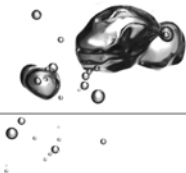


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1. Introduction

The introduction to the Emu Swamp Dam Environmental Impact Statement (EIS) presents an overview of the Project and the Proponent, the Stanthorpe Shire Council (SSC). It also presents the Project objectives, the environmental impact assessment process and the planning and approvals context.

1.1 Project Description

SSC is considering two options for the proposed Emu Swamp Dam Project ('the Project'):

- Urban Water Supply Dam; and
- Combined Urban and Irrigation Dam

This EIS assesses both options. The proposed Urban Water Supply Dam option is a 5,000 ML dam with a water entitlement licence of 1,500 ML/year. A 23 km pipeline (the urban pipeline) would connect the dam to the Mt Marlay water treatment plant near Stanthorpe.

The proposed Combined Urban and Irrigation Dam option is a 10,500 ML dam. The urban component has a water entitlement licence of 1,500 ML/year. The irrigation component has a water entitlement licence of 1,740 ML/year. A 23 km pipeline (the Urban Pipeline) would connect the dam to the Mt Marlay water treatment plant near Stanthorpe. An irrigation pipeline network of approximately 102 km (the Irrigation Pipeline) would connect the dam to a number of irrigators throughout Stanthorpe Shire.

The proposed dam will be constructed on the Severn River 15 km southwest of Stanthorpe. **Figure 1-1** shows the dam location.

The Project objectives are presented in **Section 1.2**.

Construction of the dam will occur over a period of approximately 18 months with the majority of the works occurring in the immediate vicinity of the proposed dam wall. Construction works will also occur in the corridor of the urban pipeline and the irrigation pipeline.

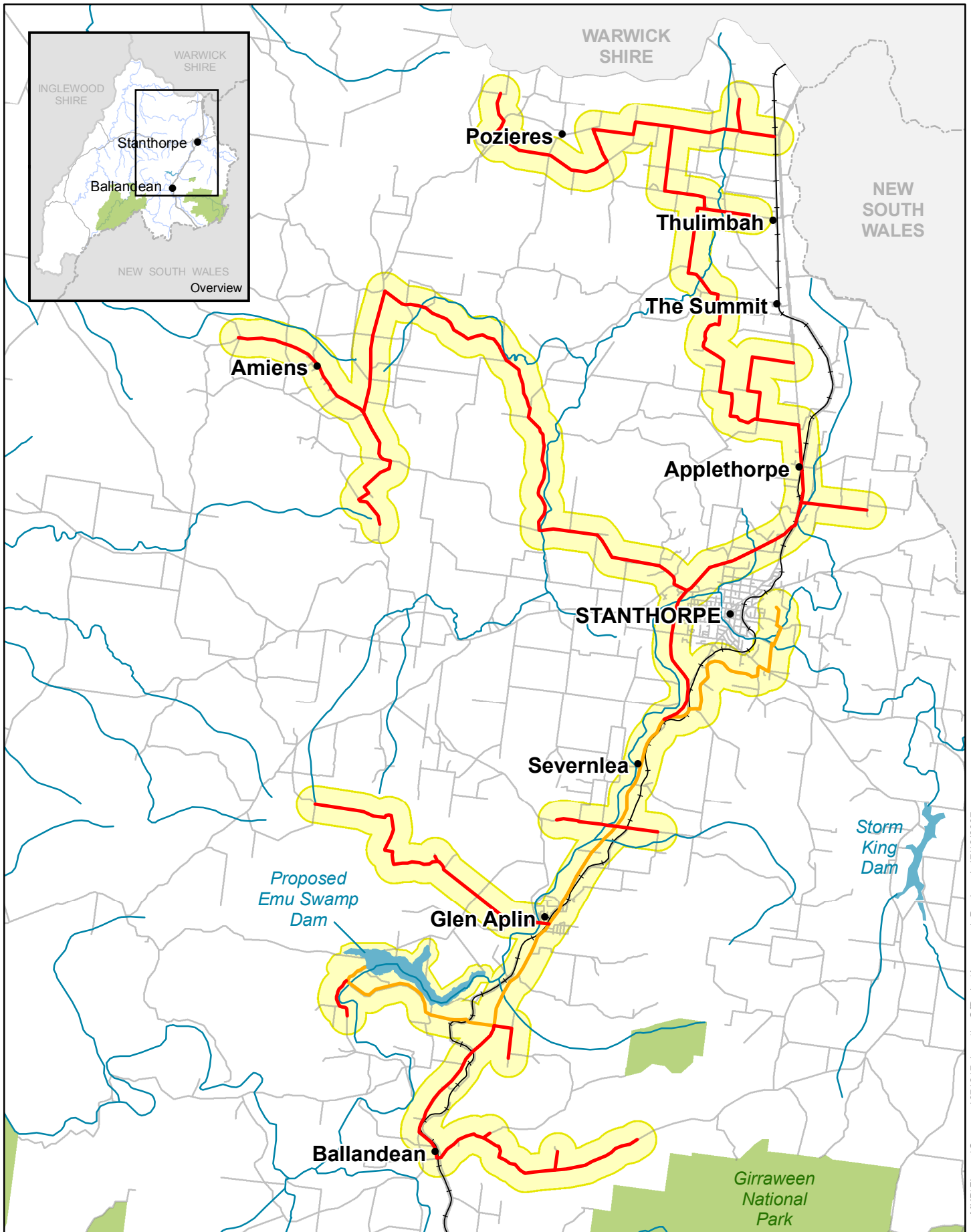
Section 3 of the EIS provides a detailed description of the Project and the associated works to be delivered as part of the construction of the dam. These are summarised below:

- quarrying operations;
- manufacturing concrete;
- Roller Compacted Concrete (RCC) dam wall construction;
- pipeline construction
- creation of recreation facilities;
- vegetation clearing and site establishment; and
- constructing Stalling Lane Access Road.

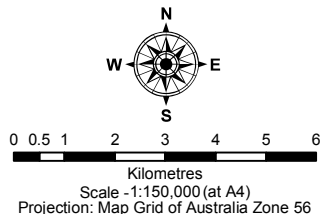
1.2 Project Objectives and Scope

The Project has two key objectives and these are:

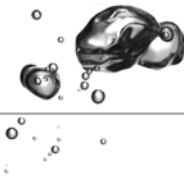
- increasing the urban supply for the town of Stanthorpe and outlying villages (for both the Urban Water Supply Dam and the Combined Urban and Irrigation Dam); and
- providing a secure source of irrigation water to supplement existing water supplies for a number of irrigators throughout the Shire (only for the Combined Urban and Irrigation Dam).



- Legend**
- Urban Pipeline
 - Irrigation Pipeline
 - Inundation Area
 - Project Area



EMU SWAMP DAM EIS
 Project Area
Figure 1-1 Proposed Emu Swamp Dam, Urban Pipeline and Irrigation Pipeline



1.3 The Proponent

The proponent of the Urban Water Supply Dam Project is SSC.

The proponent of the Combined Water and Irrigation Dam is SSC on behalf of a local Irrigators Group

SSC undertakes and delivers a wide range of business and municipal activities and services. All activities of SSC are to service and support the community of the Stanthorpe Shire. SSC has the responsibility to set local laws, collect rates and deliver municipal services to the community. Services provided by SSC include animal control, building and development planning and control, cemetery management, disaster management, community health, laws and regulations, libraries, parking, rate collection and management, waste management, cleaning and recycling and water and wastewater management. All activities of occur within the boundaries of the Stanthorpe Local Government Area (LGA).

The Irrigators Group consists of approximately 50 local irrigators who want to gain increased water security for their existing farming operations. The Irrigators Group will be a customer of the Council who will be responsible for the operation of the Combined Urban and Irrigation Dam. The Irrigators Group will be responsible for the distribution of water to individual irrigators.

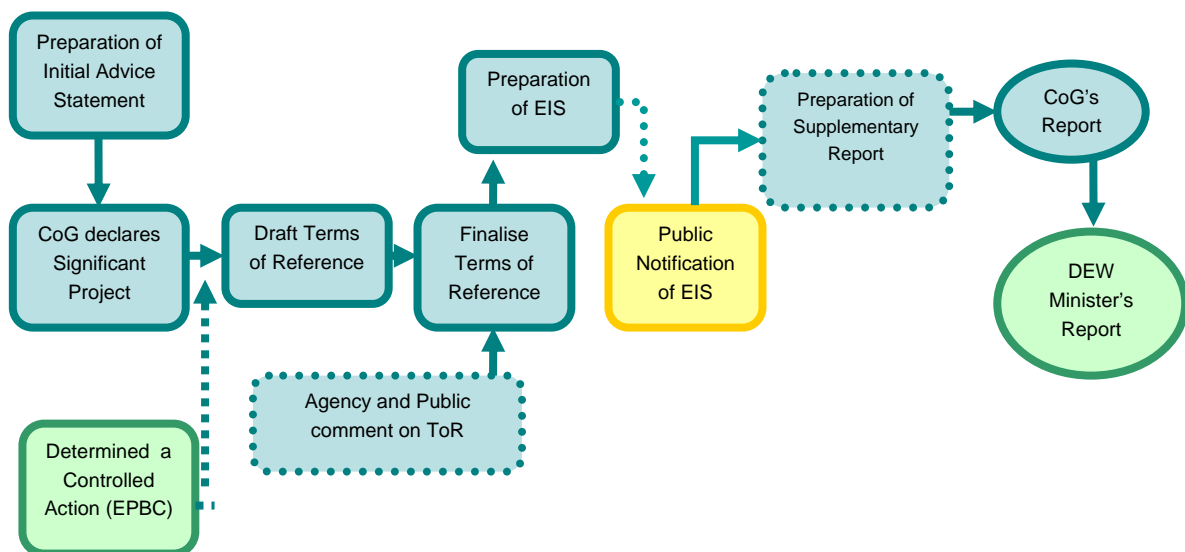
1.4 The Environmental Impact Assessment Process

SSC sought to have the environmental and planning approvals required for this Project to be assessed under the *State Development and Public Works Organisation Act 1971* (SDPWO Act) thereby providing independent environmental evaluation of the Project. The EIS assessment process under the SDPWO Act is shown in **Figure 1-2**.

