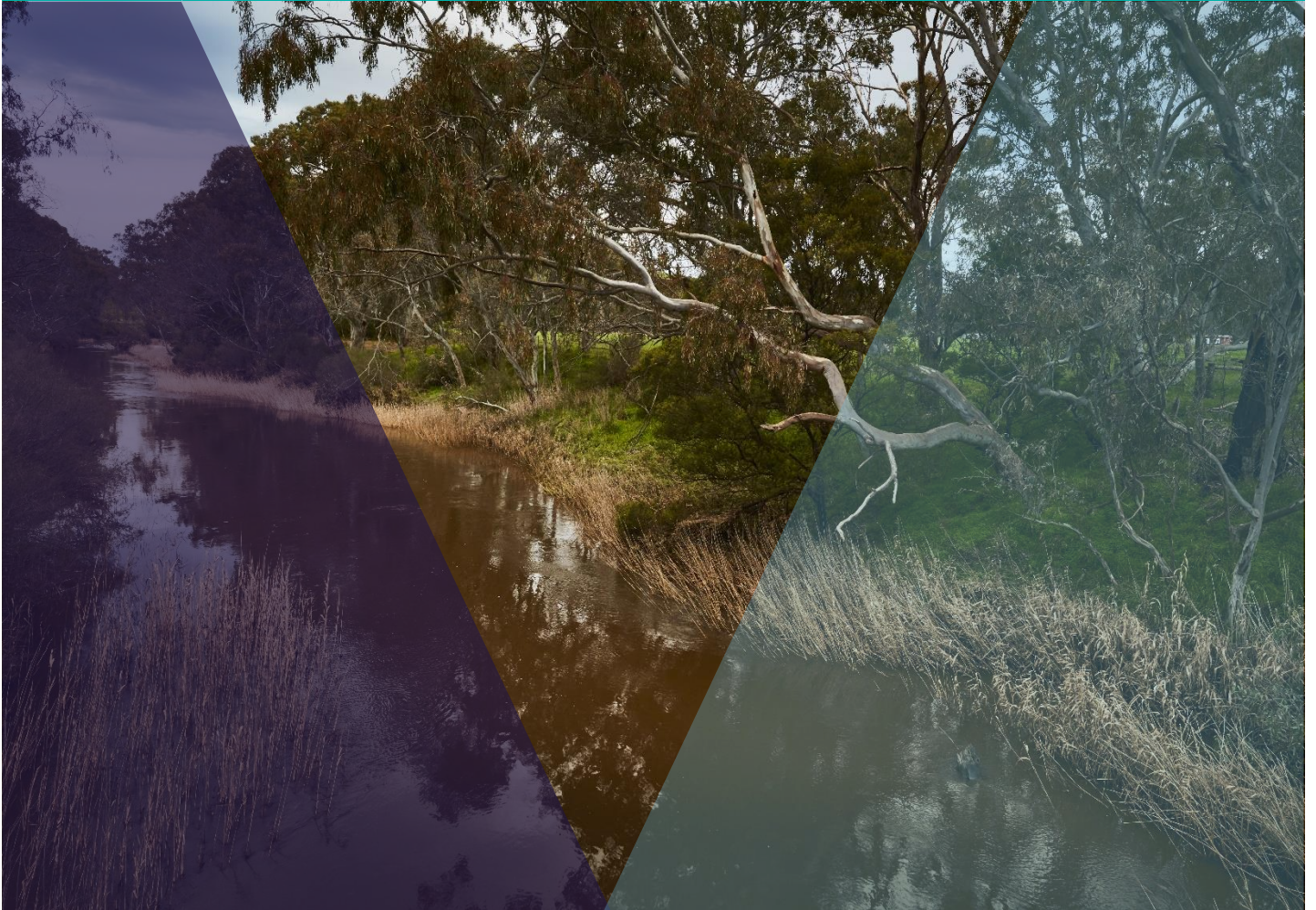


Waterway Identification Guidelines 2022



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Ministerial approval

I endorse these guidelines to support delegates in making decisions in relation to waterways under the *Water Act 1989*.

A handwritten signature in blue ink, appearing to read 'Lisa Neville', written in a cursive style.

The Hon. Lisa Neville MP
Minister for Water

Signed: 28/02/2022

1. Introduction

The purpose of these guidelines is to establish the consistent application of the definition of a waterway, as defined in the *Water Act 1989*, and to outline a uniform process for delegates of the Minister for Water to follow when assessing whether a waterway exists. Various decisions of courts and tribunals also guide or influence the assessment of whether land is a waterway.

