

## 8.2.176 Water resource catchment overlay code



Photograph 8.2.176-1  
Photograph of Hinze Dam. Photograph by Fotomedia.

### 8.2.176.1 Application

This code applies to assessing material change of use, reconfiguring a lot or operational work for development subject to the Water catchments and dual ~~reticulation supply system~~ overlay and identified within **Part 5.10 Categories of development and assessment – Overlays**.

When using this code, reference should be made to **Section 5.3.2** and, where applicable, **Section 5.3.3**, in **Part 5**.

### 8.2.176.2 Purpose

- (1) The ~~water~~Water resource catchment overlay deals with catchment areas and areas identified by a local government or Bulk Water Supply Authority as a water resource requiring protection of water quality (e.g. local catchments or bores).
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) Water supply catchment areas are managed to ensure the highest level of protection possible to the city's potable water supply.
  - (b) Development is located and designed to ensure that it does not create an adverse impact or present a risk to water quality in water resource catchment areas.
  - (c) Management of development contributes to the maintenance and protection of water quality in water resource catchment areas by preventing contaminants, sedimentation and solid or liquid waste from entering surface water or groundwater.
  - (d) The physical integrity of waterways, wetlands, lakes, springs, riparian areas and natural ecosystems that support water quality are protected.

**Comment [MU2 - CP1]:** Theme - Other land use changes - improving clarity, consistency and alignment within the City Plan;  
Item 27 – Dual supply system

**Comment [LF2]:** Theme: Other land use changes - improving clarity, consistency and alignment within the City Plan;  
Item 32 – Minor administrative and editorial improvements

**8.2.176.3 Specific benchmarks for assessment**

**Part A** applies to accepted development subject to requirements.

**Part B** applies to assessable development.

**PART A – ACCEPTED DEVELOPMENT SUBJECT TO REQUIREMENTS**

**Table 8.2.176-1: Water resource catchment overlay code – for accepted development subject to requirements**

**Required outcomes**

**General provisions**

**RO1**

Development complies with the horizontal separation distances (setbacks) within **Table 8.2.176-2: Minimum horizontal separation distances required in water resource catchment area.**

**RO2**

Cut and fill onsite must not exceed 0.5 metres in depth or more than 10 cubic metres.

**RO3**

Development does not include the incineration or burial of waste and all other waste is collected and stored in weather proof, sealed waste receptacles, located in roofed and bunded areas, for disposal by a licenced contractor.

**RO4**

Management, handling and storage of chemicals (including fuelling of vehicles), is undertaken in secured, climate controlled, weather proof, level and bunded enclosures.

**On-site sewerage systems**

**RO5**

The on-site wastewater treatment system must produce a minimum secondary treated effluent (90th percentile) and effluent application must ensure water quality is maintained and protected.

**RO6**

The on-site wastewater treatment system for a dwelling house must include:

- (a) emergency storage capacity of 1,000 litres and adequate buffering for shock loading/down time;
- (b) a reserve land application area of 100% of the effluent irrigation design area;
- (c) land application areas that are vegetated;
- (d) the base of the land application field is at least 2 metres above the seasonal high water table/bedrock (whichever is the closest to the base of the application area); and
- (e) wastewater collection and storage systems must have capacity to accommodate full load at peak times.

**RO7**

The on-site wastewater treatment system for development other than a dwelling house must include emergency storage capable of holding 3-6 hours peak flow of treated effluent in the event of emergencies/overload with provision for desludging.

**RO8**

Where development involves a Permanent Plantation, a minimum of 30% ground cover is required.

**Advisory note**

Accepted development identified in the assessment tables as subject to requirements must comply with all the nominated requirements in this and other applicable codes.

**Table 8.2.176-2: Minimum horizontal separation distances required in water resource catchment area**

| Feature  | Surveyed bank of an intermittent water course | Surveyed bank of a permanent water course | Water supply well, bore &/or dam | Nearest cut, embankment or other point where effluent might surface | Upper flood margin level of an urban water supply storage | Natural grade (maximum) | Flood immunity                 |
|--|---|---|----------------------------------|---|---|-------------------------|--------------------------------|
| Development involving treated effluent disposal (irrigation areas)   | 50m   | 100m                                      | 50m                              | 30m   | 400m  | 10%                     | 1 metre above 1 in 50 year ARI |
| Development involving waste and emission sources, storages and treatment areas   | 50m   | 100m                                      | 250m                             | 30m   | 400m  | 10%                     | 1 metre above 1 in 50 year ARI |
| Development involving Dangerous & hazardous substances management, storage & handling  | 50m   | 100m                                      | 250m                             | 30m   | 400m  | 10%                     | 1 metre above 1 in 50 year ARI |
| Development involving water recycling & re-use discharge   | 50m   | 100m                                      | 250m                             | 30m   | 400m  | 10%                     | 1 metre above 1 in 50 year ARI |
| Development for any use in the Residential activities group (refer to SC1.1.1 Defined activity groups)   | 50m   | 100m                                      | 30m                              | 30m   | 400m  | 15%                     | 1 in 100 year ARI              |
| Development for any use in the following activity groups: <ul style="list-style-type: none"> <li>• Business activities</li> <li>• Community activities</li> <li>• Industrial activities</li> <li>• Tourism and entertainment activities</li> <li>• Transport and infrastructure activities</li> </ul> (refer to SC1.1.1 Defined activity groups) | 100m  | 100m                                      | 250m                             | 50m   | 800m  | 6%                      | 1 in 50 year ARI               |
| Development for any use in the Rural activities group (refer to SC1.1.1 Defined activity groups)   | 50m   | 100m                                      | 250m                             | 30m   | 800m  | 5%                      | 1 in 20 year ARI               |
| Development for any use in the Recreation and environment activities group (refer to SC1.1.1 Defined activity groups)  | 50m   | 100m                                      | 250m                             | 30m   | 400m  | 5%                      | 1 in 50 year ARI               |