An Initial Advice Statement was prepared and submitted to the Queensland Coordinator-General (CoG) on 13 September 2006. The Initial Advice Statement was submitted to the CoG to provide sufficient information to:

- enable consideration for declaration of the Project as a significant project under the SDPWO Act; and
- provide information to enable advisory agencies and the public to have input into the draft Terms of Reference (ToR) for the EIS.

■ **Figure 1-2 The EIS Process under the SDPWO Act**



The CoG declared on 5 February 2007 that the Project was a significant project for which an EIS is required, and this EIS has been prepared to satisfy the requirement of the SDPWO Act.

Draft ToR for the EIS were prepared by the CoG and advertised from 31 March 2007 inviting public comment. Submissions were accepted until 8 May 2007. Matters raised in submissions were considered by the CoG and where appropriate incorporated into the final ToR, which were presented to the proponent on 27 June 2007. A copy of the ToR is contained in **Appendix A** of this EIS.

The EIS also provides the CoG with a framework to:

- consider the economic, social and environmental aspects of the Project in the context of legislative and policy provisions and decide whether the Project can proceed;
- set conditions for approval, as appropriate, to seek to achieve economically, socially and environmentally sustainable development; and
- where necessary, recommend an environmental management and monitoring program.

The EIS has been written to provide information to members of the community, organisations and Government agencies that have an interest in the Project, who are invited to make formal submissions on the EIS, in accordance with the SDPWO Act (see **Section 1.6.4**).

Although the Project will be assessed under the EIS provisions of the SDPWO Act, all approvals under the relevant State Government legislation will still be required to be obtained. All approvals required under Commonwealth, State and Local laws are identified in **Appendix B** of the EIS.

The Commonwealth Department of the Environment, Water, Heritage and the Arts (DEW) was formally consulted through a referral of the Emu Swamp Dam Project under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to determine whether the Project was a 'controlled action' under the Act. The Department subsequently determined on 3 January 2007 that the Emu Swamp Dam Project was a controlled action due to the potential impact on threatened listed species and communities. Consequently, the Project requires assessment and approval under the EPBC Act.

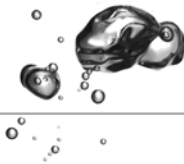
The Australian Government has accredited the EIS process under the SDPWO Act under a bilateral agreement between the Australian and Queensland governments. This will enable the EIS to meet the environmental impact assessment requirements under both the Australian and Queensland legislation.

1.5 Structure and Presentation of Findings

The results of investigations and findings associated with the Emu Swamp Dam Project are presented in the EIS as a comprehensive document providing sufficient information to allow an informed decision on the potential impacts of the Project and mitigation measures. The EIS provides the reader with information and background to understand:

- the scope of the Project;
- the Project alternatives that have been considered;
- the existing environment of the Project;
- impacts that may occur as a result of the Project;
- the proposed solutions to particular issues identified in the EIS; and
- measures to mitigate any adverse impacts.

The EIS provides government agencies with technical details on the Project impacts and mitigation measures which will be assessed as part of the EIS approval. The EIS sets the foundation for subsequent approvals, necessary for dam construction.



The EIS also includes an outline of the Draft Environmental Management Plans (EMPs), outlining the mitigation measures and management framework, to demonstrate the commitment of SSC to ensure that the recommendations of the EIS are implemented for both the construction and operational phases of the Project.

The Executive Summary provides a broad overview of the Emu Swamp Dam Project, the existing environment and the identified Project impacts. It also provides a summary of the conclusions reached and the recommendations put forward to the CoG. To gain a comprehensive understanding of the complexities of the Project, its likely impacts, proposed mitigation measures and outcomes of the process, the Executive Summary should be read in conjunction with the EIS and other supporting documentation.

The EIS is presented in 2 volumes. **Table 1-1** lists the volumes of the EIS and the sections contained in each volume.

■ **Table 1-1 EIS Structure**

EIS Volume	EIS Section
Volume 1	Section 1 - Introduction Section 2 - Project Need Section 3 - Project Description Section 4 - Topography, Geology, Soils and Geomorphology Section 5 - Land Use and Planning Section 6 - Land Contamination Section 7 - Surface Water Resources and Water Quality Section 8 - Groundwater Section 9 - Terrestrial Ecology Section 10 - Aquatic Ecology
Volume 2	Section 11 - Air Quality and Greenhouse Gases Section 12 - Noise and Vibration Section 13 - Transport and infrastructure Section 14 - Socio-Economic Section 15 - Cultural Heritage Section 16 - Landscape and Visual Amenity Section 17 - Waste Management Section 18 - Hazard and Risk Section 19 - Cumulative Impacts Section 20 - Environmental Management Plans Section 21 - References Appendices A - Final Terms of Reference B - Statutory Permits and Development Approvals C - Potential Impacts on Matters of National Environmental Significance D - Consultation Report E - Project Study Team Qualifications and Experience F - Supporting Information G - List of Proponent Commitments H - Data Disclosure

1.6 Public Consultation Process

1.6.1 Purpose and Scope of Consultation Process

As part of the development of the EIS for the Project an extensive community consultation program was implemented between March and November 2007. The consultation process aimed to inform, consult and involve

the community in order to achieve positive outcomes for stakeholders directly and indirectly impacted by the Project.

