



GUIDELINES

For the preparation of an
ENVIRONMENTAL IMPACT STATEMENT
for the

Mannum Waters Marina and Residential Development

Proposal by Tallwood Pty Ltd



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Planning SA

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Appendix A SA Development Act, Section 46B, EIS Process

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1 INTRODUCTION

- 1.1 On 31 March 2005, the Minister for Urban Development & Planning ('the Minister') made a declaration in the Government Gazette for the proposed 'Mannum Waters' Marina and Residential Development proposal, to be assessed as a Major Development under the provisions of Section 46 of the *Development Act 1993*.
- 1.2 The proposed development is a multi-component commercial/recreational marina facility and associated residential development (including waterfront allotments), together with a site for related commercial and tourism activities, on land located immediately south of Mannum on the River Murray.
- 1.3 The Major Developments Panel (the Panel) is an independent statutory authority that has the task of determining the appropriate form of assessment for a Major Development, and setting Guidelines for the requisite documentation. To assist in this process, the Panel produced an Issues Paper on the proposal and invited public and Government Agency comment. The date by which the public could make a submission on the Issues Paper has closed, but the Issues Paper can still be accessed free of charge from Planning SA and the Mid Murray Council to obtain further information about the proposal. It can also be viewed at Planning SA's 'Major Developments Panel' website: http://www.planning.sa.gov.au/md_panel/index.html
- 1.4 Following consideration of all public and government submissions, the Panel has determined that the proposal will be subject to the processes and procedures of an Environmental Impact Statement (EIS), as set out in Section 46B of the *Development Act 1993*, for the following reasons:
 - 1.4.1 The magnitude of the development and the range of activities proposed (including residential, tourism, recreational and commercial uses)
 - 1.4.2 The general sensitivity of the location, being located on the River Murray
 - 1.4.3 The potential impacts on the riverine environment, wetlands, River Murray water quality and the community
 - 1.4.4 Significant infrastructure requirements, especially the relocation and upgrade of the Mannum Sewage Treatment Plant
 - 1.4.5 The economic implications and environmental sustainability of the proposal
 - 1.4.6 Design and management requirements to control pollution sources (especially from houseboats).
- 1.5 The Panel has now prepared Guidelines for the proposed 'Mannum Waters' Marina and Residential Development, based on the significant issues relating to the proposed development and taking into consideration the issues raised in the submissions. The EIS should be prepared in accordance with these Guidelines and should describe what the proponent wants to do, what the environmental effects will be and how the proponent plans to manage the project.

- 1.6 A further opportunity for public comment will occur when the completed EIS is released for public exhibition. At that time, an advertisement will be placed in *The Advertiser* and the *Murray Valley Standard* to indicate where the EIS is available, and the length of the public exhibition period. During the exhibition period, written submissions on the proposal can be made to the Minister for Urban Development & Planning, the Hon. Paul Holloway, MLC.
- 1.7 The Panel's role in the assessment process is now fulfilled. The Minister will continue with the assessment process under Section 46 of the *Development Act 1993* from this point. The object of Section 46 is to ensure that matters affecting the environment, the community or the economy to a significant extent, are fully examined and taken into account in the assessment of this proposal.
- 1.8 The documentation and the analyses from the assessment process will then be used by the Governor in the decision-making process, under Section 48 of the *Development Act 1993*, to decide whether the proposal can be approved, and the conditions that will apply.

2 BACKGROUND

- 2.1 The proponent of the proposed 'Mannum Waters' Marina and Residential Development is Tallwood Pty Ltd.
- 2.2 Tallwood Pty Ltd now proposes to establish a marina that would primarily be for the berthing of houseboats (recreational, commercial and permanently occupied) and residential sub-division that would have a limited number of waterfront allotments. It is also proposed to develop associated commercial (ie. small scale hospitality and retail opportunities), tourist and public recreational facilities. If approved, the proposal would be developed over approximately 10 years.
- 2.3 The Panel has determined that the proposal will be subject to the processes and procedures of an Environmental Impact Statement (EIS), as set out in Section 46B of the *Development Act 1993*.
- 2.4 The proponent has been advised by the Minister for Urban Development & Planning that an Environmental Impact Statement is required to assist the Government in assessing the environmental, social and economic impacts of the proposal. An EIS is to be prepared by the proponent, which will describe what the proponent wants to do, what the impacts will be and how the proponent plans to manage the impacts of the project.
- 2.5 The Panel has prepared these Guidelines for the proponent based on the significant issues relating to the proposed development. These Guidelines identify the issues associated with the proposal that must be addressed in the EIS. To assist in determining the significant issues, an Issues Paper was released for public and agency comment. This period for comment closed on 12 October 2005. In preparing the Guidelines, the Panel has considered the issues raised in the submissions.