The identification of land as a waterway is important because it has implications for landholders with respect to works and take and use licences and the referral of applications to catchment management authorities. If a waterway is not clearly a river, stream or lake, it can sometimes be difficult and contentious to identify whether land constitutes a waterway as defined in the Act.

The identification of a waterway is also essential as part of establishing whether an offence has been committed under sections 33E or 63 of the Act, for taking water from a waterway without authorisation, and under sections 75 and 75A of the Act if a licence is required for works on a waterway but has not been obtained.

These guidelines replace the *Waterway Determination Guidelines (2002)* that were introduced following the introduction of the *Water (Irrigation Farm Dams) Act 2002* and amendments to the *Water Act* in the same year. These legislative changes extended the licensing regime to the use of water for irrigation and commercial use from dams off waterways and from springs and soaks. Thus, the identification of a waterway was no longer the only requirement to determine if a take and use licence was required. Following the legislative changes, the identification of whether a waterway is present was still required to establish if a works licence is required (Note that dams not on a waterway and below the potentially hazardous size criteria, do not require a works licence).

In summary, the licensing requirements in relation to waterways are:

- a person is required to hold a take and use licence (under section 51 of the Act) if that person proposes to take or divert any water from a waterway (except when taking water under section 8 or 8A of the Act¹), and
- a person is required to obtain authorisation to construct, alter, operate, remove or decommission works on waterways (either a works on waterways permit or a licence under section 67 of the Act).

The Minister for Water has delegated the licensing responsibilities to:

- rural water corporations and Melbourne Water for works, including dams, on a waterway associated with the take and use of water, and
- catchment management authorities for works on waterways not associated with taking water (such as waterway crossings, jetties etc).

Note: Licensing authorities should not approve an application to construct a dam on a waterway unless the applicant has thoroughly investigated alternative sites for the dam and alternative sources of water supply.

These guidelines are intended for use by rural water corporations, Melbourne Water and CMAs as authorities with licensing powers delegated by the Minister for Water.

¹ Under section 8 a person is authorised to take water from a waterway only for domestic and stock purposes and only if the person has access to the waterway.

2. What is a waterway?

2.1 Defined in the *Water Act 1989*

Section 3 of the Act provides the following definition of a waterway.

‘Waterway means:

- (a) a river, creek, stream or watercourse; or
- (b) a natural channel in which water regularly flows, whether or not the flow is continuous; or
- (c) a channel formed wholly or partly by the alteration or relocation of a waterway as described in paragraph (a) or (b); or
- (d) a lake, lagoon, swamp or marsh, being—
 - (i) a natural collection of water (other than water collected and contained in a private dam or a natural depression on private land) into or through or out of which a current that forms the whole or part of the flow of a river, creek, stream or watercourse passes, whether or not the flow is continuous; or
 - (ii) a collection of water (other than water collected and contained in a private dam or a natural depression on private land) that the Governor in Council declares under section 4(1) to be a lake, lagoon, swamp or marsh; or
- (e) land on which, as a result of works constructed on a waterway as described in paragraph (a), (b) or (c), water collects regularly, whether or not the collection is continuous; or
- (f) land which is regularly covered by water from a waterway as described in paragraph (a), (b), (c), (d) or (e) but does not include any artificial channel or work which diverts water away from such a waterway; or
- (g) if any land described in paragraph (f) forms part of a slope rising from the waterway to a definite lip, the land up to that lip.’

2.2 Interpretation guidance

The following is guidance for interpretation of each paragraph of the definition of ‘waterway’ in the *Water Act 1989*.

2.2.1 Paragraph (a): a river, creek, stream or watercourse

A river, creek, stream or watercourse has a defined bed and banks. It may be identified on Parish plans, titles or topographic maps.

A river, creek or stream named and marked as such on plans, included in a list of Victorian streams or known locally as a creek, is likely to be a waterway. However, if there is doubt, a waterway identification should be carried out, particularly if the site in question is towards the headwaters of the creek.

A watercourse that has previously been determined under the *Water Act 1958* is also considered to be a waterway under the *Water Act 1989*.

A watercourse determined under the common law definition is valid also. Under common law, a watercourse is required to have a channel bed, banks - which are the steeper sides of a

channel - and a flow of water, which must be regular but not necessarily continuous². The flow in a watercourse must emanate from a source other than immediate rainfall, for example from springs, soaks or water percolating from soil. See Part 2.6 for a more detailed explanation of what constitutes a spring or a soak.

2.2.2 Paragraph (b): a natural channel in which water regularly flows, whether or not the flow is continuous

A natural channel where water regularly flows does not require a defined bed and banks, as is required by the paragraph (a) definition.

