



Government  
of South Australia

Department of Water,  
Land and Biodiversity  
Conservation

*River Murray Act 2003*  
Referral Assessment Policy

# Overview and General Provisions

1

*River Murray Act 2003*  
General and Overview Provisions  
ISBN: 978-1-921218-59-0

## **Copyright**

© Government of South Australia, through the Department of Water, Land and Biodiversity Conservation 2006. This work is Copyright. Apart from any use permitted under the Copyright Act 1968 (Cwlth), no part may be reproduced by any process without prior written permission obtained from the Department of Water, Land and Biodiversity Conservation. Requests and enquiries concerning reproduction and rights should be directed to the Chief Executive, Department of Water, Land and Biodiversity Conservation, GPO Box 2834, Adelaide SA 5001.

## **Disclaimer**

The Department of Water, Land and Biodiversity Conservation, and its employees do not warrant or make any representation regarding the use, or results of use of the information contained herein as to its correctness, accuracy, reliability, currency or otherwise. The Department of Water, Land and Biodiversity Conservation and its employees expressly disclaim all liability or responsibility to any person using the information or advice.

# Contents

## Overview

Purpose of Referral Assessment Policy ..... 4  
 Background – River Murray Act 2003 ..... 4

## General Provisions

Provisions ..... 7  
 Explanation of flow diagrams ..... 10

## Attachments

**Attachment 1: Extract from the River Murray Act 2003** ..... 16  
 Objects ..... 16  
 Objectives ..... 17

**Attachment 2: River Murray Protection Area** ..... 18

**Attachment 3: Appendix 5 of the River Murray Act  
 Implementation Strategy Key Threats, Impacts, Priorities and Actions** ..... 19

**Attachment 4: Extract from the *Development Regulations 1993*** ..... 22  
 8–Referrals with respect to River Murray Protection Areas ..... 22  
 9–Referrals with respect to the use of River Murray water within the Murray-Darling Basin ..... 22

## PURPOSE OF REFERRAL ASSESSMENT POLICY

The Referral Assessment Policy has been prepared to help guide decision-making on matters that have been referred to the Minister for the River Murray for comment or direction under the River Murray Act 2003. It will assist officers from the Department of Water, Land and Biodiversity Conservation (DWLBC) in the assessment of statutory instruments and applications referred to the Minister for the purposes of the Act. The policy consists of general provisions, special provisions and activity provisions<sup>1</sup>. It will ensure that decisions meet the Minister's obligations under the Act, and are consistent with the objects and objectives for a healthy River Murray contained in the Act. The relationship between the provisions is illustrated in Figure 1.

## BACKGROUND - RIVER MURRAY ACT 2003

The River Murray Act requires certain statutory instruments<sup>2</sup> and certain applications for authorisations issued under related operational Acts<sup>3</sup> to be referred to the Minister for the River Murray prior to the instrument being adopted, or the application granted.

### Referral of statutory instruments

In responding to referred instruments, the Minister is obliged to take into account:

- » the objects and objectives for a healthy River Murray contained in the Act, and to seek to further those objectives
- » the terms or requirements of the *Murray-Darling Basin Agreement 1992*, and any relevant resolution of the Ministerial Council under that agreement.

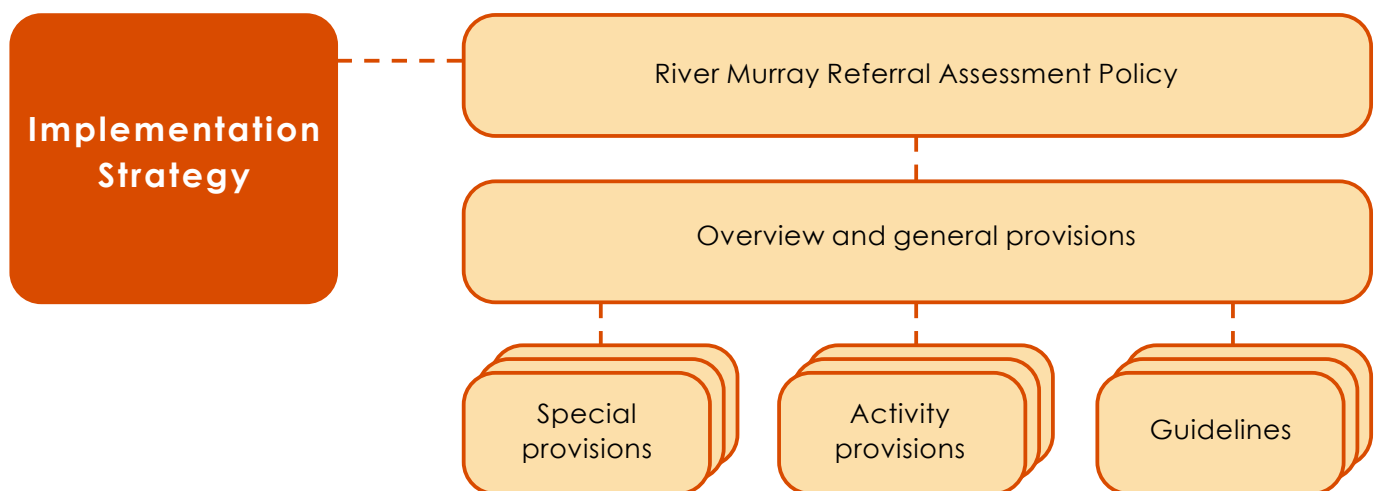


Figure 1: River Murray referral assessment framework

<sup>1</sup> The special provisions and activity provisions are presently under development by the Department of Water, Land and Biodiversity Conservation.

<sup>2</sup> A statutory instrument is a plan, program or policy that is prepared under the provisions of an Act. For example, a development plan prepared under the Development Act 1993 is a statutory instrument.

<sup>3</sup> The related operational Acts under which applications might need to be referred are the Crown Lands Act 1929, Development Act 1993, Fisheries Act 1982, Harbors and Navigation Act 1993, Heritage Places Act 1993, Historic Shipwrecks Act 1981, Mining Act 1971, National Parks and Wildlife Act 1972, Native Vegetation Act 1991, Natural Resources Management Act 2004, Petroleum Act 2000, and South Eastern Water Conservation and Drainage Act 1982.

