Residential “Concessional Development”:** Except for group homes and seniors living, no controls apply to residential accommodation types of concessional development in the Low Flood Risk Precinct, including areas subject to riverine flooding.
 - g. Concessional Development** is development that involves:
 - a. An internal or external alteration to an existing dwelling, which does not change the floor area and/or footprint of the existing dwelling;
 - b. An addition to existing residential premises of not more than 10% of the floor area of the existing building footprint or 30m², whichever is the lesser;
 - c. An addition to existing premises other than those in b) of not more than 10% of the floor area of the existing building footprint;
 - d. A change of use which does not increase flood risk having regard to property damage and personal safety;
 - e. Subdivision which does not propose the creation of new allotments with potential for further development;
 - f. The construction of an outbuilding with a floor area of no greater than 30m²
- Note:** for the purposes of b. and c., the floor area or area of existing building footprint is that which existed at the date that this DCP came into force.
- h.** Refer to Appendix E: Flooding Guidelines to determine the Land Use Category for the proposed development for the purposes of applying the controls in Table 2-4.
 - i.** Where a mixed-use development is proposed, the DCP controls within this matrix and section are applied based on the Land Use Category for each component. Where components of a mixed-use development overlap (e.g. car parking), the Land Use Category with the more onerous controls are to be applied.

2.4.2. Floor Levels

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS	
PC.1 <ul style="list-style-type: none"> • O.32 • O.34 • O.37 	All floor levels are to be equal to or greater than the 5% Annual Exceedance Probability (AEP) flood level.
PC.2 <ul style="list-style-type: none"> • O.32 • O.34 • O.37 	Habitable floor levels are to be equal to or greater than the 1% AEP flood level plus freeboard .
PC.3 <ul style="list-style-type: none"> • O.32 • O.34 • O.37 	Habitable floor levels are to be no lower than the PMF level.
PC.4 <ul style="list-style-type: none"> • O.32 • O.34 • O.37 	Non-habitable floor levels are to be no lower than the 5% AEP level.
PC.5 <ul style="list-style-type: none"> • O.32 • O.34 • O.37 	<p>Floor levels are to be equal to, or greater than, the level of the 1% AEP flood level plus freeboard.</p> <p>Where this is not practical due to compatibility with the height of adjacent buildings, or compatibility with the floor level of existing buildings, or the need for access for persons with disabilities, a lower floor level may be considered. In these circumstances, the floor level is to be as high as practical, and when undertaking alterations or additions no lower than the existing floor level.</p>
PC.6 <ul style="list-style-type: none"> • O.32 • O.34 • O.36 • O.37 	Where floor levels are to be raised to address flood risk considerations, open undercroft areas must be acceptably designed to be integrated into the architecture of the development and to avoid the accumulation of rubbish and the potential to harbour vermin.
PC.7 <ul style="list-style-type: none"> • O.32 • O.34 • O.36 	<p>Where a building is elevated to reduce flood hazard, subject to an assessment as to acceptability on amenity, the undercroft area is to remain open to permit the free flow of water under the building, with a minimum clearance of 1.5m between the undercroft and suspended floor.</p> <p>A restriction will be placed on the title of the land, pursuant to Section 88B of the Conveyancing Act, where the lowest floor is elevated more than 1.5m above finished</p>

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

- | | |
|---|---|
| <ul style="list-style-type: none"> • O.37 | <p>ground level, confirming that the undercroft area will not be enclosed or used as habitable floor area.</p> <p>Note: Any blockage of the undercroft area is the responsibility of the owner of the building, and not Council's.</p> |
| <p>AS.2</p> <ul style="list-style-type: none"> • O.34 | <p>Where the development is required to elevate floors, the development should remain acceptable with regards to its appearance and accessibility from the public domain and the amenity of the occupants on the site and surrounding properties.</p> |

2.4.3. Flood Resilient Construction

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

- | | |
|---|--|
| <p>AS.1</p> <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.37 | <p>All structures are to have flood resilient construction below the prescribed floor flood planning level.</p> |
| <p>PC.1</p> <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.37 | <p>All structures are to have flood resilient construction below the 1% AEP flood level plus freeboard.</p> |
| <p>PC.2</p> <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.37 | <p>All structures are to have flood resilient construction below the PMF level.</p> |

2.4.4. Structural Soundness

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

- | | |
|---|--|
| <p>PC.1</p> <ul style="list-style-type: none"> • O.33 • O.37 | <p>All structures are to be designed to remain structurally sound up to the prescribed minimum flood planning level.</p> |
|---|--|

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.2 If the development proposes to contain a refuge area, all structures are to be designed to remain structurally sound in a PMF event.

- O.32
- O.33
- O.37

PC.3 All structures are to be designed to remain structurally sound in a PMF event.

- O.32
- O.33
- O.37

Note: In most circumstances certification of structural soundness by a structural engineer informed by appropriate flooding information can be provided at construction certificate stage. However, where proposals involve alterations and additions or relate to atypical designs, Council may require certification at the development application stage.

2.4.5. Car Parking and Driveway Access

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.1 The minimum surface level of open car parking spaces or carports is to be no lower than the 1% AEP flood or the level of the crest of the road at the location where the site has access to the road.

- O.32
- O.34
- O.37

PC.2 Garages are to have a minimum **finished floor level** (FFL) no lower than the 1% AEP flood plus 200mm **freeboard**.