A drainage depression without defined bed and banks can be considered a defined channel. A channel can be a fold in the contours of the land where water generally collects and flows, in contrast to a sheet flow of water across or along a contour where there is no defined point that collects water³.

The continuity of flow of water is not an essential element of this definition, providing when it does flow it does so in a confined and regular way. See part 2.6 of these guidelines for further explanation of regularity of flow.

2.2.3 Paragraph (c): a channel formed wholly or partly by the alteration or relocation of a waterway

A waterway includes a channel that has been altered or relocated as a result of works or by a natural event.

Many natural channels that some might view as drainage depressions or drainage lines are waterways under the Act.

2.2.4 Paragraph (d): a lake, lagoon, swamp or marsh

Under d(i), a waterway may be a lake, lagoon, swamp or marsh, being a natural collection of water (other than water collected and contained in a private dam or a natural depression on private land) into, through or out of which a current that forms the whole or part of the flow of a river, creek, stream or watercourse passes, whether or not the flow is continuous.

Under d(ii) a lake, lagoon, swamp or marsh may be declared to be a waterway by the Governor in Council under section 4(1) of the Water Act, even in the absence of a flow into or out of it.

These definitions include wetlands and billabongs.

The presence of riparian vegetation may also indicate the existence of a waterway, in that it would indicate the presence of a swamp or wetland that may or may not have a defined bank and bed.⁴

2.2.5 Paragraph (e): land on which, as a result of works constructed on a waterway as described in paragraphs (a), (b) or (c), water collects regularly, whether or not the collection is continuous

If works are constructed on a waterway and water collects regularly (as, for example, water in a dam), then the additional land on which the water collects is also part of the waterway.

² Refer to the High Court case of *Knezovic v Shire of Swan Guildford* (1968) 118 CLR 468

³ Refer to the High Court case of *Knezovic v Shire of Swan Guildford* (1968) 118 CLR 468

⁴ VCAT decision *Kapiris v Macedon Ranges Shire Council* VCAT 2012

If a drain is constructed on land where a waterway did not previously exist, the drain does not become a waterway. However, constructing works that connect to a waterway (for example, a stormwater channel or drain) to enable water to drain more efficiently does not change its status as a waterway.

See Part 2.6 of these guidelines for further explanation of regular flow.

2.2.6 Paragraph (f): land that is regularly covered by water from a waterway as described in paragraphs (a), (b), (c), (d) or (e) but does not include any artificial channel or work that diverts water away from the waterway

This paragraph provides that a waterway is also the land that is regularly covered by water from a waterway but does not include an artificial drain or channel that takes water away from a waterway or is not connected to the waterway.

2.2.7 Paragraph (g): if any land described in paragraph (f) forms part of a slope rising from the waterway to a definite lip, the land up to that lip

If any land that is regularly covered by water from a waterway as described in paragraphs (a) to (e) forms part of a slope rising from the waterway to a definite lip, the land up to that lip is a waterway.⁵

2.3 Extension of definition for take and use licences

Section 51(7) of the Act extends the above definition of “waterway”, but only in relation to applications for take and use licences, not works licences or waterway management functions under Part 10 of the Act. Section 51(7) provides that:

waterway includes any collection of water which is from time to time replenished in whole or in part by water coming by a natural sub-surface path from a waterway.

This definition ensures that when water is taken from an excavation for alluvial deposits near a waterway, the source of the water is properly considered in licence application decisions. This includes for example, in licensing bores or shallow excavations known as dragline holes in proximity to waterways, excavations that may be considered a dam and dewatering activities related to mines and quarries.

2.4 Designated waterways

What is a designated waterway?

A designated waterway is a waterway that has been declared to be a designated waterway under section 188 or 188A of the Act by an Authority. CMAs may declare a (non-designated) waterway within their waterway management district to be a designated waterway by following the steps outlined in section 188 of the Act⁶. This power does not apply to Melbourne Water as all waterways in Melbourne Water’s waterway management district are declared to be designated (section 188A).

Each CMA has a set of gazetted maps, showing the designated waterways for their catchment. Maps of designated waterways are available for viewing at CMA offices and in some cases on CMA websites.

⁵ VCAT decision: Norman vs GMW 2010

⁶ Designated waterways were initially declared using hydrology lines on topographic maps at a point in time and not based on site inspections.

CMAs have the delegated power to license works on waterways in line with their function to protect waterways under Part 5 of the Water Act, which excludes works associated with the take and use, conveyance or storage of water, and works associated with dams or bores. CMAs generally⁷ use a by-law⁸ to issue a permit to control, manage and authorise works and activities on or affecting a designated waterway (excluding works associated with the take or storage of water). The by-law is made under sections 160, 219 and 287ZC of the Act.

