

# Guideline - Activities in a watercourse, lake or spring carried out by an entity

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## Version History

Version	Date	Comment
1	27/02/2007	Endorsed
2	24/07/2010	Addition to list of entities noted in this guideline and definition of watercourse changed to reflect amendment to Water Act 2000 by the Natural Resources and Other Legislation Amendment Act 2010 on 26 March 2010.
3	18/10/2010	Addition to the list of entities to include QR Limited and Queensland Rail Limited.
4	16/02/2011	Replace listing Ergon Energy Pty Ltd 078 875 902 with Ergon Energy Corporation Limited ACN 087 646 062
5	22/02/2011	Update legislative references for the Local Government Act 2009. Ensure that the Brisbane City Council is listed under City of Brisbane Act 2010.
6	16/12/2011	Updated guideline to apply in wild river areas, definitions updated, and ensure vegetation management clearing rules are in line with schedule 24 of the Sustainable Planning Act 2009.
7	09/02/2012	Allowed for contractors, sub-contractors of entities to use guideline. It is the responsibility of the entities to ensure their contractors are compliant with the guideline.

# Procedure

## 1. Purpose

The purpose of this guideline is to allow an entity to undertake necessary activities in a watercourse without the need for a riverine protection permit, the regulatory authorisation given under the *Water Act 2000* (Water Act). The activities of destroying native vegetation, placing fill and excavating in a watercourse, lake or spring are regulated under the Water Act.

Clearing of native vegetation in a watercourse or lake does not require assessment under the *Sustainable Planning Act 2009* if the clearing is carried out in accordance with this guideline.

This guideline outlines the requirements and provides outcomes and acceptable solutions to ensure activities minimise adverse impacts on water quality, water flow, vegetation and the physical integrity of the watercourse, lake or spring.

This guideline explains:

- who should use this guideline and when the guideline applies
- activities captured by this guideline
- the process of planning activities
- compliance with this guideline
- required outcomes and acceptable solutions
- recording activities
- best practice approach.

## 2. Applicable entities under this guideline

This guideline has been developed for use by an entity which includes any of the following:

1. A local government under the *Local Government Act 2009*
2. A local government owned corporation under the *Local Government Act 2009*
3. A government department declared under the *Public Service Act 2008*
4. The Queensland Electricity Transmission Corporation Limited (ACN 078 849 233), trading as Powerlink Queensland
5. Ergon Energy Corporation Limited (ACN 087 646 062)
6. Energex Limited (ABN 40 078 849 055)
7. QR Limited (ABN 47 564 947 264)
8. Northern SEQ Distributor-Retailer Authority (trading as Unitywater - ABN 89 791 717 472)
9. Central SEQ Distributor-Retailer Authority (trading as Queensland Urban Utilities – ABN 86 673 835 011)
10. Southern SEQ Distributor-Retailer Authority (trading as Allconnex Water - ABN 80 769 308 350)
11. Queensland Rail Limited (ABN 71 132 181 090)
12. Brisbane City Council and its corporate entities under the *City of Brisbane Act 2010*.

Contractors, subcontractors and other agents engaged by an entity to undertake activities for or on behalf of the entity must also use this guideline.

## 3. Where does this guideline apply?

This guideline may be used by an entity (and its contractors, subcontractors and other agents) when destroying native vegetation, excavating or placing fill in a watercourse, lake or spring in association with:

- construction, installation, removal, maintenance or protection of infrastructure under the control of the entity
- establishment and maintenance of flow efficiency around such infrastructure
- restoration, flood mitigation, erosion protection or weed control.

The entity may carry out the activities of clearing vegetation, excavating and placing fill in a watercourse, lake or spring without a riverine protection permit in accordance with this guideline which is permitted under sections 49, 50 and 51 of the Water Regulation 2002.

Activities which involve the destruction of native vegetation in a watercourse, lake or spring are regulated under both the *Water Act* and *Sustainable Planning Act 2009*.

To the extent an activity involves the clearing of native vegetation, this guideline only applies to clearing that is:

- less than 0.5 hectares, and
- the vegetation is:
  - a least concern regional ecosystem shown on the regional ecosystem map or remnant map as remnant vegetation, or a least concern regional ecosystem shown as Category B on a Property Map of Assessable Vegetation, or
  - shown as non remnant vegetation on the regional ecosystem or remnant map or shown as Category X on a Property Map of Assessable Vegetation, and
- carried out in accordance with this guideline.