- O.32
- O.34
- O.37

PC.3 Except for dwelling houses, secondary dwellings, dual occupancies, semi-detached dwellings, and attached dwellings, the level of the driveway providing access between the road and parking space must be either:

- O.34
- O.37
 - a. no lower than 300mm below the 1% AEP flood, or
 - b. such that the depth of inundation during a 1% AEP flood is not greater than either the depth at the road or the depth at the car parking space.

PC.4 Basement garages and car parking areas with a floor level below the 5% AEP flood or more than 300mm below the 1% AEP flood level are to have adequate warning systems, signage and exits, in accordance with the [NSW Flood Risk Management Guideline EM01](#).

- O.32
 - O.34
 - O.37
- Warning systems are to include both audible and visual alarms and a continuously rising pedestrian route is to be provided between all parts of a basement car park and an exit.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.5 <ul style="list-style-type: none"> • O.32 • O.34 • O.37 	Restraints or vehicle barriers are to be provided to prevent floating vehicles leaving a site during a 1% AEP flood, other than for single dwelling houses, secondary dwelling, dual occupancies, semi-detached dwellings, and attached dwellings.
PC.6 <ul style="list-style-type: none"> • O.32 • O.34 • O.37 	Basement car parking levels are to be protected from inundation by a 1% AEP flood (plus 200mm). Where required, the crest of the driveway providing access between the road and basement garages will need to be a minimum of 200mm above the level of the 1% AEP flood.
AS.1 <ul style="list-style-type: none"> • O.32 • O.34 • O.37 	Measures should be provided to warn people not to drive out of car parking areas in flood events where this would be dangerous, or to otherwise provide guidance and facilities to be able to safely exit the carpark.

2.4.6. Emergency Management

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

AS.1 <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.37 	The development should be designed and be able to be managed to ensure that during a flood emergency all occupants are capable of reaching safe refuge.
PC.1 <ul style="list-style-type: none"> • O.33 • O.34 • O.37 	Reliable access for pedestrians or vehicles is to be provided from a minimum level equal to the lowest habitable floor level to an area of refuge above the PMF level. This should involve evacuation to an area outside of the PMF extent, except for areas where Shelter In Place (SIP) has been identified as a suitable option.
PC.2 <ul style="list-style-type: none"> • O.33 • O.34 • O.37 	Reliable access for vehicles is to be provided to allow safe and orderly evacuation without increased reliance upon the SES or other authorised emergency services personnel.
PC.3 <ul style="list-style-type: none"> • O.33 • O.34 • O.37 	Adequate flood warning systems, signage and exits are to be available locally and provided on site where required by Council to allow safe and orderly evacuation without increased reliance upon the NSW SES or other authorised emergency services personnel.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.4 <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.37 	<p>Development is to allow for the implementation of emergency management measures consistent with any applicable Flood Evacuation Strategy.</p>
PC.5 <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.37 	<p>An engineer's report is to be provided to certify that an area for refuge on site is available in circumstances where SIP is identified as a suitable option.</p>
PC.7 <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.37 	<p>A site flood emergency response plan (FERP) is to be prepared.</p> <p>Note: A FERP should form part of a broader flood impact and risk assessment (FIRA) where that is also required.</p>

2.4.7. Management and Design

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

AS.1 <ul style="list-style-type: none"> • O.33 • O.34 • O.37 	<p>The development should be designed and managed to ensure that it does not cause unacceptable levels of pollution and valuable goods are capable of being protected during a flood event.</p>
PC.1 <ul style="list-style-type: none"> • O.32 • O.37 	<p>A dedicated storage area within the dwelling of a minimum of 8m³ is to be provided to store goods above the 1% AEP flood level plus freeboard.</p> <p>This storage area is to be identified on site plans submitted with a development application.</p>
PC.2 <ul style="list-style-type: none"> • O.32 • O.37 	<p>Applicants are to demonstrate that an area is available to store goods above the PMF level.</p>
PC.3 <ul style="list-style-type: none"> • O.32 • O.34 • O.37 	<p>No storage of materials which may cause pollution or be potentially hazardous during any flood event is permitted below the 1% AEP plus freeboard.</p>

2.4.8. External and Cumulative Flood Impacts Controls

The controls of this sub-section (2.4.8) and sub-sections 2.4.9, 2.4.10, and 2.4.11 apply in the following way:

- a. If the Cumulative Flood Impact Assessment Threshold Criteria in Table 2-5 are NOT exceeded, then no further assessment of cumulative flood impacts is required and Sections 2.4.8 (this section), 2.4.9, 2.4.10, and 2.4.11 do NOT apply.
- b. If the Cumulative Flood Impact Assessment Threshold Criteria in Table 2-5 are exceeded, then Sections 2.4.8 (this section), 2.4.9, 2.4.10, and 2.4.11 apply.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS	
PC.1 <ul style="list-style-type: none"> • O.34 • O.35 • O.36 • O.37 	<p>Any additional fill in flood storage areas above the fill level allowed for by the Cumulative Flood Impact Assessment Threshold Criteria in Table 2-5 must be addressed by:</p> <ol style="list-style-type: none"> a. compensatory excavation, and/or b. the floor(s) of a proposed building are to be elevated in a manner that maintains flood storage capacity in the 1% AEP floodplain (see Note 2 in Table 2-4) if required to achieve the minimum flood planning level.
PC.2 <ul style="list-style-type: none"> • O.34 • O.35 • O.36 • O.37 	<p>No additional fill than that otherwise allowed for by the Cumulative Flood Impact Assessment Threshold Criteria in Table 2-5 is permitted in the floodway.</p>
PC.3 <ul style="list-style-type: none"> • O.34 • O.35 • O.36 • O.37 	<p>Any proposed changes to ground levels and consequently the maximum height of fill including any associated retaining walls and buildings, must also be acceptable having regard to amenity and streetscape considerations of this DCP and the MLEP 2011.</p> <p>Note: Cumulative impact assessments are undertaken at a strategic planning level by Council and are not required to be provided with individual development applications.</p>
PC.4 <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.35 • O.36 • O.37 	<p>A site-specific Flood Impact Assessment (FIA) will be required to be prepared and submitted with the development application where the Local Siting Criteria in Table 2-5 are not satisfied. This FIA will need to demonstrate compliance with the FIA-related controls listed in Table 2-5 and outlined in the Prescriptive Controls and Acceptable Solutions following Table 2-4.</p>
PC.5 <ul style="list-style-type: none"> • O.32 • O.33 	<p>Where required to be provided by Table 2-5, a site-specific FIA is to be prepared in accordance with the Flood Impact Technical Guidelines within Appendix E: Flooding Guidelines. Council may also require overland flow flooding impacts or other potential localised flood impacts to be addressed through a Surface Water Assessment prepared in</p>

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

<ul style="list-style-type: none"> • O.34 • O.35 • O.36 • O.37 	<p>accordance with Appendix A: Application Requirements - Other Development or Appendix B: Application Requirements - Minor Development, whichever is applicable.</p>
<p>AS.1</p> <ul style="list-style-type: none"> • O.33 • O.34 • O.35 • O.36 • O.37 	<p>The site-specific flood impact assessment should consider any existing applicable broader flood impact and risk assessment (FIRA) to address other floodplain risk management considerations such as emergency management.</p>
<p>PC.6</p> <ul style="list-style-type: none"> • O.34 • O.35 • O.36 • O.37 	<p>The assessment of a proposal to fill land will be based on ground levels as existing at [Council to insert date that DCP amendments to commence]. Where land has been filled to the maximum permitted by the DCP, no further filling will be supported.</p>
<p>AS.2</p> <ul style="list-style-type: none"> • O.34 • O.35 • O.36 • O.37 	<p>Conveyance and storage of floodwaters through the floodplain is not to be materially impacted by the development in isolation and when considered together with a cumulative impact assessment.</p>

Table 2-5: External and Cumulative Flood Impacts

Proposed Development (as defined by Section 1 of Appendix E: Flooding Guidelines)	Cumulative Flood Impact Assessment Threshold Criteria (Notes 1 and 3)	Local Siting Criteria Site-specific Flood Impact Assessment (FIA) required if exceeded (Note 3)	Controls for site specific flood impact assessments (Note 2 and 3)		
			Off-site Flood Levels	Off-site Flood Flow Velocities	Adjoining Land Flood Hazard
Fill pad to support a dwelling house in a non-urban zone	A maximum fill pad volume in the 1% AEP floodplain of 7,000m ³ per lot.; AND Is not located in a floodway.	FIA is required where: <ul style="list-style-type: none"> the fill pad or other works are located within 30m of another fill pad or solid structure within the 1% AEP floodplain or 15m from the property boundary, measured from the toe of the pad, or 	AS.1, 2	AS.2	N/A
Fill pad – other (Note 4)	A maximum fill pad volume in the 1% AEP floodplain of 3,500m ³ per lot; AND Is not located in a floodway.	<ul style="list-style-type: none"> located closer than 40m from the top bank of the Hunter River or major tributary, or abutting an existing levee or between an existing levee and the Hunter River, or 	AS.1, 2	AS.2	N/A
Other development in a non-urban zone	Any development is not to be located in a floodway or flood storage area, other than minor development.	<ul style="list-style-type: none"> any driveway providing access to a fill pad that is to be constructed, in whole or part, 150mm or more above existing ground level, or where considered necessary in the opinion of Council. 	AS.1, 2, 3	AS.1,3	PC.1
Dwelling house on urban zoned land	The maximum fill extent for the purposes of a dwelling house and any ancillary buildings on land zoned R1 General Residential, and within the 1% AEP floodplain, is 100% of the lot area; AND The existing ground level is raised to a maximum level equal to the applicable residential floor level under Section 2.4.2.	FIA is required where an overland flow path would be affected or where considered necessary in the opinion of Council.	AS.1, 2, 3	AS.1,3	N/A

Table 2–5: External and Cumulative Flood Impacts

Medium density housing	<p>The maximum fill extent for the purposes of a medium density housing, and within the 1% AEP floodplain, is 80% of the lot area, AND</p> <p>The existing ground level is raised to a maximum level equal to the applicable residential floor level under Section 2.4.2.</p>	FIA is required where located within a floodway, where an overland flow path would be affected or as considered necessary in the opinion of Council.	AS.1, 2, 3	AS.1,3	PC.1
Industrial development	<p>The maximum fill extent for the purposes of all buildings and outdoor storage areas on land zoned for industrial development purposes within the 1% AEP floodplain is 70%; AND</p> <p>The existing ground level is raised to a maximum level equal to the 5% AEP flood level.</p>	FIA is required where located within a floodway, where an overland flow path would be affected or as considered necessary in the opinion of Council.	AS.1, 2, 3	AS.1,3	PC.1
All other development other than minor development	The threshold criterion for all other development, other than minor development is any placement of fill within the 1% AEP floodplain.	FIA is required where located within a floodway, where an overland flow path would be affected or as considered necessary in the opinion of Council.	AS.1, 2, 3	AS.1,3	PC.1
Minor development	N/A	N/A	N/A	N/A	N/A
Subdivision (Note 4)	<p>The threshold criteria are exceeded by any subdivision that involves the creation of a new lot within a floodway or flood storage area, other than a lot that is not intended to be permanently occupied such as a lot to be used only for agricultural purposes or a public reserve; AND</p> <p>where the combined allowable fill for all proposed lots is exceeded by the allowable fill for the original lot. (Note E)</p>	FIA is required where considered necessary in the opinion of Council.	AS.1, 3, 4	AS.2	PC.1, 2