What is an identified waterway?

An identified waterway is a waterway that has been assessed in the field and verified to exist by an officer of a licensing authority having regard to these guidelines.

2.5 The occurrence of springs and soaks

A spring⁹ does not necessarily mark the beginning of a waterway, but it might be an important factor in the assessment process. The main consideration is whether the water emanating from the spring flows in a natural channel.

If the spring results in a soak¹⁰ (from which no water flows), or if the flow from a spring occurs over broad, fairly flat land the site should not be determined to be a waterway. If further downstream, the natural contours of the land fold into a channel and the water from the spring flows in it, a waterway would occur at that point¹¹.

If a dam has been built on a spring that causes the water level to rise above the natural lip below which a waterway occurs, the dam in its entirety is considered to be on the waterway. This is because the water is held above and on land including the natural lip below which a waterway would be identified (hence whole or in part on a waterway). A dam can be considered to be on a spring if, in the absence of rain, water is seen running out of the dam or its wall.

In the above case, the dam is considered to be built on land that would have constituted part of a waterway — the part downstream of the lip — under Section 3 of the Act. The waterway is considered to extend to land on which a channel is formed wholly or partly by the alteration or relocation of a waterway as described in paragraphs (c), (e), (f) and (g).

2.6 Regularity of flow

The paragraph (b) definition of a waterway does not require continuity of flow: the flow of water may be considered regular without being continuous or permanent.¹²

Boggy ground from which there is no flow of water does not constitute a waterway. The flow of water does not need to be continuous; but critically, it must be regular. The critical factor under paragraph (b) is the regularity of the flow rather than the cause of the flow.

The rate and magnitude of the flow are immaterial in determining a waterway.

The problem with the term ‘regular’ is that its meaning tends to be subjective. A person in a dry area of the state might view a waterway that flows once or twice a year as being regular (in the

⁷ Excluding Glenelg Hopkins CMA which does not use a by-law

⁸ The Waterways Protection By-Law 2014

⁹ A spring indicates a natural discharge point for water from an underground source

¹⁰ A soak indicates surface or ground water has collected due to the topography but that the collection of water is not sufficient to flow to any great extent over the ground.

¹¹ VCAT decision: Prana Properties Pty Ltd v Goulburn Murray Water (2019) VCAT 265

¹² Clark and Renard (1972) *The Law of Allocation for Private Use* Vol 2, Page 12

context of many years), but someone in a wetter area of the state might consider such flows to be irregular.

To overcome this problem, the catchment area at the site can be used to assess the regularity of flow. Past studies have shown that it can be argued a regular flow will occur in a natural channel given a catchment area of 60 ha or more. Therefore, if a site has a catchment area of 60 ha or more, the paragraph 9(b) regularity of flow requirement is met, and a waterway can be assessed to exist at the site. There are some areas of Victoria where a waterway may still exist if the catchment area is less than 60 ha, but the assessment would not be based on the regularity of flow.

3. Identification of a waterway

Assessing whether a waterway exists at a site will usually require site visits and the gathering and interpretation of a variety of information.

3.1 Inspection

Each case should be assessed on its own merits. Observations made during a site visit should be documented. If seasonal conditions are unusually dry or if an inspection is conducted in mid-summer, it may not be possible to observe flow, and other information must be carefully considered.

The introduction of the *Water Act 1989* meant that many natural channels that may have previously been viewed as drainage depressions or drainage lines became 'waterways' under the Act.

The inspection procedure will follow a process: A river, creek or stream or watercourse must have a defined bed and banks. If the flow of water is clearly not part of a river, creek, stream, it may be a watercourse. If a natural channel is not a watercourse, further assessment may be required, considering the definitions in paragraphs (b) to (g), to establish if it is a waterway.

3.2 Establishing the source of water

Establishing the source of the water will help with the assessment. Observations should be made to indicate if the source of flow is from springs, soaks, rainfall, snow melt or another source, or from the convergence of overland flows. If undertaking an inspection during dry conditions, observing ground vegetation may help determine if there is a spring: for example, if reeds and rushes are visible.

3.3 Making and recording an identification

Spatial coordinates should identify the location of the identification, and the responsible licensing authority should develop an appropriate system to record identifications. The identifications should be recorded in a waterway assessment report: Appendix 2 has a model waterway identification report.

3.4 Flow of water

Observations of the flow regime should be made when visiting the site. Details of the estimated flow rate and the seasonal conditions at the time of the visit should be recorded. The average rainfall for the locality should also be recorded by reference to a rainfall atlas or from information obtained from the nearest weather station to the site in question.