## Referral of statutory applications

In assessing and responding to referred applications, the Minister is obliged to act consistently with, and seek to further, the objects and objectives for a healthy River Murray. The Minister must also take into account:

- » the extent to which the activity may affect the river
- » the extent to which any similar activity is being, or is likely to be, undertaken in the Murray-Darling Basin, and any cumulative effects of such activities
- » the views, responses or requirements of any other person or body that in the opinion of the Minister are relevant to the assessment
- » the terms or requirements of the Murray-Darling Basin Agreement
- » any relevant policy (whether published for the purposes of the Act or not)
- » such other matters as the Minister thinks fit. The referral system for statutory applications is explained in the *River Murray Act 2003 Referrals* (fact sheet no 36) ([www.dwlbc.sa.gov.au](http://www.dwlbc.sa.gov.au)).

## Objects and objectives

Everyone involved in the administration of the *River Murray Act* must behave consistently with, and seek to further, the objects and objectives for a healthy River Murray, contained in sections 6 and 7 respectively of the Act (see Attachment 1).

## Definition of River Murray

The *River Murray Act* recognises the need to protect the river as a complex set of characteristics and features.

The River Murray is defined in the Act as:

- (a) the main stem of the River Murray
- (b) the natural resources of the River Murray, being:
  - » the river system – defined as the river itself and all anabranches, tributaries, floodplains, wetlands and estuaries in any way connected or associated with the river, and related beds, banks and shores

- » soil, groundwater and surface water, air, vegetation, animals and ecosystems connected or associated with the river system
- » cultural and natural heritage, and amenity and geological values connected or associated with the river system
- » minerals and other substances and facilities subject to the operation of a Mining Act and such that activities undertaken in relation to them may have an impact on the river.

This broad definition affects the way the objects and objectives for a healthy River Murray and all other provisions of the Act are interpreted.

## Murray-Darling Basin and River Murray protection areas

Some instruments and applications must be referred wherever they occur in the Murray-Darling Basin, others only where they occur in a River Murray protection area.

The Murray-Darling Basin is the part of the basin that occurs in South Australia, as defined in Schedule B of the *Murray-Darling Basin Act 1993*.

The River Murray Regulations 2003 specify two River Murray protection areas: 1. the floodplain area - this is essentially the river itself and its connected anabranches, wetlands, floodplains and estuaries that occur along the main stem 2. the tributaries area - part of the Eastern Mount Lofty Ranges, consisting of the tributaries that flow into the Lower Lakes and the river itself.

A map showing River Murray protection areas is provided as Attachment 2.

## Minister's priorities

This policy reflects the Minister's priorities as identified in the River Murray Act Implementation Strategy, which are to: \* improve water quality \* achieve an environmental flow regime for the river \* manage the clearance of vegetation \* conserve and protect heritage values.

Appendix 5 of the implementation strategy (a table of the key threats, impacts, priorities and actions) is provided as Attachment 3.

## Assessing impact on the River Murray – instruments and applications

The objects of the *River Murray Act* require the referral system to operate so that any development or activities that may affect the river are either: \* undertaken in a way that provides the greatest benefit to, or protection of, the river, while at the same time providing for the economic, social and physical wellbeing of the community \* prevented from proceeding where they are unacceptable in view of their adverse potential effects on the river.

The *River Murray Act* is not intended as the primary regulatory statute for any activity. Activities are referred to the Minister by other regulatory agencies to give the Minister an opportunity to ensure that the activity will be either neutral or beneficial to the river. The referring agency, or other local or state agencies, will also undertake an assessment of the activity against the relevant statute or policy. For example, a local government would assess the application against its development plan, or an activity may require a licence from the Environment Protection Authority.

The *River Murray Referral Assessment Policy* is not to be used to fetter the discretion of the Minister or delegate. All relevant considerations, including the guidance provided by this policy, will be taken into account when the Minister or delegate determines a response to a referred matter.

# General Provisions

## Role of the general provisions

The general provisions apply to all statutory instruments and applications referred to the Minister for the River Murray under or pursuant to a related operational Act. They are to be read and applied in conjunction with the overview section in this policy. Reference should also be made to any specific objectives and principles contained among the special provisions and/or activity provisions that are relevant to the referred application or instrument.

## PROVISIONS

In exercising the Minister's powers<sup>4</sup>, on receipt of a referred application the Minister:

- » will require a proponent to demonstrate that each potential impact of a proposed activity will have a neutral or beneficial effect on the River Murray
- » may impose conditions to ensure that the activity will have a neutral effect
- » may impose conditions so that the activity has a beneficial effect, where it is reasonable and practicable to do so.

## What is a neutral or beneficial effect?

An activity has a neutral or beneficial effect on the River Murray when the impacts of the activity are known and understood, and the activity:

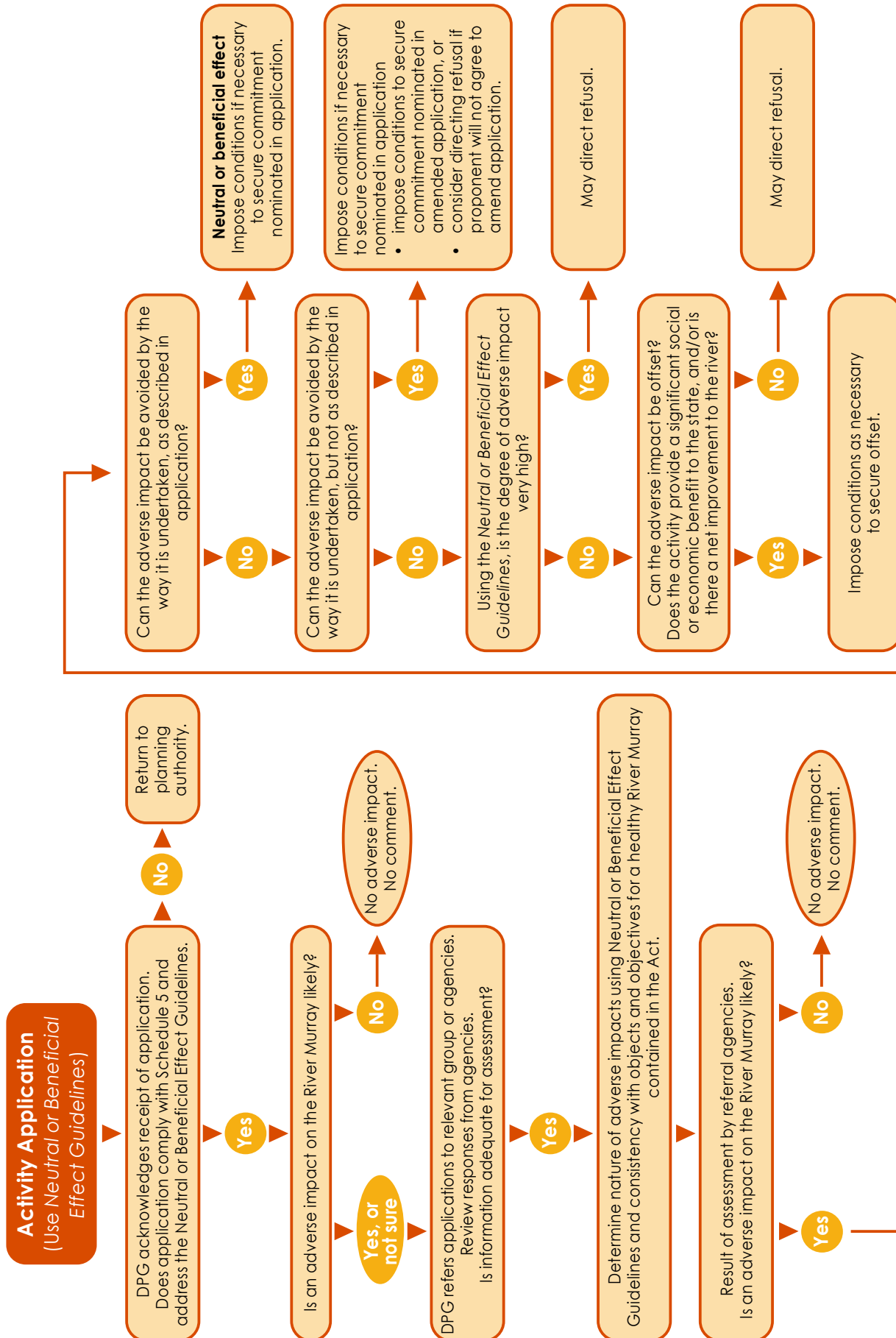
- (1) has no potential for adverse impact, or
- (2) will lead to an improvement consistent with the objects and objectives for a healthy River Murray, or
- (3) has potential for an adverse impact that would be inconsistent with one or more of the objectives for a healthy River Murray, however:
  - (A) the activity would avoid the adverse impact or risk of impact because of the way it would be undertaken or
  - (B) it is impossible to avoid the adverse impact or potential impact, and
    - (i) the adverse impact is not very high (refer to the River Murray Neutral or Beneficial Effect Guidelines<sup>5</sup>), and
    - (ii) the adverse effects of the activity can be offset by specific cost effective actions that will benefit the river and can be secured by the imposition of conditions, and
    - (iii) the proponent can sufficiently demonstrate (e.g. via the results of an economic viability study and/or business case) that the activity provides:
      - (a) significant social or economic benefit to the people of the state, and/or
      - (b) a net improvement to the river. For example, where a net improvement would be gained by replacing an existing activity, that is having an adverse impact, with an activity with a lesser impact.

The following flow diagrams illustrate how the above policy will be applied.

<sup>4</sup> The powers of the Minister are set out in section 22 of the River Murray Act 2003 and also in relevant provisions of the related operational Act under which an application is referred to the Minister.

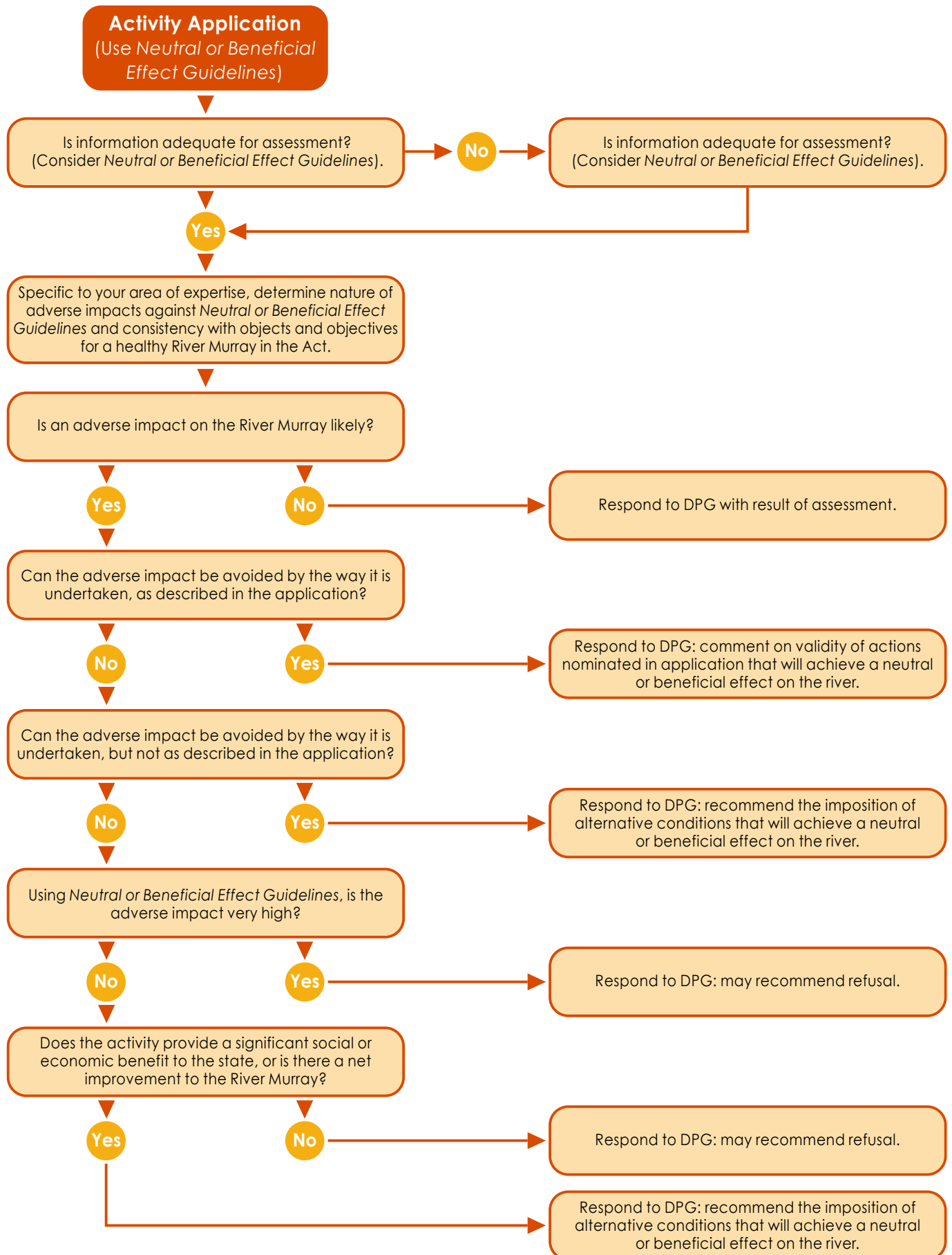
<sup>5</sup> The River Murray Neutral or Beneficial Effect Guidelines (DWLBC 2007).