Notes:

The cumulative flood impact threshold criteria were determined as part of the Lower Hunter River Floodplain Cumulative Development & Impact Study & Plan (Stages 1, 2 and 3: 2021; 2023 & 2023) and is broadly based on the cumulative impact of potential development in the floodplain into the foreseeable future, as opposed to the impact of an individual development. The cumulative flood impact threshold criteria apply independently of the local siting criteria.

1. All controls relate to the 1% AEP flood with climate change related rainfall and sea level adjustments forecast for the year 2100 adopted by Council for the purposes of these controls, unless otherwise stated.
2. All assessments are to be based on flood conditions as predicted for the year 2100 based on best available climate change flood risk data and ground levels as existing as at [Insert date that DCP amendments to commence].
3. Includes fill pads for any other purpose such a stock refuge, shed, or any ancillary works such as access driveways.
4. When considering the acceptability of subdivision, this is to take into consideration all works and buildings that would be anticipated to facilitate future development permitted in the zoning of the land such as the creation of a fill pad and access road on rural zoned land or the construction of an industrial building on land zoned for employment purposes. All filling assessed as necessary and acceptable is to be undertaken prior to the issue of a subdivision certificate, unless identified as a restriction on the title of the lot to be undertaken prior to building works. The wording of the restriction is to be approved by Council, and Council is to be assigned as the authority to amend or rescind the restriction.

2.4.9. Off-site Flood Levels

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS	
AS.1 <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.35 • O.36 • O.37 	<p>The flood impact of the development should not exceed a maximum increase of 10mm at the footprint of buildings that are not associated with the development, in cases where floor levels are currently inundated in a 1% AEP flood.</p>
AS.2 <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.35 • O.36 • O.37 	<p>The flood impact of the development should not exceed a maximum increase of 20mm in inundation in a 1% AEP flood of land zoned for urban residential, industrial or commercial purposes.</p>
AS.3 <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.35 • O.36 • O.37 	<p>The flood impact of the development should not exceed a maximum increase of 30mm in inundation in a 1% AEP flood of land zoned for rural, primary production, environment conservation or public recreation purposes.</p>
AS.4 <ul style="list-style-type: none"> • O.32 • O.33 • O.34 • O.35 • O.36 • O.37 	<p>The flood impact of the development should not exceed a maximum increase of 30mm in inundation, during floods up to a 5%, 2% or 0.05% AEP event of land zoned for residential, industrial or commercial purposes.</p>

2.4.10. Off-site Flood Flow Velocities

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS	
AS.1 <ul style="list-style-type: none">• O.32• O.33• O.34• O.35• O.36• O.37	The development should not result in flood flow velocities increasing at the property boundary for any flood up to a 1% AEP flood: <ul style="list-style-type: none">a. by any amount where the existing condition flow velocity is greater than 1.5 m/s, orb. by more than 20% where the existing flow velocity is less than 1.5 m/s.
AS.2 <ul style="list-style-type: none">• O.32• O.33• O.34• O.35• O.36• O.37	The flood impact of the development should not exceed a maximum relative increase in velocity of 10%, where the resulting velocity is greater than 1.0 m/s, unless adequate scour protection measures are implemented and/or the velocity increases do not exacerbate erosion as demonstrated through site-specific risk of scour, or geomorphological assessments.
AS.3 <ul style="list-style-type: none">• O.32• O.33• O.34• O.35• O.36• O.37	The development should not result in an increase in velocity beyond 1.0 m/s, unless adequate scour protection measures are implemented in accordance with the recommendations of a suitably qualified professional engineer.

2.4.11. Adjoining Land Flood Hazard

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS	
<p>PC.1</p> <ul style="list-style-type: none"> • O.32 • O.34 • O.35 • O.36 • O.37 	<p>The development is not to result in an increase in the flood hazard category of adjoining land defined according to the general hazard vulnerability curves shown in Figure 2-4 of the 'Australian Disaster Resilience Handbook 7 - Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia' (ADR 2017).</p> <p>Figure 2-4: General flood hazard vulnerability curves</p>
<p>PC.2</p> <ul style="list-style-type: none"> • O.32 • O.34 • O.35 • O.36 • O.37 	<p>Any new lot created by the subdivision of land must have a defined building area, outside of the floodway or flood storage area, that is capable of accommodating development envisaged by the zoning of the land. The building area is to be shown as a restriction on the title of the property, where the property is located within a non-urban land use zone in the MLEP 2011.</p>

2.5. Environmental Hazard Management

2.5.1. Bushfire

The aim of this sub-section is to ensure that properties identified within or adjacent to bushfire prone land undertake the necessary mitigation measures to avoid or reduce the impact of bushfire to property. Relevant legislation and policy that should be read in conjunction with this Chapter are listed below:

- *Environment Protection and Biodiversity Conservation Act 1999*
- *Rural Fires Act 1997*
- [Planning for Bush Fire Protection 2019](#)
- *Rural Fires Regulation 2022*

Further property information on identifying whether a property is within or near bushfire prone land can be found on [Council's Mapping webpage](#), or the [NSW Planning Portal Spatial Viewer](#).