3.5 Changes to waterways over time

Waterway identifications are made by delegates at a point in time. Over time, waterways or parts of waterways may change or shift or disappear. External factors such as rainfall, drought, climate change or over extraction can affect the surface component of a waterway and the waterway may no longer be apparent on the surface.

4. Decision pathway to identify a waterway

The decision pathway explained below can be used to assess whether a waterway exists at a site.

PART A – DOES A WATERWAY EXIST?

DECISION 1

Testing whether a river, creek, watercourse or stream exists at the site (paragraph a)?

*Is there a river, creek, watercourse or stream at the site?
a named river, creek or stream identified on Parish plans, titles or topographic maps,
a channel with bed, banks and a regular flow of water, or
a watercourse previously determined under the Water Act 1958?*

Yes – **A waterway exists.**

No / unsure – Not a waterway. Go to decision 2.

DECISION 2

Testing whether a natural channel where water flows is present (paragraph b)?

*Do you consider:
there is a natural channel? and/or
when water flows, does it do so in a confined way?*

No – Not a waterway by paragraph (a) or (b). Go to decision 4

Yes – Go to decision 3

DECISION 3

Testing whether the flow is regular (paragraph b)?

Do you consider the catchment area is 60 ha or more?

Yes – **A waterway exists**

No – Go to the next question.

Do you consider the channel is fed by a spring or absorbent soil?

Yes – **A waterway exists.**

No – Not a waterway by paragraphs (a) or (b). Go to decision 4

DECISION 4

Testing if there is a lake, lagoon, swamp or marsh (paragraph d)?

Do you consider there is a natural collection of water with flow into, through or out (other than water collected and contained in a private dam or a natural depression on private land)?

Yes – **A waterway exists**

No – Go to the next question.

Has the collection of water been declared by the Governor in Council under section 4(1) to be a lake, lagoon, swamp or marsh?

Yes – **A waterway exists**

No – Not a waterway by paragraphs (a), (b), or (d). Go to decision 5.

PART B – IS THE ADJOINING LAND PART OF THE WATERWAY

DECISION 5

Testing whether a channel is part of a waterway (paragraphs c, e and f)?

Do you consider a channel has been formed, altered or relocated as a result of works or by a natural event on a waterway (paragraph c)?

No – Not a waterway by paragraphs (a), (b), (c) or (d). Go to decision 6
Yes – go to next question

Is the land an artificial channel or work that diverts water away from the waterway (paragraph f)?

Yes – Not a waterway
No – Go to next question

Is the land regularly covered by water from a waterway (paragraph e)?

No – Not a waterway by paragraphs (a), (b), (c), (d) or (e). Go to decision 6
Yes - **The channel is a waterway**

DECISION 6

Testing if land with works is part of a waterway (paragraph e)

Does the land collect water regularly, as a result of works (such as a dam) on a waterway as described in paragraphs (a), (b) or (c), whether or not the collection is continuous (paragraphs e)?

No – not a waterway by paragraphs (a), (b), (c), (d) or (e). **Go to decision 7**
Yes – **The land is part of a waterway.**

DECISION 7

Is the land part of a slope rising from the waterway to a definite lip (paragraph g)?