Specifically, the objectives of community consultation for the Project were to:

- enhance community awareness and understanding of the Project;
- identify key stakeholders (including stakeholder group representatives), their needs and values;
- facilitate involvement by the community into Project development;
- provide information on the EIS process;
- seek input in terms of key issues and concerns and suggestions to mitigate these concerns
- seek feedback on the preferred concept;
- provide information on the outcomes of Project studies; and
- demonstrate how issues of concern to the community were identified, considered and addressed during the EIS process.

1.6.2 Stakeholder Consultation

SSC has directly and indirectly engaged a number of stakeholders via a comprehensive stakeholder and community engagement program.

Consultation activities undertaken since March 2007 have included:

- face-to-face meetings with stakeholders, including property owners, environmental groups, farmers and irrigators, Stanthorpe Shire Councillors, business owners and traditional owners;
- distribution of Fact Sheets containing information about the Project;
- project information on the SSC website;
- newspaper articles;
- call contact number, through the SSC call centre;
- site visits;
- emails; and
- letters.

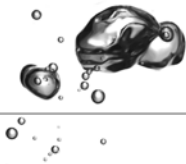
An overview of the key issues raised during consultation between March 2007 to November 2007 are outlined in **Appendix D** of the EIS. The top four key issues of concern for stakeholders include:

- 1) property impacts, including land acquisition process and compensation;
- 2) need for reliable and secure water supply;
- 3) employment and training opportunities provided by the dam, including during the construction phase, and through improved business opportunities following construction; and
- 4) location of the dam and pipeline and extent of the inundation area.

1.6.3 Agency Consultation

SSC has held several meetings with Government agencies about the Project as part of the preparation of the EIS. These meetings are summarised below.

A briefing for all interested State Government agencies was held on 26 April 2007, at the start of the display of the draft ToR. The briefing provided an overview of the scope of the Project, as background to the ToR, to assist agencies comment on the draft ToR. Departments present at this briefing were:



- Environmental Protection Agency (EPA);
- Department of Natural Resources and Water (DNRW);
- Department of Primary Industries and Fisheries (DPIF);
- Department of Main Roads (DMR);
- Department of State Development;
- Department of Infrastructure;
- Department of Local Government, Planning, Sport and Recreation;
- Queensland Health;
- Department of Emergency Services;
- Department of Housing; and,
- Department of Communities.

A series of meetings have been held with DNRW to discuss the potential impact of the project on the hydrology of the Severn River. The meetings established the operating conditions for the dam to protect rights of water licence holders and the environment downstream of the proposed dam.

A meeting was held with DNRW on 9 October 2007 to discuss potential offset strategies for endangered vegetation communities. It was agreed that it would not be possible to agree a formalised offset strategy before submission of the EIS. SSC have agreed to formalise a compensatory habitat package in response to the clearing and inundation of native vegetation within 12 months of the project being approved.

A series of meetings have been held with EPA to discuss the scope of the Project and the potential impacts on terrestrial and aquatic ecology. EPA has raised a number of issues that needed to be addressed as part of the EIS.

A series of meetings have been held with the Department of Primary Industries and Fisheries (DPIF) to discuss the need for a fish transfer device on the proposed dam. A site inspection and aerial flyover with DPIF occurred on 9 October 2007 to inspect the condition and hydrology of the Severn River. This inspection provided background to ongoing discussions on the need for, and type of fish transfer device to be built as part of the Project.

A meeting was held with DMR in Warwick on 8 October 2007 to outline the potential impacts on the road network during construction and to discuss the issues pertaining to location of the urban and irrigation pipelines within the road reserve.

1.6.4 Submissions on the EIS

The EIS for the Project will be on public display for 30 business days from 12th January 2007 at a number of locations including Stanthorpe Shire Library and SSC offices. This process aims to inform and engage stakeholders with an interest in the Project.

Members of the community, organisations and Government agencies are invited to make formal submissions on the EIS, in accordance with the SDPWO Act. Submissions are to be written (either electronically or in hard copy) and, in the case of hard copy submissions, signed by each person making the submission. The submission should state the name and address of each person making the submission and state the grounds of the submission and the facts and circumstances relied on to support the submission.

The CoG will consider all properly made submissions on the EIS received within the submission period. Copies of all submissions will be provided to the Proponent. All submissions will be treated as public documents, unless the author of the submission requests that the submission be treated as a confidential submission.