Objectives

O.38 To ensure that risks associated with bushfire are appropriately and effectively managed on the development site.

O.39 To ensure that bushfire risk is managed in connection with the preservation of the ecological values of the site and adjoining lands.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.1 <ul style="list-style-type: none">• O.38• O.39	A Bushfire Assessment is required to be prepared by a suitably qualified consultant and submitted with any application involving bushfire prone land, in accordance with Appendix A: Application Requirements – Other Development or Appendix B: Application Requirements – Minor Development, whichever is applicable.
PC.2 <ul style="list-style-type: none">• O.38	<p>Vegetation management for the purposes of bushfire risk management must be accommodated within the site, not through the clearing, adjustment or management of vegetation on land managed by Council.</p> <p>Note: Vegetation management for private benefit cannot be imposed on any land managed by Council or any other public land.</p>
PC.3 <ul style="list-style-type: none">• O.38	Development that is within or adjacent to bushfire prone land must comply with the NSW Rural Fire Service Planning for Bushfire Protection Guidelines .

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.4	Any Asset Protection Zone must be located outside of areas of environmental significance, including:
<ul style="list-style-type: none"> • O.39 	<ul style="list-style-type: none"> a. a key habitat such as threatened species and populations and threatened ecological communities b. vegetated riparian zones c. other vegetation to be retained or protected due to environmental constraints.
	<p>Note: Asset Protection Zones for private benefit cannot be imposed on any land managed by Council or any other public land.</p>
PC.5	Clearing of native vegetation or trees for the purposes of reducing bushfire risk must be consistent with any current applicable Bushfire Risk Management Plan prepared under the Rural Fires Act 1997 .
<ul style="list-style-type: none"> • O.38 	
<ul style="list-style-type: none"> • O.39 	

2.5.2. Mine subsidence

This section applies to all development consisting of a new building or structure, extension or structural alteration, or subdivision located on land within a proclaimed mine subsidence district. Mine Subsidence Districts (districts) are proclaimed in areas where there are potential subsidence risks from active or non-active underground coal mining. A district is a land zoning tool administered by Subsidence Advisory NSW under the Coal Mine Subsidence Compensation Act 2017. Subsidence Advisory NSW regulates building and subdivision works within districts to ensure new homes, buildings and structures are built to an appropriate standard that reduces the risk of damage should subsidence occur.

Relevant legislation and policy that may be read in conjunction with this Chapter are listed below:

- *Coal Mine Subsidence Compensation Act 2017*
- [Subsidence Advisory NSW Surface Development guidelines](#)

Further information to find out if a site is located within a proclaimed mine subsidence district can be found at [Council's Mapping webpage](#), [NSW Planning Portal Spatial Viewer](#), or contacting [Subsidence Advisory NSW](#).

Objectives

O.40 Identify historic or ongoing underground mining risk.

O.41 Minimise the risk of potential mine subsidence damage through sensitive design.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.1	All development proposed within a declared mine subsidence district is to be designed to mitigate the risks of potential mine subsidence, including in accordance with any applicable Geotechnical Assessment prepared for the site.
<ul style="list-style-type: none"> • O.41 	

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

AS.1

- O.40
- O.41

Development is designed in accordance with relevant development guidelines from Subsidence Advisory NSW. Documentation must include appropriate notes and detail to confirm compliance with the [guidelines](#).

2.5.3. Contamination

Relevant legislation and policy that may be read in conjunction with this Chapter are listed below:

- [National Environment Protection \(Assessment of Site Contamination\) Measure](#)
- *Maitland Local Environmental Plan 2011*
- *Contaminated Land Management Act 1997*
- *State Environmental Planning Policy (Resilience and Hazards) 2021*
- [NSW Contaminated Land Planning Guidelines](#)

Refer to *SEPP Resilience and Hazards* and the NSW State Government's '*Managing Land Contamination: Planning Guidelines*' for more information on activities that may cause or potentially cause contamination.

In addition, refer to [Council's Contaminated Land Policy – Land Use Planning](#) for further information on identifying whether your site may be contaminated and the development process. Further information to find out if a site is contaminated or potentially contaminated can be found on [Council's Mapping webpage](#), or the [NSW Planning Portal Spatial Viewer](#).