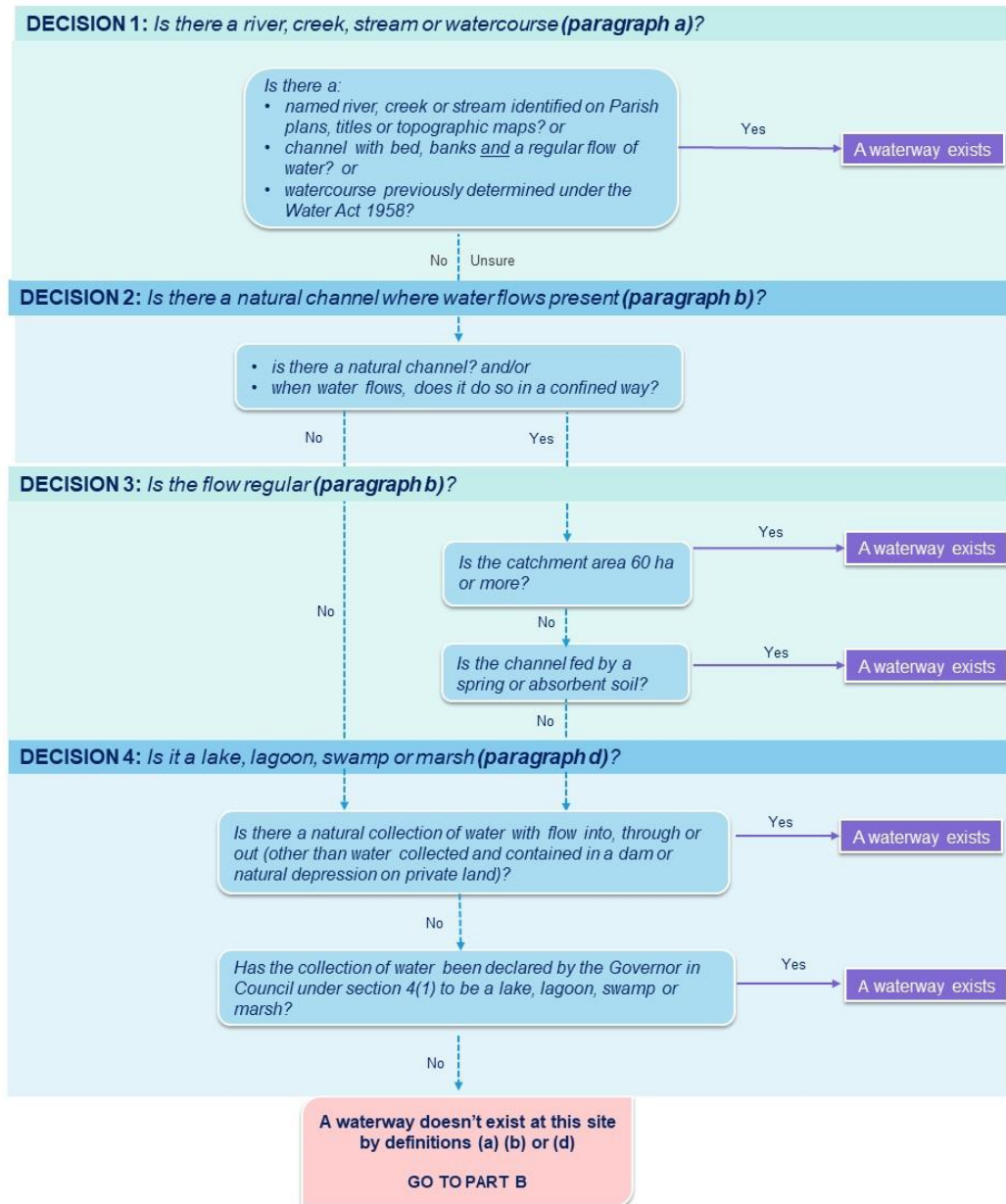
Do you consider the site forms part of a slope rising to a defined lip — which is the top of a high bank — where the land below is naturally — not due to works — and regularly covered by water from a waterway?