Submissions are to be received by the CoG on or before close of business on the last day of the submission period. The submission period will be clarified in public advertisements made in the Courier Mail and the Border Post.

Written submissions should be addressed to:

Attention: EIS Project Manager - Emu Swamp Dam Project
 Major Projects Division
 Department of Infrastructure and Planning
 PO Box 15009
 Brisbane City East QLD 4002; or
 Fax on: (07) 3225 8282; or
 Email to: emuswampdam@infrastructure.qld.gov.au

A properly made submission on the EIS will be considered a properly made submission for any application for development approval for a material change of use for this Project under the *Integrated Planning Act 1997*. If such an application is made to the assessment manager, the information and referral stage and the notification stage outlined in the *Integrated Planning Act 1997* will be deemed to be fulfilled by the EIS process under the SDPWO Act.

1.7 Planning Context

This section provides an assessment of the Project’s consistency with the relevant state, regional and local planning policies.

1.7.1 Water Resource (Border Rivers) Plan

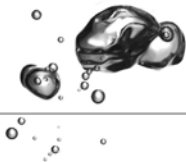
The *Water Resource (Border Rivers) Plan* (WRP) was released by DNRW in 2003. The WRP was developed from an extensive stakeholder engagement program and a comprehensive water resource modelling process undertaken by the DNRW. New water allocations for Stanthorpe Shire from the WRP are presented in **Table 1-2**.

■ Table 1-2 : New Water Allocations from Stanthorpe Shire

	New Water Allocations
Town water supply	1,500 ML/year
Irrigation & associated industry	3,500 ML/year

Source: DNRW 2003

The draft *Border Rivers Resource Operations Plan* (ROP) was released by DNRW in January 2007. The draft ROP contains proposals for the many issues that must be addressed in implementing the Water Resource (Border Rivers) Plan 2003. The draft ROP distributes the unallocated (agricultural) water between the sub-catchments upstream of the Emu Swamp Dam site as shown in **Table 1-3**.



■ **Table 1-3 : Distribution of Irrigation Water by Sub-Catchment**

Sub-Catchment	Pump Capacity (ML/day)	Flow Conditions (ML/day)	Long Term Average Annual Take (ML/year)	Average Opportunity (Days/year)
Cannon Creek	50	100	75	2
Upper Broadwater	50	100	75	2
Lower Broadwater	75	120	400	9
Upper Quart Pot Creek	70	210	350	6
Lower Quart Pot Creek	70	210	390	9
Four Mile Creek	50	140	50	2
Upper Severn River	80	350	400	11
Total			1,740	

Source: DNRW 2007

The key points to note from the draft ROP are:

- unallocated irrigation water is to be provided from a dam on the Severn River provided the dam is declared to be a significant project under the SDPWO Act;
- unallocated irrigation water that is not required for a declared significant project is to be released via an auction process within 18 months of the release of the final ROP;
- auctioned water will comprise small volumes tied to sub-catchments and having the pumping and flow constraints – as shown above the availability of this water will be only a few days per year;
- there will be limited, if any, opportunities to trade irrigation water within the catchment unless a dam and pipeline network is constructed;
- farmers are interested in the combined urban and irrigation dam project because the availability of water from the dam will be much better than from natural runoff; and
- the final ROP (yet to be released) will define how water infrastructure is to be operated so that it complies with Water Allocation Security Objectives (WASOs) and Environmental Flow Objectives (EFOs):

The Project has been developed to comply with the objectives of the WRP and the draft ROP.

1.7.2 Stanthorpe Shire Council Planning Scheme

The SSC Planning Scheme establishes a framework for managing development and land uses in order to broad strategic objectives for the Shire. The Project is assessed against the Planning Scheme in **Section 5** of the EIS.

1.7.3 Local Laws

Under Chapter 2, Part of the *Local Government Act 1993*, each local government has jurisdiction to make laws within their local government area. The local laws that are applicable to the Project are:

- No. 5 – Keeping and Control of Animals
- No. 8 – Control of Signs
- No. 12 – Blasting Operations
- No. 13 – Parks and Reserves
- No. 14 – Control of Nuisances
- No. 17 – Roads
- No. 22 – Control of Local Government Premises
- No.23 – Water Supply

1.8 Project Approvals

This section identifies all relevant Commonwealth and State Legislation applicable to the Project. It describes the approvals process and identifies the appropriate approvals required for the respective elements of the Project.

1.8.1 Commonwealth Legislation and Initiatives

Environment Protection and Biodiversity Conservation Act 1999

The primary objective of the EPBC Act is to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance.

Under the EPBC Act, an action requires the approval of the Environment Minister if it has, will have, or is likely to have a significant impact on a Matter of National Environmental Significance. Matters of National Environmental Significance under the EPBC Act include:

- the world heritage values of a declared World Heritage Property;
- the National Heritage values of a National Heritage place;
- the ecological character of a declared Ramsar wetland;
- listed threatened species and communities;
- listed migratory species;
- nuclear actions; and
- the Commonwealth marine environment.