Flow chart for DWLBC’s Development Planning Group (DPG) to process referred development applications





Flow chart for referral bodies and agencies



## EXPLANATION OF FLOW DIAGRAMS

### What information should accompany an application?

It is the applicant's responsibility to provide enough information about the proposed activity and its likely impact to allow for the assessment of the proposal.

Applications referred under the Development Act 1993 must meet the requirements of Schedule 5 of the Development Regulations 1993, and any that do not should be returned (see Attachment 4 for Schedule 5, paragraphs 8 and 9).

The matters that need to be addressed by the proponent to establish a neutral or beneficial effect are outlined in the River Murray Neutral or Beneficial Effect Guidelines.

The Minister for the River Murray may also request additional information as necessary to assess the application. If additional information is requested, the referring authority (eg, local council) must be notified<sup>6</sup>.

Additional information, if required, should be sought as soon as the need for it becomes evident. Delays in seeking further information can result in unnecessary additional costs being incurred by applicants.

### What information should accompany an instrument?

An instrument should include all material necessary to enable the Minister to make an assessment of the impact on the river. Additional information should be sought in the first instance from the referring agency.

### What factors will be taken into account when assessing impact?

Any change or risk of change to the River Murray represents an impact on the river (see page 2, definition of River Murray).

The following matters should be considered in assessing the impact that an activity, or the implementation of a statutory policy, would or may have on the river:

- » the direct and indirect impacts of the activity (both on-site and off-site)
- » the proposed frequency and duration of the activity
- » the cumulative impacts of the proposed activity and similar activities being undertaken or that may be undertaken in the foreseeable future
- » the necessity for exclusive use and opportunity for shared communal outcomes
- » the availability of alternative methods or materials that have a lesser impact
- » the total impact that can be attributed to the activity over time
- » the consistency with the desirable character of the locality
- » the sensitivity of the aspect of the river that would be affected
- » the degree of confidence with which the impacts of the activity are known and understood
- » the net environmental impact of the activity
- » the impact or risk of impact (see River Murray Neutral or Beneficial Effect Guidelines)
- » the reversibility of the potential impact.

The River Murray Neutral or Beneficial Effect Guidelines contain further assistance on assessing the impact of an activity.

### Consistency with the objects and objectives for a healthy River Murray

The River Murray Act 2003 contains the objects (section 6) and the objectives for a healthy River Murray (section 7) (see Attachment 1).

An activity will not be consistent with the objectives if its impact is likely to hinder or prevent one or more of the objectives being met. The activity will therefore have an adverse impact. Examples of such impacts are listed below.

Examples of the types of activities that may cause these impacts are listed in Attachment 3.

<sup>6</sup> Where the referral is made under the Development Act 1993, the authority should be notified in accordance with section 37(2) of that Act. Where the referral is made under another Act, notification to the proponent and the referring authority must be made in accordance with section 22(6) of the River Murray Act 2003. ??

## Examples of River Murray impacts

Examples of impacts that are likely to hinder or prevent an objective for a healthy River Murray being met include:

- » any hindrance of existing or planned restoration projects including, for example:
  - o attempts to provide, reinstate or maintain ecologically significant elements of the flow regime of the River Murray system, or
  - o efforts to improve connectivity between and within environments of the system
- » excessive extraction of water
- » obstruction of the flow of floodwaters
- » disruption to the ecological processes of the river and its floodplain through any means (including the placement of buildings or structures, or the clearance of native vegetation growing on, in or near the banks or bed of the river system, or associated with the system), including by causing or contributing to:
  - loss of habitat or key vegetation associations
  - loss of connectivity between systems
  - incursions of exotic plants
  - o erosion
  - rising groundwater
  - dryland salinity
  - degraded landscape or amenity values
- » increased pressure on the biodiversity of ecosystems, for example, through:
  - adverse impact on habitat features
  - adverse impact on the environments of the River Murray, including wetlands and floodplains
  - contributions to the decline in the abundance of native species
  - impeding migration of native species (including aquatic biota)
- » alteration of natural drainage systems in a way that would have adverse effects on existing vegetation on adjoining properties or roads, or increase the risk of flooding of existing developments or erosion downstream, or otherwise detrimental hydrological effects
- » adverse effects on natural, physical, chemical or biological quality or characteristics of soil resources - for example, loss of site soil through erosion or siltation during either the construction phase or commencement of an activity
- » decline in the quality of surface or groundwater, or of the capacity of natural systems to restore or maintain water quality, for example through:
  - contamination (including contamination of soil)
  - increases in salinity levels
  - increases in nutrient levels
  - increases in sedimentation or turbidity, for example because of erosion
- » modification of a natural landscape associated with the river system
- » departure from the desirable character of the location
- » adverse effects on any culturally significant aspects of the river
- » degradation of cultural or natural heritage, including amenity value
- » any hindrance to the use or management of resources and sites of cultural, historic or other heritage value, including Aboriginal sites of anthropological, archaeological or historic significance
- » impaired cultural and historical relationships with the river, either permanently or for a period significant to the nature of the particular relationship
- » increased risk to human health and damage to property from flooding.

## Referral of instrument or application to other regulatory agencies, and consult other agencies where relevant

Other agencies should be engaged as appropriate in the assessment of activities and in finding ways to allow an activity to proceed that would have a neutral or beneficial effect on the river. This would help to support economic development within a sustainability context, and avoid conflicting requirements from different agencies (for example, as to pollution avoidance or amenity requirements).

