



GUIDELINES FOR APPROVAL TO CARRY OUT WORKS ON A WATERWAY

The Goulburn Broken Catchment Management Authority (CMA) is the Authority responsible for the issuing of permits to a person, company or Authority to carry out works on a waterway. The CMA has been delegated this function by the Minister for Water under sections 161, 162 and 219 of the *Water Act 1989* creating By-law No.4. The objective of this by-law is to make provision for:

- a) the control, management and authorisation of works and activities in, on or over designated waterways and designated land or works;
- b) the protection and care of designated waterways and designated land or works;
- c) conservation and preservation of flora and fauna and habitat in designated waterways and designated land and works.

Note: A copy of By-law No. 4 Waterways Protection, is available from the Authority on request.

1. General guidelines

Before a permit may be issued the proponent must provide the Authority with information regarding details of the works, the site of the works and any approvals obtained from other relevant Authorities. In some cases, it may be necessary for the proponent to engage a suitably qualified person to provide design and specifications of the works. This may also include a hydrologic/hydraulic assessment of the site area and the waterway.

are; Department of Energy, Environment and Climate Action, Local Government, Goulburn-Murray Water, Environment Protection Authority, and Aboriginal Affairs Victoria. Necessary approvals are to be forwarded to the CMA office.

(Note: where a crossing is clearly to be located on private land, approval may not be necessary for all of the above Authorities. However, they should be contacted and a written response obtained).

2. Procedure

To obtain a permit from the Authority the following steps will assist in speeding up the time taken to assess the application.

2.1 Steps

- (i) Proponent contacts CMA requesting approval to carry out works or activities across a waterway. Request should be directed to the nearest CMA office. Proponent is provided with an application form, guidelines for assessment and advised of other requirements necessary to issue a permit.
- (ii) Proponent fills out the application form and returns it to the CMA.
- (iii) On advice from the CMA the proponent may be required to obtain approval from other Authorities. Relevant Authorities

- (iv) After conducting a site inspection, the CMA field inspector will submit a written report to the CMA office for review. The report will include recommended conditions of approval where appropriate.
- (v) On assessment of the information the proponent may be issued with a permit or advised to employ a person qualified to provide construction design and specifications and or, hydraulic assessment (in most cases the proponent will be advised of this requirement on receipt of the application).
- (vi) Once the CMA has received satisfactory information a permit may be issued.

3. Assessment Criteria

The following information sets out the general criteria necessary for approval. More detailed information and advice can be obtained from the CMA office.

3.1 Inspection

A site inspection is essential to assess the general suitability of the site for the proposed works and check that the documentation reflects the site conditions.

For example, the selection of the crossing site should take into consideration the long-term stream behaviour. The crossing should preferably be located in a relatively straight section of stream, where the bed and banks are relatively stable. If bank or bed scour is likely at or near the crossing, stabilisation techniques such as rock beaching or other means should be identified, included in the submission and undertaken during construction.

The site should also be chosen with regard to environmental considerations such as:

- The condition of the riparian zone and likely extent of any disturbance of the zone.
- Vegetation protection. The number, size and condition of trees to be removed, particularly with regard to hollow bearing trees must be documented.
- Impacts on aquatic flora and fauna habitat and ecosystems.
- Impacts on wildlife corridors.
- Impacts on aboriginal heritage or cultural values.
- Impacts of construction equipment and materials.

Photographs of the site will be taken for future reference by the CMA.

3.2 Assessment Guidelines

The application is to be assessed to ensure the works will be acceptable in terms of the hydraulic and environmental characteristics or values of the stream.

The intent of the assessment is to ensure the works will not lead to an overall reduction in waterway health. Where a reduction in health is unavoidable, the works may be approved if the proponent can implement other works to offset the impacts, leading to a net gain in waterway health.

The CMA is not the responsible authority for determining whether the proposed works are structurally sound, though a check will be made should a certified design be produced where appropriate.

Where the proposal does not meet the assessment criteria, the assessor shall consider the potential impacts. As appropriate, the applicant may need to provide more information or modify the proposal.

Some works such as access crossings may create Occupational Health and Safety hazards. Responsibility rests with the owner of the structure and not the CMA. The extent of the CMA's liability will be defined in the letter of approval for the permit (see **Section 7**).

Off-site impacts need to be identified and accepted by the relevant parties prior to approval of the works. This would normally be done by the relevant Local Government Council as part of issuing a Planning Permit for the works where appropriate.

3.3 Works and Environmental Management Plan

The construction of works will normally require some removal of native vegetation and disturbance to the soil. Any disturbance should be minimised. For most minor works the environmental considerations during construction are adequately covered by the standard permit conditions set out on the permit.