The Project has been determined to be a controlled action under the EPBC Act with the following controlling provisions:

- Sections 18 and 18a – Listed threatened species and communities

The Australian Government has accredited the EIS process under the SDPWO Act under a bilateral agreement between the Australian and Queensland governments. This will enable the EIS to meet the environmental impact assessment requirements under both the Australian and Queensland legislation.

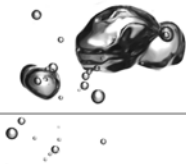
1.8.2 State Legislation

State Development and Public Works Organisation Act 1971

Under Section 26 of the SDPWO Act, the CoG may declare by gazette notice, that a Project is a ‘Significant Project’. The CoG may declare a project to be a ‘significant project’ based on one or more of the following criteria:

- complex approval requirements, including local, State and Australian Government involvement;
- a high level of investment in the State;
- potential effects on infrastructure and/or the environment;
- provision of substantial employment opportunities, and
- strategic significance to a locality, region or the State.

On 5 February 2007, the CoG declared the Emu Swamp Dam Project as a ‘Significant Project’ for which an EIS is required, in accordance with Part 4 of the SDPWO Act. The EIS assessment process under the SDPWO Act is presented in **Figure 1-2**. Although the Project has been declared a Significant Project, this does not negate the legislative requirements to obtain all relevant planning and environmental approvals under State legislation. The following provides a summary of the relevant legislation and approvals applicable to the Project. A list of approval requirements is also provided in **Appendix B**.



Integrated Planning Act 1997

The *Integrated Planning Act 1997*, (IPA), forms the foundation of Queensland's planning and development assessment legislation. The purpose of this Act is to seek to achieve ecological sustainability by:

- coordinating and integrating planning at the local, regional and state levels;
- managing the process by which development occurs; and
- managing the effects of development on the environment (including managing the use of premises).

IPA establishes a step-by-step process for lodging, assessing and deciding development applications. This process is known as the Integrated Development System (IDAS). The following Acts (relevant to this Project) have been incorporated into the IDAS process:

- *Environmental Protection Act 1994*
- *Fisheries Act 1994*
- *Queensland Heritage Act 1992*
- *Vegetation Management Act 1999*
- *Water Act 2000*

All approvals required for the Project are identified in **Appendix B**. These approvals will be gained separately to the EIS process.

Environmental Protection Act 1994

Environmentally Relevant Activities

The *Environmental Protection Act 1994* (EP Act) includes a requirement for certain activities, being Environmentally Relevant Activities (ERA) to be licensed. Approval to operate an ERA is obtained through a Development Approval under IPA. ERAs are defined in Schedule 1 of the *Environmental Protection Regulation 1998*.

The Project will require the following ERAs which will be obtained through separate IPA applications:

- ERA 7 – chemical storage;
- ERA 11 - petroleum storage;
- ERA 19 - dredging material;
- ERA 20 – extracting rock or other material;
- ERA 22 – screening materials;
- ERA 62 – concrete batching; and
- ERA 84 – regulated waste storage.

Duty of Care

In addition to development approval requirements, Sections 319 and 320 of the EP Act establish a duty of care to all individuals and organisations to protect the environment. Therefore, it is not permissible to cause environmental harm (as defined in the Act) whilst undertaking any activity unless all reasonable and practical means are taken to minimise that harm.

Environmental Protection Policies

The EP Act outlines the scope and content for preparing environmental protection policies to protect Queensland's environment. These policies may be made with regard to the environment or anything that affects or may affect the environment. Environmental Protection Policies exist for:

- *Air - Environmental Protection (Air) Policy 1997.* The EPP (Air) aims to protect the air quality of Queensland by identifying environmental values to be enhanced or protected, sets goals for air quality and provides a framework for making decisions on the management of the air environment and involving the community in achieving these goals.
- *Waste - Environmental Protection (Waste Management) Policy 2000.* The EPP (Waste Management) intends to protect the Queensland environment by identifying values to be protected with regard to waste management, providing a framework to make consistent decisions, ensure waste is managed in a manner with the principles of ecologically sustainable development, minimising the impact of waste on the environment, minimising the volume of waste generated, maximising recycling and providing for the preparation of waste management plans.
- *Noise - Environmental Protection (Noise) Policy 1997.* The EPP (Noise) protects the acoustic environment of Queensland by identifying values to be protected with regard to noise, specifying acoustic quality objectives, providing for a framework for consistent decisions with regard to noise and developing noise management plans.
- *Water - Environmental Protection (Water) Policy 1997.* The EPP (Water) protects the waters of Queensland by providing a framework for identifying environmental values for Queensland waters, deciding and stating water quality guidelines and objectives for water quality and making consistent and equitable decisions regarding the efficient use of resources, as well as involving the community through consultation and education.

Among other things, these policies establish the desired state of the environment against which development approvals can be assessed. Development approvals for the Project therefore need to demonstrate compliance and consistency with these policies.

