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Loxton Numerical Groundwater Model 2004

W Yan, SR Howles and AJ Hill

Knowledge and Information Division

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Knowledge and Information Division
Department of Water, Land and Biodiversity Conservation
25 Grenfell Street, Adelaide SA 5000
GPO Box 2834, Adelaide SA 5001

Telephone	National	(08) 8463 6800
	International	+61 8 8463 6800
Fax	National	(08) 8463 6999
	International	+61 8 8463 6999
Website	www.dwlbc.sa.gov.au	

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FOREWORD

South Australia's natural resources are fundamental to the economic and social well-being of the State. One of the State's most precious natural resources, water is a basic requirement of all living organisms and is one of the essential elements ensuring biological diversity of life at all levels. In pristine or undeveloped situations, the condition of water resources reflects the equilibrium between, rainfall, vegetation and other physical parameters. Development of these resources changes the natural balance and may cause degradation. If degradation is small, and the resource retains its utility, the community may assess these changes as being acceptable. However, significant stress will impact on the ability of the resource to continue to meet the needs of users and the environment. Understanding the cause and effect relationship between the various stresses imposed on the natural resources is paramount to developing effective management strategies. Reports of investigations into the availability and quality of water supplies throughout the State aim to build upon the existing knowledge base enabling the community to make informed decisions concerning the future management of the natural resources thus ensuring conservation of biological diversity.

Bryan Harris

Director, Knowledge and Information Division

Department of Water, Land and Biodiversity Conservation

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1. ACKNOWLEDGEMENT

The numerical groundwater flow model detailed in this report is a developed from an earlier Loxton – Bookpurnong groundwater model originally developed by Australian Water Environments between 1999 and 2003 (AWE 2003).

During the development of the Loxton – Bookpurnong numerical groundwater model numerous discussions were had regarding model fundamentals, technical issues and progress with Mr Don Armstrong of Lisdon Associates, who also undertook a final review of the model and report.

2. EXECUTIVE SUMMARY

The Loxton and Bookpurnong irrigation areas are located adjacent to the River Murray primarily in the northeast region of the South Australian part of the Murray Basin. Over the past 60 years, concerns have been raised regarding the salt load impacts on the River resulting from the irrigation development. On average 173 tonnes/day of salt enters the river in the Loxton – Bookpurnong area at flows of less than 5000 ML/day, and up to 365 tonnes/day at flows of 20 000–30 000 ML/day. The original pre-development base salt load entering the river is calculated to be 16 tonnes/day. The additional salt load results from the increased flux of saline groundwater that occurs in response to the development of irrigation drainage groundwater mounds.

Numerical groundwater modelling forms a component of the investigation phase of a major program to design and construct a groundwater management scheme (salt interception scheme – SIS) that will control the flux of saline groundwater (and therefore salt load) entering the River Murray.

The objectives of the this project were to develop an *impact assessment model of moderate complexity,* capable of simulating the regional aquifer system that could be used to:

1. Estimate the flux of saline groundwater entering the River Murray from the aquifer system, and when combined with groundwater salinities, the salt load entering the river.
2. Predict the flux of saline groundwater and salt load entering the River Murray under different irrigation practices and development scenarios until 2104.
3. Improve the understanding of the hydrogeology of the regional aquifer system and processes in the model area.
4. Assist with broad scale planning of conceptual SIS wellfield designs targeting the Loxton Sands and Monoman Formation, and predict the reduction in the salt load entering the River Murray.
5. Provide a sound technical basis for evaluating salt loads entering the River Murray from the irrigation areas.
6. Assist with the development of management strategies for the Katarapko Island disposal basin.

The model also provides a sound technical basis for evaluating the flux of saline groundwater and salt load entering the River Murray resulting from accountable actions, resulting from existing and future irrigation development and salt interception schemes, in the Loxton – Bookpurnong area.

This report describes the development, testing and application of the MODFLOW groundwater model that covers the area from the South Australian border to Lock-3. The model is predominantly associated with the River Murray, floodplains and highlands. The model was calibrated to regional potentiometric heads (pre-irrigation) and observed data (between 1970 to 2003, post irrigation development), where available.

A steady state model was initially used to model post-river regulation, but pre-irrigation development conditions. A transient model was then developed and calibrated to the historic period (1955 to 2004), to investigate the historic potentiometric head changes and flux of saline groundwater and salt load entering the River Murray. The calibrated transient model was then used to predict the response to a number of scenarios for a period of 100 years, to determine the flux of saline groundwater and salt load entering the river, and EC impact at Morgan.

The scenarios and modelled and predicted salt loads entering the River Murray over next 100 years are summarised in Table 1, which indicates that:

Scenario-1: Pre-irrigation development, approximate 7 tonnes/day of salt entered the River Murray from the Loxton area and 9 tonnes/day from Bookpurnong area.

Scenario-2: Post-irrigation development, and the current situation, 92 tonnes/day of salt enters the River Murray from Loxton area and 73 tonnes/day from the Bookpurnong area.

Scenario-3: Pre-1988 irrigation development without improved irrigation practice (IIP) in the 1990s may result in 113 tonnes/day of salt entering the River Murray from Loxton area and 103 tonnes/day from the Bookpurnong area at 2104.

Scenario-4: Pre-1988 irrigation development with IIP may reduce the salt load entering the river to 101 tonnes/day from the Loxton area and 64 tonnes/day from the Bookpurnong area at 2104.

Scenario-5: Pre-1988 irrigation development with IIP and Loxton headworks rehabilitation (RH) commencing in 2002 may reduce the salt load entering the river to 79 tonnes/day from the Loxton area and 60 tonnes/day from the Bookpurnong area at 2104.

Scenario-6: Post-1988 irrigation development with IIP and RH may result in 100 tonnes/day of salt entering the River Murray from Loxton area and 173 tonnes/day from the Bookpurnong area at 2104.

Scenario-7: This is Scenario-5 with the addition of SIS-1 designed for the current recharge conditions. SIS-1 is a conceptual wellfield that includes 65 floodplain and highland production wells in the Loxton area and 13 floodplain production wells in the Bookpurnong area. SIS-1 may intercept around 70% of the salt load entering the River Murray at 2104.

Scenario-8: This is Scenario-6 with the addition of SIS-2 designed for the maximum recharge conditions. SIS-2 is a conceptual wellfield that includes 65 floodplain and highland production wells in the Loxton area (pumping at higher rates than SIS-1) and 38 floodplain production wells in the Bookpurnong area. SIS-2 may intercept around 90% of the salt load entering the River Murray at 2104.

Table 1. Summary of modelled and predicted salt loads entering the River Murray

Scenario	Model Run	Irrigation development area	IIP	RH	SIS	Loxton (tonnes/ day)	Bookpurnong (tonnes/ day)
1	Steady State	None	None	None	None	6.65	9.21
2	1945–2004	1945–2004 (from 1945 to current condition)	70–85%	Yes	None	92.34	72.76
3	2004–2104	Pre-1988	70%	None	None	112.61	103.21
4	2004–2104	Pre-1988	85%	None	None	101.35	64.01
5	2004–2104	Pre-1988	85%	Yes	None	79.43	59.89
6	2004–2104	Post-1988*	85%	Yes	None	99.65	172.69
7	2004–2104	Pre-1988	85%	Yes	SIS-1 designed for current recharge condition	23.2	17.28
8	2004–2104	Post-1988*	85%	Yes	SIS-2 designed for post-1988 recharge condition	12.38	14.26

* Post-1988 includes pre-1988 + post-1988 irrigation development

3. INTRODUCTION

The Department for Water, Land and Biodiversity Conservation (DWLBC) developed a numerical MODFLOW groundwater flow model for the Riverland area, SA-VIC border to Lock-3 in South, Australia in 2003/4. The aim of the project was to provide a management tool for determining salt loads entering the River Murray from the Loxton and Bookpurnong irrigation areas, and to assess Salt Interception Schemes (SIS) concept schemes in these areas. After the model was reviewed by groundwater modelling experts and accredited for the Loxton area by the Murray Darling basin Commission (MDBC), the model could be used to evaluate salt loads resulting from accountable actions, irrigation practice, irrigation area development and SIS.

3.1 POLICY BACKGROUND

In 2001, the Murray Darling Basin Ministerial Council approved the publication of the *Basin Salinity Management Strategy 2001–2015* (BSMS). Similarly, the South Australian Government adopted the *River Murray Salinity Strategy 2001–2015* in 2001. These initiatives followed the adoption of the Ministerial Councils' *Salinity and Drainage Strategy 1988* (S&DS), taking into account the *1999 Basin Salinity Audit* and the *National Land and Water Resources Audit.*

The objectives of the BSMS are to:

1. Maintain water quality of the shared water resources of the River Murray and River Darling.
2. Control the rise in salt loads in all tributary rivers of the Murray-Darling Basin.
3. Control land degradation and protect important terrestrial ecosystems, protect farmland, cultural heritage and built infrastructure.
4. Maximize net benefits from salinity control across the Basin.

Under the S&DS, 1 January 1988 was adopted as a baseline from which any subsequent actions that affected River Murray salinity were the responsibility of the State in which the action occurred. One of the main components carried forward from the S&DS was the system of salinity credits and debits, however changes were made to the manner in which credits and debits were entered on the registers. Under the 1988 Strategy, debits and credits were entered as the impact at 30 years. Within the BSMS, entries onto the register are the average of the 30 years, with the maximum impact in 100 years also recorded. The BSMS allowed for any action resulting in an increase in river salinity, such as new irrigation developments, to occur, provided that salinity credits, gained by contributing to the funding of salt interception schemes or other measures, to offset any salinity debits arising from these accountable actions.

The S&DS has significantly reduced salinity in the River Murray through implementation of salt interception schemes and improved land and water management. The target of restricting river salinity at Morgan below a threshold of 800 EC at least 95% of the time is close to being met. However, the 1999 Salinity Audit highlighted that the future impacts of salt mobilisation, due to further irrigation developments and the effects of dryland salinity, would diminish the achievements of the S&DS unless further action was taken.

Consequently, the BSMS commits the partner governments to an initial 7-year investment program of salinity mitigation works and measures to be implemented across the Murray

Darling Basin to deliver 61 EC credits to the river and to offset the States accountable actions.

There are currently four operational salt interception schemes within South Australia, all located with in the Woolpunda – Cadell reach of the River Murray (Woolpunda, Waikerie, Waikerie IIA and the Qualco – Sunlands Groundwater Control Scheme). There are a further two schemes currently being investigated in the Woolpunda – Cadell reach (Waikerie IIB and Waikerie IIC) and ongoing investigations for schemes in the Pike River, Murtho and Chowilla areas. In addition to the investigations program, construction has commenced on two schemes at Bookpurnong and Loxton, having been investigated over the past six years and approved by Ministerial Council in 2003 and 2004 respectively.

In presenting both the Bookpurnong and Loxton schemes to Ministerial Council for approval, South Australia proposed a credit allocation and cost-sharing methodology on the basis of the preliminary predicted impacts of the various pre-and post-1988 actions undertaken in each of the areas. The assessment of those impacts is required to be consistent with the reporting requirements of both Schedule ‘C’ of the *Murray-Darling Basin Agreement 1992* and the *Basin Salinity Management Strategy Operational Protocols 2003.*

3.2 INVESTIGATION BACKGROUND

The Loxton – Bookpurnong irrigation area is located adjacent the River Murray in the northeast region of the Murray Basin (Fig. 1). Figure 1 clearly indicates the location of the project area. The model domain is considerably larger than the actual project area to avoid model boundary effects interfering with model results within the project area. Water bodies and irrigation areas are clearly distinguishable on aerial photography (Fig. 2) which also included Transient Electro-Magnetics (TEM) results discussed later in this report.