3 THE ENVIRONMENTAL IMPACT STATEMENT PROCESS

- 3.1 An EIS, as defined in Section 46B of the *Development Act 1993*, includes a description and analysis of issues relevant to the development and the means by which those issues can be addressed.
- 3.2 The EIS should detail the expected environmental, social and economic effects of the development. The EIS must consider the extent to which the expected effects of the development are consistent with the provisions of any Development Plan, the Planning Strategy, the objects of the *River Murray Act 2003* and any matter prescribed by the Regulations under the *Development Act 1993*. The EIS should also state the proponent's commitments to meet conditions (if any) placed on any approval that may be given to avoid, mitigate or satisfactorily control and manage any potential adverse impacts of the development on the environment. Further to this, any other information required by the Minister must be considered.
- 3.3 In preparing the EIS, the proponent should bear in mind the following aims of the EIS and public review process:
 - 3.3.1 To provide a source of information from which interested individuals and groups may gain an understanding of the proposal, the need for the proposal, the alternatives, the environment which would be affected, the impacts that may occur and the measures to be taken to minimise these impacts.
 - 3.3.2 To provide a forum for public consultation and informed comment on the proposal.
 - 3.3.3 To provide a framework within which decision-makers may consider the environmental aspects of the proposal in parallel with social, economic, technical and other factors.
- 3.4 Following the release of the Guidelines adopted by the Panel:**
 - 3.4.1 An EIS must be prepared by the proponent in accordance with these Guidelines.
 - 3.4.2 An EIS is then referred to any prescribed authority or body, and to other relevant authorities or bodies for comment.
 - 3.4.3 Public exhibition of the EIS document by advertisement is undertaken for a least 30 business days. Written submissions are invited.
 - 3.4.4 During the submission period, a public meeting is held in the locality by Planning SA to provide information on the development or project, to explain the EIS document and processes, and to assist interested persons to make submissions under the *Development Act 1993*.
 - 3.4.5 Copies of the submissions from the public and other relevant agencies will be given to Tallwood Pty Ltd (the proponent) soon after closing of the public comment period.

- 3.4.6 The proponent must then prepare a written response in a ‘Response Document’ to the matters raised by the Minister or any prescribed or specified authority or body and the public.
- 3.4.7 The Minister then prepares an Assessment Report taking into account any submissions and the proponent’s response to them. Comments from any other authority or body may be considered as the Minister thinks fit.
- 3.4.8 The Assessment Report and the Response Document are to be kept available for inspection and purchase at a place and period determined by the Minister. Availability of each of these documents will be notified by advertisements in *The Advertiser* newspaper and the *Murray Valley Standard*.
- 3.4.9 A copy of the EIS, the Response Document prepared by the proponent and the Assessment Report will be given to the Mid Murray Council for distribution purposes.
- 3.4.10 The Governor is the relevant decision maker under Section 48 of the Development Act 1993, when a development application is subject to the EIS process.
- 3.4.11 In arriving at a decision, the Governor must have regard to:
- Provisions of the appropriate Development Plan and regulations
 - If relevant, the Building Rules
 - The Planning Strategy
 - EIS and Assessment Report
 - If relevant, the *Environment Protection Act 1993*
 - If relevant, the objects of the *River Murray Act 2003* and any obligations under the Murray-Darling Basin Agreement

4 THE ENVIRONMENTAL IMPACT STATEMENT DOCUMENT

4.1 The Guidelines set out the major issues associated with the proposal and their degree of significance as determined by the Panel. It describes each issue and then outlines the way that these issues should be dealt with in the EIS.

4.2 In these Guidelines the terms “description” and other similar terminology should be taken to include both quantitative and qualitative materials as practicable and meaningful. Similarly, adverse and beneficial effects should be presented in a quantitative and/or qualitative terms as appropriate.

4.3 The main text of the EIS should be clear and precise and presented in terms that are readily understood by the general reader. Technical details should be included in the appendices so that the EIS forms a self-contained entity.

4.4 The document should give priority to the major issues associated with the proposal. Matters of lesser concern should be dealt with only to the extent required to demonstrate that they have been considered to assist in focussing on the major issues.

4.5 The following should be included in the EIS:

4.5.1 SUMMARY

4.5.2 The EIS should include a concise summary of the matters set out in section 46B of the *Development Act 1993* and include all aspects covered under the headings set out in the Guidelines below, in order for the reader to obtain a quick but thorough understanding of the proposal and the resulting environmental impact.

4.5.3 INTRODUCTION

The introduction to the EIS should briefly cover the following:

- Background to, and objectives of, the proposed development.
- Details of the proponent.
- Staging and timing of the proposal, including expected dates for construction and operation.
- Relevant legislative requirements and approval processes.
- Purpose and description of the EIS process.

4.5.4 NEED FOR THE PROPOSAL

The need for the proposal should be discussed to include the following:

- The specific objectives that the proposal is intended to meet, including market requirements.
- Expected local, regional and state benefits and costs, including those that cannot be adequately described in monetary or physical terms (eg. effects on aesthetic amenity), and

- A summary of environmental, economic and social arguments to support the proposal, including the consequences of not proceeding with the proposal.

4.5.5 DESCRIPTION OF THE PROPOSAL

The description of the proposal should include the following information:

- a description of the existing environment
- the nature of the proposal and the location
- construction and commissioning timeframes
- a description of construction, operation, maintenance and monitoring practices and techniques, including reference to the location, layout, elevation and appearance of structures (and buildings where relevant), an indicative land division plan, a description of easements and infrastructure requirements and availability
- management arrangements for the construction and operational stages should be provided.

4.6 The EIS must include the following:

4.6.1 ASSESSMENT OF EXPECTED ENVIRONMENTAL, SOCIAL AND ECONOMIC EFFECTS

The assessment of effects should include all issues identified in Section 5 of these Guidelines.

4.6.2 CONSISTENCY WITH GOVERNMENT POLICY

The *Development Act 1993* requires the EIS to state its consistency with the relevant Development Plan and Planning Strategy.

4.6.3 AVOIDANCE, MITIGATION, MANAGEMENT AND CONTROL OF ADVERSE EFFECTS

The proponent's commitments to meet conditions proposed to avoid, mitigate, satisfactorily manage and/or control any potentially adverse impacts of the development on the physical, social or economic environment must be clearly stated as part of the EIS.