Fisheries Act 1994

The *Fisheries Act 1994* regulates fisheries resources and fish habitats, and was 'rolled' into the IPA and IDAS process on 1 March 2005. The *Fisheries Act 1994* and *Fisheries Regulation 1995* are administered by the DPIF, and regulate development including:

- aquaculture projects;
- waterway barrier works;
- removal, destruction or damage of marine plants; and
- activities being undertaken in a declared Fish Habitat Area.

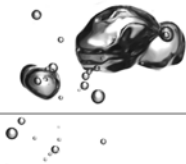
For the Project, it will be necessary to apply for a waterway barrier works approval for the construction of the dam wall. As part of the approval for a water barrier work, the Chief Executive of the DPIF may direct that a fishway be constructed as part of the Project, to allow fish to pass the barrier.

As part of the design process for the dam, SSC has commenced negotiations with DPIF on the need for a fishway. The aquatic ecology studies reported in **Section 10** of the EIS have been undertaken to assist with the collection of data relevant to the assessment of the water barrier works approval. Discussions with DPIF have centred on the information needs of DPIF and the scope and methodology of the fish surveys that will be used to make a final determination of the application for a waterway barrier works approval.

Vegetation Management Act 1999

The Urban Water Supply Dam will cover an area of 110 ha with a FSL of 734.5 m AHD. The Combined Urban and Irrigation Dam will cover an area of 196 ha with a FSL of 738m AHD. This will result in the permanent inundation of a maximum of 107 ha of mapped regional ecosystems.

Under the *Vegetation Management Act 1999* (VMA) the Project requires approval for the clearing of native vegetation. An application will need to be submitted to the DNRW to obtain an Ongoing Purposes Clearing Permit



for the Project. As part of this application, vegetation offsets will be required to maintain the extent of relevant native vegetation and associated environmental values. Various policies and codes under the VMA set out performance requirements that applications for clearing native vegetation must meet.

The Policy for Vegetation Management Offsets applies to an offset proposed to meet a performance requirement under a Regional Vegetation Management Code. To meet the performance requirements of the VMA and the Policy, the clearing application for the Project must provide vegetation offsets. SSC has identified what the proposed impacts to vegetation and wildlife are as a result of the Project and has undertaken to develop a compensatory habitat strategy for the Project, as a response to the Policy for Vegetation Management Offsets. The compensatory habitat strategy prepared for the Project is described in **Section 09** of the EIS.

SSC is committed to delivering a compensatory habitat package in response the clearing and inundation of native vegetation. The objectives of the compensatory habitat strategy will be twofold:

- the strategy will aim to provide tangible conservation and biodiversity benefits at the local and regional scale, with an emphasis on threatened species conservation (species listed as threatened under the EPBC Act); and
- the strategy will seek to comply with the intent of the VMA and associated Codes and Policies.

Water Act 2000

The *Water Act 2000* provides a legislative basis for the sustainable planning and management of the State's non-tidal water resources. The *Water Act 2000* identifies that most water related developments or developments affecting water supply and freshwater streams require assessment and approval under the IPA.

The IPA defines water related developments as:

- most works in a watercourse (pumps, gravity diversions, stream diversions, weirs, barrages and dams);
- works that interfere with overland flow (in a declared 'Overland Flow' area);
- artesian bores; and
- subartesian bores (in a declared 'groundwater' area).

While some developments are exempt or self-assessable, others require a development permit from the Assessment Manager, being either DNRW or the Local Government authority.

There is potential for the requirement of a number of permits and licenses under the *Water Act 2000* including the following:

- development permit (operational works) for the construction of a referable dam;
- failure impact assessment is required under Section 480 for dams that are more than 8m in height and meet certain storage capacity criteria;
- permit to take water from a watercourse for a specified purpose where the activity has no foreseeable end date. A water allocation or resource operation license is also required; and
- riverine Protection Permit to destroy vegetation, excavate or place fill in a watercourse under Section 266 and Section 814.

Nature Conservation Act 1992

The *Nature Conservation Act 1992* is intended to conserve biological diversity, ecologically sustainable use of wildlife, ecologically sustainable development and international criteria developed by the World Conservation Union (International Union for the Conservation of Nature and Natural Resources) for establishing and managing Protected Areas. An approval under the provisions of the *Nature Conservation Act* (not the IPA) is required to disturb, harm or destroy the species listed under the Act found within the Project footprint.

Aboriginal Cultural Heritage Act 2003

The *Aboriginal Cultural Heritage Act 2003* aims to provide recognition and protection of Aboriginal and Torres Strait Islander cultural heritage. This Act replaces the repealed *Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987*, which previously addressed cultural heritage issues.

Under this Act, Aboriginal and Torres Strait Islander cultural heritage is protected through a duty of care for all persons to take reasonable and practical measures to avoid harming cultural heritage. Duty of care guidelines have been gazetted under the Act, which set out reasonable and practical measures for ensuring that the duty of care established under the Act is met.

The *Aboriginal Cultural Heritage Act 2003* gives respect and empowerment to Traditional owners to be directly involved in the assessment and management of their own cultural heritage. Traditional owners are able to register significant cultural heritage places, such as sacred sites, on a cultural heritage register administered by the Cultural Heritage Coordination Unit within the DNRW.