A component of the water accession passing the root zone (rainfall infiltration, irrigation drainage, and other associated irrigation losses) recharges the groundwater table in the Loxton Sands and has resulted in the development of groundwater mounds in the both the Loxton and Bookpurnong irrigation areas. These groundwater mounds have significantly increased the flux of saline groundwater, and therefore the salt load entering the River Murray.

Run-of-river salinity surveys indicate that a flux of saline groundwater enters the River Murray in the Loxton – Bookpurnong reach (Table 2). Observations indicate a salt load of 98 tonnes/day entering the river in the Loxton reach (Fig. 1), and 75 tonnes/day entering the river in the Bookpurnong reach at flows of less than 5000 ML/day. The salt load may double (188 tonnes/day Loxton, and 177 tonnes/day Bookpurnong) at flows of 20 000–30 000 ML/day. The construction of SIS has been proposed to intercept the flux of saline groundwater before it enters the river.

Australian Water Environments (AWE) undertook preliminary hydrogeological investigations in the Loxton – Bookpurnong area aimed at increasing the knowledge of the hydrogeology in relation to the construction of a SIS in both areas. This work culminated in a submission (DWLBC 2003) to the MDBC High Level Inter-Jurisdictional Working Group on Salt Interception in February 2003 regarding SIS in the Loxton – Bookpurnong area. AWE developed a MODFLOW model of the Loxton – Bookpurnong area in 1999, and developed a more complex model early in 2003 (AWE 2003).

Table 2. Run-of-river observed salt load (DWLBC/AWE submission report 2003)

Flow (ML/day)	**Salt Load** (tonnes/day)	
	Loxton: June 1991 – July 2002 Rilli's floodplain - Habel's landing	**Bookpurnong: 1994 – 2002 Lock-4 - Rilli's floodplain**
<5000	98	75
5000–10 000	100	102
10 000–20 000	119	126
20 000–30 000	188	177

DWLBC commenced further hydrogeological investigations in the Loxton area from mid 2003. One component of these investigations was modelling, and in late 2003 DWLBC took over further development of the AWE 2003 model. The objective of these investigations was to design a SIS and progressing the project to a point where the scheme was construction-ready. The term construction-ready meaning that there is sufficiently detailed knowledge of the hydrogeology of the Loxton area (and that this knowledge has been ground-truthed by in-river salinity methods, drilling, hydrochemistry, geophysics and pumping tests), and confidence in numerical groundwater modelling, so that a SIS can be designed to a point where it is ready for construction with minimal additional investigative work.

The model discussed in this report incorporates both the Loxton and Bookpurnong areas. However, the bulk of the discussion relates to the Loxton area due to the principal role of DWLBC in investigations for the Loxton SIS. AWE had the principal role in the investigations for the Bookpurnong SIS.

Modelling has concentrated on replicating the gradient between the highland and floodplain, potentiometric heads on the floodplain, and the gradient between the floodplain and the River Murray. Based on these results and available salinity data, the salt load entering the river valley and the river can be calculated. This is an appropriate approach for the modelling that has been undertaken.

3.3 SOURCE OF SALINE GROUNDWATER FLUX TO RIVER MURRAY

Prior to designing a SIS the following key issues need to be determined:

1. A clear understanding of the magnitude of the flux of saline groundwater and salt load entering the River Murray.
2. The sections of the river reach in which major flux occurs.
3. The target aquifers.
4. The hydraulic relationships between aquifers.
5. The hydraulic relationship between the aquifers and the river.

3.4 OBJECTIVES

Numerical groundwater flow models enable the creation of a computer based mathematical representation of the conceptual understanding of an aquifer system. The model is a powerful tool for validating the understanding and for predicting the response of the aquifer system to imposed stresses.

The objectives of DWLBC groundwater modelling were to develop an *impact assessment model of moderate complexity* (in the terminology of the MDBC 2000) capable of simulating the regional aquifer system that could be used to:

1. Estimate the flux of saline groundwater entering the River Murray from the aquifer system, and when combined with groundwater salinities, the salt load entering the river.
2. Predict the flux of saline groundwater and salt load entering the River Murray under different irrigation practices and development scenarios until 2104.
3. Improve the understanding of the hydrogeology of the regional aquifer system in terms of:
    a. The groundwater flux within and between aquifers.
    b. Recharge to the Loxton Sands in the Loxton area.
    c. The behaviour of the aquifer system in floodplain areas.
    d. The hydraulic communication between the aquifer system and the surface water system.
4. Assist with broad scale planning of conceptual SIS wellfield designs and predict the reduction in the salt load entering the River Murray. Saline groundwater pumped from SIS will be disposed of to the Noora disposal basin.
5. Assist with the design and location of investigation wells, production wells, and observation wells for pumping tests in the Loxton area.
6. Assist with the development of management strategies for the Katarapko Island disposal basin.

The terms *modelled* and *predicted* are used in this report. The term modelled has been used when output from the model (eg a potentiometric head distribution) can be compared to observed data. The term predicted has been used when the calibrated model has been used to determine the future result of particular scenarios.

4. HYDROGEOLOGY AND HYDROLOGY OF THE LOXTON – BOOKPURNONG AREA

4.1 REGIONAL HYDROGEOLOGY

The Murray Basin is a closed groundwater basin containing Cainozoic unconsolidated sediments and sedimentary rock up to 600 m in thickness, and contains a number of regional aquifer systems (Evans and Kellet 1989). The major aquifers within the study area are the Murray Group Limestone, Loxton Sands and Monoman Formation (floodplain only) (Fig. 3). Groundwater flow in all of the aquifers is towards the River Murray.

The Loxton Sands forms a regionally extensive unconfined – semi-unconfined aquifer into which the channel of the ancestral River Murray was incised. Within this channel, the Monoman Formation and the overlying Coonambidgal Formation were deposited, and it is within this sequence that the channel of the modern River Murray is incised. The river is a sink for regional groundwater within the Loxton – Bookpurnong area.

Saline groundwater (7000–50 000 mg/L) enters the River Murray by lateral flow from the Loxton Sands and Monoman Formation (Fig. 4), and by slow upward leakage through the Bookpurnong Formation from the underlying confined regional Murray Group Limestone by the following pathways :

1. Direct inflow via seepage from exposed Loxton Sands at or near the base of cliffs adjacent to the River Murray.
2. Discharge from sands of the Monoman Formation that act as a conduit for lateral flow from Loxton Sands (and upward leakage from the Murray Group Limestone) underlying the floodplains.
3. Discharge from sands of the Monoman Formation and localised hypersaline lakes (salinas), often at the back of the floodplain, that deliver high salt loads during and after periods of flood.
4. Slow upward leakage through the Bookpurnong Formation from the underlying confined Upper Mannum Formation.
5. Slow upward leakage from Murray Group Limestone that may be in direct communication with the River Murray due to erosion of the Lower Loxton Clay and Shells and Bookpurnong Formation.

These processes are summarised in an elementary conceptual hydrogeological model (Fig. 5).

The hydraulic communication between the Loxton Sands and Monoman Formation is an important component in controlling the salt movement in the area. The flux of saline groundwater entering the River Murray is dominated by the hydraulic conductivity of the Loxton Sands, and the head difference between the river and nearby groundwater.

As the River Murray is mainly in contact with Loxton Sands and Monoman Formation in the study area, the majority of the salt load entering the river is contributed by these two aquifers that are the targets for salt interception in the Loxton - Bookpurnong area.

A schematic diagram of the conceptual hydrogeological model for the Loxton - Bookpurnong area is given in Figure 5. The figure details the conceptual model of groundwater flow between the aquifers, the broader regional groundwater flow system, inter-aquifer flow and local recharge mechanisms.

4.2 HYDROGEOLOGICAL UNITS

The characteristics of each hydrogeological unit (Fig. 3, Table 3) in the project area are discussed in order of increasing depth below ground surface in the following sections.

Table 3. Hydrogeological units of the Loxton – Bookpurnong area

Hydrogeological Unit		Aquifer / aquitard	Salinity range (mg/L)	Yield (L/s)
Coonambidgal Formation		Clay layer	NA	NA
Monoman Formation		Aquifer unconfined - semi-confined in river valley	7000–60 000	0.5–10
Loxton Sand		Aquifer unconfined to on highland	7000–40 000	0.5–5
Lower Loxton Clay and Shells		Aquitard – clay, shells	NA	NA
Bookpurnong Formation		Aquitard – clay	NA	NA
Murray Group Limestone	Pata Formation	Aquifer (semi-confined upstream of river kilometre 486) limestone	10 000–30 000	0.5–1
	Winnambool Formation	Aquitard – marl	NA	NA
	Glenforslan Formation	Semi-confined aquifer limestone	5000–30 000	0.5–2
	Finniss Formation	Aquitard - marl	NA	NA
	Upper Mannum Formation	Confined aquifer limestone	3000–25 000	5–10
	Lower Mannum Formation	Confined aquifer limestone	NA	NA

4.2.1 COONAMBIDGAL FORMATION

The Coonambidgal Formation clay layer occurs ubiquitously across the floodplain and comprises clay and silts deposited during periods of episodic flooding. This unit is commonly 4–5 m thick in the middle of the respective floodplains, but can vary in thickness from 1–11 m, with the greater thicknesses observed at the break in slope between the floodplain and highland.

4.2.2 MONOMAN FORMATION

The Monoman Formation unconfined – semi-confined aquifer is the primary target for salt interception on the floodplain, where the Loxton Sands cannot be targeted on the highland. This unit consists of relatively clean, fine to coarse grained, fluvial sands deposited as point bar sands within a wide floodplain. This unit occasionally comprises minor clay and silt layers, and occasional lignite bands towards the base of section. The Monoman Formation is commonly 4–10 m thick and is thin to absent at the break in slope. However, it can realise a thickness of up to 25 m in deep incised channels within the meander belt (Fig. 3).

As a consequence of the depositional environment, the Monoman Formation is a highly variable aquifer with yields ranging from 0.5–10 L/s. This variability makes it difficult to predict likely yields across the floodplain, to the extent that production wells separated by 10 m can demonstrate contrasting specific yields.

Due to its semi-unconfined nature, the potentiometric surface for the Monoman Formation for May 2004 has been merged with the Loxton Sands (Fig. 6). Potentiometric heads are up to 2 m above river pool level (~10.0 m AHD) at the break of slope (Loxton Sands / Monoman Formation) on the eastern side of the River Murray. On the western side of the river potentiometric heads are either close to or below river pool level with the exception of a slightly elevated potentiometric head (11 m AHD) in the area of the Katarapko Island disposal basin to which irrigation drainage water from the Comprehensive Drainage System (CDS) network is pumped. Groundwater salinity values in the Monoman Formation are highly variable, possibly as a result of evaporative effects on the floodplain, and range from 25 000–60 000 mg/L.

4.2.3 LOXTON SANDS

The Loxton Sands unconfined aquifer is the primary target for salt interception on the highland, yet poses the most difficulty due to its unpredictable hydraulic nature. In broad terms, the Loxton Sands represents an inverted aquifer, with the most permeable coarse grained and frequently unsaturated sands occurring at the top of the sequence and the least permeable fine sands (and occasional shell hash) at the base of the succession. These sands grade to a low permeability silty clay and shell facies towards the base, referred to in this report as the Lower Loxton Clay and Shells. This upward coarsening sequence represents a shift from offshore to nearshore and back beach/dune depositional environments, reflecting cyclic eustatic sea level drops resulting in progradational clastic packages.