Regional ecosystem and remnant maps can be downloaded free of charge from the Department of Environment and Resource Management (the Department) website <<http://www.derm.qld.gov.au>> .

This guideline does not set a limit on the quantity of material that can be excavated or placed in a watercourse, lake or spring during the course of activities. However, activities must not exceed an amount necessary to achieve the required outcomes.

Where an activity cannot be carried out in accordance with this guideline, the entity must not carry out the activity unless a riverine protection permit is granted under the *Water Act* or another exemption applies.

This guideline does not apply to:

- excavation for obtaining quarry material from a watercourse or lake
- excavation or placing fill in a way that would interfere with the flow of water in a watercourse, lake or spring to the extent a water licence would be required under the *Water Act*
- activities in springs in which the water is connected to artesian water, or subartesian water connected to artesian water, within the area covered by the *Water Resource (Great Artesian Basin) Plan 2006*.

If it is anticipated that works or activities may conserve water or retard the flow of water downstream, or may redirect the flow of water, then a licence to interfere with the flow of water may be required and advice is to be sought from the department before commencing activities.

## **4. Activities in a wild river area**

For watercourses, lakes and springs in a wild river high preservation area, wild river special floodplain management area or in a nominated waterway, the guideline only applies to activities:

- for the control of non-native plants or declared pests in the area
- necessary for specified works in the area
- for installing or maintaining works or infrastructure required to support other development for which a development permit is not required.

The spatial coordinates relating to the locations of a wild river area can be obtained by contacting the department or accessing the Wild Rivers Map <<http://www.derm.qld.gov.au/wildrivers/wildrivers-map.php>> on the department's website.

## **5. Planning activities**

There are several details an entity needs to consider prior to undertaking an activity in a watercourse, lake or spring. Sections 5 and 6 are part of the process of planning to ensure the activity is carried out in a sustainable and safe way.

The entity should consider all relevant matters when planning to determine the most suitable activities and the potential impacts of those activities. The entity should investigate and collate data concerning the potential impacts and document proposed measures to mitigate them.

The level of investigation and data collection should reflect the sensitivity of a site and the potential for the activities to adversely impact on the watercourse, lake or spring. For activities that involve excavating or placing fill greater than a volume of 500 cubic metres per activity site or across multiple activity sites a higher level of investigation and design would be required.

Information collected during the investigation and design of a project should be made available to the department on request.

Matters that should be considered by the entity include:

- a. the effects of the proposed activity on water quality
- b. the quantity of native vegetation to be destroyed or material to be excavated or filled
- c. the type of vegetation to be destroyed or material to be excavated or filled
- d. the seasonal factors influencing the watercourse, lake or spring
- e. the position in the watercourse, lake or spring of the vegetation to be destroyed or the proposed excavation or placing of fill
- f. the reasons for carrying out the activity
- g. the extent the activity may have an adverse effect on the physical integrity of the watercourse, lake or spring.

## **6. Impact statement**

The measures necessary to mitigate the impacts of activities at individual sites should be considered at the planning and design stage. The entity should collect and record relevant information for each activity site, including:

- the identity and site location of each watercourse, lake or spring that will be subjected to activities
- the location within the watercourse, lake or spring that may be impacted by the proposed activities
- the proposed project including details of the purpose of the project, activities involved and timing of activities
- the type and area of vegetation to be destroyed, and the method of destruction at each activity site
- estimated volumes of material to be excavated from, or fill to be placed at each activity site.

## **7. Compliance with this guideline**

The entity must comply with sections 8–12 to meet the requirements of this guideline. The entity is responsible to actively self-manage its activities and those of its contractors, subcontractors and other agents to ensure compliance with this guideline at all times.

The department may undertake audits to ensure compliance with this guideline. If an entity

undertakes activities outside the provisions of this guideline, a riverine protection permit under section 269 of the Water Act will be required. It is an offence to undertake activities not in accordance with this guideline or without a riverine protection permit. Penalties for non-compliance apply under the relevant legislation.

Where there is any doubt about the requirements, purpose or extent of this guideline the entity should seek advice from a local office of the department before commencing activities.