The design of the proposal should be flexible enough to incorporate changes to minimise any impacts highlighted by this evaluation or by post-operation monitoring programs.

4.7 The EIS should provide the following additional information:

4.7.1 SOURCES OF INFORMATION

The sources of information (eg. reference documents, literature searches, research projects, authorities consulted) should be fully referenced, and reference should be made to any uncertainties in knowledge. Where judgments are made, or opinions given, these will need to be clearly identified as such, and the basis on which these judgments or opinions are made will need to be justified. The expertise of those making the judgments, including the qualifications of consultants and authorities, should also be provided.

4.7.2 APPENDICES

Technical and additional information relevant to the EIS that is not included in the text should be included in the appendices (maps, graphs, tables, photographs, reports etc). A glossary may also be appropriate.

The design of the proposal should be flexible enough to incorporate changes to minimise any impacts highlighted by this evaluation or by post-operation monitoring programs.

4.7.3 OTHER

Appropriate plans, drawings and elevations are needed for a decision to be made. As much information as possible is required of the design and layout of the proposal.

5 THE MAIN ISSUES

5.1 NEED FOR THE PROPOSAL

- 5.1.1 Justify the rationale for the proposal from an environmental, economic and social perspective, including the reasons for its proposed location, scale and staging.
- 5.1.2 Assess the “do nothing” option.

5.2 ENVIRONMENTAL ISSUES

River Murray

- 5.2.1 Describe how the development could lead to environmental improvements.
- 5.2.2 Describe how the development could affect upstream and downstream users of the River Murray, particularly the potable water supply sourced by the Mannum – Adelaide pipeline and downstream water supply intakes.
- 5.2.3 Outline the visual effects from the River Murray and environs of the proposed development in this locality, especially the effects of the appearance and built form of buildings and structures (including earthworks, roads and infrastructure).
- 5.2.4 Describe the effect of the proposed development on riverine native flora and fauna, especially as a result of discharges from the marina waterways and by increased human activity.
- 5.2.5 Describe the effect of the proposed development on the biological diversity and conservation significance of the Baseby Levee Wetland system, including design and management measures to mitigate habitat fragmentation, loss of connectivity and potential changes to hydrology and water quality.
- 5.2.6 Describe the general impact of increased recreational and commercial boating movements and activities, including pollutant loads, the risk of spills and noise.
- 5.2.7 Outline the implications of the proposed development on the ability to establish environmental flows along this stretch of the river.
- 5.2.8 Describe how the marina and constructed wetland would be managed during times of manipulated high and low river levels.
- 5.2.9 Detail the measures to protect the river bank, existing wetlands and waterways during and after construction, including buffers.
- 5.2.10 Outline how the river bank would be managed, including existing uses, erosion, litter and pest plants (especially Willow and Boxthorn control).
- 5.2.11 Describe how public access to the river front would be managed, including the mooring of houseboats, during both construction and operational phases.

- 5.2.12 Identify measures to protect any historic shipwrecks within the area, in accordance with the Historic *Shipwrecks Act 1981*.

Water Quality

- 5.2.13 Describe the impact that water discharged from the proposed development would have on water quality and the health of the river.
- 5.2.14 Outline measures to protect and maintain suitable water quality in waterways, particularly the management of run-off and the control of pollutant and micro-organism sources.
- 5.2.15 Detail how sufficient water turn-over rates and flushing will be achieved for the marina basin and waterways, especially through the use of modelling.
- 5.2.16 Calculate the amount of water, including evaporation, that would be removed from the river on an annual basis to maintain the marina basin, waterways and constructed wetland.
- 5.2.17 Outline the arrangements for securing a water allocation for the filling and maintenance of water levels in the marina basin, waterways and constructed wetland, including the location where the allocation could be sourced from.
- 5.2.18 Describe the approach to water sustainability, including ways in which mains water supply use can be minimised or supplemented and opportunities for recycling water, particularly stormwater.
- 5.2.19 Describe water sensitive urban design measures and uses of wastewater that could be adopted.
- 5.2.20 Detail the function and ability of the constructed wetland system to improve water quality discharges from the development, particularly for each stage of its construction.
- 5.2.21 Outline measures to protect and maintain suitable water quality in the existing and constructed wetlands.
- 5.2.22 Outline measures to prevent fertilizers, herbicides and pesticides derived from residential allotments and open space reserves from entering the marina and waterways.
- 5.2.23 Describe measures to minimize and contain any pollutants from entering the waterways from the proposed development.

Native Vegetation (Terrestrial & Aquatic)

- 5.2.24 Describe the significance of the native vegetation in the local and regional context.
- 5.2.25 Detail the extent, condition and significance of native vegetation (individual species and communities) that may need to be cleared or disturbed during construction and the ability of communities or individual species to recover, regenerate or be rehabilitated.
- 5.2.26 Calculate the area of clearance that would be required for the whole site and for individual community types (including ancillary clearance for accommodation and infrastructure).
- 5.2.27 Identify measures to minimise and mitigate vegetation clearance, including incorporating remnant stands in the layout design, and to compensate for the loss of native vegetation and habitat and to deliver significant environmental benefit.
- 5.2.28 Describe the effect on the conservation status (local, regional, state or national) and habitat value of vegetation communities and individual species (especially those that are threatened).
- 5.2.29 Describe the potential for habitat fragmentation and how it would be minimised.
- 5.2.30 Describe changes in biological diversity resulting at the interface between the proposed development and existing vegetation ie. the “edge effect”.
- 5.2.31 Describe the effect of introduced weed species on native vegetation before and after construction.