Detailed sedimentological analysis, downhole geophysical logging and airborne electromagnetic (HEM) geophysical surveys (Hill et al. 2004) have helped to unravel the complexity of the Loxton Sands and provide some confidence for predicting suitable facies for salt interception at or below river pool level.

The Loxton Sands have been targeted in the Loxton area for salt interception where no floodplain exists. However, the base of the fine sands and shell hash occurs close to river pool level and accordingly, this has a significant impact on production well spacing in order to achieve effective salt interception. Although the Loxton Sands are commonly up to 25–30 m thick, the permeable basal shell hash and coarse sand unit that occur at the base of the succession in the Loxton area is only 2–3 m thick. Yields up to 1.5 L/s have been observed in production wells completed in the basal shell hash facies. Elsewhere, yields vary from <0.5 L/s in fine-grained sands up to 5 L/s in coarse-grained facies in the area targeted for highland interception in the Bookpurnong area.

The potentiometric surface for the Loxton Sands and Monoman Formation for May 2004 is given in Figure 6. A prominent groundwater mound trending northeast - southwest occurs in the Loxton Sands in the Loxton irrigation area with a maximum height of 26 m AHD, and a smaller mound occurs in the Bookpurnong area.

Groundwater salinity values in the Loxton Sands vary dramatically across the Loxton – Bookpurnong region, reflecting impact of low salinity irrigation recharge on the saline native groundwater. Groundwater salinity data were sourced from pumping tests and HYDROLAB geophysical sonding, the latter demonstrating stratification with the heavier dense saline groundwater underlying fresher irrigation water. For the purposes of predicting salt loads entering the River Murray, the more saline native groundwater values were adopted for various zones along the river ranging from ~5000–40 000 mg/L.

4.2.4 BOOKPURNONG FORMATION

The Bookpurnong Formation aquitard occurs between the Loxton Sands and the underlying Pata Formation. This unit consists of poorly consolidated plastic silts and shelly clays that are differentiated from the Lower Loxton Clays and Shells (grey in colour) on the basis of colour (light to dark khaki) and increased plasticity.

The Bookpurnong Formation reaches a maximum thickness of 15 m in the Loxton area but is highly variable with no discernable trend observed. This unit is thin to occasionally absent on all floodplains in the Loxton area, more likely as a consequence of erosion, but possibly as a result of depositional thinning.

4.2.5 MURRAY GROUP LIMESTONE

Prior to recent subdivision of the Murray Group Limestone reported in Luksik and James (1998), it was accepted that the Bookpurnong Formation was separated from the underlying Murray Group Limestone by the poorly consolidated to plastic marls of the Winnambool Formation.

The recent work has resulted in a more detailed subdivision reflecting a change from predominantly fluvial environments of the Renmark Group to alternating deeper marine and shelf facies resulting in deposition of marl aquitards (Winambool Formation, Finnis Formation, Ettrick Formation), and limestone aquifers (Pata Formation, Glenforslan Formation, Upper and Lower Mannum Formations).

4.2.5.1 Pata Formation

The Pata Formation semi-confined aquifer is a poorly consolidated bryozoal limestone with interbedded friable sand layers that occurs throughout the Loxton – Bookpurnong region. This unit outcrops to the south of Loxton where it is exposed at river pool level downstream from the Loxton Caravan Park, river kilometre 486 (and is dry 5 km to the west). The Pata Formation aquifer dips gently to the northeast to depths ~70 m (-25 m AHD) below ground surface at Bookpurnong. In the Loxton area this unit commonly occurs 35–40 m below ground surface on the highland, but can occur as shallow as 10 m beneath the surface on the floodplains. This unit is typically in the range of 10–15 m in thickness with an observed thickening to the northeast.

Although described as a limestone, the unit represents a poor aquifer due to the presence of marl. Pumping tests conducted by DWLBC at both floodplain and highland sites has returned yields of ~0.5–1 L/s.

The potentiometric surface for the Pata Formation for May 2004 is given in Figure 7. An expression of the Loxton groundwater mound is evident resulting from downward leakage and possible hydraulic loading. The groundwater mound reaches an elevation of 24.7 m AHD and a steep gradient exists towards the River Murray. A maximum 1.7 m positive (downward driving) head difference exists between the overlying Loxton Sands and the Pata Formation at the centre of the groundwater mound, lesser head differences occur elsewhere.

Groundwater salinities in the Pata Formation are uniformly high (up to 30 000 mg/L) on the highland with lower salinities on the floodplain (~10 000 mg/L).

4.2.5.2 Winnambool Formation

The Winnambool Formation aquitard comprises grey to pale green calcareous clay (marl) and silty clay. This unit dips to the northeast, consistent with the regional tilt. To the south of Loxton this formation occurs ~30 m below ground surface, deepening to as much as 85 m below ground surface at Bookpurnong. This unit varies is ~3 m in thickness, with its depocentre located on Katarapko Island, and provides an effective aquitard between the Pata Formation and Glenforslan Formation.

4.2.5.3 Glenforslan Formation

The Glenforslan Formation semi-confined aquifer is a grey sandy limestone that closely resembles the Pata Formation, with the exception that it contains occasional fine-grained, hard bands. This unit has a thickness consistently in the range 20–30 m and dips to the northeast.

The potentiometric surface for the Glenforslan Formation for May 2004 is given in Figure 8. A maximum 5.9 m positive (downward driving) head difference exists between the overlying Pata Foramtion and the Glenforslan Formation at the centre of the groundwater mound, and an approximately -5 m negative (upward driving) head difference occurs on Katarapko Island area.

Groundwater salinity in the Glenforslan Formation ranges from 5000–30 000 mg/L.

4.2.5.4 Finnis Formation

The Finniss Formation aquitard is a thin but persistent grey to dark grey clay with thin sand layers and hard bands separating the Glenforslan Formation and Upper Mannum Formation. This unit has a maximum thickness of 4.5 m but is commonly 1–2 m in thickness.

4.2.5.5 Upper Mannum Formation

The Upper Mannum Formation confined aquifer has only been fully penetrated by a small number of wells in the area. This unit is 25 m thick at Bookpurnong and comprises highly fossiliferous calcarenitic and sandy limestone. This unit dips to the northeast, but is difficult to separate from the underlying Lower Mannum Formation in the Loxton region.

The potentiometric surface for the Upper Mannum Formation for May 2004 is given in Figure 9. There is no discernable expression of the Loxton groundwater mound, although this may be an artefact of poor well coverage. A 0.1 m positive (downward driving) head difference exists between the overlying Glenforslan Formation and the Upper Mannum Formation in the Loxton area.

Groundwater salinity in the Upper Mannum Formation ranges from 3000–25 000 mg/L.

4.2.5.6 Lower Mannum Formation

The Lower Mannum Formation confined aquifer has only been fully penetrated by a small number of wells in the area. This unit has a thickness up to 75 m thick at Bookpurnong. This formation comprises hard, well compacted and moderately to well cemented grey limestone with some evidence of recrystallisation. There is an increase of fine carbonate sand towards the top of the unit.

4.3 CONCEPTUAL INTERACTION BETWEEN THE AQUIFER SYSTEM AND THE RIVER MURRAY

4.3.1 PRE-IRRIGATION DEVELOPMENT GROUNDWATER FLUX TO THE RIVER MURRAY

Post-construction of the locks and weirs on the River Murray in the 1930s (river regulation) and pre-irrigation development around 1945, a flux of saline groundwater entered the river from the Loxton Sands and Monoman Formation driven by the small regional groundwater gradient. The pre-irrigation development base groundwater flux (little different to that occurring pre-river regulation) was small compared with that occurring post-irrigation development.

The pre-irrigation development flux of saline groundwater entered the River Murray by the following mechanisms in the Loxton area:

1. Direct inflow via seepage from exposed Lower Loxton Sands at or near the base of cliffs adjacent to the River Murray.
2. On Rilli’s floodplain (wide), groundwater flowed from the highland into the Monoman Formation (underlying the floodplain) that acts as a conduit for lateral flow from the Loxton Sands to the River Murray. Evapotranspiration resulted in the concentration and storage of salt in the floodplain. This salt was mobilised and flushed by the regular flood events that surcharged the floodplain, and induced a flux of saline groundwater to enter the river.
3. On the southern, narrow floodplain, where evapotranspiration is of less significance, a small hydraulic gradient resulted in the discharge of groundwater to the River Murray.
4. Slow upward leakage through the Bookpurnong Formation from the underlying confined Upper Mannum Formation.
5. Slow upward leakage from Murray Group Limestone where there is direct communication with the River Murray due to erosion of the Lower Loxton Clay and Shells and Bookpurnong Formation.

4.3.2 POST-IRRIGATION DEVELOPMENT GROUNDWATER FLUX TO THE RIVER MURRAY

Post-regulation of the River Murray, pumping of river water for irrigation on the surrounding highlands commenced in the mid 1940s and mid 1950s in the Loxton and Bookpurnong areas respectively. Irrigation drainage resulted in the development of a groundwater mound in the Loxton area, with an elevation at its centre 16 m above river pool level. This anthropogenic modification of the aquifer system dramatically increased the flux of saline groundwater entering the river. The potentiometric surface of the unconfined aquifer(s) (Fig. 6) indicates steep gradients adjacent the river in the Loxton Sands and Monoman Formation.

The post-irrigation development flux of saline groundwater enters the River Murray by the following mechanisms in the Loxton area:

1. Direct inflow via seepage from exposed Lower Loxton Sands at or near the base of cliffs adjacent to the River Murray.
2. On Rilli’s floodplain (wide), a portion of highland groundwater flow discharges via seepage at the break of slope between the highland and floodplain. The remainder of the highland groundwater flows through the Monoman Formation underlying the floodplain and discharges to the River Murray. Evapotranspiration, occurs to the extent that the groundwater table is lower in elevation than the river pool level, resulting in the concentration and storage of salt in the floodplain. The movement of salt from the

highlands into the floodplain is greater than that into the river (under non-flooding conditions). During and after the now infrequent flood events, some of this highly concentrated salt is mobilised and flushed to the river.

3. On the southern, narrow floodplain, groundwater flows from the highland into the salinas / wetlands, and into the underlying Monoman Formation. An hydraulic gradient exists in the Monoman Formation towards the River Murray (evapotranspiration is of less significance) resulting in the discharge of groundwater to the river in this area.
4. Slow upward leakage through the Bookpurnong Formation from the underlying confined Murray Group Limestone.
5. Slow upward leakage from Murray Group Limestone where there is direct communication with the River Murray due to erosion of the Lower Loxton Clay and Shells and Bookpurnong Formation.

The elementary conceptual hydrogeological cross-section (Fig. 5) indicates the hydrogeological units, surface water features, and groundwater mound within the Loxton area. Groundwater flow in the aquifer system, including lateral flow from the highland area, discharges to the River Murray and floodplain areas. Upward leakage from Upper Mannum Formation is also indicated.

The conclusions regarding the post-irrigation development flux of saline groundwater entering the River Murray are based on the interpretation of data acquired from numerous methods including run-of-river salinity surveys, TEM, in-stream salinity, hydrochemistry, pumping tests, geology and geophysics. At the time of writing, investigations are nearing conclusion and will be reported separately. However, the following section discusses TEM, a method that has proved a useful tool for indicating areas where there is potential for flux.

Aside:- The TEM Technique

TEM is a technique that provides a measure of the electrical resistivity (or conversely the electrical conductivity) of the subsurface below a TEM sounding. The TEM results represent a bulk resistivity of the river sediments and river water.