If there is not enough information contained in the instrument or application, the referral agency should request that the Development Planning Group obtain more information. A detailed explanation of the additional information required must be contained with the request.

## Determining nature of impact

The River Murray Neutral or Beneficial Effect Guidelines are to be used to assist the proponent, the Development Planning Group and referral groups to determine the types of impacts resulting from a proposed activity.

## Minister may direct that conditions be imposed

The River Murray Act states that the Minister may direct that an activity application not be granted unless specified conditions are imposed.

Conditions must be directed at furthering the objects and objectives for a healthy River Murray contained in the Act. Conditions should be reasonable and practicable (i.e. cost-effective and economically feasible) as required to ensure that the activity is undertaken in a way that provides the greatest benefit to, and protection of, the river while also providing for the economic, social and physical wellbeing of the community.

Relevant objectives and targets of the State Strategic Plan are to be taken into account when considering the community's wellbeing.

Some activities may also need to be managed through a licence or permit issued under another piece of legislation.

If the proposed conditions are likely to result in significant costs to the proponent, the Development Planning Group should liaise with the proponent to discuss the conditions' intention and appropriateness.

## Different types of conditions may be imposed

Conditions may be required to:

- » ensure that the activity is consistent with the objects and objectives for a healthy River Murray, or
- » avoid the impacts potentially associated with the activity.

The *River Murray Act* specifies that conditions may be imposed that require the proponent to:

- » undertake any steps necessary to offset or protect against any adverse impact on the river
- » develop an environment improvement program or participate in a specified scheme
- » participate in any other scheme to protect, restore or otherwise benefit the river
- » comply with a specified code or standard
- » enter into a bond or other financial arrangement to ensure that money is available to address the costs of any damage to the river in the event of a breach of term or condition of the authorisation.

## Conditions to ensure consistency with objects and objectives for a healthy River Murray

An activity may satisfy the test for a neutral or beneficial effect because of particular specifications or undertakings contained in the application.

Elements that are fundamental to the application being assessed as neutral or beneficial at this level should be secured by ensuring that relevant conditions are imposed on the activity approval.

### Conditions to avoid adverse impacts should be appropriate to the level of potential impact, including cumulative impacts

Conditions should be appropriate to and in proportion to the assessed level of adverse impact.

The River Murray Neutral or Beneficial Effect Guidelines provide guidance in determining the types and levels of adverse impacts that may occur as a result of an activity.

Impacts to be taken into account include potential contribution to a cumulative effect that would result in damage that is irreversible or reversible only in the long term or at significant expense.

### Conditions to avoid adverse impact

Types of conditions to avoid adverse impact on the river include:

- » siting or designing the activity (such as a subdivision of land, or building and structures and their finished surfaces) in a manner that is consistent with the desirable character of the location and that minimises the visual impact when viewed from the river
- » preventing or minimising loss of site soil through erosion or siltation during both construction and commencement of an activity, in order to protect the natural, physical, chemical or biological quality or characteristics of soil resources
- » protecting the river from erosion and decline in water quality by requiring that chemicals stored on site or stormwater associated with the activity are carefully managed
- » requiring the stabilisation of the river bank while an activity is being undertaken
- » protecting existing habitat through fencing or providing a buffer from the activity
- » requiring the activity to be undertaken consistent with principles of water conservation and water use efficiency. In particular, the design and operation of an activity should aim to conserve surface water and groundwater resources, including by:
  - providing for the efficient use of surface water and groundwater resources, including, where reasonably practicable, for the reuse and/or recycling of wastewater
  - making maximum and efficient use of natural rainfall and stormwater run-off by incorporating stormwater management and water harvesting measures (subject to the provisions of any relevant water allocation plan)
  - where applicable, incorporating water-sensitive landscaping principles, including siting and use of locally indigenous plant species
  - protecting water quality by intercepting pollutant-bearing stormwater before it leaves the site and treating or disposing of it in a way that avoids impact
  - protecting soil and water from contamination by ensuring that all wastes associated with an activity, and all biological organisms and chemicals used in conjunction with an activity, are managed to prevent adverse impacts (including through measures to prevent or minimise any potential for airborne or waterborne movement or land contamination, fire hazard, or energy emission or explosion).

## Conditions to achieve beneficial effect

The Minister may direct that conditions be imposed so that the activity contributes to the enhancement or restoration of the river (including reversing cumulative impacts) to an extent that is reasonable and practicable.

Particular attention will be paid to the possibility of restoration or enhancement in the identified priority areas, as stated in the River Murray Act Implementation Strategy (see Overview - Minister's priorities, page 3).

## Conditions should be appropriate to the level of opportunity

Conditions requiring restoration or enhancement will be tailored according to opportunities that are reasonable and incidental to the activity, taking into account the objects and objectives for a healthy River Murray.

### Conditions to achieve beneficial effects

Types of conditions to achieve beneficial effects for the river include:

- » landscaping to provide a buffer between the activity and key habitat or re-vegetation sites or wetland restoration
- » managing stormwater to improve water quality
- » entering a land management agreement for the protection or management of a heritage site
- » re-vegetating where this is likely to contribute to reversing cumulative effects
- » contributing to the installation of new wastewater treatment schemes
- » building and/or landscape siting and design that removes unsightly aspects, shields unsightly views, or enhances the river environment.

Additional steps that are not necessarily ancillary to the approved activity, e.g. re-vegetation, or participating in a scheme to manage a wetland on the site, may be required in relation to the priority areas.

The use of conditions for specific activities, or to protect specific aspects of the river, is detailed in the relevant special provisions and/or activity provisions of the River Murray Referral Assessment Policy.

## Offsetting adverse impacts

Offsets are aimed at preventing further deterioration of the River Murray, while allowing developments and activities that demonstrate significant public, social and economic benefits and/or a net improvement to the river to proceed.

An adverse impact rated as very high will not generally be capable of adequate offset, and consideration should be given to directing refusal of the application.

