

## 11c Riparian land & watercourses

### Explanatory outline

Section 11c outlines assessment criteria relating to the protection of watercourses and riparian land. The following matters are covered:

- water quality and flows
- aquatic and riparian ecosystems
- watercourse bed and bank stability
- fish and aquatic organism passage
- rehabilitation of watercourses and riparian areas
- water extraction
- measures to avoid, minimise or mitigate development impacts

This section should be read in conjunction with *Upper Hunter LEP 2013* clause 6.6 *Riparian land and watercourses* and the accompanying Watercourse Map.

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### 11c.1 Application of this section

This section applies to development described in Column 1 when carried out on land described in Column 2.

Column 1: Type of development	Column 2: Applicable land
Any development that requires development consent.	<ul style="list-style-type: none"> <li>• Land within the bed of any watercourse shown on the <i>Upper Hunter Local Environmental Plan 2013 Watercourse Map</i></li> <li>• Land within 40 metres of the top of the bank of any watercourse shown on the <i>Upper Hunter Local Environmental Plan 2013 Watercourse Map</i></li> <li>• Land within 40 metres of the top bank of any other river, stream, creek or tributary or other natural water course.</li> </ul>

### 11c.2 Relevant planning instruments & legislation

The following environmental planning instruments, NSW legislation, policies and plans are relevant to development to which this section applies:

- *Upper Hunter Local Environmental Plan 2013* (Clause 6.6 Riparian Land and watercourses) requires consideration of impacts from a development on identified land, and consent must not be granted except where adverse impacts are avoided, minimised or mitigated
- *Water Management Act 2000* (Regulates water planning and licensing)
- *Protection of the Environment Operations Act 1997* (Provides a framework for regulating water pollution)

Further planning instruments and legislation may also be relevant. In the event of any inconsistency, the above listed instruments will prevail over requirements or criteria contained in this section.

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The *Hunter-Central Rivers Catchment Action Plan 2013-2023* also applies. (Catchment Goal 5 is to improve or maintain the ability of catchments to provide fresh water for environmental and human use)

### 11c.3 Definitions

There may be words used in this Part that are defined in the *Environmental Planning and Assessment Act, 1979*, as amended, or within *Upper Hunter Local Environmental Plan 2013*, as amended. The **Dictionary** to this DCP provides additional definitions that are relevant to this Part, including:

- watercourse
- Watercourse Map

### 11c.4 Objectives

The objectives of this section are to:

1. protect and maintain riparian areas from the impacts of development
2. protect and maintain natural water courses and associated vegetation and habitats
3. ensure that suitable riparian buffers are provided and maintained
4. implement the *Upper Hunter Local Environmental Plan 2013* objectives relating to riparian land and watercourses.

### 11c.5 Supporting plans & documentation

Development applications that are subject to this section should be supported by the following plans and documentation.

Item	When required	Plans or information to be provided
<b>A. General requirements</b>	All applications	Refer to Part 2 <b>Preparing &amp; lodging a development application</b> .
<b>B. Riparian land assessment</b>	All applications	<p>A report, with accompanying plans where necessary, prepared by a suitably qualified and experienced person, that assesses the following matters:</p> <ul style="list-style-type: none"> <li>• impacts on water quality and stream flow</li> <li>• impacts on aquatic and riparian species, habitats and ecosystems</li> <li>• impacts on stream bed and stream bank stability</li> <li>• impacts on the free passage of fish and other aquatic organisms</li> <li>• any required future rehabilitation of the watercourse and riparian areas</li> <li>• impacts on water extraction from the watercourse</li> <li>• proposed measures to avoid, minimise or mitigate the above impacts.</li> <li>• consultation with relevant NSW Government agencies (currently Department of Primary Industries (Fisheries) and NSW Office of Water) in relation to proposed works within riparian corridors or buffers</li> <li>• evidence of water licences and other entitlements where this is relevant to achieving the objectives of this part and LEP requirements, particularly in relation to subdivisions creating additional dwelling entitlements.</li> </ul>

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Item	When required	Plans or information to be provided
	All applications creating urban stormwater runoff directly affecting a natural watercourse	Additional information to that above, being: <ul style="list-style-type: none"> <li>downstream impacts on the development that may result from changes to natural ground levels, filling or excavation, and urban stormwater drainage, and paving of impervious surfaces</li> <li>paving of impervious surfaces and resulting changes to water infiltration into the ground and runoff</li> <li>retention of vegetation on the land and its role in maintaining pre-development hydrological conditions.</li> </ul>

### 11c.6 Assessment criteria

A performance-based approach will be adopted in the assessment of development applications. Applications will be assessed according to the extent to which the outcomes specified in the left-hand column of the following table will be satisfied or achieved by the design, construction or operation of the proposal.