Objectives

- O.42 To ensure that land is fit for its intended land use based on the National Environment Protection (Assessment of Site Contamination) Measure thresholds for contaminants.
- O.43 To ensure that contaminated land is identified through appropriate investigations in line with current legislation and best practice.
- O.44 To ensure that contaminated land is appropriately and effectively managed or remediated prior to development taking place.
- O.45 To ensure that changes to land use will not increase the risk to public health or the environment because of contamination on site, or on adjacent properties.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.1

- O.42
- O.43

Information regarding any potential contamination present on the site is to be provided as part of any Statement of Environmental Effects lodged with Council.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.2 <ul style="list-style-type: none"> • O.42 • O.43 	<p>If a site has the potential for contamination to exist in relation to historical activities on the site, a Preliminary Site Investigation (PSI) must be prepared by a professionally qualified consultant and submitted with the development application.</p>
PC.3 <ul style="list-style-type: none"> • O.42 • O.43 	<p>A Detailed Site Investigation Report (DSI) is required in the following circumstances:</p> <ol style="list-style-type: none"> Where the PSI indicates that the land may be contaminated, or When the site is, or was, formally used for an activity listed in Table 1 of the Managing Land Contamination Planning Guidelines within Council's Contaminated Land Policy, or other potentially contaminating activities known to Council, and a land use change is proposed that has the potential to increase the risk of exposure to contamination, or To accompany a remediation proposal or notification.
PC.4 <ul style="list-style-type: none"> • O.42 • O.44 • O.45 	<p>Where a Detailed Site Investigation Report identifies the need for remediation, a Remedial Action Plan (RAP) must be prepared and submitted prior to issue of the development consent, or in certain circumstances the issue of the construction certificate or subdivision works certificate as determined relevant by Council staff.</p>
PC.5 <ul style="list-style-type: none"> • O.42 • O.45 	<p>The site must be validated as suitable for its intended use prior to the issue of an occupation certificate. Council may request a review by an NSW Accredited Independent Site Auditor.</p>

Note: A PSI forms the first step in assessing if land is contaminated. If a PSI indicates potential contamination, the next assessment required is a Detailed Site Investigation (DSI). A DSI provides a comprehensive assessment of contamination and provides context for further assessment/remediation, which may result in a Remedial Action Plan.

2.5.4. Acid Sulfate Soils

Relevant legislation and policy that should be read in conjunction with this Chapter are listed below:

- *Clause 7.1 of the Maitland Local Environmental Plan 2011*
- *NSW Acid Sulfate Soils Planning Manual*
- *NSW EPA Waste Classification Guidelines Part 4: Acid sulfate soils*

Further information to find out if a site is impacted by acid sulfate soils can be found on [Council's Mapping webpage](#), or the [NSW Planning Portal Spatial Viewer](#).

Objectives

- O.46 To manage and mitigate the impacts of land development in relation to acid sulfate soils, where present in the landscape.
- O.47 To ensure the environmental value and ecological health of waterways, soil, trees, and vegetation are appropriately protected from the release of acid water from disturbed acid sulfate soils.
- O.48 To manage and mitigate the impacts on infrastructure within acid sulfate soils and waterways where degradation and accelerated corrosion could occur.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

AS.1 <ul style="list-style-type: none">• O.46	Development should be sited or designed to avoid the disturbance of acid sulfate soils or potential acid sulfate soils.
PC.1 <ul style="list-style-type: none">• O.46• O.47• O.48	Where the disturbance of Class 1, 2, or 3 acid sulfate soils is unavoidable, a Preliminary Acid Sulfate Soil Assessment report must be submitted with the development application, in accordance with the NSW Acid Sulfate Soils Planning Manual.
PC.2 <ul style="list-style-type: none">• O.46• O.47• O.48	Where a Preliminary Acid Sulfate Soil Assessment report identifies potential adverse impacts, a detailed assessment report and management plan must be submitted, in accordance with the NSW Acid Sulfate Soils Planning Manual.
PC.3 <ul style="list-style-type: none">• O.46• O.47• O.48	Disposal of any acid sulfate soil as waste during development is undertaken in accordance with the NSW EPA Waste Classification Guidelines Part 4: Acid sulfate soils.

2.5.5. Noise and Vibration

Development that is likely to produce an adverse noise or vibration impact on occupants of the site or of nearby properties include, but are not limited to:

- clubs, hotels and pubs with outdoor smoking, dining and gaming areas, mechanical plant, carpark,
- function centres,
- childcare centres,
- educational establishments,
- industrial uses that interface with residential or sensitive land uses,
- residential developments with ventilation and air-conditioning plant, carpark, and
- commercial developments with workshops, mechanical and ventilation plant such as air exhaust and supply fans, chillers, cooling towers, truck and freight train movements, loading docks and the like.

Relevant legislation and policy that should be read in conjunction with this Chapter are:

- *Protection of the Environment Operations Act 1997*
- *NSW EPA Noise Policy for Industry*

Further information can be found at the [NSW EPA](#) website on noise legislation and guidelines.

Objectives

O.49 To minimise the generation of noise and, or vibration, and to mitigate associated adverse impacts on the amenity of neighbouring properties and their occupants, and on occupants of the proposed development.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.1	Where development has the potential to produce an adverse noise or vibration impact on occupants of the site or of nearby properties, an acoustic and vibration assessment must be prepared by a qualified consultant in accordance with Appendix A: Application Requirements – Other Development or Appendix B: Application Requirements – Minor Development, whichever is applicable.
• O.49	
PC.2	Noise or vibration generated by development either during construction or operation must not exceed the criteria stipulated in the <i>NSW EPA Noise Policy for Industry</i> or the <i>Noise Guide for Local Government</i> at the property boundary of the noise source, or at a receiving lot boundary.
• O.49	

2.5.6. Air Quality

The aim of this sub-section is to ensure that air quality is not negatively impacted on by dust and odour from development.

Relevant legislation and policy that may be read in conjunction with this Chapter are listed below:

- *Protection of the Environment Operations Act 1997*
- [*Buffer Zones to Reduce Land Use Conflict with Agriculture – An Interim Guideline \(2018\)*](#)
- *Chapter 9: Rural and Other Land Uses of the MDCP 2025*

Further information can be found at the [NSW EPA](#) website on noise legislation and guidelines.