The following principles apply to the use of offsets:

- » adverse impacts must be avoided first by using all cost-effective prevention and mitigation measures on-site. Offsets are then only used to address remaining adverse impacts
- » all standard regulatory requirements must still be met
- » offsets must never encourage or facilitate ongoing poor environmental performance
- » offsets will complement other government programs
- » offsets will be proportional to the adverse impact
- » offsets must be:
  - enduring - they must offset the impact of the development for the period that the impact occurs or quantifiable - the impacts and benefits must be reliably estimated
  - targeted - they must offset the impacts on a 'like-for-like' basis, e.g. the removal of vegetation must be replaced by vegetation of the same or of higher value
  - located appropriately - they must offset the impact in the same locality, preferably on-site. Where this is not practical or economically feasible, it may be appropriate to allow it off-site, or by financial contribution to a scheme specified by the Minister
  - supplementary - they must be beyond existing requirements and not already being funded under another scheme

- enforceable - they must be enforceable through development consent conditions, licence conditions, covenants or a contract.

### Offset conditions

Examples of types of offset conditions that may be used include:

- » entering into a River Murray Act management agreement for an area of conservation value that would assist in meeting the objects and objectives for a healthy River Murray. For example:
  - the rehabilitation and ongoing management of a wetland
  - restoration and management of habitat/vegetation including weed and vermin control
- » contributing to a scheme to manage groundwater, e.g. salt interception.

## Attachment 1

### Extract from the *River Murray Act 2003*

#### OBJECTS

6. (1) The objects of this Act are -
- (a) to ensure that all reasonable and practicable measures are taken to protect, restore and enhance the River Murray in recognition of its critical importance to the South Australian community and its unique value from environmental, economic and social perspectives and to give special acknowledgement to the need to ensure that the use and management of the River Murray sustains the physical, economic and social wellbeing of the people of the State and facilitates the economic development of the State; and
  - (b) to provide mechanisms to ensure that any development or activities that may affect the River Murray are undertaken in a way that provides the greatest benefit to, or protection of, the River Murray while at the same time providing for the economic, social and physical wellbeing of the community; and
  - (c) to provide mechanisms so that development and activities that are unacceptable in view of their adverse effects on the River Murray are prevented from proceeding, regulated or brought to an end; and
  - (d) to promote the principles of ecologically sustainable development in relation to the use and management of the River Murray; and
  - (e) to ensure that proper weight is given to the significance and wellbeing of the River Murray when legislative plans and strategies are being developed or implemented; and
  - (f) to respect the interests and aspirations of indigenous people with an association with the River Murray and to give due recognition to the ability of those indigenous people to make a significant contribution to the promotion of the principles of ecologically sustainable development in relation to the use and management of the River Murray; and
  - (g) to respect the interests and views of other people within the community with an association with the River Murray and to give due recognition to the ability of those people to make a significant contribution to the promotion of the principles of ecologically sustainable development in relation to the use and management of the River Murray; and
  - (h) otherwise to ensure the future health, and to recognise the importance, of the River Murray.
- (2) For the purposes of this section, the following are declared to be the principles of ecologically sustainable development:
- (a) that the use, development and protection of the environment should be managed in a way, and at a rate, that will enable people and communities to provide for their economic, social and physical wellbeing and for their health and safety while -
    - (i) sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and
    - (ii) safeguarding the life-supporting capacity of air, water, land and ecosystems; and
    - (iii) avoiding, remedying or mitigating any adverse effects of activities on the environment;
  - (b) that proper weight should be given to both long and short-term economic, environmental, social and equity considerations in deciding all matters relating to environmental protection, restoration and enhancement and to the facilitation of sustainable economic development.