## **8. Consent of adjacent owners**

Section 13A of the *Land Act 1994* provides that the owner of land adjacent to a boundary watercourse or lake may exercise a right of access and trespass to the land in the watercourse or lake. Before undertaking an activity or applying for a riverine protection permit, written approval is required from the registered landowners adjoining the watercourse, lake or spring. Where an activity requires access across the full width of a watercourse, consent of the registered owners on the opposite bank is also required.

## **9. Notification**

The entity must notify the local departmental office at least five business days before commencement of the activity where excavation or placement of fill is of a volume greater than 5,000 cubic metres per activity site.

Notification must include the following:

- name of the entity and contact details of the responsible person
- name of watercourse, lake or spring where activity will occur
- location of activity as latitude/longitude or northing/easting or lot/plan
- reason for the activity
- the estimated area of vegetation to be destroyed, the volume of material to be excavated and volume of fill to be placed.

## **10. Site accessibility**

The site must be available for inspection by departmental officers at all times to enable inspection of activities to ensure they have been carried out in accordance with this guideline.

## **11. Recording activities**

The entity must maintain records of activities carried out under the authority of this guideline. The extent of the records must reflect the extent of activities associated with each project. These records are to be retained for a minimum of two years after completion of the activity and must be made available to the department on request.

Minimum information that must be recorded for each activity site includes:

- any documentation relating to the planning of activities
- activity site location and site access details
- commencement and completion dates
- the area of native vegetation cleared, the amounts of material excavated and the amount of fill placed
- impact management and rehabilitation details.

For those activities that require a higher level of investigation and design, generally where the activities involve excavating or placing fill of a volume of 500 cubic metres or more, the following additional information must be recorded:

- the disposal location(s) and quantity of spoil material removed
- the quantity of native vegetation removed from the site
- the plant equipment used e.g. size of excavator, number and type of trucks
- before, during and post activity photographs of the site
- rehabilitation information
- incidents of unanticipated failure of management methods and subsequent remedial action.

## 12. Required outcomes and acceptable solutions

Table 1 lists the required outcomes that must be achieved when undertaking activities to meet the requirements of the guideline.

Acceptable solutions are also provided. If the acceptable solutions are carried out relevant to the activity, the activity will be taken to have met the required outcome. If the activity cannot be carried out within the prescribed acceptable solutions, the entity must be able to demonstrate the required outcomes have been achieved through an alternative solution.

Table 1: Required outcomes and acceptable solutions

Required outcome	Acceptable solutions (proponents can propose an alternative solution to meet the required outcome)
<p>1. The activity is limited to the extent necessary or as an unavoidable part of the construction, installation, removal, maintenance or protection of the relevant infrastructure or the protection or enhancement of the stability of a watercourse, lake or spring</p>	<p>Acceptable solutions to limit impact of activities</p> <ul style="list-style-type: none"> <li>• The extent of activities is carried out only where necessary and unavoidable as stated in the record of the activity.</li> <li>• The area of disturbance is restricted to the area necessary as stated in the record of the activity.</li> <li>• Where available, an existing access track is used instead of constructing a new access track.</li> <li>• The number of bank cuttings and fills required (e.g. for access tracks) is kept to a minimum.</li> <li>• Activities are completed as quickly as possible.</li> <li>• Mature native trees are not destroyed in association with destruction of non-native vegetation (e.g. weed control).</li> </ul>
<p>2. Carrying out the activity must not adversely impact water quality within the watercourse</p>	<p>Acceptable solutions to not adversely impact water quality within the watercourse</p> <ul style="list-style-type: none"> <li>• Water run-off is diverted around areas of disturbance.</li> <li>• Sediment generated by activities is managed by use of sediment traps in order to minimise water turbidity outside the work site.</li> <li>• All machinery used in the activities is stored, refuelled and maintained outside the outer banks of the watercourse, lake or spring.</li> <li>• Activities are not carried out on the outside of the watercourse bend, on steep banks or where the soil type is prone to erosion (dispersive soils).</li> <li>• Only pesticides and herbicides that are registered for use in aquatic environments are used (i.e. breaks down in water). When using pesticides and herbicides, only use those registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA) for the intended use, at the suggested rates and only by methods registered on the label. Refer to the APVMA &lt;<a href="http://www.apvma.gov.au/">http://www.apvma.gov.au/</a>&gt; website for further details.</li> <li>• Where activities may disturb acid sulphate soils, refer to the Department of Local Government and Planning and the Department of Natural Resources and Mines, 2002, State Planning Policy 2/02 Guideline: Planning and Managing Development Involving Acid Sulfate Soils &lt;<a href="http://www.derm.qld.gov.au/land/ass/products.html">http://www.derm.qld.gov.au/land/ass/products.html</a>&gt; and</li> </ul>