The design guidelines specified in the right-hand column indicate design and best practice solutions by which the required outcomes can be met. They do not preclude other solutions that may be suitable under particular local circumstances. All proposals will be considered on merit.

Outcomes to be achieved	Design guidelines
<b>A. Water quality &amp; flows</b> <ul style="list-style-type: none"> <li>Suitable water quality in watercourses and streams is maintained, consistent with accepted standards.</li> <li>Development does not significantly impact on natural flow regimes</li> </ul>	<ul style="list-style-type: none"> <li>Land use and development is to contribute towards achieving the objects of the <i>Water Management Act 2000</i> including protecting and managing streams, groundwater and riparian areas to retain natural ecological functions, using water resources in an ecologically sustainable manner, and taking into account the provisions of relevant water sharing plans made under the Water Management Act 2000.</li> <li>Compliance with Department of Primary Industries (DPI) or relevant NSW Office of Water approval requirements, and relevant guidelines.</li> </ul>
<b>B. Aquatic &amp; riparian ecosystems</b> <ul style="list-style-type: none"> <li>Aquatic and riparian ecosystems and habitats are protected and maintained</li> </ul>	<ul style="list-style-type: none"> <li>Developments should ensure that habitat connectivity is maintained within and adjacent to streams.</li> <li>Development in riparian buffer areas (within 40 metres of watercourse or stream) should be avoided where other options are available.</li> <li>Protect and maintain habitat for listed threatened species and endangered ecological communities.</li> </ul>
<b>C. Watercourse bed &amp; bank stability</b> <ul style="list-style-type: none"> <li>Stream and watercourse stability of beds and banks is protected by avoiding adverse development impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Developments should not affect bed or stream stability and should comply with DPI guidelines.</li> <li>Riparian vegetation and natural flood flows and floodplains are to be retained and not affected by development.</li> </ul>
<b>D. Fish &amp; aquatic organism passage</b> <ul style="list-style-type: none"> <li>Free passage for the movement of fish and aquatic organisms is maintained</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with DPI approval requirements, and relevant guidelines or NSW Office of Water requirements.</li> </ul>

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### Outcomes to be achieved

### Design guidelines

#### E. Easements and restrictions as to user

- Easements and restrictions as to user will be required depending on the extent to which access to Council assets is required and to ensure minimisation of the risk to urban drainage and flooding.

#### F. Rehabilitation of watercourses & riparian areas

- Degraded or unstable watercourses, stream banks or riparian areas are protected and rehabilitated.

- Where watercourses and riparian areas are degraded or unstable, measures to rehabilitate these should be considered in conjunction with a development.

#### G. Water extraction

- Development impacts on water flow and availability are identified and assessed

- Compliance with DPI approval requirements, and relevant guidelines.

#### H. Floodplain management

- The provisions of part 10a Floodplain Management must be met.

#### I. Measures to avoid, minimise or mitigate development impacts

- All development must incorporate and document measures to avoid, minimise or mitigate adverse impacts

- Measures taken to avoid, minimise or mitigate development impacts are to be submitted in development application documentation.

#### J. Riparian Land Masterplans

- The development is consistent with any Masterplan or the like adopted by Council affecting riparian land or its management, including fencing, management techniques or other issues relating to riparian land use

### 11c.7 Supplementary guidance

The following documents or reference materials provide further advice or information that is relevant to this section:

- *Hunter Unregulated and Alluvial Water Sharing Plan* and *Hunter Regulated Water Sharing Plan*  
<https://www.industry.nsw.gov.au/water/plans-programs/water-sharing-plans/status>
- A range of guidelines relating to controlled activities also apply  
<https://www.industry.nsw.gov.au/water/licensing-trade/approvals/controlled-activities>
  - NSW Department of Primary Industries, 2013, *Policy and guidelines for fish habitat conservation and management Update*
  - NSW Department of Primary Industries (Office of Water), 2012, *Guidelines for riparian corridors on waterfront land.*
  - NSW Department of Primary Industries (Office of Water), 2012, *Guidelines for instream works on waterfront land.*



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- NSW Department of Primary Industries (Office of Water), 2012, *Guidelines for laying pipes and cables in watercourses on waterfront land.*
- NSW Department of Primary Industries (Office of Water), 2012, *Guidelines for outlet structures on waterfront land.*
- NSW Department of Primary Industries (Office of Water), 2012, *Guidelines for vegetation management plans on waterfront land.*
- NSW Department of Primary Industries (Office of Water), 2012, *Guidelines for watercourse crossings on waterfront land.*
- Department of Environment, Climate Change and Water NSW, 2010, *NSW Wetlands Policy.* <https://www.environment.nsw.gov.au/topics/water/wetlands/protecting-wetlands/nsw-wetlands-policy>