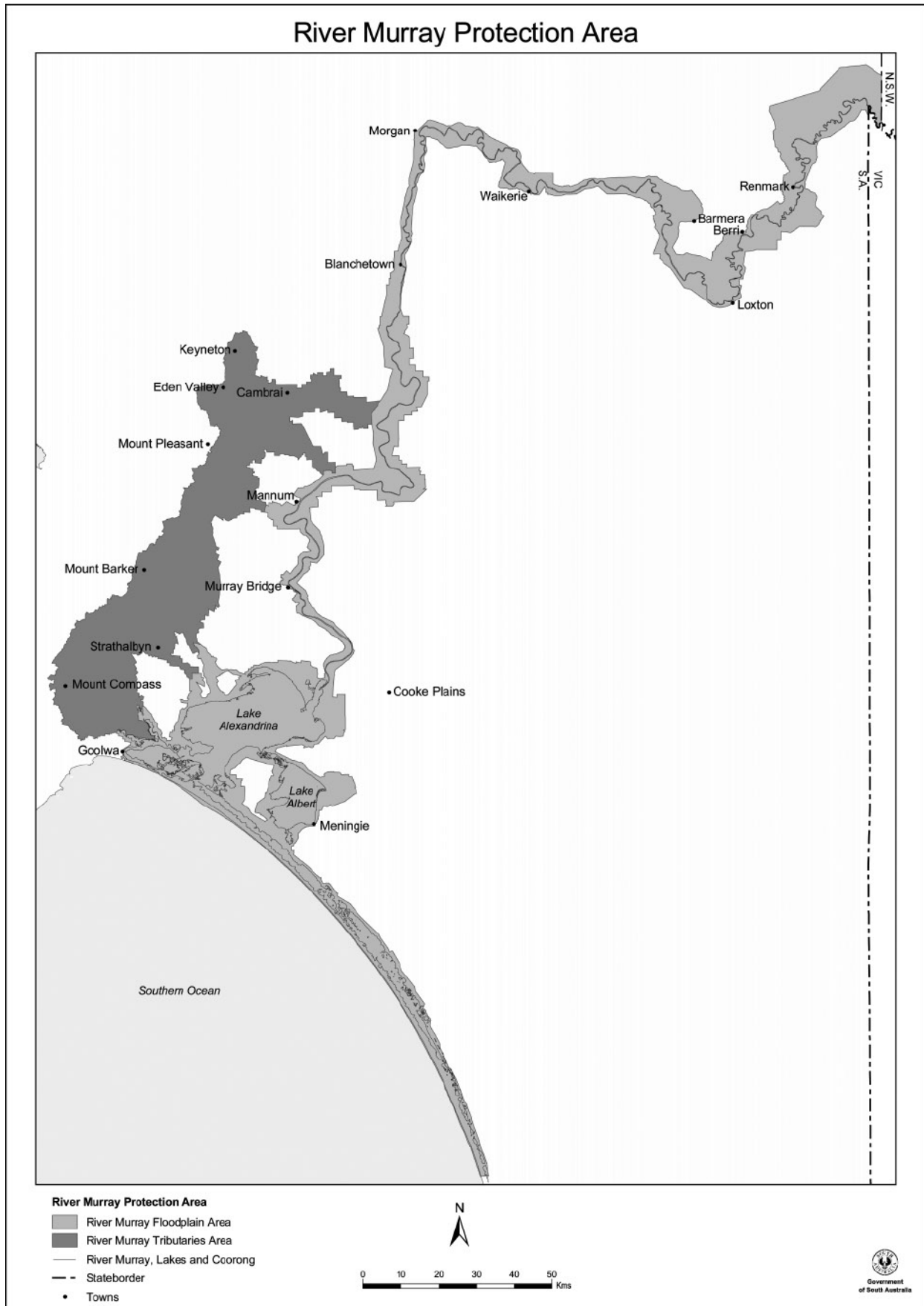


## OBJECTIVES

7. (1) The following objectives will apply in connection with the operation of this Act:
  - (a) the river health objectives; and
  - (b) the environmental flow objectives; and
  - (c) the water quality objectives; and
  - (d) the human dimension objectives.
- (2) The river health objectives are as follows:
  - (a) the key habitat features in the River Murray system are to be maintained, protected and restored in order to enhance ecological processes;
  - (b) the environments constituted by the River Murray system, with particular reference to high-value floodplains and wetlands of national and international importance, are to be protected and restored;
  - (c) the extinction of native species of animal and vegetation associated with the River Murray system is to be prevented;
  - (d) barriers to the migration of native species of animal within the River Murray system are to be avoided or overcome.
- (3) The environmental flow objectives are as follows:
  - (a) ecologically significant elements of the natural flow regime of the River Murray system are to be reinstated and maintained;
  - (b) the Murray mouth should be kept open in order to maintain navigation and the passage of fish in the area, and to enhance the health of the River Murray system and estuarine conditions in the Coorong;
  - (c) significant improvements are to be made in the connectivity between and within the environments constituted by the River Murray system.
- (4) The water quality objectives are as follows:
  - (a) water quality within the River Murray system should be improved to a level that sustains the ecological processes, environmental values and productive capacity of the system;
  - (b) the impact of salinity on the ecological processes and productive capacity of the River Murray system is to be minimised;
  - (c) nutrient levels within the River Murray system are to be managed so as to prevent or reduce the occurrence of algal blooms, and to minimise other impacts from nutrients on the ecological processes, environmental values and productive capacity of the system;
  - (d) the impact of potential pollutants, such as sediment and pesticides, on the environments constituted by the River Murray system is to be minimised.
- (5) The human dimension objectives are as follows:
  - (a) a responsive and adaptable approach to the management of the River Murray system is to be implemented taking into account ecological outcomes, community interests and new information that may become available from time to time;
  - (b) the community's knowledge and understanding of the River Murray system is to be gathered, considered and disseminated in order to promote the health and proper management of the system;
  - (c) the interests of the community are to be taken into account by recognising indigenous and other cultural, and historical, relationships with the River Murray and its surrounding areas, and by ensuring appropriate participation in processes associated with the management of the River Murray system;
  - (d) the importance of a healthy river to the economic, social and cultural prosperity of communities along the length of the river, and the community more generally, is to be recognised.

# Attachment 2

## River Murray Protection Area



## Attachment 3

### Appendix 5 of the River Murray Act Implementation Strategy: Key Threats, Impacts, Priorities and Actions

Key Threat	Why is this identified as a key threat? – Processes and Impacts	Priorities	Actions to be undertaken under the strategies
<b>Clearance of vegetation</b>	<p><b>Processes:</b></p> <p>Clearance can occur through:</p> <ul style="list-style-type: none"> <li>» direct removal of plants, or</li> <li>» indirect means such as permanent flooding of plants, lack of water, excessive grazing or significant weed incursion.</li> </ul> <p><b>Impacts:</b></p> <p>Clearance causes or contributes to:</p> <ul style="list-style-type: none"> <li>» loss of habitat, which has an impact on native species (e.g. hinders migratory patterns, loss of places to live and breed). Habitat loss is the most significant threat to species survival. The already low levels of remaining vegetation compound the effects of new clearance, contributing to continuing loss of diversity and hindering success of species recovery programs.</li> <li>» loss of key vegetation associations (e.g. red gum woodland), which are essential for adequate habitat as well as survival of the plant species found in that association.</li> <li>» incursions of exotic plants (weeds), which can have a devastating effect on productivity of land, habitat, and water quality.</li> <li>» erosion. Clearance in or near watercourses can result in erosion with resultant water quality impacts.</li> <li>» rising groundwater and dryland salinity, which in turn has an impact on salinity of ground and surface water.</li> <li>» degraded landscape and amenity values, with resulting impacts on cultural and natural heritage, and industries relying on these features, such as tourism.</li> </ul>	<p><b>Manage the clearance of vegetation</b></p> <p>Control clearance of endemic native vegetation, and encourage re-vegetation.</p> <p>Control clearance of non-endemic vegetation where vegetation significantly benefits an aspect of the river.</p>	<p>Develop policies for the protection and restoration of vegetation, taking into account the guidelines prepared under the Native Vegetation Act, and in conjunction with the Native Vegetation Council.</p> <p>Use the referral process in all relevant activity types to control vegetation clearance and require or encourage re-vegetation.</p> <p>Encourage other agencies to reflect vegetation policies, including through mandatory referral of statutory instruments to the Minister.</p> <p>Use management agreements to promote re-vegetation or vegetation management and protection in key areas.</p> <p>Use enforcement and prosecution to increase compliance rates.</p>