In September 2003, a total of 80 km of data over a 37 km stretch of the River Murray was collected in the Loxton - Bookpurnong area between the Katarapko Island outlet and Lock-4 (Fig. 2A). In order to delineate variations across the river, soundings were conducted every 5 m adjacent to both banks. Inversion of the data typically produces around 10 resistivity depth values (beneath each sounding), between 0 m (river surface) and -30 m.

Subtraction of the nearest river water depth value from the data of each TEM sounding yields the shallowest river sediment resistivity value (Fig. 2A). This data represents the resistivity for the sediments immediately below the water-sediment interface.

Strip plots of the data for both the Katarapko and eastern banks surveys (Fig. 2B) is overlain with river bathymetry data, displayed as a broken black line, which is the interface between the river sediments and river water.

Zones of high conductivity (low resistivity) are indicated in the TEM data. Of greatest interest is the conductivity of the sediments immediately below the river water - sediment interface. This is the zone where potential discharge (or loss from the river to the aquifer) of saline groundwater to the river may be interpreted.

Conductive features (0–5 Ohm.m), seen as reds and oranges can be interpreted as either materials containing more saline groundwater than the surrounding material, or conductive clays, through which water does not move readily. Resistive features (>10 Ohm.m), seen as green and blues can be interpreted as material containing groundwater of a lower salinity than *elsewhere. It is worth noting that variations in formation porosity and connectivity will also affect the resistivity the data. Each situation must be interpreted in the light of local hydrogeology. The correlations between the resistivity and the geology will not be unique and the validity of geophysical interpretations could be checked by drilling.*

A comparison with the June 2003 run-of-river salinity survey yields broad but evident correlations with the resistive and conductive anomalies within the shallow sediments. Conductive sediment zones are relatable to increasing run-of-river salt loads and resistive sediment zones are relatable to decreasing run-of-river salt loads.

A noticeable zone of high conductivity sediments (<5.0 Ohm.m) occurs between river kilometre 488 and 506 (Fig. 2A). Within this zone, there are a number of smaller zones with reduced sediment conductivity (river kilometres 496–499 and 501–502.5) that may be attributed to local hydrogeological effects. Other minor conductive zones can be seen immediately downstream of Lock-4 (river kilometre 516) and between river kilometre 510 and 511.

It is evident on a strip plot (Fig. 2B) of the Katarapko Island and the eastern (irrigation) bank surveys that the Katarapko survey is more conductive at depth (-10 and -20 m). Deeper conductive features are not likely to represent salt discharge areas that are more likely to occur in the uppermost part of the river sediments (Fig. 2A). These deeper features are likely to be related to higher groundwater salinities, but the reduced hydraulic gradients in the Katarapko Island side of the river means that the flux of saline groundwater is likely to be low, except post-flooding, or if disposal of CDS water to the disposal basin is increased.

The TEM results correspond with the interpretation of the potentiometric surface of the unconfined aquifer(s) that indicates that the majority of the flux of saline groundwater enters the river in the Loxton area in sections of the river where hydraulic gradients are steep, and along the cliffs. Other sections of the river adjacent to the floodplain have a low groundwater flux due to reduced hydraulic gradients.

5. MODEL CONSTRUCTION

5.1 MODFLOW AND VISUAL MODFLOW

MODFLOW is a three-dimensional finite difference mathematical code that was developed by the US Geological Survey (McDonald and Harbaugh 1988). Visual MODFLOW Version 3.1.0.86 was developed by Waterloo Hydrogeologic Inc. in recent years and is a pre-processor for quick generation of data files for MODFLOW.

Visual MODFLOW was used as a tool for generating MODFLOW model grids, boundary conditions, observation well data, production wells and zones for aquifer hydraulic parameters. The software was also used for establishing settings to run the model, and to obtain quick and convenient output results. The PCG2 solver was used for all steady state and transient modelling runs.

5.2 MODEL CONSTRUCTION

5.2.1 MODEL DOMAIN AND GRID

The model domain simulates an area 75 km (east west) by 60 km (north south). The bounding AMG coordinates of the model domain are (southwest) E425122 N6160180 and (northeast) E500122 N6220180 (GDA 1994) (Fig. 10).

The selection of a large model domain that incorporates the smaller study area is consistent with good modelling practice. The model domain boundaries are set at a sufficient distance from the study area such that they do not influence the behaviour of the aquifer system in the study area.

The rectangular model grid was divided into 334 rows and 394 columns. The minimum grid size is 125 x 125 m in the Loxton area. The maximum grid size is 250 x 250 m in the remaining model area (Fig. 11).

5.2.2 MODEL LAYERS

MODFLOW layer options are given in Table 4.

The regional aquifer system in the Loxton – Bookpurnong area was conceptualised as eight layers, including five aquifer layers and three aquitard layers (Fig. 12, Table 5). The model grid was applied to the eight layers resulting in 1 052 768 finite difference cells.

5.2.2.1 Ground surface

The Department of Environment and Heritage (DEH) provided regional elevation data. Ground surface elevation is given in Figure 13. The elevation of the floodplain is ~10–12 m AHD. The elevation of the highland is 30–50 m AHD.

Table 4. MODFLOW layer types

Layer type	Aquifer type	Aquifer hydraulic parameters
Type-0	Confined	Transmissivity and storage coefficient (specific storage, S_S) are constant.
Type-1	Unconfined	Transmissivity varies and is calculated from saturated thickness and hydraulic conductivity. The storage coefficient (specific yield, S_Y) is constant. Type-1 is only valid for the uppermost layer of a model.
Type-2	Confined/ Unconfined	Transmissivity is constant - the storage coefficient may alternate between values applicable to the confined (S_S) or unconfined (S_Y) states.
Type-3	Confined/ unconfined	Transmissivity varies and is calculated from the saturated thickness and hydraulic conductivity. The storage coefficient may alternate between values applicable to the confined (S_S) or unconfined (S_Y) state.

Table 5. Model layer aquifers and aquitards

Layer No	Hydrogeological unit	Aquifer / aquitard	MODFLOW layer
1	Loxton Sands, Monoman Formation, part Pata Formation	Aquifer	Type-1
2	Lower Loxton Clay and Shells, Bookpurnong Formation, Pata Formation	Aquitard	Type-3
3	Pata Formation	Aquifer	Type-3
4	Winnambool Formation	Aquitard	Type-0
5	Glenforslan Formation	Aquifer	Type-0
6	Finnis Formation	Aquitard	Type-0
7	Upper Mannum Formation	Aquifer	Type-0
8	Lower Mannum Formation	Aquifer	Type-0

5.2.2.2 Layer-1: Loxton Sands, Monoman Formation and part Pata Formation

Layer-1 simulates the Loxton Sands unconfined – semi-unconfined aquifer, the Monoman Formation semi-unconfined – semi-confined aquifer, and part Pata Formation unconfined aquifer:

1. In the highland area the unconfined aquifer is represented by the Loxton Sands. The base of Layer-1 is the base of the Loxton Sands.
2. The Blanchetown Clay has not been modelled as the effect of this aquitard in perching water is accounted for by controlling the time lag and recharge rate to the Loxton Sands groundwater table.
3. The Monoman Formation represents the bulk of the unconfined aquifer in the River Murray valley. In reality, the Monoman Formation occurs in the unconfined – semi-confined state depending on the thickness and competence of the overlying Coonambidgal Formation. The representation of the Monoman Formation in the model as an unconfined aquifer results in the maximum flux of saline groundwater entering the river, and the most conservative wellfield design in terms of production well spacing and pumping rates. Regardless of the actual state of confinement of the Monoman Formation, when production wells are pumped, the aquifer becomes unconfined to some radial distance from the production well. The base of Layer-1 (top of Layer-2) is the base of the Monoman Formation.

4. Downstream of Loxton, the Pata Formation comes into hydraulic communication with the River Murray and forms the unconfined aquifer.
5. Base elevations were determined from geological and geophysical logs and extrapolation of these values. The elevation of the base of Layer-1 (top of Layer-2) occurs from between –30 and 30 m AHD (Fig. 14).
6. The representation of Layer-1 as a Modflow Type-1 layer (unconfined) results in conservative behaviour when concept wellfields are applied in the model.

5.2.2.3 Layer-2: Lower Loxton Clay and Shells, Bookpurnong Formation and part Pata Formation

Layer-2 simulates the Lower Loxton Clay and Shells and Bookpurnong Formation aquitards, and part Pata Formation semi-confined aquifer:

1. In the highland area Layer-2 represents the Lower Loxton Clay and Shells and Bookpurnong Formation. The base of Layer-2 is the base of the Bookpurnong Formation.
2. Due to concerns about the spatial continuity of the Bookpurnong Formation in the Loxton area (refer to Fig. 23), this aquitard was removed from the model within the River Murray valley and was replaced with the Pata Formation semi-confined, low permeability aquifer. As a result, the Monoman Formation contiguously overlies the Pata Formation in this area.
3. In the River Murray valley outside of the Loxton area, Layer-2 represents the Bookpurnong Formation. The base of Layer-2 is the base of the Bookpurnong Formation.
4. Base elevations were interpreted from geological and geophysical logs and the extrapolation of these values. The elevation of the base of Layer-2 (top of Layer-3) occurs between -30 and 20 m AHD (Fig. 15).

5.2.2.4 Layer-3: Pata Formation

Layer-3 simulates the regionally distributed Pata Formation semi-confined low permeability aquifer. The base elevation of Layer-3 was interpreted from geological and geophysical logs and extrapolation of these values, and by examination of the cross-sections given in Figure 3. The base elevation of Layer-3 (top of Layer 4) occurs between -50 and 10 m AHD (Fig. 16).

5.2.2.5 Layer-4: Winnambool Formation

Layer-4 simulates the regionally distributed Winnambool Formation aquitard. Layer-4 thickness of 3 m was taken from AWE (2003). The base elevation of Layer-4 (top of Layer-5) occurs between -50 and 10 m AHD (Fig. 17).

5.2.2.6 Layer-5: Glenforslan Formation

Layer-5 simulates the regionally distributed Glenforslan Formation semi-confined, low permeability aquifer. Layer-5 thickness of 25 m was taken from AWE (2003). The base elevation of Layer-5 (top of Layer-6) occurs between -70 and -20 m AHD (Fig. 18).

5.2.2.7 Layer-6: Finnis Formation

Layer-6 simulates the regionally distributed Finnis Formation aquitard. Layer-6 thickness of 3 m was taken from AWE (2003). The base elevation of Layer-6 (top of Layer-7) occurs between –80 and -20 m AHD (Fig. 19).

5.2.2.8 Layer-7: Upper Mannum Formation

Layer-7 simulates the regionally distributed Upper Mannum Formation (semi)-confined moderate permeability aquifer. Layer-7 thickness of 25 m was taken from AWE (2003). The base elevation of Layer-7 (top of Layer-8) occurs between -100 and -40 m AHD (Fig. 20).

5.2.2.9 Layer-8: Lower Mannum Formation

Layer-8 simulates the regionally distributed Lower Mannum Formation (semi)-confined low permeability aquifer. Layer-8 thickness of 100 m was taken from AWE (2003). The base elevation of Layer-8 is between -220 and -130 m AHD (Fig. 21).

5.2.3 MODEL AQUIFER HYDRAULIC PARAMETERS

It is standard practice, when commencing a modelling project, to initially allocate aquifer and aquitard hydraulic properties based on previous reported values.

