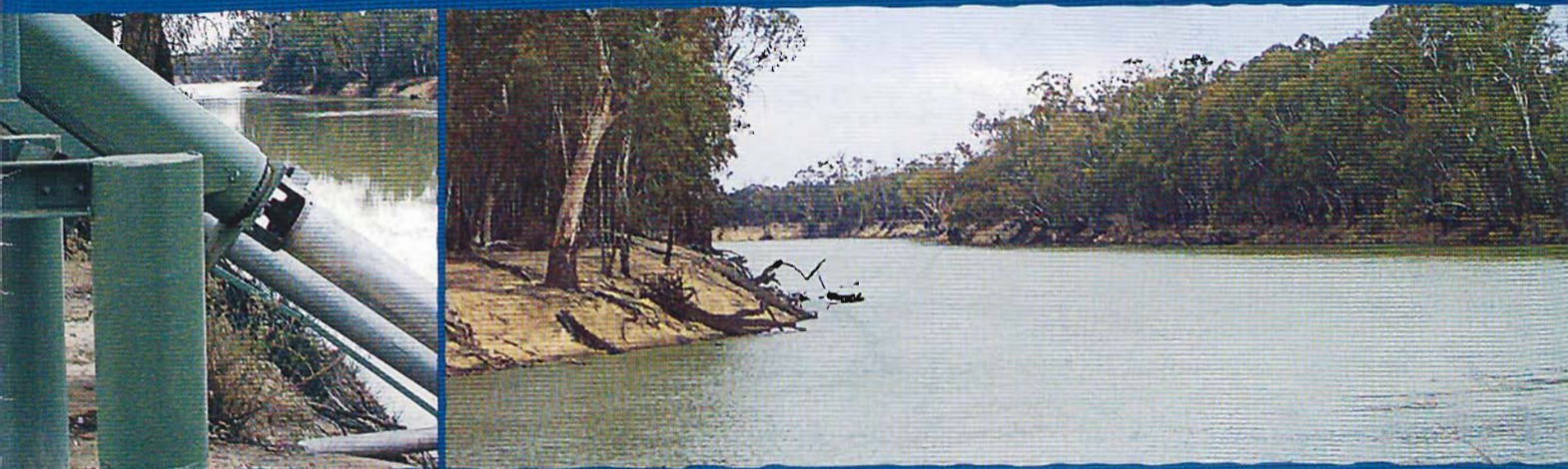


Siting and Design Guidelines

for Water Diversion Works on or across Crown land



Before works commence, it is the legal responsibility of the applicant to obtain the necessary approvals from the Department of Natural Resources and Environment, the relevant Aboriginal/Cultural Heritage Authority, Municipal Council and Water Authority.

Pumps, Pumphouses, Pipeline

Pumps, pipelines and associated water diversion works can impact on the environment, they are located. The construction of pumps, pumphouses and pipelines along the Murray vegetation, erosion, disturbance to banks, decreased aesthetic value and disturbance to

It is the intent of these guidelines to protect the aesthetic, archaeological and conservat

Works on Crown land

- Approval under the relevant legislation must be obtained from the Department of Natural Resources and Environment prior to the commencement of works.
- Works on or across Crown land may require a licence from the Department of Natural Resources and Environment under the *Land Act 1958*, *Crown land Reserves Act 1978* or *Forest Act 1958*, or consent under *National Parks Act 1975*.
- Works on or across Crown land may require a planning permit from the relevant Municipal Council. Consultation must be made with the relevant Council to determine the requirement of a Planning permit.
- Should a Planning permit be required for works on or across Crown land, the consent of the relevant Public Land Manager is required prior to an application being made.
- Under the *Water Act 1989*, a licence is required to construct water diversion works within a waterway (including the Murray River), and a diversion licence is required to take and use water. Necessary licences must be obtained from the relevant water authority prior to the commencement of works.
- Works on or across Crown land adjacent to the Murray River may require approvals from relevant NSW Authorities. Consultation should be made with the relevant NSW authorities to determine the requirement for any necessary approvals.

Native Vegetation

- Any proposal to lop, destroy or remove native vegetation will require a Planning Permit from the relevant municipal Council, unless exemptions apply. The siting and installation of the proposed water diversion works should avoid disturbance to native vegetation and may require consultation with the Department of Natural Resources and Environment.
- All works must be rehabilitated in consultation with, and to the satisfaction of the relevant Public Land Manager.

- Any disturbance to vegetation or ground surface levels at the pump site caused through excavation and installation of the facility must be restored to a standard satisfactory to the Public Land Manager.
- Unused tracks must be closed and revegetated by the applicant in consultation with the relevant Public Land Manager.

Aboriginal/ Cultural Heritage Values

- All registered and unregistered Aboriginal places, objects and archaeological sites are protected under the *State Archaeological and Aboriginal Relics Preservation Act 1972* and the *Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984*. The relevant Aboriginal/ Cultural Heritage Authority must be contacted prior to the commencement of works, to determine the existence of any Aboriginal places, objects and archaeological sites.