Key elements of the *Aboriginal Cultural Heritage Act 2003* include:

- blanket protection of areas and objects of traditional and customary significance, as well as areas of archaeological significance;
- recognition of the key role of traditional owners in cultural heritage matters;
- establishment of practical and flexible processes to address cultural heritage in a timely and cost efficient manner;
- the replacement of cultural heritage permitting arrangements with the duty of care, the cultural heritage management planning process and other agreement based mechanisms; and
- increased penalties for harming Aboriginal and Torres Strait Islander cultural heritage.

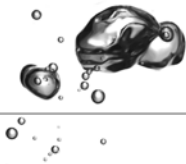
The *Aboriginal Cultural Heritage Act 2003* states that a notified Cultural Heritage Management Plan (CHMP) is required if an EIS is undertaken. The Act also provides information on the nature and content of a CHMP. A CHMP is also required to be registered by the Minister for Natural Resources and Water, and may also be dealt with under an Indigenous Land Use Agreement (ILUA).

Queensland Heritage Act 1992

The *Queensland Heritage Act 1992* provides for the conservation and protection of places and items of historical and/or non-indigenous cultural heritage, i.e., all places that derive from the post-settlement history of Queensland. Under this Act, places and items must be entered into a Queensland Heritage Register in order to be protected.

Substantial penalties may apply for damage to a place or items that has been entered on the Register. At least one of the following criteria must be satisfied in order to be entered onto the Register (Section 23 (1)):

- the place is important in demonstrating the evolution or pattern of Queensland's history;
- the place demonstrates rare, uncommon or endangered aspects of Queensland's heritage;
- place has potential to yield information that will contribute to an understanding of Queensland's history;
- the place is important in demonstrating the principal characteristics of a particular class of cultural places;
- the place is important in exhibiting particular aesthetic characteristics valued by the community or a particular cultural group;
- the place is important in demonstrating a high degree of creative or technical achievement at a particular period;
- the place has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons; and
- the place has a special association with the life or work of a particular person, group or community of importance in Queensland's history.



There are no structures listed on the Queensland Heritage Register within the inundation area, or area of construction works of the project. The Cultural Heritage Survey as part of the EIS did not recommend any sites or places for nomination to the Queensland Heritage Register.

Transport Infrastructure Act 1994

The *Transport Infrastructure Act 1994* provides for the management of the National and State road network and rail network. A permit under this Act is required to work in, or interfere with, a State-controlled road or railway.

The construction of the urban and irrigation pipeline along the New England Highway will require permits under this Act.

Land Act 1994

The *Land Act 1994* regulates the opening and closing of State and local roads and land dealings relating to changes in land tenure. Permits to clear vegetation on State-owned land are administered under the *Land Act 1994*.

Roads are managed on a day to day basis by the relevant local government authority, or in the case of state controlled roads, by the DMR. The DNRW through the provision of the *Land Act 1994*, is responsible for the land in roads.

There is potential for the requirement of a number of permits under the *Land Act 1994* including the following:

- road closure application; and
- permit to occupy unallocated State land, a reserve or a road.

The construction and operation of the Project will require the closure of Emu Swamp Road.

The inundation area for the project contains areas of reserve and road reserve.

1.8.3 Project Approval Requirements

A list of the approvals required to be obtained under the relevant State legislation described above is provided in **Appendix B**. The anticipated program for the approvals is also presented in **Table 1-4**.

■ Table 1-4 Project Approvals Timeframe

Approval	Date
Draft EIS display period	January 2008 to February 2008
Submission of Supplementary EIS report	March 2008
CoG assessment	April to May 2008
EIS approved	May 2008
Department of the Environment and Water Resources assessment	May to June 2008
Preparation of IDAS applications	March 2008
Submit IDAS applications	April 2008
Assessment of applications by referral agencies	April to May 2008
Application decision period	May to June 2008
Approvals issued	July 2008

1.9 Other Considerations

1.9.1 Effect of SEQ Water Industry Restructure

The Queensland Government has initiated a major re-structure of water supply arrangements in southeast Queensland (QWC 2007). Under these proposals an integrated water grid is to be established for the distribution of water and local governments will no longer have responsibilities for bulk water supply components including dams.

Stanthorpe Shire is outside the southeast Queensland area and is not presently affected by these proposals. The Project would still be needed even if a similar re-structure was proposed for other parts of the state including Stanthorpe Shire.

1.9.2 Effect of Local Authority Amalgamations

The Queensland Government has initiated a reform of local government in the state. Under these reforms Stanthorpe and Warwick Shires are to be amalgamated to become the Southern Downs Regional Council (SDRC). The SDRC transition committee has been informed about the Project and in principle supports the Project.

1.9.3 Effect Queensland Government Ceding Water Rights

Queensland ceded the water rights of the Murray Darling to the Federal government in early 2007. The Federal government indicated at the time existing water resource plans, including the Border Rivers ROP, would not be affected. The Project will comply with the WRP so the cessation of water rights is unlikely to affect the Project.