Objectives

O.50 To ensure air quality is not negatively impacted on by dust and odour in recognition of the associated human health impacts.

O.51 To ensure that measures are implemented to maintain air quality.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.1

- O.50
- O.51

An Air Quality Impact Assessment (AQIA) and/or Odour Report is required to be prepared in accordance with Appendix A: Application Requirements – Other Development and/or Appendix B: Application Requirements – Minor Development, whichever is applicable, in instances where development has potential to adversely impact surrounding areas in terms of air quality and/or odour. This includes:

- Rural industries
- Heavy Industry
- Sewage treatment plants
- Waste or resource management facilities
- Extractive industry
- Other development types if requested by Council

2.5.7. Hazardous and Offensive Land Use Buffers

The aim of this sub-section is to ensure that ensure development is not adversely impacted by hazardous or offensive development.

Refer to Chapter 9, Section 9.2.1 of this DCP for buffer requirements for agricultural activities, such as intensive agriculture.

Refer to *SEPP Resilience and Hazards, Chapter 3 Hazardous and Offensive Development* and the NSW State Government's [Planning Circular PS 21-031 Planning and assessment guidelines for hazardous industry](#) for further information on hazardous and offensive development requirements.

Objectives

O.52 To ensure development is not adversely impacted by noise or air quality of hazardous or offensive development, such as agricultural activities, industry, airports or wastewater treatment facilities.

PRESCRIPTIVE CONTROLS AND ACCEPTABLE SOLUTIONS

PC.1 <ul style="list-style-type: none">• O.52	Unless a building is for non-habitable purposes, development within 400m of a wastewater treatment plant is generally not supported. Refer to Figure 2-5 and Figure 2-6 for wastewater treatment plant locations and associated 400m buffers.
AS.1 <ul style="list-style-type: none">• O.52	<p>Should a development seek to provide habitable structures within the identified wastewater treatment plant buffer zones, they are to demonstrate that:</p> <ul style="list-style-type: none">a. The proposed structure is ancillary to the applicable wastewater treatment plant, ORb. The proposed development lot is either wholly or partially within the buffer zone and cannot otherwise be positioned outside of the buffer zone (in the case of a lot partially within the buffer), ANDc. An Odour Assessment and Air Quality Assessment are prepared by suitably qualified professionals in accordance with, at a minimum, the requirements for each assessment under Appendix A: Application Requirements – Other Development or Appendix B: Application Requirements – Minor Development, whichever is applicable, ANDd. Demonstrated communication is had with Hunter Water regarding the development, ANDe. The Odour Assessment and Air Quality Assessment find that any impacts can be suitably mitigated through additional measures, and that any requirement for outside Private Open Space or Communal Open Space is not compromised as a result of unacceptable odour or air quality impacts.