In order to commence model calibration, regional values of aquifer and aquitard hydraulic parameters were derived from previous reports, and reference to current pumping tests.

Some aquifer hydraulic parameters were altered in specific areas during both steady state and transient calibration to achieve the final values required for accurate calibration. The final aquifer and aquitard hydraulic parameters are given in Table 6, with their distribution within each layer given in Figures 22–30.

Table 6. Calibrated aquifer and aquitard hydraulic parameters

Aquifer / aquitard	Layer	Hydraulic conductivity		Storage	
		Kh (m/day)	**K_V** (m/day)	**S_Y** (-)	**S_S** (/m)
Loxton Sands	1	0.5–10	0.05–0.1	0.15	
Monoman Formation	1	15	0.15	0.15	
Lower Loxton Clay and Shells Bookpurnong Formation	2	0.005	$2.38x10^{-3}$		$5x10^{-6}$
Pata Formation	1, 2, 3	0.38	0.038	0.15	$5x10^{-6}$
Winnambool Formation	4	0.0001	$2.02x10^{-4}$		$5x10^{-6}$
Glenforslan Formation	5	0.5	0.005		$5x10^{-6}$
Finnis Formation	6	$1x10^{-4}$	$1x10^{-4}$		$5x10^{-6}$
Upper Mannum Formation	7	2	0.02		$5x10^{-6}$
Lower Mannum Formation	8	0.5	0.005		$5x10^{-6}$

5.2.3.1 Loxton area

In the Loxton area calibration resulted in:

1. An horizontal hydraulic conductivity of 15 m/day, and a specific yield of 0.15 for the Monoman Formation. Horizontal hydraulic conductivity values remain very close to (and within the same order of magnitude) as values determined from pumping tests (30–40 m/day). Due to the representation of the Monoman Formation in the model as an unconfined aquifer, storage coefficient values determined from pumping tests are not relevant.

2. Horizontal hydraulic conductivities of 0.5–10 m/day, and a specific yield of 0.15 for the Loxton Sands resulted in the best fit to the observed (historic) potentiometic head data. A horizontal hydraulic conductivity value of 10 m/day is within the order of magnitude of those determined from pumping tests.

In addition:

1. Pata Formation aquifer hydraulic parameters were obtained from reference to current pumping tests (horizontal hydraulic conductivity <0.7 m/day, specific storage $3x10^{-6}$ – $4x10^{-5}$/m).
2. Glenforslan Formation and Upper and Lower Mannum Formation aquifer hydraulic parameters were adopted from AWE (2003), and are generally consistent with the results of pumping tests.

Aquitard hydraulic parameters were applied to control the upward and downward leakage between the Loxton Sands, Monoman Formation, and the Upper Mannum Formation:

1. Bookpurnong Formation vertical hydraulic conductivity was obtained from reference to current pumping tests (vertical hydraulic conductivity range $1x10^{-3}$ – $5x10^{-3}$ m/day).
2. Winnambool Formation vertical hydraulic conductivity was obtained from reference to current pumping tests (vertical hydraulic conductivity range $1x10^{-5}$ – $1x10^{-3}$ m/day).
3. Finnis Formation parameters were adopted from AWE (2003). Current pumping tests indicate the values are conservative (vertical hydraulic conductivity range $1x10^{-5}$ – $1x10^{-4}$ m/day).

Note regarding Bookpurnong area

In the Bookpurnong area, aquifer hydraulic parameters for the Loxton Sands were adopted from AWE (2003) and these were used in both calibration and prediction.

5.2.4 MODEL BOUNDARIES

The eight-layer model is complex, and different boundary conditions were applied to simulate the aquifer system, River Murray, and their hydraulic communication.

5.2.4.1 Layer-1: Loxton Sands and Monoman Formation and <u>part</u> Pata Formation

The regional groundwater flow is from east to west within the model domain with groundwater flux entering the River Murray. Where the aquifers are laterally adjacent, groundwater flows from the Loxton Sands into the Monoman Formation, and then discharges to the river. The following boundary conditions were applied to Layer-1 (Fig. 31):

1. No-flow boundaries where groundwater flow is parallel to the model edge.
2. General head boundaries and constant head boundaries to simulate groundwater flow on the model edges where flow occurs into and out of the model.
3. Constant head boundaries to simulate hydraulic communication between the Noora evaporation basin and aquifers.
4. Constant head boundary cells to simulate the River Murray (river stage AHD):
    a. 16.30 m upstream Lock-5
    b. 13.2 m Lock-5 to Lock-4
    c. 9.8 m Lock-4 to Lock-3
5. River cells to simulate anabranch creeks on the floodplain.
6. Drainage cells to simulate groundwater seepage from the highland to the floodplain in the Loxton area. The potentiometric heads were set at 11 m AHD, the average ground surface elevation of the northern floodplain.

7. Drainage cells (potentiometric head 27 m AHD) were used in the Loxton area throughout the area where the CDS occurs to control the groundwater table if it rises to the elevation of the CDS.
8. River cells to simulate the Katarapko Island disposal basin.

Aside:- The Loxton Comprehensive Drainage System (CDS)

The CDS was constructed to control the perched groundwater table that developed above the Blanchetown Clay. There is no requirement for the Blanchetown Clay to be simulated in the model for modelling runs to the present, as the effect of this aquitard in perching water is accounted for by controlling the recharge rate and lag times to the Loxton Sands, where the true groundwater table occurs.

However, the model does require control of the groundwater table during predictive modelling runs, to account for the possibility that the groundwater mound in the Loxton Sands reaches an elevation where the CDS would provide control. This control is provided by using drainage cells throughout the area where the CDS occurs to control the groundwater table if it rises to the elevation of the CDS.

5.2.4.2 Layer-2: Lower Loxton clay and shells and Bookpurnong Formation and <u>part</u> Pata Formation

Very small volumes of water move laterally into and out of this layer due to its low permeability. The following boundary conditions were applied to Layer-2 (Fig. 32).

1. No-flow boundaries were used at the model edges.
2. Some constant head boundaries were used along the River Murray in areas where the river is in hydraulic communication with the Pata Formation.
3. River cells were used to simulate Lake Bonney.

5.2.4.3 Layer-3: Pata Formation

Regional groundwater flow is from the southeast to northwest within the model domain. The following boundary conditions were applied to Layer-2 (Fig. 33).

1. Constant head boundaries were used at the model edges to simulate groundwater flow into and out of the model.
2. Constant head boundaries were used in the western area of the model where the River Murray is in hydraulic communication with the Pata Formation.
3. Constant head boundary cells to simulate the River Murray (river stage AHD):

   a. 9.8 m upstream Lock-3

   b. 6.1 m downstream Lock-3

5.2.4.4 Layer-4 and Layer 6: Winnambool Formation and Finnis Formation

Very small volumes of water move laterally into and out of this layer due to its low permeability. No-flow boundaries were used at the model edges (Fig. 34).

5.2.4.5 Layer-5, 7 and 8: Glenforslan Formation, Upper and Lower Mannum Formation

Regional groundwater flow is from the southeast to northwest within the model domain. Constant head boundaries were used at the model edges to simulate groundwater flow into and out of the model (Fig. 35).

5.2.5 MODEL RECHARGE

The Loxton – Bookpurnong area has a semi-arid climate with hot dry summers and some rainfall during winter months. The average rainfall is ~400 mm/year with pan evaporation of ~2000 mm/year.

Prior to clearance of the native vegetation on the highland, vertical recharge to the Loxton Sands resulting from rainfall infiltration is believed to have been as low as 0.1 mm/year (Allison et al. 1990). A recharge rate of 0.1 mm/year was applied in the steady state model, and to the non-irrigated areas in the transient model. Recent data obtained by the CSIRO and Department for Environment and Heritage (DEH) indicates increased recharge in the dryland farming areas, and this data will be included in the further modelling.

In the Loxton area, the recharge zones and recharge rates to the Loxton Sands were initially adopted from AWE (2003). These recharge zones and recharge rates were modified during calibration (Figs 36a, 36b, App. A-1 [Loxton] and B-1 [Bookpurnong]) and applied in predictive modelling to simulate recharge from all sources to the Loxton Sands.

The modified recharge zones and recharge rates were modified by calibrating the model to potentiometric heads in the Loxton Sands. The total volume was compared with the total accession volume calculated by Ken Smith Technical Services in 1997 (refer to discussion in calibration section). It is accepted that the values reported by AWE have had professional judgement applied in their derivation.

Note regarding recharge in the Loxton - Bookpurnong area

In the Bookpurnong area, recharge zones and recharge rates to the Loxton Sands were adopted from AWE (2003) and these were used in both calibration and prediction. The following information regarding this issue was provided by AWE:

Recharge zones and rates for Loxton - Bookpurnong irrigation areas to 1997 are derived from detailed crop data and water balances provided by Ken Smith Technical Services. Crop types and hectares under irrigation were assembled on a property-by-property basis. Crop factors, based on work done by AWE for the Bookpurnong Lock-4 Environmental Association in 2002–03, were used to calculate the total application volume in each irrigation zone. The zones are based on cadastral boundaries within the Loxton - Bookpurnong LAP area and GIS coverages. The application volume in each irrigation zone was multiplied by 25% to account for an estimated irrigation efficiency of 75% and lagged for 20 years, a length of time based on the 27 years measured at Clark's floodplain and initial model calibration. Some percentage of the volume was not lagged, but was assumed to reach the aquifer by drain in two special recharge zones. This volume is a fraction of the total recharge volume, the fraction depending on how many wells were believed to be in use at different dates (2% per well to a maximum of 10%). Some scenarios include changes in future recharge due to a predicted expansion in irrigation at Bookpurnong. Likely patterns of growth post 1997 were developed by AWE in consultation with David Ingerson of the LAP Steering Committee with some input from the Bookpurnong and Lock-4 Environmental Group.

5.2.6 MODEL EVAPOTRANSPIRATION

Evapotranspiration was simulated using ground surface as a control point (evapotranspiration rate 200 mm/year, Holland et al. (2001)) and applying an extinction depth of 1.5 m. Evapotranspiration is most likely to occur on the floodplain and in some areas to the east of the Loxton groundwater mound where a shallow groundwater table exists.

5.2.7 MODEL GROUNDWATER ALLOCATION AND USE

There is no allocation of groundwater or use in the Loxton – Bookpurnong area.

5.2.8 MODEL STRESS PERIOD

The transient model can be used to model the historical period (1945–2004) and for predictions (2004–2104) using a two-year stress period. In the final reporting, the results of predicted salt loads entering the River Murray have been represented from 1945 because irrigation commenced around 1945, but there were no hydraulic changes from 1945–55 due to the time lag associated with recharge.

6. MODEL CALIBRATION

6.1 STEADY STATE MODELS, TRANSIENT MODELS AND CALIBRATION

Steady state models are used to model equilibrium hydrologic conditions and/or conditions when changes in storage are insignificant. Transient models are used to model time dependent stresses and / or where water is released from, or taken into storage.

Calibration of the model with existing data must be conducted in order to have confidence in predictive modelling. Calibration is necessary to demonstrate that the model can replicate the behaviour of the aquifer system for at least one set of conditions. A sensitivity analysis must also be undertaken to determine the relative importance of model parameters (i.e. the system drivers) in achieving calibration.

6.2 STEADY STATE MODEL CALIBRATION

Steady state calibration is undertaken to develop a broad-scale hydraulic conductivity distribution by matching modelled to observed potentiometric heads. Steady state calibration was performed by adjusting hydraulic conductivities (within reasonable limits) and model boundary conditions. Dynamic stresses and storage effects are excluded from steady state calibration.