Yes – **The land is part of a waterway**

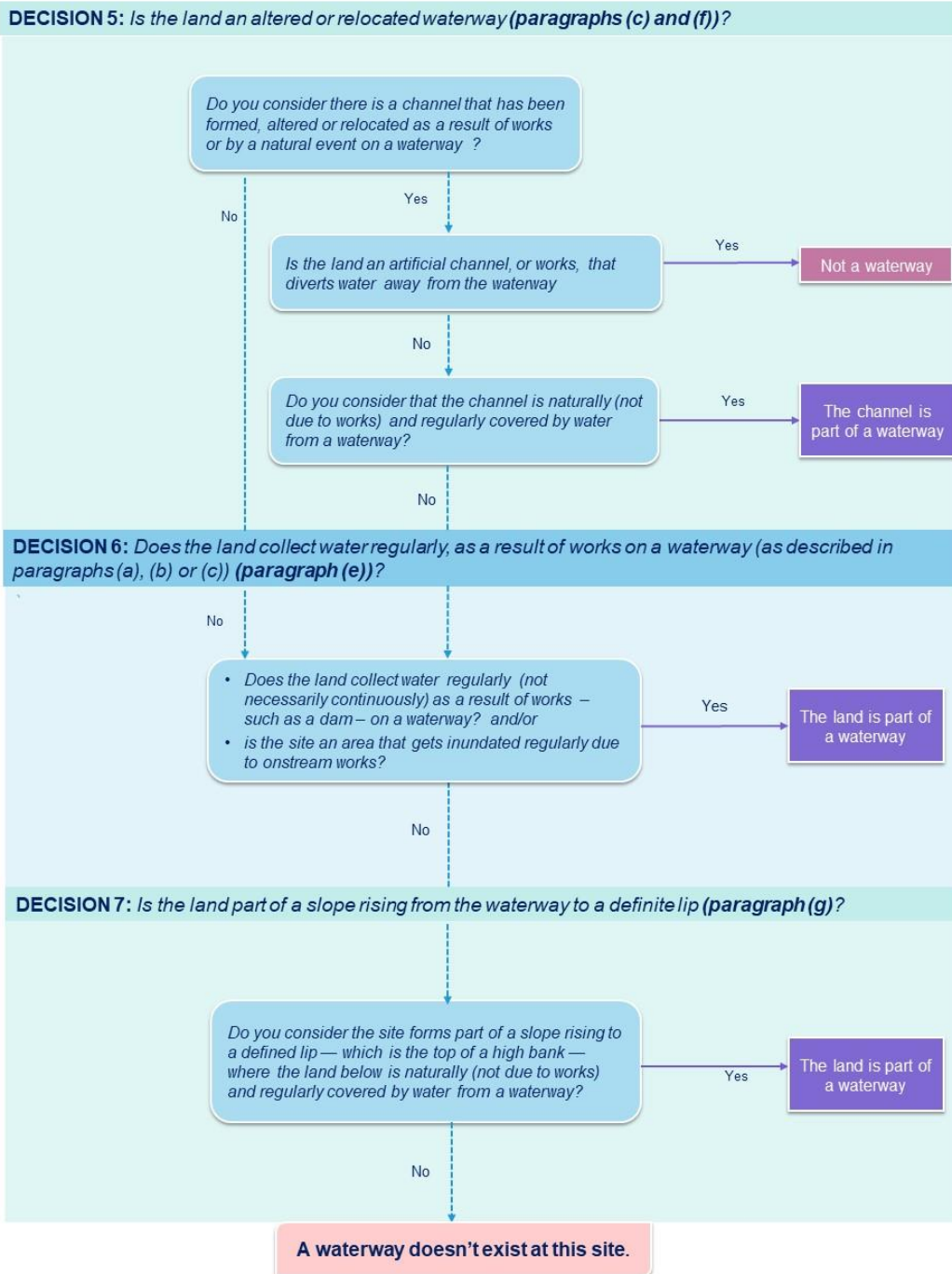
No – **A waterway doesn't exist at the site**
The site does not meet any of the requirements of paragraphs (a) to (f).

Flowchart for identifying a waterway

Part A – Does a waterway exist?



Part B – Is adjoining land part of a waterway?



Appendices

Appendix 1: Who needs to assess whether land is a waterway?

Entity	Scope of powers and functions
Water corporations	<p>Certain water corporation boards and employees hold delegated¹³ powers from the Minister to administer applications for or relating to:</p> <ul style="list-style-type: none">• water shares to take water from a declared system under section 33F• take and use licences to take and use water from a non-declared system under section 51• works licences for:<ul style="list-style-type: none">○ dams on a waterway under section 67○ private dams not on a waterway if they are of a size described in section 67(1A) of the Act○ any other works associated with the take, use, conveyance or storage of water (such as pumps in a waterway, diversion channels or pipes) under section 67. <p>They are also responsible for enforcing the offences of unauthorised taking of water under sections 33E and 63 of the Act and unauthorised dams and works on waterways associated with the taking, storage or diverting of water under sections 75 and 75A of the Act.</p>
Catchment management authorities	<p>All CMA boards and certain CMA employees hold delegated powers from the Minister to administer applications for or relating to works licences for:</p> <ul style="list-style-type: none">• works on a waterway not associated with the take, use, conveyance or storage of water (such as bridges, fencing and erosion control) under section 67 of the Act• works to temporarily or permanently deviate a waterway, not including any such works associated with the take, use, conveyance or storage of water under section 67 of the Act. <p>These powers apply whether or not a waterway is a designated waterway.</p> <p>They also have the delegated authority to enforce the offences of unauthorised works on or affecting waterways, that are not associated with the taking or storage of water, under section 75 of the Act.</p>
Department of Environment, Land, Water and Planning	<p>The Deputy Secretary and the Executive Directors of the Water and Catchments Group hold delegated powers from the Minister to administer applications for or relating to works licences for all types of works.</p>

13. Delegations are a way to authorise others (such as CMAs and water corporations or employees) to exercise a Minister's statutory power, function or duty.

Appendix 2: Model waterway identification report

1 Name and address of the land owner

Name

Address

..... Postcode

2 Name and address of the occupier (if the owner is not the occupier)

Name

Address

..... Postcode

3 Location of the waterway

Lot no. LP no.

Allotment Section

Parish / township

Volume.....Folio.....

AMG coordinates Zone Easting Northing

4 Name of the waterway

Name Tributary of

5 Reason for the waterway identification

.....
.....
.....