Key Threat	Why is this identified as a key threat? – Processes and Impacts	Priorities	Actions to be undertaken under the strategies
<p><b>Poor and declining quality of surface water</b></p>	<p><b>Processes:</b></p> <p>Degradation of water quality can occur through:</p> <ul style="list-style-type: none"> <li>» direct contamination, for example because of:                             <ul style="list-style-type: none"> <li>– inappropriate storage and disposal of polluting substances (including septic tanks in permeable river sediments)</li> <li>– polluting activities being undertaken in or adjacent to the river (such as house boats and marinas, and livestock grazing on floodplain and riverbanks)</li> <li>– disposal of stormwater and other run-off water (these in turn can be caused by inappropriate siting or design of development); or</li> </ul> </li> <li>» salinity, because of:</li> <li>» increased irrigation in high risk sites or clearance of vegetation</li> <li>» rising saline groundwater through factors including irrigation increasing the natural groundwater gradient towards the river, or</li> <li>» erosion and silting.</li> </ul> <p>Rising salinity levels in surface water are a major, and increasing, cause of declining water quality.</p> <p><b>Impacts:</b></p> <p>Declining water quality causes, among other things:</p> <ul style="list-style-type: none"> <li>» loss of productivity of land</li> <li>» increased water treatment costs</li> <li>» declining river health in terms of loss of vegetation (i.e. habitat), threats to survival of native species.</li> </ul>	<p><b>Improve water quality</b></p> <p>Prevent increases in salinity and work to reduce current salinity levels including the 'legacy of history'.</p> <p>Control and manage pollution from sources and processes other than salinity.</p>	<p>Develop policies under the River Murray Act 2003 for protecting and improving water quality, taking into account/based on existing policies such as the Environment Protection (Water Quality) Policy and the SA River Murray Salinity Strategy 2001 - 2015.</p> <p>Use the referral system (for both applications and statutory instruments) to implement policy outcomes, including those identified in the SA River Murray Salinity Strategy.</p> <p>Ensure the revision of the River Murray Water Allocation Plan reflects strengthened salinity policy.</p> <p>Appoint Environment Protection Act authorised officers as officers under the River Murray Act; coordinate enforcement policy with the EPA; encourage and support priorities for enforcement.</p> <p>Develop appropriate responses to activities that are presently unregulated, such as farm practices and marinas and boating activities.</p>

Key Threat	Why is this identified as a key threat? – Processes and Impacts	Priorities	Actions to be undertaken under the strategies
<p><b>Threats to heritage values</b></p>	<p><b>Processes:</b></p> <p>Degradation of heritage values can occur through:</p> <ul style="list-style-type: none"> <li>» environmental degradation - key causes are set out in the preceding columns of this table</li> <li>» disturbing, destroying or preventing access to sites of significance to indigenous peoples</li> <li>» degradation of landscape and amenity values of the river</li> <li>» restrictions to access</li> <li>» degradation of built heritage, including historic shipwrecks.</li> </ul> <p><b>Impacts:</b></p> <p>Degraded heritage values can lead to:</p> <ul style="list-style-type: none"> <li>» declining social and economic wellbeing of indigenous peoples with an association with the river</li> <li>» loss of enjoyment and declining social wellbeing of communities (indigenous and non-indigenous) who use the river for recreational pursuits</li> <li>» declining economic wellbeing of those who rely on the heritage values of the river for their livelihood</li> <li>» diminished cultural wealth, and associated opportunities, for future generations</li> </ul>	<p><b>Protect heritage values of the River</b></p>	<p>Use referral system (for both applications and statutory instruments) to protect heritage values (in particular, important indigenous sites and landscape features such as renowned vistas, cliffs and other geological features, and built heritage).</p> <p>Encourage other agencies, both informally and formally through referral of statutory instruments, to recognise and protect heritage values.</p> <p>Support government and non-government agencies, and indigenous and non-indigenous groups to identify key heritage values and to identify and implement appropriate management regimes for their protection and/or restoration.</p> <p>Enforcement - review existing legislation to determine any need for additional regulatory protection of heritage values.</p>

# Attachment 4

## Extract from the *Development Regulations 1993*

### 8—REFERRALS WITH RESPECT TO RIVER MURRAY PROTECTION AREAS

(1) This clause applies with respect to an application that involves a development that must be referred to the Minister for the time being administering the River Murray Act 2003 under item 19 or 20 of Schedule 8.

(2) An application to which this clause applies must be accompanied by—

- (a) a site plan, drawn to a scale of not less than 1:500, showing—
  - (i) the boundaries and dimensions of the site; and
  - (ii) the location of the proposed development and, as relevant, any place on the site where an activity specified in the relevant item under Schedule 8 is to be carried out; and
  - (iii) any significant topographical features (including the contours of the land and any creek or flood plain); and
  - (iv) the approximate location of any native vegetation; and
  - (v) the method of drainage, including drainage management, and the direction of flow of any stormwater, and the location and nature of any works or services that are proposed to be installed or used in connection with the management of water (including stormwater); and
  - (vi) the location and nature of any proposed or existing effluent disposal facilities that are to be used in connection with the development and are not to be connected to disposal or treatment services; and
  - (vii) the location and method of construction of any proposed access track or road which is to give access to any waterfront (if any); and
  - (viii) the approximate north point; and

- (b) a plan or description of the surrounding area that identifies or describes—
    - (i) the land uses of adjacent land; and
    - (ii) the location of any watercourse, wetland, dam or other form of surface water within 500 metres of a boundary of the site; and
  - (c) a detailed description of the activities to be undertaken on the site, and information on each of the following (insofar as may be relevant):
    - (i) methods to be used to minimise potential impacts on the River Murray;
    - (ii) arrangements for the storage, treatment, disposal or re-use of waste, stormwater or sewage;
    - (iii) the excavations, earthworks or embankments to be undertaken or created for the purposes of the development, and how soil erosion will be prevented.
- (3) In this clause- native vegetation has the same meaning as in the Native Vegetation Act 1991; River Murray has the same meaning as in the River Murray Act 2003.

### 9—REFERRALS WITH RESPECT TO THE USE OF RIVER MURRAY WATER WITHIN THE MURRAY-DARLING BASIN

- (1) This clause applies in respect of an application that involves a development that must be referred to the Minister for the time being administering the River Murray Act 2003 under item 21 of Schedule 8.
- (2) An application to which this clause applies must be accompanied by—
- (a) a site plan, drawn to a scale of not less than 1:500, showing—
    - (i) the boundaries and dimensions of the site; and

- (ii) the location of any proposed or existing pumpsheds, pipes or other infrastructure for irrigation or drainage; and
  - (iii) the location and size of any proposed or existing dams or bores; and
  - (iv) the location on the site where the water is proposed to be used or applied; and
  - (v) the approximate north point; and
- (b) detailed information on each of the following:
- (i) the estimated water allocation requirements for the relevant development; and
  - (ii) the source or sources from which it is proposed that the water required for the purposes of the relevant development will be obtained; and
  - (iii) the capability of the soil on the site to sustain the proposed development; and
  - (iv) the location of any place (whether or not on the site) from where water is proposed to be extracted.

Notes.....

A series of horizontal dotted lines for writing notes.