Native Fauna (Terrestrial & Aquatic)

- 5.2.32 Describe the local and regional context for native fauna.
- 5.2.33 Describe the potential extent of fauna and/or habitat loss or disturbance and the ability of communities or individual species to recover (especially the occurrence of threatened or significant species).
- 5.2.34 Outline the effect on the conservation status of faunal communities or individual species, including any listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.
- 5.2.35 Describe the potential effect of introduced species on native fauna, including domestic cats and dogs.
- 5.2.36 Identify mitigation measures and their effectiveness, including the protection of existing habitat and/or the provision of alternative habitat.

Groundwater and Land Contamination

- 5.2.37 Describe the existing groundwater and land related environmental conditions, including possible contamination sources. This should be supported by site specific investigations, including groundwater and soil testing.
- 5.2.38 Describe the short and long term effects of fill placement and the construction of channels and basins on land and/or groundwater quality and movement, including measures to manage salinity.
- 5.2.39 Describe stormwater and wastewater management and the potential impact on land and/or groundwater.

Management

- 5.2.40 Describe the risk of causing or exacerbating any environmental problems in the locality, and describe mitigation measures and their expected effectiveness.
- 5.2.41 Describe the design and management requirements for the constructed wetlands to maintain suitable water quality and healthy ecosystems, particularly the establishment of a suitable hydrological regime that takes into consideration the implications of environmental flow regimes.
- 5.2.42 Describe the sewage/waste water disposal and refuse collection systems for commercial and recreational boats and the potential for incorporating recycling and resource recovery.
- 5.2.43 Outline waste management strategies for households and tourist facilities and the potential for incorporating recycling and resource recovery.
- 5.2.44 Detail arrangements for managing solid waste, black water and grey water.
- 5.2.45 Describe the use of amenity/landscape plantings and broad scale revegetation, including the opportunities for the use of locally endemic species.
- 5.2.46 Describe how the spread of pest plants and animals within and around the proposed development would be managed.
- 5.2.47 Identify the implications for maintenance dredging or removal of aquatic plant growth, including disposal options and impacts on the environment and community.

Monitoring

- 5.2.48 Outline measures to monitor, manage and rehabilitate impacts on the River Murray.
- 5.2.49 Detail the measures to be taken to monitor and manage groundwater quality and quantity.
- 5.2.50 Describe how all potential sources of air pollution (especially dust) would be controlled and monitored, including measures for the reduction or elimination of dust.
- 5.2.51 Detail management strategies to respond to outcomes identified in monitoring programmes.

General

- 5.2.52 Detail what will be included in an environmental management plan for the construction and operational phases.
- 5.2.53 Provide information on the expected levels of noise associated with the operation of the facility, identifying all potential noise sources, and describe the extent to which these noise emissions could be reduced and contained to minimise the effects upon the environment, the marina community and the wider locality.
- 5.2.54 Outline measures to be adopted to control nuisance insects, particularly mosquito populations and other potential disease vectors that could pose a risk to human health.
- 5.2.55 Detail measures to ensure that residential, recreational and commercial activities would be conducted in an environmentally sustainable manner, particularly to protect water quality.
- 5.2.56 Identify opportunities for energy conservation.
- 5.2.57 Describe any climate change implications, eg. particularly greenhouse gas generation.

5.3 RISK/HAZARD MANAGEMENT

- 5.3.1 Detail procedures to be adopted to identify whether acid sulphate soils are present and management measures that would be required during construction and operation.
- 5.3.2 Detail procedures to be adopted to identify whether the land is contaminated and management measures that would be required during construction and operation, especially for the Mannum sewage treatment plant site.
- 5.3.3 Describe strategies for ensuring public safety during construction and operation.

- 5.3.4 Describe procedures and strategies to prevent, manage and mitigate pollution spills, sewage leaks, discharges from houseboats or algal blooms, including the ability to isolate the marina from the river and constructed wetland.
- 5.3.5 Detail measures and strategies for the management of hazardous, flammable or explosive materials in the commercial areas or on boats, including level of risk.
- 5.3.6 Describe the dry-dock management for careening (access to hull) and interception of pollutants such as hull scrapings, paints and anti-foulants.
- 5.3.7 Detail the relevant requirements of the flood protection policies in the Development Plan and how compliance would be achieved for the proposed development.
- 5.3.8 Detail flood mitigation strategies, including the ability to maintain navigable water depths during periods of river level manipulation associated with establishing environmental flows along this stretch of the River Murray.
- 5.3.9 Describe procedures and strategies to manage and monitor invasive weed species to protect riverine and aquatic vegetation.
- 5.3.10 Detail the design of the entrance ways, edge treatments and moorings, including design requirements for flood protection and bank protection from wave action.
- 5.3.11 Describe strategies to ensure public safety on and around the marina basin, waterways and entrance ways including the removal of obstructions and the permitted recreational use of water bodies, including boating navigation.
- 5.3.12 Identify the seismic risk to infrastructure and reclaimed land, especially the potential for liquefaction of soil.