	<p>follow management principles in accordance with the Department of Natural Resources and Mines, 2002, Soil Management guidelines in the Queensland Acid Sulfate Soil Technical Manual          &lt;<a href="http://www.derm.qld.gov.au/land/ass/products.html">http://www.derm.qld.gov.au/land/ass/products.html</a>&gt; , Brisbane</p> <ul style="list-style-type: none"> <li>• Fill placed under the authority of this guideline is limited to fill which occurs naturally and is free from contamination i.e. does not contain weeds, chemicals, oils, pesticides, trash, etc.</li> </ul>
<p>3. Carrying out the activity must not impound or impede the natural flow of water within the watercourse</p>	<p>Acceptable solutions to not impound or impede the natural flow of water within the watercourse</p> <ul style="list-style-type: none"> <li>• Constructed drainage and discharge structures do not alter the natural bed and bank profile.</li> <li>• Material excavated that is not waste material is spread evenly within the bed and banks of the watercourse such that it does not interfere with the flow of water.</li> <li>• Stockpiling of fill does not occur within the bed and banks.</li> <li>• Natural stream bed controls or features that create natural waterholes (riffles, logs, sediment or rock bars) are not lowered or removed.</li> <li>• Access tracks and crossings do not interrupt low flow along the watercourse i.e. they are at the natural bed level or include culverts or pipes that allow flow at the natural bed level both upstream and downstream of the crossing.</li> <li>• Any access tracks, crossings or culverts are orientated perpendicular to the stream channel <math>\pm 10^\circ</math>.</li> <li>• Culverts are of a sufficient size to ensure uninterrupted low flows, and to minimise the occurrence of blockage of culverts caused by flood-borne debris.</li> </ul>
<p>4. Carrying out the activity must not result in de-stabilisation of the bank associated with the watercourse</p>	<p>Acceptable solutions that will not result in de-stabilisation of the bank associated with the watercourse</p> <ul style="list-style-type: none"> <li>• Trees are cut near or at ground level to retain the root mass in the ground.</li> <li>• Bed and bank stabilisation measures such as rock revetment, reinforced matting and large woody debris, log piling or similar are used. For information about engineered solutions see Guidelines for the Design of River Bank Stability and Protection using RIP-RAP Design (also known as the RIPRAP User Guide) available from eWater Toolkit website          &lt;<a href="http://www.toolkit.net.au/Tools/RIPRAP/documentation">http://www.toolkit.net.au/Tools/RIPRAP/documentation</a>&gt; .</li> <li>• Access tracks are:             <ul style="list-style-type: none"> <li>• provided with a scour apron and cut off the wall on the downstream side sufficient to prevent bed erosion</li> <li>• orientated perpendicular to the stream channel <math>\pm 10^\circ</math></li> <li>• located on a relatively straight reach of the watercourse</li> <li>• located at riffles.</li> </ul> </li> <li>• Ramps cut into the bank for crossings and access are orientated downstream.</li> <li>• Mechanically cleared banks are stabilised before clearing adjacent areas.</li> <li>• Fill placed in the bed of the stream does not redirect flow into a bank.</li> <li>• Only naturally occurring fill is used for backfill around in-stream structures and/or to return a bank profile to pre-disturbance condition.</li> <li>• Areas of bank cleared of vegetation and not required for the final works associated with the activity are revegetated with native trees, shrubs and grasses endemic (local) to the area.</li> </ul>

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## 13. Best practice approach

A best practice approach encourages actions to enhance water and stream management outcomes and where possible should be followed. This section outlines a number of best practices for carrying out an activity in a watercourse, lake or spring. The design of infrastructure and planning for works, construction, maintenance and operation should be carried out with consideration of the following actions:

- Where possible, activities should be timed to coincide with no or low flow.
- Measures to minimise interference with the flow of water during flood events and minimise the potential for changes to flood heights and flood flow paths.
- Not impounding or otherwise unduly interfering with the flow of water in the watercourse including provision to convey low flows past the site.
- When carrying out activities under this guideline, entities should consider erecting signage at the work site to inform the public that the activities are being carried out under the authority of this guideline.
- Provided the quantities are not excessive, wood debris is often best left in a watercourse in a manner that will not cause damage through erosion or diversion of flowing water. For example, fallen trees can be moved to align with the flow of water as this can provide environmental benefits, slow down larger flows and potentially reduce erosion.
- Woody debris is best retained within the banks of the watercourse.
- Cleared vegetation (excluding weed species) in excess of instream needs should be mulched and used on-site to assist in rehabilitating disturbed areas by minimising weed growth, protecting planted vegetation and reducing sediment run-off.
- Where possible, activities should not be carried out on the outside of the watercourse bend, on steep banks or where the soil type is prone to erosion (dispersive soils).
- Bed and bank stability is managed to minimise erosion and reduce sedimentation. For example, avoid scouring from abrupt changes in flow direction caused by a structure, fill excavation or fallen vegetation.
- Where appropriate, measures to prevent potential migration of adverse impacts upstream and downstream of the structure (e.g. rock protection works in the activity site to prevent bed and/or bank erosion).
- The alignment and shape of structures should minimise the potential for scour.
- Bare surfaces exposed by an activity should be protected from weathering, rain drop impact and water runoff.
- Limits of disturbance should be visible on the activity site by clearly marking the ground or vegetation on the outer perimeter with flagging tape or paint. This aids contractors or others undertaking the activity to easily determine vegetation that can be destroyed or the limits to any excavation or placement of fill.
- Machinery used in carrying out an activity is selected to achieve minimal disturbance of the site. For example, the size is fit for the purpose and not larger than required.
- Selection of sites for construction of new infrastructure in previously disturbed areas.
- Where practical, align structures perpendicular to the direction of water flow.
- Support poles and towers for overhead pipe and cable crossings should not be placed within the low flow channel or upon bank edges.
- Submerged pipe and cable crossings are buried below the potential scour depth for the bed substrate material. For example, in sand substrate, scour depth is equal to bank-full depth, where in gravel streams it can be greater than two metres.
- If culverts are required, box culverts should be used in preference to circular pipes.
- Culverts, the cement base and apron must:
  - mimic the substrate of that found naturally in the surrounding bed substrate
  - be of a sufficient size to ensure uninterrupted low flows
  - minimise the occurrence of blockage of culverts caused by flood-borne debris.

## 14. Legislative responsibilities

Activities carried out in accordance with this guideline are permitted only for the purposes of the Water Act. Compliance with this guideline does not remove the entity's obligation to comply with other relevant legislation, including:

- *Aboriginal Cultural Heritage Act 2003*
- *Environmental Protection Act 1994*
- *Fisheries Act 1994*
- *Land Act 1994*
- *Land Protection (Pest and Stock Route Management) Act 2002*
- *Native Title Act 1993 (Commonwealth)*
- *Nature Conservation Act 1992*
- *Plant Protection Act 1989*
- *River Improvement Trust Act 1940*
- *Sustainable Planning Act 2009*
- *Vegetation Management Act 1999*
- *Wet Tropics World Heritage Protection and Management Act 1993*—activities must be carried out in accordance with the Wet Tropics Management Plan 1998 guideline
- *Wild Rivers Act 2005*.

All Queensland government Acts are listed on the Office of the Queensland Parliamentary Counsel <<http://www.legislation.qld.gov.au/>> website.

# Definitions

## ***Definitions developed for the purpose of this guideline***

**Access tracks** are constructed to allow stock, vehicles and machinery (excavators and so on) to safely and easily move into, along, across and out of a stream channel. Access tracks commonly involve the cutting and/or filling of a section of bank to provide reasonable track grades.

**Acid sulfate soils** occur naturally over extensive low-lying coastal areas, predominantly below five metres AHD. These soils may be found close to natural ground level but may also be found at depth in the soil profile. Potential acid sulfate soils only become a problem when they are disturbed and exposed to air. Typically, excavating or otherwise removing soil or sediment or filling land causes disturbance of acid sulfate soils.

**Activity** means destroying vegetation, excavating or placing fill in a watercourse, lake or spring.

**Activity site** is a unique location where an activity takes place. A project may include multiple activity sites provided the activity sites are in different reaches of the watercourse. A reach is the stretch of water visible between bends in a river or channel. Note: laterally adjacent activities are considered to be a single activity site.