Powerlines

- Powerlines located in urban, rural residential and tourist development areas within 100m of the riverbank, must be installed underground.
- Where practical, existing powerlines must be made to conform to these recommendations.
- Electricity supply cables to pumphouses must be placed underground.
- The replacement and upgrading of feeder lines to pumps must be placed underground.
- Where practical pumps are to be located near existing powerlines.

es and Associated Works

t, particularly along the Murray River Reserve due to the narrow corridor in which
ay River Reserve and other Crown land areas may result in the removal of native
o cultural heritage and archaeological sites.

tion values of the riverine environment and other Crown land areas.

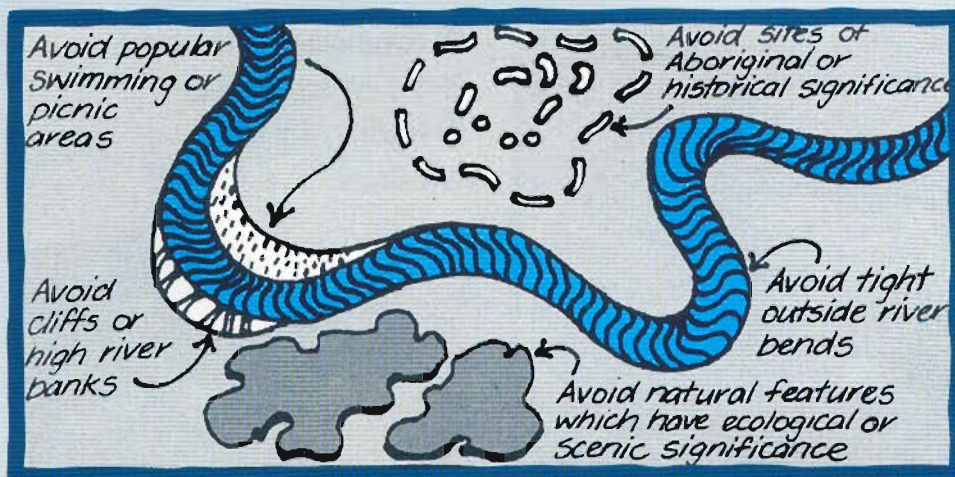
Siting of Pumps and Pumphouses

- Pumps must be located away from high banks that are susceptible to slumping, such as the outside of tight river bends or vertical banks.
- Pumps must be sited in such a way to allow screening from the river and any access roads by existing vegetation.
- Pumps must be sited so as to minimise visual impact to the surrounding landscape.

- Screening of Pumphouses are to be of local indigenous species, planted and maintained to the satisfaction of the Public Land Manager.

Note

Pumps and pumphouses located on land subject to flooding from Murray River flood flows, could be damaged or demolished by a significant flood event.



Design of Pumps and Pumphouses

- The pumphouse should include housing only for the essential works required for diverting water from the river. Filters, filtrate, irrigation controls, fertigation and other equipment must not be placed on Crown land.
- Pumphouses are to be as small as practicable and of dimensions in proportion to the size of the pump. (e.g. Any pumphouse larger than 3x3 metres would require special consideration by the Public Land Manager)
- The walls of the pumphouse should be constructed from colorbond sheeting or dark stained timber cladding. Roofing material should be colorbond. Colours of pumphouses must be compatible with the surrounding environment. (e.g. Colorbond Mist Green, Rivergum, Saltbush, or Beige)
- Delivery pipes from pumps must be placed underground.
- Suction pipes should be raised above bank slopes and be secured by steel supporting posts. The colour of the suction pipe should be compatible with the surrounding environment.
- Excess bulk fuel and lubricant must not be stored on or near the site. No filtrate or any other material associated with the diversion of water may be placed back into the river or watercourse.
- Fuel operated pumps are not encouraged and would require the special consideration of the Public Land Manager.
- The area around fuel operated pumps should be bunded.
- All reasonable efforts should be made to suppress noise to the satisfaction of the responsible authority.

- Electrical fittings and/or motors must comply with the requirements of the relevant power authority and should be fixed above the Nominal Flood Protection Level, that is the 100 year Average Recurrence Interval (ARI) floodlevel plus a freeboard margin of 300mm.

Access to Pumps and Pumphouses

- Access to a pump(s) is restricted to one track with a vehicle turn around area.
- Adjoining private diverters will be encouraged to consolidate pump siting (nests), so that several pumps can be serviced by one track.

Maintenance of Pumps and Pumphouses

- Soil is to be returned to its original profile and compacted and should be accompanied by revegetation with local indigenous species. Adequate maintenance and surveillance by the licensee may be required to overcome any erosion problems.
- The site will at all times be cleared of rubbish and debris.
- All water and fuel leaks are to be attended to immediately along with any reclamation works necessary.
- Disused pumphouses, which are assessed as having no aesthetic or historic value, must be demolished by the owner, the material removed from the site within 30 days and the site restored to the satisfaction of the relevant Public Land Manager.