5.4 EFFECTS ON COMMUNITIES

- 5.4.1 Outline the size and source of the construction workforce and identify how accommodation requirements would be met for each stage of the development.
- 5.4.2 Detail opportunities for Aboriginal employment.
- 5.4.3 Identify the effects on the existing character of Mannum and surrounds.
- 5.4.4 Describe how the proposal would be integrated with the Mannum township, including linking proposed and existing walking and cycling trails.
- 5.4.5 Outline measures to manage and mitigate traffic generation and truck movements to and from the site and their hours of operation during the construction period for each stage of the development, particularly the impact on local roads.
- 5.4.6 Describe the implications for public service providers including health, education and recreation to support the proposed development.
- 5.4.7 Detail the consequences of establishing a marina facility for the recreational and commercial boating fraternities.

- 5.4.8 Outline the impact on existing tourism and recreation activities and infrastructure, including integration with the existing golf course.
- 5.4.9 Describe the impact on local and regional land uses, including traffic impacts at peak periods.
- 5.4.10 Describe the potential impact from adjoining land uses on the proposed development.
- 5.4.11 Identify and where appropriate model, the effects of the proposed sewage treatment plant on the amenity and health of nearby future residents, including aesthetics, odours, noise and the storage of chemicals.
- 5.4.12 Describe the land tenure arrangements (both during and after construction) for the proposed development and the opportunities for commercial, private recreational or public access to berths, launching facilities or other associated facilities.
- 5.4.13 Outline the location and availability of public facilities including telephones, toilets, open space, recreation areas and the lighting of public areas.
- 5.4.14 Describe the implications of allowing permanent occupation of houseboats.
- 5.4.15 Describe the benefit and amenity improvements due to infrastructure changes.
- 5.4.16 Identify opportunities for recreational activities, particularly walking and cycling.

5.5 ECONOMIC ISSUES

- 5.5.1 Identify employment and investment opportunities, including the “multiplier effect”.
- 5.5.2 Identify the economic effects the construction and on-going workforce would have in a local and regional context.
- 5.5.3 Outline the potential for the proposal to attract and enhance the business operations of other allied industries and commercial ventures.
- 5.5.4 Outline the opportunity for tourism and investment in the area arising from the proposal.
- 5.5.5 Describe any potential costs or savings to the Government of infrastructure expansion with regard to transport networks, electricity supply, water supply, sewerage or management of the river.
- 5.5.6 Describe the sustainability of long-term management of the proposed development, including potential costs and benefits to council and rate payers of long-term management and maintenance of the marina facilities, waterways, residential development and constructed wetlands.
- 5.5.7 Describe the impact on existing houseboat activities and infrastructure at or near Mannum.

- 5.5.8 Describe the opportunities for the houseboat industry and its support services.
- 5.5.9 Outline the financial strategies to be employed to ensure the relevant infrastructure is in place for each stage in the project, including exit strategies should the proposal not proceed.

5.6 NATIVE TITLE AND ABORIGINAL HERITAGE

- 5.6.1 Outline any known cultural significance of the site to Aboriginal people, including any stories or myths.
- 5.6.2 Identify the effect on any Aboriginal sites of archaeological, anthropological or other significance under the *Aboriginal Heritage Act 1988*, including any sites listed in the Register of the National Estate and the SA Register of Aboriginal Sites and Objects, or identified after consultation with Aboriginal councils or groups.
- 5.6.3 Detail measures to ensure compliance with the *Aboriginal Heritage Act 1988*.
- 5.6.4 Identify any native title issues in respect of the requirements of the *Native Title Act 1993* (Commonwealth) and the *Native Title (South Australia) Act 1994*.
- 5.6.5 Describe the impact on the appropriate Native Title Claimants (as determined by the Minister for Aboriginal Affairs and Reconciliation) and the consequent impact on the potential ongoing enjoyment of native title rights, if any, by native title holders.

5.7 CONSTRUCTION AND OPERATIONAL EFFECTS

- 5.7.1 Provide a site construction plan and outline strategies to minimise effects on the local environment, particularly the ecological impact on riverine communities.
- 5.7.2 Identify any existing infrastructure or buildings to be removed or retained.
- 5.7.3 Describe the proposed methodology for dredging/floodplain excavation and earthworks drainage, frequency, disposal of excavated material, maintenance activities and impacts on water quality and the environment, particularly turbidity.
- 5.7.4 Identify the source and origin of any construction materials, including revetments and fill for land forming.
- 5.7.5 Describe the implications of placing a large amount of fill on the floodplain, particularly contamination and implications for natural drainage, water circulation and flood management.
- 5.7.6 Provide information on the transport and storage of any construction materials to minimise effects on the local amenity.

- 5.7.7 Identify measures for the control of stormwater run-off, groundwater discharges, dust, mud, vibration, noise, odour (including from rotting aquatic vegetation, algal blooms and organic soils) and other emissions during construction.
- 5.7.8 Describe the implementation of environmentally acceptable work practices.
- 5.7.9 Describe the anticipated timelines for each stage of the project.
- 5.7.10 Describe the impact on road networks during construction and operation of the proposed development.
- 5.7.11 Describe the design and operational measures to prevent stormwater and other run-off from the residential, commercial, tourist and other built areas from directly entering waterways and the riverine environment.
- 5.7.12 Outline measures to minimise turbidity, particularly from boating movements and wave action.
- 5.7.13 Describe the compatibility of land uses, particularly measures to avoid conflict between commercial boating and residents/tourists, including the potential for increased water skiing activities in the vicinity.
- 5.7.14 Outline management controls for housing and commercial construction activities to minimise social and environmental impacts, including building waste.
- 5.7.15 Describe the management agreements between the Mid Murray Council and the proponent during and after construction.
- 5.7.16 Detail long-term management agreements for operation of the proposed development, including the ownership of land and infrastructure.
- 5.7.17 Detail any proposed by-laws and encumbrances to control and manage activities, particularly to ensure that the development is environmentally sustainable in the long-term.
- 5.7.18 Describe the proposed monitoring of impacts during and after construction.