For major works, or where there are potential threats to significant stream values, the applicant should provide full details of how the works are to be constructed to ensure potential threats to the stream are identified and addressed and comply with relevant guidelines of all relevant Authorities.

3.4 Hydraulic Criteria

Where the structure obstructs the stream flow (eg. a bridge or culvert) it should be designed to cater for a range of flows, flow levels and debris expected at the site.

Under normal flow conditions the proposed works should be of sufficient capacity so flow velocities remain relatively unchanged. This will involve sizing the structure so as not to significantly reduce the waterway area.

Structures would normally be designed to cater for a certain design event. This can be based on the bank full capacity of the stream or a statistical rainfall event depending on the type of structure and consequences of it being overtopped in greater events.

Hydraulic assessments will need to be carried out for all types of crossings. However, the level of assessment depends on the type of structure, and a detailed assessment is only required where the works are likely to cause an adverse impact on upstream flooding. The assessment should be carried out for a range of flows to determine the critical event.

Where the effect of the structure on upstream water levels cannot be readily evaluated by the CMA assessor, the applicant may be requested to provide a hydraulic assessment. This should be done by a suitably qualified person experienced in the analysis of hydrology/hydraulics on waterway systems. The analysis will include estimation of design flows, flow velocities through the structure and afflux to determine the upstream impact. A range of flows up to and including bank full flow should be considered.

The methodology is available as an attachment to this document upon request.

3.5 Geomorphology

The natural physical processes and natural features of the waterway must be considered in the design and assessment of structures on rivers and streams. These include:

- Flow regime, i.e. intermittent or permanently flowing.
- Type of soil or rock at the site.
- Extent of active bank erosion.
- Extent of bed erosion or sedimentation.
- Meander progression.
- Bed slope.
- Vegetation
- Size, quantity and location of flood debris.

In-stream structures should preferably be located in stable, relatively straight sections of the stream to minimise the risk of the structure being undermined or outflanked due to erosion of the bed or banks. It is necessary to check that the works do not result in the re-direction or concentration of flows, which may accelerate erosion.

It is not practical to cover every conceivable type of situation in these Guidelines and professional judgement will be essential. As there is a wide variation in stream characteristics across Victoria, some flexibility will also be required in determining acceptable works. For all

applications involving modifications of river planforms, specialist geomorphologic advice should be sought.

4. Further Information

Further detailed information setting out suitable structure type and hydraulic assessment is available upon request.

5. Permit conditions

Permits issued by the CMA for works on waterways come with conditions of approval. The conditions are set out on the permit and the letter of approval. These conditions form part of the approval process and must be adhered to. Any variation to these conditions must first be approved by the CMA.

Note sand and gravel extractions will not be permitted, unless there is a demonstrated waterway benefit in terms of waterway health.

6. Other Permits

The issue of a permit by the CMA does not remove the responsibility of the applicant to apply for any authorisation or permission necessary under any other Act or by-law, such as Local Government, or Department of Primary Industries.

7. Liability

Notwithstanding any description contained in the plans or specifications, the landowner or contractor shall be responsible for satisfying himself as to the nature and extent of the specified works and the physical and legal conditions under which the works will be carried out.

Permits issued for works on waterways include an indemnity clause. The indemnity is acknowledged and signed by the applicant on the application form. The indemnity excludes the CMA from liability against claims, suits or actions arising from injury, loss damage or death to any person or property which may arise from the construction, maintenance, existence or use of the works.

8. Contacts

Authorities, including addresses and telephone numbers are shown on the back of this document.

CONTACTS

Goulburn Broken Catchment Management Authority

Offices:

Shepparton (03) 5822 7700
Benalla (03) 5822 7700
Yea (03) 5822 7700

Department of Energy, Environment and Climate Action

Offices:

Alexandra (03) 5772 0200
Broadford (03) 5784 0600
Tatura (03) 5833 5222
Seymour (03) 5735 4300
Benalla (03) 5761 1611

Goulburn-Murray Water

Offices:

Tatura (03) 5833 5500

Local Government

Offices:

Benalla Rural City Council	(03) 5760 2600
Campaspe Shire Council (Echuca)	(03) 5481 2200
Greater Shepparton City Council	(03) 5832 9700
Mansfield Shire Council	(03) 5775 8555
Mitchell Shire Council (Broadford)	(03) 5734 6200
Moira Shire Council (Numurkah)	(03) 5862 0222
Murrindindi Shire Council	(03) 5722 0333
Strathbogie Shire Council (Euroa)	(03) 5795 2010

Environment Protection Authority

Offices:

Wangaratta (03) 5721 7277