**PART B – ASSESSABLE DEVELOPMENT BENCHMARKS**

**Table 8.2.176-3: Water resource catchment overlay code – for assessable development**

| Performance outcomes   | Acceptable outcomes   |
|--|---|
| <p><b>All development (excluding any use within the Industrial activities group (refer to SC1.1.1 Defined activity groups), Intensive animal industry, Intensive horticulture, Animal keeping, Wholesale nursery, Motor sport facility and Outdoor sport and recreation)</b></p>   |   |
| <p><b>PO1</b><br/>Appropriate separation distances are maintained between all development activity and waterways, groundwater recharge areas, on-site water supplies and urban water supply storages to ensure water quality is maintained and protected.</p>  | <p><b>AO1</b><br/>Development complies with the horizontal separation distances (setbacks) within <b>Table 8.2.176-2: Minimum horizontal separation distances required in water resource catchment area.</b></p>  |
| <p><b>PO2</b><br/>The capture of solid or liquid waste from all land use, development and activities is designed, constructed and managed to prevent the release of contaminants to surface water or groundwater bodies.</p>   | <p><b>AO2.1</b><br/>Run-off and sediment from roadways and impervious surfaces are intercepted and treated on-site to remove oil, grease, chemicals, silt, trace metals and nutrients such as nitrogen and phosphorous.</p>   |
|  | <p><b>AO2.2</b><br/>Management, handling and storage of substances (including fuelling) must be undertaken in secured, climate controlled, weather proof (roofed), level and bunded enclosures.</p>   |
|  | <p><b>AO2.3</b><br/>No incineration or burial of waste is to be undertaken on-site.</p>   |
|  | <p><b>AO2.4</b><br/>Solid waste is collected and stored in weather proofed, sealed waste receptacles, located in roofed and bunded areas, for collection by a licenced contractor.</p>  |
|  | <p><b>AO2.5</b><br/>Holding tanks are used for all liquid waste and provide for the separation of oils/solvents and solids prior to pump-out and collection by a licenced contractor.</p>   |
|  | <p><b>AO2.6</b><br/>No excavation or fill on-site is to exceed 0.5 metres in depth or more than 10 cubic metres.</p>  |
| <p><b>On-site sewerage systems</b></p>   |   |
| <p><b>PO3</b><br/>Wastewater is managed to ensure there is no worsening or adverse impacts to health risks, environmental risks and water quality.<br/><br/>Editor's Note- For guidance refer to the Seqwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012.</p> | <p><b>AO3</b><br/>The secondary treated wastewater treatment system must include:</p> <ul style="list-style-type: none"> <li>(a) emergency storage capable of holding 3-6 hours peak flow of treated effluent in the event of emergencies or overload with provision for desludging;</li> <li>(b) back up pump installation and backup power;</li> <li>(c) MEDLI modelling to determine irrigation rates and sizing of irrigation areas;</li> <li>(d) vegetated land application areas are not located in overland flow paths or on areas that perform groundwater recharge or discharge functions; and</li> <li>(e) wastewater collection and storage systems have a capacity to accommodate full load at peak times and includes temporary facilities.</li> </ul> |

| Performance outcomes   | Acceptable outcomes   |
|--|---|
| <b>Rural activities</b>  |   |
| <b>PO4</b><br>Development and associated activities are managed in a sustainable manner, to ensure water quality is maintained and protected.  | <b>AO4.1</b><br>Where development is for the purposes of a permanent plantation there must be no movement of sediment or nutrients beyond the boundary of the site.                 |
|  | <b>AO4.2</b><br>Fertilisers, treated wastewater and soil conditioners are placed in soils before mulching and not via surface spreading following planting.                         |
|  | <b>AO4.3</b><br>15% of runoff from irrigation events is captured via recovery dams, drainage systems and first flush/sediment controls, including vegetated filters.                |
| <b>PO5</b><br>Development provides for the protection, maintenance, management and rehabilitation of the riparian area adjacent to waterways and water storages.   | <b>AO5.1</b><br>Riparian vegetation is retained.  |
|  | <b>AO5.2</b><br>Stock and equine access to riparian areas and waterways is controlled by fencing.   |
|  | <b>AO5.3</b><br>Vegetation within overland flow and natural drainage lines is retained and trails are located and maintained to minimise scour, erosion and to avoid steep gullies. |
| <b>For any use within the Industrial activities group (refer to SC1.1.1 Defined activity groups), Intensive animal industry, Intensive horticulture, Animal keeping, Wholesale nursery, Motor sport facility and Outdoor sport and recreation only</b>       |   |
| <b>PO6</b><br>Development must maintain or enhance water quality in water resource catchment areas.<br><br><b>Note:</b> refer to the Seqwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012. | <b>AO6</b><br>No acceptable outcome provided.   |