5.8 EFFECTS ON INFRASTRUCTURE REQUIREMENTS

- 5.8.1 Describe the existing infrastructure for gas, electricity, water, sewerage, stormwater management, communications systems and local roads.
- 5.8.2 Describe the impact the proposed development will have on gas, electricity, water, sewerage, stormwater management, communication systems and local roads.
- 5.8.3 Describe the impact the proposed development will have on the existing Mannum township sewage treatment system, including the proposed relocation and expansion of the existing plant, or alternative systems to which the proposed development will connect.
- 5.8.4 Describe the connection to water supply for the proposed development and include information on the quantity of potable water required.
- 5.8.5 Outline the implications for adopting water sensitive urban design measures for managing stormwater and minimising water use.
- 5.8.6 Outline the feasibility of using constructed wetlands and the golf course or open space reserves for managing stormwater run-off.
- 5.8.7 Describe the feasibility of using the golf course, or other land, for the disposal of treated effluent, such as wastewater.
- 5.8.8 Describe the facilities to be provided for waste disposal from recreational, commercial and permanently occupied vessels, including black water, grey water and solid waste.
- 5.8.9 Detail emergency services arrangements.
- 5.8.10 Outline opportunities to incorporate best practice infrastructure design.

5.9 PLANNING AND ENVIRONMENTAL LEGISLATION AND POLICIES

- 5.9.1 Describe the proposal's variance from and consistency with the relevant Development Plan and the Planning Strategy for Regional South Australia.
- 5.9.2 Describe the changes that would be required to be made to the Development Plan to accommodate the proposed uses not covered by any approval made under the Major Developments process.
- 5.9.3 Describe the requirements of the *Environment Protection Act 1993* and associated policies and guidelines, and how these will be addressed, including strategies regarding any non-compliance issues which may arise, eg. separation distances.
- 5.9.4 Describe the requirements of the *River Murray Act 2003* and the Murray-Darling Basin Agreement and the implications for the proposed development.

- 5.9.5 Describe the consistency of the development with State and Commonwealth legislation and initiatives relating to conservation or protection of water quality, the biological environment and heritage items.
- 5.9.6 Detail any recreational boating policies or strategies relevant to the proposal, particularly those that relate to houseboats.
- 5.9.7 Detail any other relevant plans or studies that relate to the area, particularly those that relate to the River Murray.
- 5.9.8 Identify legislative requirements and the range of approvals needed to complete the proposed development.
- 5.9.9 Detail any statutory or other instruments, such as land management agreements, which could be used to control environmental aspects of the proposed development.

Development Act 1993, Section 46B:

EIS process - Specific provisions

46B. (1) This section applies if an EIS must be prepared for a proposed development or project.

(2) The Minister will, after consultation with the proponent -

(a) require the proponent to prepare the EIS; or

(b) determine that the Minister will arrange for the preparation of the EIS.

(3) The EIS must be prepared in accordance with guidelines determined by the Major Developments Panel under this subdivision.

(4) The EIS must include a statement of -

(a) the expected environmental, social and economic effects of the development or project;

(b) the extent to which the expected effects of the development or project are consistent with the provisions of -

(i) any relevant Development Plan; and

(ii) the Planning Strategy; and

(iii) any matters prescribed by the regulations;

(c) if the development or project involves, or is for the purposes of, a prescribed activity of environmental significance as defined by the *Environment Protection Act 1993*, the extent to which the expected effects of the development or project are consistent with -

(i) the objects of the *Environment Protection Act 1993*; and

(ii) the general environmental duty under that Act; and

(iii) relevant environment protection policies under that Act;

(ca) if the development or project is to be undertaken within the Murray-Darling Basin, the extent to which the expected effects of the development or project are consistent with -

(i) the objects of the *River Murray 2003*; and

- (ii) the *Objectives for a Healthy River Murray* under that Act; and
 - (iii) the general duty of care under that Act;
- (cb) if the development or project is to be undertaken within, or is likely to have a direct impact on, the Adelaide Dolphin Sanctuary, the extent to which the expected effects of the development or project are consistent with -
- (i) the objects and objectives of the *Adelaide Dolphin Sanctuary Act 2005*; and
 - (ii) the general duty of care under that Act;
- (d) the proponent's commitments to meet conditions (if any) that should be observed in order to avoid, mitigate or satisfactorily manage and control any potentially adverse effects of the development or project on the environment;
- (e) other particulars in relation to the development or project required -
- (i) by the regulations; or
 - (ii) by the Minister.

(5) After the EIS has been prepared, the Minister -

- (a) -
- (i) must, if the EIS relates to a development or project that involves, or is for the purposes of, a prescribed activity of environmental significance as defined by the *Environment Protection Act 1993*, refer the EIS to the Environment Protection Authority; and
 - (ia) must, if the EIS relates to a development or project that is to be undertaken within the Murray-Darling Basin, refer the EIS to the Minister for the River Murray; and
 - (ib) must, if the EIS relates to a development or project that is to be undertaken within, or is likely to have a direct impact on, the Adelaide Dolphin Sanctuary, refer the EIS to the Minister for the Adelaide Dolphin Sanctuary; and
 - (ii) must refer the EIS to the relevant council (or councils), and to any prescribed authority or body; and
 - (iii) may refer the EIS to such other authorities or bodies as the Minister thinks fit,

for comment and report within the time prescribed by the regulations; and

- (b) must ensure that copies of the EIS are available for public inspection and purchase (during normal office hours) for at least 30 business days at a place or places

determined by the Minister and, by public advertisement, give notice of the availability of copies of the EIS and invite interested persons to make written submissions to the Minister on the EIS within the time determined by the Minister for the purposes of this paragraph.