Due to the absence of pre-irrigation development potentiometric head data, the steady state model was calibrated using a constructed (S Barnett DWLBC) pre-irrigation development potentiometric surface (Fig. 37) that is believed to represent equilibrium hydraulic conditions in the area (note that this is the only available data).

A modelled potentiometric surface was achieved that closely matches the constructed (groundwater table) potentiometric surface (Fig. 38) in the Loxton Sands and Monoman Formation (in the east of the model domain), and the Murray Group Limestone (in the west of the model domain where it is unconfined), at a time post-regulation of the River Murray, but prior to irrigation development and enhanced recharge to the Loxton Sands.

6.3 TRANSIENT MODEL CALIBRATION

Transient calibration is undertaken to calibrate aquifer and aquitard hydraulic parameters, and refine boundary conditions. The potentiometric surface output from the steady state model was used as the starting point for transient model runs up to 2004. The transient model was calibrated through an iterative process that involved adjusting the boundary conditions, recharge rates and aquifer hydraulic parameters. Each time a change to the boundary conditions and aquifer hydraulic parameters was made in the transient model, the steady state model was altered and rerun, with the output being used as the starting point for the transient model.

Model calibration was achieved by the following actions, in accordance with Murray Darling Basin Commission (2000):

1. Qualitative comparison between modelled and observed potentiometric heads.
2. Quantitative comparison between modelled and observed potentiometric heads.
3. Iteration residual error.

4. Using salt load as confirmation (rather than water balance as calibration, as recommended).

6.3.1 TRANSIENT MODEL CALIBRATION - QUALITATIVE COMPARISON OF POTENTIOMETRIC HEADS

Initial qualitative calibration of the transient model was undertaken by simulating the regional potentiometric heads at 2003 and 2004. The modelled and observed potentiometric heads from 2003 and 2004 were compared to determine the accuracy of the calibration.

6.3.1.1 Layer-1: Loxton Sands and Monoman Formation and part Pata Formation

Qualitative comparison between the modelled (Fig. 39) and observed potentiometric heads (Fig. 6) of the Loxton Sands and Monoman Formation in the Loxton area, indicates the modelled distribution closely represents the shape and form of the observed distribution, including the Loxton groundwater mound.

Note regarding Bookpurnong area

Qualitative comparison between the modelled and observed (2002) potentiometric heads of the Loxton Sands and Monoman Formation in the Bookpurnong area indicates the modelled distribution adequately represents the shape and form of the observed distribution.

6.3.1.2 Layer-3: Pata Formation

Qualitative comparison between modelled (Fig. 40) and observed potentiometric heads (Fig. 7) of the Pata Formation indicates the modelled distribution adequately represents the shape and form of the observed distribution, including an expression of the Loxton groundwater mound resulting from downward vertical leakage from the Loxton Sands (and possibly hydraulic loading of the aquifer by the mound in the overlying Loxton Sands).

6.3.1.3 Layer-5: Glenforslan Formation

Qualitative comparison between the modelled (Fig. 41) and observed potentiometric heads (Fig. 8) of the Glenforslan Formation indicates the modelled distribution represents the shape and form of the observed distribution, but with an expression of the Loxton groundwater mound.

Aside:- Calibration of Potentiometric Heads in Deeper Units

Calibration of potentiometric heads in deeper units is hampered by the lack of observed data, particularly prior to the current investigations. The model predicts the downward continuation of the Loxton groundwater mound into the Glenforslan Formation and Upper Mannum Formation, where there is no evidence of mounding.

The model represents a conservative hydraulic scenario, allowing for downward vertical leakage to the Glenforslan Formation and Upper Mannum Formation resulting in an expression of the Loxton groundwater mound, and elsewhere in the model allowing for upward leakage from the Murray Group Limestone. Potential upward leakage was a topic of concern to SA Water, AWE and DWLBC.

Acceptance of this model response recognises the fact that existing aquifer and aquitard hydraulic parameter data are sparse, may be conservative, and have been applied over much larger areas than that actually tested during pumping tests.

This conservative approach to modelling indicates that, regardless of the development of a groundwater mound in the Glenforslan Formation and Upper Mannum Formation, the target aquifers for salt interception are the Monoman Formation and Loxton Sands.

6.3.1.4 Layer-7: Upper Mannum Formation

Qualitative comparison between the modelled (Fig. 42) and observed potentiometric heads (Fig. 9) of the Upper Mannum Formation indicates the modelled distribution represents the shape and form of the observed distribution, with an expression of the Loxton groundwater mound.

6.3.2 TRANSIENT MODEL CALIBRATION - QUANTITATIVE COMPARISON OF POTENTIOMETRIC HEADS

Due to the fact that the target aquifers for salt interception are the Loxton Sands and Monoman Formation, quantitative calibration was conducted for these aquifers. The lack of observed data from the Pata Formation, Glenforslan Formation and Upper Mannum Formation precludes quantitative calibration for these units.

In the Loxton area quantitative comparison between modelled and observed (historical) potentiometric heads of observation wells (Fig. 43) completed in the Loxton Sands and Monoman Formation indicates a satisfactory match (Figs 44–52).

Note regarding Bookpurnong area

No quantitative calibration has been undertaken in the Bookpurnong area at this time, but is recommended as a component of future work.

6.3.3 TRANSIENT MODEL CALIBRATION ITERATION RESIDUAL ERROR

The iteration residual error, between modelled and observed potentiometric heads of the Loxton Sands and Monoman Formation in the Loxton area was calculated using data from 1976, 1990 and 2004 (years for which more data was available). The calculations (Figs 53–55) indicate a normalised root mean square value for 1976 (6.8%), 1990 (4.8%) and model validation in 2004 (4.7%). These values are less than, or close to, the 5% recommended by Murray Darling Basin Commission (2000).

6.3.4 MODEL CONFIRMATION - COMPARISON OF SALT LOAD

6.3.4.1 Loxton area

Groundwater salinity values in the Loxton Sands vary dramatically across the Loxton - Bookpurnong region, reflecting the impact of low salinity irrigation drainage water on the saline native groundwater. Groundwater salinity data were sourced from pumping tests and HYDROLAB geophysical sonding, the latter demonstrating stratification with the heavier dense saline groundwater underlying low salinity irrigation water.

For the purposes of predicting salt load entering the River Murray, professional judgement was applied to available groundwater salinity data to arrive at values considered to be representative of various zones along the river (Fig. 4). The more saline native groundwater values (7000–40 000 mg/L) were adopted for these zones.

The salt load entering the River Murray in the Loxton – Bookpurnong area was calculated by converting the modelled groundwater flux by applying relevant values of groundwater salinity for a number of model flow budget zones along the river (Figs 56, 57 respectively). The salinity for each zone and the resulting calculations of the salt load are given in Appendix A-2 [Loxton] and B-2 [Bookpurnong].

In the Loxton area confirmation that the modelled (calculated) salt load entering the River Murray matched the salt load observed during run-of-river salinity surveys (that can have a wide range depending on river flows) was achieved by comparing the modelled and observed values. The modelled salt load values of 120–140 tonnes/day are quite acceptable when compared to the run-of-river data that indicates 80–120 tonnes/day (Table 7), and this provides additional confidence in the model.

Table 7. Comparison between modelled salt load and run-of-river salinity data in the Loxton area

Year	Salt load (tonnes/day) at flow rates of 5000–20 000 ML/day			
	Modelled			Run-of-river salinity data
	Eastern side Irrigation Area	**Western side Katarapko Island** (disposal basin)	**Total**	
Jul 1992 – Jul 2002	100	43	143	100–119
Aug 2001 – Jul 2002	96	28	124	82–104

Asside:- Salt load from Katarapko Island

The flux of saline groundwater from the western side of the River Murray is driven by the operation of the Katarapko Island disposal basin. When this basin has been operated with a high water level a flux of saline groundwater is induced towards the river. Due to the fact that no basin waterlevel data was available, an estimated high water level was applied in the model, consistent with maximum observed (historical) potentiometric heads in the surrounding aquifer. This modelling approach results in a maximum flux entering the river that may be greater than that currently occurring.

Note regarding Bookpurnong area

In the Bookpurnong area, the modelled salt load of 72 tonnes/day closely matches the run-of-river salt load in 2002 of 78 tonnes/day given in AWE (2003).

6.3.5 MODEL CONFIRMATION – COMPARISON OF RECHARGE VOLUME

The input recharge zones and recharge rates (AWE 2003) were modified by calibrating the model to provide a best match with potentiometric heads in the aquifers. The total volume of recharge applied in the model was then compared with the calculated total accession volume from Smith (1997) (Fig. 58).

The calculated total accession (Smith) took into account rainfall infiltration, total application, irrigation efficiency and other associated irrigation losses. The modelled recharge volume (which was adjusted during the calibration process) was less than or equal to the calculated accession volume. Any difference is most certainly due to the calculated volume including water perched above the Blanchetown Clay, inaccuracies in records of pumped volumes, and assumptions made regarding losses. The close similarity in the values gives confidence that the total recharge applied in the model is satisfactory.

6.3.6 MODEL CONFIRMATION - COMPARISON BETWEEN MODEL RESULTS AND TEM

The modelling discussed in this report confirms that the sections of the River Murray where the salt load entering the river is greatest (Fig. 59) is relatively consistent with potential discharge zones indicated by the TEM data (Fig. 2).

7. MODELLING RUNS AND PREDICTIVE MODELLING RUNS

Once satisfactory calibration of the model has been achieved, the transient model provides a useful predictive tool to quantify fluxes of saline groundwater, and the impacts of specific pumping stresses on potentiometric heads, over periods that may range from tens to hundreds of years.

In particular, the model can predict the:

1. Lateral flux of saline groundwater and (by using appropriate salinity values) salt load, entering the River Murray from the Loxton Sands and Monoman Formation in the Loxton – Bookpurnong area.
2. Vertical leakage and (by using appropriate salinity values), salt load from the Murray Group Limestone into the overlying Pliocene Sands.
3. Impact of SIS on the flux of saline groundwater and salt load entering the River Murray.

Note that all predictions are for the eastern side of the River Murray

In the Loxton area, the recharge zones and recharge rates applied in predictive modelling were based on model calibration.

Note regarding Bookpurnong area

- In the Bookpurnong area, recharge zones, recharge rates and irrigation efficiencies applied in predictive modelling were taken from AWE (2003).
- Prediction results for Bookpurnong are included in tables in the following sections.
- The proposed SIS applied in predictive modelling was provided by AWE in June 2004.

7.1 SCENARIOS

The scenarios summarised in Table 8, and detailed below, were requested to be run by DWLBC Murray Darling Basin Division and are designed to:

1. Determine the relative impact of the various pre-and post-1988 actions undertaken in the Loxton - Bookpurnong area.
2. Determine the impacts of improved irrigation practice, and distribution system rehabilitation on the flux of saline groundwater and salt load entering the River Murray.
3. Determine the accountability for cost sharing.
4. Satisfy the reporting requirements of both Schedule ‘C’ of the Murray-Darling Basin Agreement 1992 and the Basin Salinity Management Strategy Operational Protocols 2003.

The scenarios include the application (or not) of the following important conditions:

1. Improved irrigation practices (IIP) commencing in the late 1990s when furrows were replaced by sprinklers, thus increasing irrigation efficiency from 75–85%. Recharge zones are given in Figure 36a and Figure 36b and recharge rates are given in Appendix A-1-4 [Loxton] and B-1-4 [Bookpurnong] a significant reduction of recharge rates after 1998 is assumed to be due to the (IIP).
2. Loxton headworks rehabilitation (RH), ie replacement of concrete distribution channels with pipelines, commencing in 2002, resulted in reduced transportation losses which are reflected in reduced recharge rates. Recharge zones are given in Figure 36a and recharge rates are given in Appendix A-1-5 [Loxton].
3. Construction of SIS.