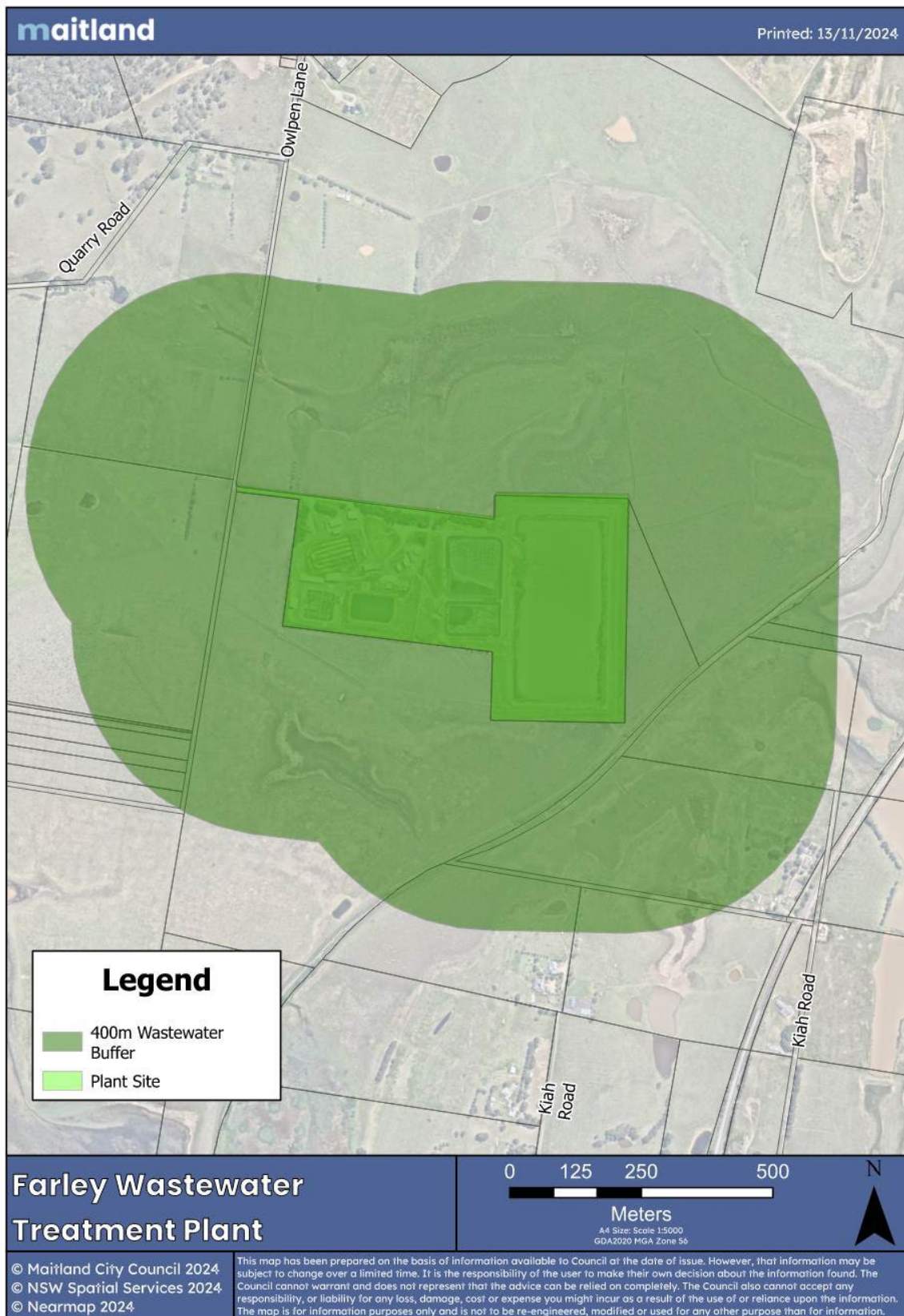


Figure 2-5: Farley Wastewater Treatment Plant

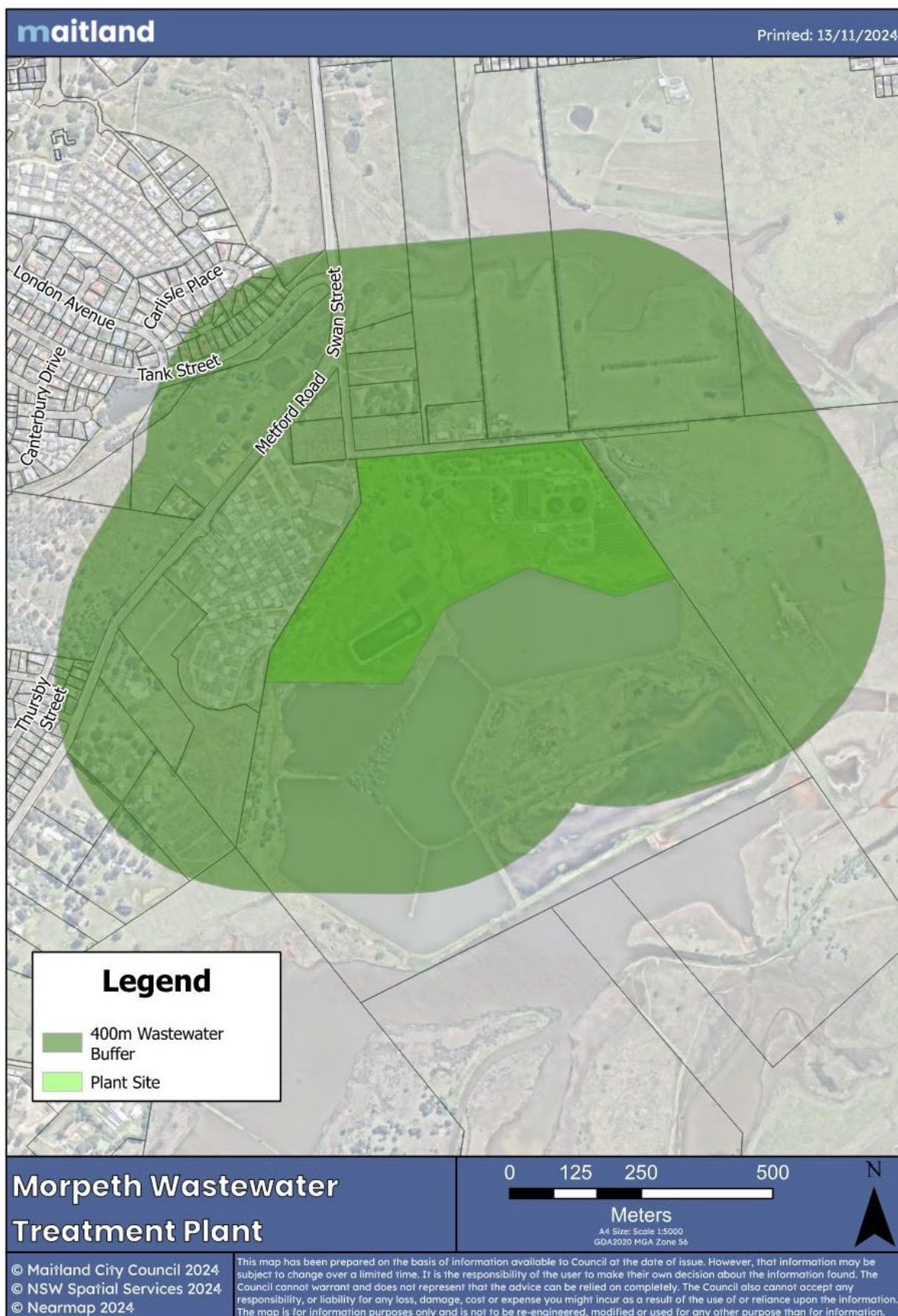


Figure 2-6: Morpeth Wastewater Treatment Plant