(6) The Minister must appoint a suitable person to conduct a public meeting during the period that applies under subsection (5)(b) in accordance with the requirements of the regulations.

(7) The Minister must, after the expiration of the time period that applies under subsection (5)(b), give to the proponent copies of all submissions made within time under that subsection.

(8) The proponent must then prepare a written response to -

- (a) matters raised by the Minister, the Environment Protection Authority, any council or any prescribed or specified authority or body, for consideration by the proponent; and
- (b) all submissions referred to the proponent under subsection (7),

and provide a copy of that response to the Minister.

(9) The Minister must then prepare a report (an "Assessment Report") that sets out or includes -

- (a) the Minister's assessment of the development or project; and
- (b) the Minister's comments (if any) on -
 - (i) the EIS; and
 - (ii) any submissions made under subsection (5); and
 - (iii) the proponent's response under subsection (8); and
- (c) comments provided by the Environment Protection Authority, a council or other authority or body for inclusion in the report; and
- (d) other comments or matter as the Minister thinks fit.

(10) The Minister must -

- (a) notify a person who made a written submission under subsection (5) of the availability of the Assessment Report in the manner prescribed by the regulations; and
- (b) by public advertisement, give notice of the place or places at which copies of the Assessment Report are available for inspection and purchase.

(11) Copies of the EIS, the proponent's response under subsection (8), and the Assessment Report must be kept available for inspection and purchase at a place determined by the Minister for a period determined by the Minister.

(12) If a proposed development or project to which an EIS relates will, if the development or project proceeds, be situated wholly or partly within the area of a council, the Minister must give a copy of the EIS, the proponent's response under subsection (8), and the Assessment Report to the council.