Table 8. Summary of modelled scenarios and conditions

Scenario	Model Run	Irrigation development area	IIP	RH	SIS
Scenario-1	Steady State	None	None	None	None
Scenario-2	1945-2004	1945–2004 (from 1945 to current condition)	70–85%	Yes	None
Scenario-3	2004-2104	Pre-1988	70%	None	None
Scenario-4	2004-2104	Pre-1988	85%	None	None
Scenario-5	2004-2104	Pre-1988	85%	Yes	None
Scenario-6	2004-2104	Post-1988*	85%	Yes	None
Scenario-7	2004-2104	Pre-1988	85%	Yes	SIS-1 designed for current recharge condition
Scenario-8	2004-2104	Post-1988*	85%	Yes	SIS-2 designed for post-1988 recharge condition

* Post-1988 includes pre-1988 + post-1988 irrigation development

7.1.1 SCENARIO-1: STEADY STATE (PRIOR TO 1945)

Scenario-1 provides the base groundwater flux and salt load entering the River Murray post-regulation and prior to irrigation development.

7.1.1.1 Scenario-1: Conditions

The following conditions were applied in the steady state model in the Loxton – Bookpurnong area:

1. Post-regulation of the River Murray.
2. Pre-irrigation development.

7.1.1.2 Scenario-1: Modelling results

The results for Loxton and Bookpurnong, given in Table 9, indicate that of the 6.65 tonnes/day salt load entering the River Murray in the Loxton area, 35% enters by vertical leakage from underlying aquifers, the remaining 65% enters by lateral flow.

Table 9. Scenario-1 predicted groundwater flux and salt load from eastern side of river.

	Loxton			Bookpurnong		
	Lateral	Upward	Total	Lateral	Upward	Total
Flux (ML/day)	0.23	0.06	0.29	0.24	0.08	0.32
Salt load (Tonnes/day)	4.31	2.34	6.65	7.24	1.98	9.21

7.1.2 SCENARIO-2: HISTORICAL 1945–2004

Transient Scenario-2 models the hydrological changes that occurred in the Loxton area, due to historical irrigation development from 1945–2004, and groundwater flux and salt load entering the River Murray. The model results are identical to those resulting from model calibration, and represent the historical on-ground situation.

7.1.2.1 Scenario-2: Conditions

The following conditions were applied in the transient model in the Loxton – Bookpurnong area:

1. Irrigation activity commencing in the Loxton area in 1945 and running until 2004.
2. A total area under irrigation that increases from 1945–2004.
3. Recharge rates applied to meet that required for calibration commencing from 1955 (due to the application of a 10 year lag time).
4. Improved irrigation practices commencing in the late 1990s with furrows being replaced by sprinklers.
5. Loxton headworks rehabilitation of the distribution network commencing in 2002.

7.1.2.2 Scenario-2: Modelling results

The results of the predicted flux of saline groundwater and salt load entering the River Murray are given in Appendix A-2 [Loxton] and B-2 [Bookpurnong].

The results for Loxton and Bookpurnong for 2004, given in Table 10, indicate the salt load entering the River Murray under current conditions. Of the 92 tonnes/day salt load in the Loxton area, 22% enters by vertical leakage from underlying aquifers, the remaining 78% enters by lateral flow.

Table 10. Scenario-2 predicted groundwater flux & salt load at 2004 from eastern side of river

	Loxton			Bookpurnong		
	Lateral	**Upward**	**Total**	**Lateral**	**Upward**	**Total**
Flux (ML/day)	3.16	0.70	3.86	2.23	0.23	2.46
Salt load (Tonnes/day)	71.76	20.59	92.34	66.92	5.84	72.76

7.1.3 SCENARIO-3: PRE-1988 IRRIGATION DEVELOPMENT WITH NO MITIGATION

Transient Scenario-3 predicts the hydrological changes, and groundwater flux and salt load entering the River Murray, that would be expected to occur in the Loxton area from 1988 until 2104 under pre-1988 irrigation development with no mitigation.

7.1.3.1 Scenario-3: Conditions

The following conditions were applied in the transient model in the Loxton – Bookpurnong area:

1. The potentiometric surface output from Scenario-2, at 1988, was used as the starting point for a prediction run until 2104.

2. Irrigation operating at 70% efficiency from 1988–2104 on pre-1988 irrigation development areas.

The following conditions represented in Scenario-2 were NOT activated:

1. Improved irrigation practices commencing in the late 1990s with furrows being replaced by sprinklers.
2. Loxton headworks rehabilitation of the distribution network commencing in 2002.
3. Post-1988 irrigation development area.

7.1.3.2 Scenario-3: Prediction results

The results of the predicted flux of saline groundwater and salt load entering the River Murray are given in Appendix A-3 [Loxton] and B-3 [Bookpurnong].

The results for Loxton and Bookpurnong for 2104, given in Table 11, indicate the predicted maximum salt load entering the River Murray. Of the 113 tonnes/day salt load in the Loxton area, 21% enters by vertical leakage from underlying aquifers, the remaining 79% enters by lateral flow.

Table 11. Scenario-3 predicted groundwater flux & salt load at 2104 from eastern side of river

	Loxton			Bookpurnong		
	Lateral	**Upward**	**Total**	**Lateral**	**Upward**	**Total**
Flux (ML/day)	4.53	0.88	5.41	3.20	0.29	3.49
Salt load (Tonnes/day)	89.10	23.51	112.61	95.99	7.22	103.21

7.1.4 SCENARIO-4: PRE-1988 IRRIGATION DEVELOPMENT + IIP

Transient Scenario-4 predicts the hydrological changes, and groundwater flux and salt load entering the River Murray, that would be expected to occur in the Loxton area from 2002 until 2104 under pre-1988 irrigation development with IIP. This scenario tests the reduction in salt load resulting from the implementation of IIP.

7.1.4.1 Scenario-4: Conditions

The following conditions were applied in the transient model in the Loxton – Bookpurnong area:

1. The potentiometric surface output from Scenario-2, at 2002, was used as the starting point for a prediction run until 2104.
2. Irrigation operating at 85% efficiency (the result of IIP) from 2002–2104 on pre-1988 irrigation development areas.

The following conditions represented in Scenario-2 were NOT activated:

1. Loxton headworks rehabilitation of the distribution network commencing in 2002.
2. Post-1988 irrigation development area.

7.1.4.2 Scenario-4: Prediction results

The results of the predicted flux of saline groundwater and salt load entering the River Murray are given in Appendix A-4 [Loxton] and B-4 [Bookpurnong].

The results for Loxton and Bookpurnong for 2104, given in Table 12, indicate the predicted salt load reduction to the River Murray, in comparison to Scenario-3. Of the 101 tonnes/day salt load in the Loxton area, 22% enters by vertical leakage from underlying aquifers, the remaining 78% enters by lateral flow. The implementation of IIP reduces the salt load by 11 tonnes/day with respect to Scenario-3.

Table 12. Scenario-4 predicted groundwater flux & salt load at 2104 from eastern side of river

	Loxton			Bookpurnong		
	Lateral	**Upward**	**Total**	**Lateral**	**Upward**	**Total**
Flux (ML/day)	4.08	0.84	4.92	1.94	0.23	2.17
Salt load (Tonnes/day)	78.94	22.42	101.35	58.33	5.68	64.01

7.1.5 SCENARIO-5: PRE-1988 IRRIGATION DEVELOPMENT + IIP + RH

Transient Scenario-5 predicts the hydrological changes, and groundwater flux and salt load entering the River Murray, that would be expected to occur in the Loxton area from 2002 until 2104 if the CURRENT RECHARGE conditions remain unchanged into the future. This scenario assumes pre-1988 irrigation development with IIP + RH. This scenario tests the reduction in salt load resulting from the implementation of RH.

7.1.5.1 Scenario-5: Conditions

The following conditions were applied in the transient model in the Loxton – Bookpurnong area:

1. The potentiometric surface output from Scenario-2, at 2002, was used as the starting point for a prediction run until 2104.
2. Irrigation operating at 85% efficiency (the result of IIP) from 2002–2104 on pre-1988 irrigation development areas.
3. Loxton headworks rehabilitation of the distribution network commencing in 2002.

Recharge from post-1988 irrigation development area was NOT included.

7.1.5.2 Scenario-5: Prediction results

The results of the predicted flux of saline groundwater and salt load entering the River Murray are given in Appendix A-5 [Loxton] and B-5 [Bookpurnong].

The results for Loxton and Bookpurnong for 2104, given in Table 13, indicate the predicted salt load reduction to the River Murray, in comparison to Scenario-4. Of the 79 tonnes/day salt load in the Loxton area, 23% enters by vertical leakage from underlying aquifers, the remaining 78% enters by lateral flow. The implementation of RH reduces the salt load by 22 tonnes/day with respect to Scenario-4.

Table 13. Scenario-5 predicted groundwater flux & salt load at 2104 from eastern side of river

	Loxton			Bookpurnong		
	Lateral	**Upward**	**Total**	**Lateral**	**Upward**	**Total**
Flux (ML/day)	3.14	0.69	3.83	1.76	0.21	1.97
Salt load (Tonnes/day)	60.91	18.52	79.43	52.73	5.16	57.89

7.1.6 SCENARIO-6: 'POST-1988' IRRIGATION DEVELOPMENT

Transient Scenario-6 predicts the hydrological changes, and MAXIMUM groundwater flux and salt load entering the River Murray, that would be expected to occur in the Loxton area from 2002 until 2104 under the MAXIMUM RECHARGE conditions. This scenario assumes pre-1988 irrigation development with IIP + RH, and post-1988 irrigation development with IIP ('POST-1988' irrigation development). This scenario tests the increase in salt load resulting from post-1988 irrigation development.

7.1.6.1 Scenario-6: Conditions

The following conditions were applied in the transient model in the Loxton – Bookpurnong area:

1. The potentiometric surface output from Scenario-2, at 2002, was used as the starting point for a prediction run until 2104.
2. Irrigation operating at 85% efficiency (the result of IIP) between 2002 and 2104 on pre-1988 irrigation development areas.
3. Loxton headworks rehabilitation of the distribution network commencing in 2002.
4. The expected increasing recharge to the Loxton Sands (after 2004) resulting from the post-1988 irrigation development areas operating at 85% efficiency.

7.1.6.2 Scenario-6: Prediction results

The results of the predicted flux of saline groundwater and salt load entering the River Murray are given in Appendix A-6 [Loxton] and B-6 [Bookpurnong].

The results for Loxton and Bookpurnong for 2104, given in Table 14, indicate the predicted maximum salt load entering the River Murray, in comparison to Scenario-5. Of the 99 tonnes/day salt load in the Loxton area, 23% enters by vertical leakage from underlying aquifers, the remaining 78% enters by lateral flow. The post-1988 irrigation development increases the salt load by 20 tonnes/day with respect to Scenario-5.