**Entity** means an entity listed under Section 2 of this guideline.

**Infrastructure** means structures and works of all kinds constructed or to be constructed in, on, over or adjacent to a watercourse, lake or spring, by an entity and includes:

1. works as defined under section 12 of the *Electricity Act 1994*
2. structures such as road crossings, access tracks, causeways, bridges, levees, erosion protection works, drainage structures

but excludes any works that take water from, or interfere with the flow of water in, a watercourse, lake or spring, or works that control the flow of water into or out of a watercourse, lake or spring in a drainage and embankment area.

**Mature native trees** are trees >20 centimetres diameter at breast height (measured at 1.3 metres from the ground).

**Specified works** means:

- a. infrastructure and works prescribed under a regulation to be necessary for disaster management, or
- b. desnagging that is the minimum necessary to allow safe navigation of a marked navigable channel, or
- c. the following infrastructure and works:
  - i. roads
  - ii. railways
  - iii. jetties and boat ramps for use by the public
  - iv. works for the rehabilitation of land, including, for example, rehabilitation of abandoned mines
  - v. infrastructure for the transmission or distribution of electricity
  - vi. pipelines
  - vii. conveyor belts
  - viii. cables
  - ix. other infrastructure, prescribed under a regulation, that relates to the transportation, movement, transmission or flow of anything through a wild river area including, for example, goods, materials, substances, matter, particles with or without charge, light, energy, information and anything generated or produced.

**Substrate** is something which underlies, or serves as a basis or foundation e.g. watercourse bed material.

## ***Definitions taken or summarised from the Water Act 2000***

**Clear**, for vegetation—(a) means remove, cut down, ringbark, push over, poison or destroy in any way including by burning, flooding or draining; but (b) does not include destroying standing vegetation by stock, or lopping a tree

**Destruction**, of vegetation, means the removing, clearing, killing, cutting down, felling, ringbarking, digging up, pushing over, pulling over or poisoning of the vegetation.

**Fill** means any kind of material in solid form (whether or not naturally occurring) capable of being deposited at a place. Fill does not include material that forms a part of, or is associated with, a structure constructed in a watercourse, lake or spring including a bridge, road, causeway, pipeline, rock revetment, drain outlet works, erosion prevention structure or fence.

**Lake**, includes:

- a. a lagoon, swamp or other natural collection of water, whether permanent or intermittent
- b. the bed and banks and any other element confining or containing the water.

### **Outer bank**

The outer bank, at any location on one side of a watercourse is, if there is a floodplain on that side of the watercourse, the edge of the floodplain that is on the same side of the floodplain as the watercourse. If there is not a floodplain on that side of the watercourse, the outer bank is the place on the bank of the watercourse marked by either a scour mark, a depositional feature or if there are two or more scour marks, two or more depositional features or one or more scour marks and one or more depositional features, whichever scour mark or depositional feature is highest.

If, at a particular location in the watercourse there is a floodplain on one side of the watercourse and the other side of the watercourse is confined by a valley margin, the outer bank on the valley margin side of the watercourse is the line on the valley margin that is at the same level as the outer bank on the other side of the watercourse.

### **Quarry material**

1. Quarry material means material, other than a mineral within the meaning of any Act relating to mining, in a watercourse or lake.
2. Quarry material includes stone, gravel, sand, rock, clay, earth and soil unless it is removed from the watercourse or lake as waste material.

**Spring** means the land to which water rises naturally from below the ground and the land over which the water then flows.

**Vegetation** means native plants including trees, shrubs, bushes, seedlings, saplings and reshoots.

### **Watercourse**

A watercourse is a river, creek or other stream, including a stream in the form of an anabranch or a tributary, in which water flows permanently or intermittently, regardless of the frequency of flow events, in a natural channel, whether artificially modified or not; or in an artificial channel that has changed the course of the stream. It includes any in-stream islands, benches and bars located in it.

Further, a watercourse is anywhere in a river, creek or other stream that is:

- i. upstream of the downstream limit of the watercourse
- ii. if there is an upstream limit of the watercourse, downstream of the upstream limit
- iii. between the outer bank on one side of the watercourse and the outer bank on the other side of the watercourse.

A watercourse does not include a drainage feature but does include in-stream islands, benches or bars.

Note: generally, the non-tidal boundary (watercourse) of land bounded by a watercourse, as provided for under the *Survey and Mapping Infrastructure Act 2003*, would not correspond precisely with the line of the outer bank of a watercourse under the *Water Act*.