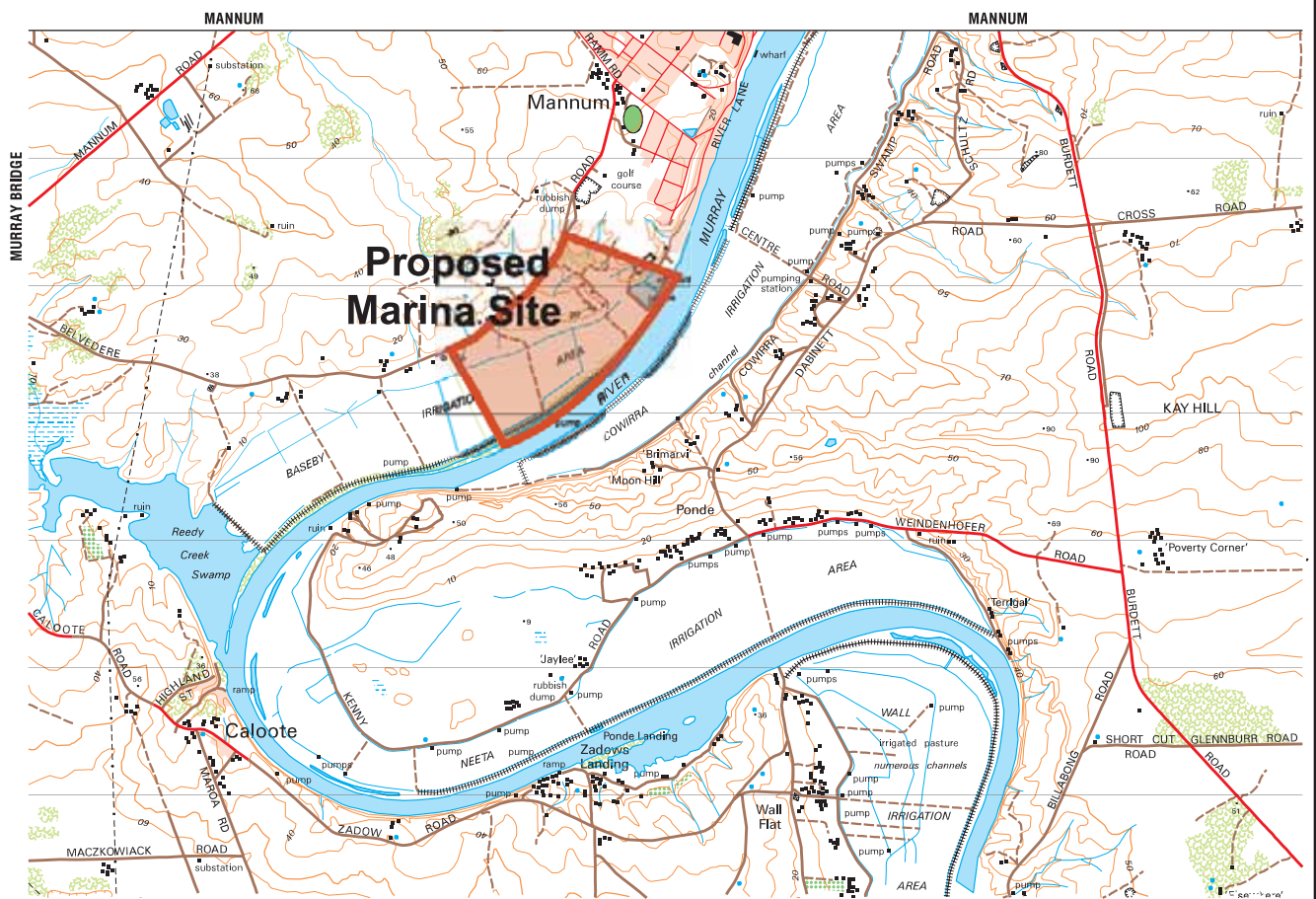
46B—EIS process—Specific provisions

- (1) This section applies if an EIS must be prepared for a proposed development or project.
- (2) The Minister will, after consultation with the proponent—
 - (a) require the proponent to prepare the EIS; or
 - (b) determine that the Minister will arrange for the preparation of the EIS.
- (3) The EIS must be prepared in accordance with guidelines determined by the Major Developments Panel under this subdivision.
- (4) The EIS must include a statement of—
 - (a) the expected environmental, social and economic effects of the development or project;
 - (b) the extent to which the expected effects of the development or project are consistent with the provisions of—
 - (i) any relevant Development Plan; and
 - (ii) the Planning Strategy; and
 - (iii) any matters prescribed by the regulations;
 - (c) if the development or project involves, or is for the purposes of, a prescribed activity of environmental significance as defined by the *Environment Protection Act 1993*, the extent to which the expected effects of the development or project are consistent with—
 - (i) the objects of the *Environment Protection Act 1993*; and
 - (ii) the general environmental duty under that Act; and
 - (iii) relevant environment protection policies under that Act;
 - (ca) if the development or project is to be undertaken within the Murray-Darling Basin, the extent to which the expected effects of the development or project are consistent with—
 - (i) the objects of the *River Murray Act 2003*; and
 - (ii) the *Objectives for a Healthy River Murray* under that Act; and
 - (iii) the general duty of care under that Act;
 - (cb) if the development or project is to be undertaken within, or is likely to have a direct impact on, the Adelaide Dolphin Sanctuary, the extent to which the expected effects of the development or project are consistent with—
 - (i) the objects and objectives of the *Adelaide Dolphin Sanctuary Act 2005*; and
 - (ii) the general duty of care under that Act;

- (d) the proponent's commitments to meet conditions (if any) that should be observed in order to avoid, mitigate or satisfactorily manage and control any potentially adverse effects of the development or project on the environment;
 - (e) other particulars in relation to the development or project required—
 - (i) by the regulations; or
 - (ii) by the Minister.
- (5) After the EIS has been prepared, the Minister—
- (a) —
 - (i) must, if the EIS relates to a development or project that involves, or is for the purposes of, a prescribed activity of environmental significance as defined by the *Environment Protection Act 1993*, refer the EIS to the Environment Protection Authority; and
 - (ia) must, if the EIS relates to a development or project that is to be undertaken within the Murray-Darling Basin, refer the EIS to the Minister for the River Murray; and
 - (ib) must, if the EIS relates to a development or project that is to be undertaken within, or is likely to have a direct impact on, the Adelaide Dolphin Sanctuary, refer the EIS to the Minister for the Adelaide Dolphin Sanctuary; and
 - (ii) must refer the EIS to the relevant council (or councils), and to any prescribed authority or body; and
 - (iii) may refer the EIS to such other authorities or bodies as the Minister thinks fit,

for comment and report within the time prescribed by the regulations; and
 - (b) must ensure that copies of the EIS are available for public inspection and purchase (during normal office hours) for at least 30 business days at a place or places determined by the Minister and, by public advertisement, give notice of the availability of copies of the EIS and invite interested persons to make written submissions to the Minister on the EIS within the time determined by the Minister for the purposes of this paragraph.
- (6) The Minister must appoint a suitable person to conduct a public meeting during the period that applies under subsection (5)(b) in accordance with the requirements of the regulations.
- (7) The Minister must, after the expiration of the time period that applies under subsection (5)(b), give to the proponent copies of all submissions made within time under that subsection.
- (8) The proponent must then prepare a written response to—
- (a) matters raised by a Minister, the Environment Protection Authority, any council or any prescribed or specified authority or body, for consideration by the proponent; and
 - (b) all submissions referred to the proponent under subsection (7),
- and provide a copy of that response to the Minister.
- (9) The Minister must then prepare a report (an *Assessment Report*) that sets out or includes—

- (a) the Minister's assessment of the development or project; and
 - (b) the Minister's comments (if any) on—
 - (i) the EIS; and
 - (ii) any submissions made under subsection (5); and
 - (iii) the proponent's response under subsection (8); and
 - (c) comments provided by the Environment Protection Authority, a council or other authority or body for inclusion in the report; and
 - (d) other comments or matter as the Minister thinks fit.
- (10) The Minister must—
- (a) notify a person who made a written submission under subsection (5) of the availability of the Assessment Report in the manner prescribed by the regulations; and
 - (b) by public advertisement, give notice of the place or places at which copies of the Assessment Report are available for inspection and purchase.
- (11) Copies of the EIS, the proponent's response under subsection (8), and the Assessment Report must be kept available for inspection and purchase at a place determined by the Minister for a period determined by the Minister.
- (12) If a proposed development or project to which an EIS relates will, if the development or project proceeds, be situated wholly or partly within the area of a council, the Minister must give a copy of the EIS, the proponent's response under subsection (8), and the Assessment Report to the council.



Location Plan