6 Waterway identification

Proceed through the decision pathway in section 6 and circle 'Yes' or 'No / unsure' as appropriate, until you decide if a waterway exists or not.

Other details

(a) Is the waterway marked on a Vicmap 1:25,000 topographical map? (e.g. <https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro>)?
Yes / No

(b) The length of the waterway ...
... upstream of the owner's property is
... downstream of the owner's property is

(c) The point of commencement is

(d) The source of water in the waterway is
..... (e.g. spring, absorbent soil, rain, snowmelt)

(e) If the waterway is spring-fed, the location of the spring in relation to the waterway is
.....

(f) The catchment area above the site is ha (Need to specify how calculated – e.g. estimated/measured by what method)

(g) Have artificial works been carried out on the waterway? Yes / No
If 'yes', describe the extent and purpose of the works
.....

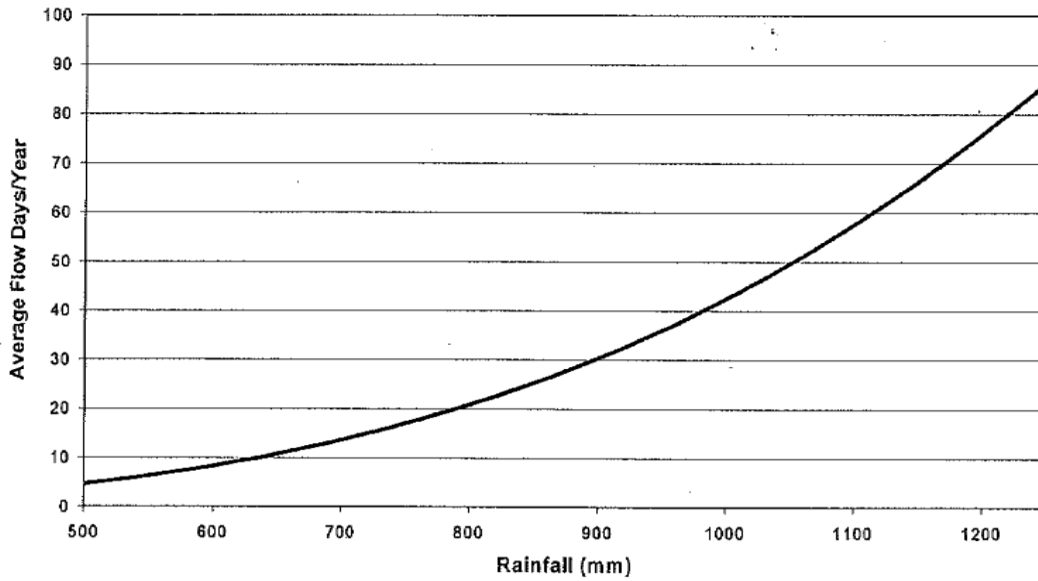
(h) Does the waterway flow into or out of a lake, lagoon, swamp or marsh? Yes / No
If 'yes', describe the connection
.....

(i) Additional remarks
.....
.....
.....

7 Flow

(a) Indicate on the following graph the estimated number of days water would flow at the site by reference to the average rainfall for the area (note that the graph assumes that no springs or soaks supply the waterway).

Plot of average annual rainfall versus the average number of flow days for a 60ha catchment



(b) The average rainfall for the area in question is mm per annum.

Source of information

(c) The average rainfall at the nearest weather station is mm per annum.

Source of information

(d) Estimated flow at time of inspection if any ML/day.

(e) Describe the climatic conditions at the time of inspection and in the week prior to inspection

.....

(f) Show the extent of the assessment on a topographic plan indicating the starting point and end point of the assessment.

8 General

(a) Give details of any licences issued on this waterway

.....

(b) Give details of any other water use from the waterway, including coordinate locations

.....

.....

(c) Describe the nature of works either existing or proposed (if appropriate attach Storage Inspection Report)

.....

.....
(d) Any additional remarks

.....
.....

9 Prior inspections (provide details of observation and dates of inspection)

.....
.....

10 Interviews (provide details of discussions with owner/occupier, upstream landholder and downstream landholder)

.....
.....
.....

Can any parties interviewed provide a detailed history? Yes / No
(If yes, attach the detailed history to the report)

11 Plan (attach sketch plan and topographical plan as appropriate showing all relevant items including sources of flow, diversion points, works, inspection points etc).

12 Assessment

Does a waterway exist at the site:
Yes / No

If 'yes, has this waterway also been designated by the relevant catchment management authority? Yes / No

Additional comments
.....
.....
.....
.....

Name

Signature

Date