Table 14. Scenario-6 predicted groundwater flux & salt load at 2104 from eastern side of river

	Loxton			Bookpurnong		
	Lateral	**Upward**	**Total**	**Lateral**	**Upward**	**Total**
Flux (ML/day)	3.96	0.84	4.80	5.42	0.41	5.83
Salt load (Tonnes/day)	77.13	22.52	99.65	162.49	10.20	172.69

7.1.7 SCENARIO-7: PRE-1988 IRRIGATION DEVELOPMENT + IIP + RH + SIS-1

Transient Scenario-7 predicts the hydrological changes, and groundwater flux and salt load entering the River Murray, that would be expected to occur in the Loxton area from 2002 until 2104 if the CURRENT RECHARGE conditions remain unchanged into the future (ie Scenario-5). This scenario assumes pre-1988 irrigation development with improved IIP + RH + SIS-1. This scenario tests the reduction in salt load resulting from the construction of SIS-1.

7.1.7.1 Scenario-7: Conditions

The following conditions were applied in the transient model in the Loxton – Bookpurnong area:

1. The potentiometric surface output from Scenario-2, at 2002, was used as the starting point for a prediction run until 2104.
2. Irrigation operating at 85% efficiency (the result of IIP) from 2002–2104 on pre-1988 irrigation development areas.
3. Loxton headworks rehabilitation of the distribution network commencing in 2002.
4. Construction of a SIS-1 in 2004.

Recharge from post-1988 irrigation development area was NOT included.

7.1.7.2 Scenario-7: Prediction results

The results of the predicted flux of saline groundwater and salt load entering the River Murray are given in Appendix A-7 [Loxton] and B-7 [Bookpurnong].

The results for Loxton and Bookpurnong for 2104, given in Table 15, indicate the predicted salt load reduction to the River Murray, in comparison to Scenario-5. The construction of SIS-1 reduces the salt load in the Loxton area by 56 tonnes/day with respect to Scenario-5.

Table 15. Scenario-7 predicted groundwater flux & salt load at 2104 from eastern side of river

	Loxton			Bookpurnong		
	Lateral	**Upward**	**Total**	**Lateral**	**Upward**	**Total**
Flux (ML/day)	0.86	0.29	1.15	0.42	0.18	0.60
Salt load (Tonnes/day)	12.71	10.94	23.20	12.69	4.59	17.28

7.1.7.3 Scenario-7: Loxton SIS-1 scheme concept design

Modelling of Scenario-5 (the current situation continuing unchanged until 2104) indicates the salt load entering the River Murray in the Loxton area at 2104 is 80 tonnes/day. This salt load results in an additional 20 EC (using a conversion of 4 tonnes of salt per EC) being observed in-river at Morgan. The operational target reduction of the Loxton SIS-1 is an in-river EC benefit approaching this value at Morgan as closely as possible.

The concept curtain wellfield SIS-1 for the Loxton area has been developed using the groundwater model. The concept SIS-1 (Fig. 60a), composed of 65 production wells pumping at 0.5–2 L/s, is intended to intercept the flux of saline groundwater that enters the River Murray from the eastern side between river kilometre 488 and 502. The saline groundwater will be transmitted to the Noora evaporation disposal basin.

The concept SIS-1 will reduce the 2104 salt load of 80 tonnes/day entering the River Murray to 23 tonnes/day, a reduction of 71%. This represents an in-river benefit at Morgan of 14 EC.

The DWLBC preferred interception option and logic includes:

1. The majority of the post-irrigation development flux of saline groundwater enters the River Murray directly from the Loxton Sands, and from the Loxton Sands via the Monoman Formation, from the eastern side of the river.
2. Ideally the Loxton Sands should be targeted to prevent discharge into the Monoman Formation and seepage at the edge of the floodplain. Pumping the Loxton Sands is preferable, as this results in a lesser volume of high salinity groundwater requiring disposal, in comparison to pumping from the Monoman Formation. The Monoman Formation should be targeted in areas where there is significant discharge from the floodplain into the River Murray. However, investigations have revealed that well construction problems force the movement of production wells to the floodplain where it exists.
3. Note that pumping from the highland controls the groundwater flux entering the floodplain, but response in the River Murray may be slow. Pumping from the floodplain may result in a more rapid in-river response, but this results primarily in removing saline groundwater in storage, rather than controlling the flux of saline groundwater entering the floodplain. It should be noted that (in general) pumping should not occur around the exterior of wide floodplains directly adjacent to the river as the hydraulic gradient is likely to be away from the river towards the centre of the floodplain.
4. The construction of SIS-1 involving a curtain of production wells is expected to result in rapid in-river EC benefits. Production wells will be required to reduce the groundwater table to river pool level at the mid-point.
5. Controlling post-flood recession discharge from the floodplain areas is not considered.
6. SIS-1 assumes the use of conventional production wells that are not as effective as required in the Loxton Sands due to the base of he aquifer being close to river pool level. Note that Scenario-8 SIS-2 assumes that the potentiometric head can be reduced to river pool level and is therefore more efficient.

Note regarding Bookpurnong area

- In the Bookpurnong area, numbers and locations of production wells, and pumping rates were provided by AWE in June 2004.
- The concept SIS-1 will reduce the 2104 salt load of 64 tonnes/day entering the River Murray to 17 tonnes/day, a reduction of 73%. This represents an in-river benefit at Morgan of 10 EC. Note that the AWE wellfield involves only floodplain production wells.

Aside:- Operation of the Katarapko Island Disposal Basin

Development of the CDS commenced in 1952 and was commissioned in 1964 to intercept excess irrigation water for transport to the Katarapko Island disposal basin. The CDS network comprises tile drains distributed throughout the Loxton irrigation region, connected to 14 large concrete caissons from which water is pumped to the Katarapko Island disposal basin. The CDS was designed to control the perched groundwater table at a depth exceeding 1.4 m below ground surface in the Loxton irrigation area. The CDS has successfully achieved this objective, with the exception of overflow areas where the water not intercepted by the CDS recharges the groundwater mound.

Prior to 1964, the potentiometric head in the Monoman Formation on Katarapko Island occurred at ~9.8 m AHD (0.2 m below river pool level) resulting in a small gradient away from the river. Although operational strategies prepared in 1976 and 1985 recommended restricting the water level in the basin to 11 m AHD, the volume being delivered to the *disposal basin in the 1970s and 1980s resulted in elevation of the potentiometric head near the basin up to 11.5 m AHD.*

While the water level in the basin has reduced as a result of improved irrigation practices and headworks rehabilitation, two small groundwater mounds still exist that exhibit a potentiometric head up to 1 m above river pool level, thus driving saline groundwater into the river. This influence is reflected in higher conductivities observed in TEM data. Observation well hydrographs indicate that fluctuations in potentiometric head up to 1 m can occur rapidly over a 6–12 month period.

The flux of saline groundwater entering the River Murray from the western side of the river is driven by the operation of the Katarapko Island disposal basin. When this basin has been operated with a high water level a flux of saline groundwater is induced to the river. Due to the fact that no basin water level data was available, an estimated high basin water level was applied in the model, consistent with maximum observed (historical) potentiometric heads in the surrounding aquifer. This modelling approach results in a maximum flux that may be greater than that currently occurring.

Historically, discharge to the Katarapko Island disposal basin has been as high as ~6000 ML/yr, peaking in 1994. In recent years, the need for the disposal basin has been reduced due to the irrigation efficiency measures implemented in the Loxton area resulting in ~2000 ML/year being pumped to the basin since 2001 (Fig. 61).

Modelling indicates that:

1. *The flux of saline groundwater entering the River Murray from the western side is mobilized by the disposal of CDS irrigation drainage water to the Katarapko Island disposal basin.*
2. *Under 2002 conditions (Table 7) the salt load entering the River Murray from the western side of the river was 28 tonnes/day.*
3. *When the disposal basin is removed from the model, and replaced with evapotranspiration simulating what is believed to be the natural floodplain conditions on Katarapko Island, the salt load entering the River Murray from the western side reduces to zero.*

7.1.8 SCENARIO-8: ‘POST-1988’ IRRIGATION DEVELOPMENT + SIS-2

Transient Scenario-8 predicts the hydrological changes, and MAXIMUM groundwater flux and salt load entering the River Murray, that would be expected to occur in the Loxton area from 2002 until 2104 under the MAXIMUM RECHARGE conditions in the future (Scenario-6). This scenario assumes pre-1988 irrigation development with IIP + RH, and post-1988 irrigation development with IIP (‘POST-1988’ irrigation development), plus SIS-2 (Fig. 60b). This scenario tests the reduction in salt load resulting from the construction of SIS-2.

7.1.8.1 Scenario-8: Conditions

The following conditions were applied in the transient model in the Loxton – Bookpurnong area:

1. The potentiometric surface output from Scenario-6, at 2004, was used as the starting point for a prediction run until 2104.
2. Irrigation operating at 85% efficiency (the result of IIP) from 2002–2104 on pre-1988 irrigation development areas.
3. Loxton headworks rehabilitation of the distribution network commencing in 2002.

4. The expected increasing recharge to the Loxton Sands (after 2004) resulting from the post-1988 irrigation development areas operating at 85% efficiency.
5. Construction of SIS-2 in 2004 to intercept 100% salt load entering the River Murray at 2104.

7.1.8.2 Scenario-8: Prediction results

The results of the predicted flux of saline groundwater and salt load entering the River Murray are given in (App. A-8 [Loxton] and B-8 [Bookpurnong]).

The results for Loxton and Bookpurnong for 2104, given in Table 16, indicate the predicted salt load reduction to the River Murray, in comparison to Scenario-6. The construction of SIS-2 reduces the salt load in the Loxton area by 87 tonnes/day with respect to Scenario-6.

Table 16. Scenario-8 predicted groundwater flux & salt load at 2104 from eastern side of river

	Loxton			Bookpurnong		
	Lateral	**Upward**	**Total**	**Lateral**	**Upward**	**Total**
Flux (ML/day)	0.05	0.32	0.37	0.23	0.3	0.53
Salt load (Tonnes/day)	1.23	11.15	12.38	6.75	7.51	14.26

7.1.8.3 Scenario-8: Loxton SIS-2 scheme concept design

Modelling of Scenario-6 indicates the salt load entering the River Murray in the Loxton area at 2104 is 100 tonnes/day. This salt load results in an additional 25 EC being observed in-river at Morgan. The operational target reduction of the Loxton SIS-2 is an in-river EC benefit approaching this value at Morgan as closely as possible.

Modelling indicates that the additional flux of saline groundwater over that of Scenario-7 can be intercepted by increasing pumping rates rather than by installing extra production wells (App. A-8 [Loxton] and B-8 [Bookpurnong]). It should be noted that although increased pumping rates can be applied to production wells in the model, it is possible that increased pumping rates will not be able to be applied to actual constructed wells.

The concept SIS-2 will reduce the 2104 salt load of 100 tonnes/day entering the River Murray to 12 tonnes/day, a reduction of 87%. This represents an in-river benefit at Morgan of 22 EC.'

7.1.9 COMPARISON OF PREDICTION RESULTS OF SALT LOADS ENTERING THE RIVER MURRAY FOR ALL SCENARIOS

The biannual prediction results of salt loads entering the River Murray for all scenarios for Loxton and Bookpurnong (Figs 62, 63 respectively) indicate the trends for each scenario.

These trends clearly indicate that the maximum benefit is rapidly achieved in Scneario-7 and Scenario-8 at both Loxton and Bookpurnong.

The SIS-2 that operates in Scenario-8 requires increasing pumping rates that may not be achievable. However, regardless of pumping rates, the outcome will be the same if the drawdown target of river pool level between production wells is achieved.

8. MODEL SENSITIVITY ANALYSIS

8.1 SENSITIVITY ANALYSIS

Sensitivity analysis is a procedure for quantifying the impact of an incremental variation in aquifer hydraulic parameters, or a stress, on an aquifers modelled response. The purpose of the sensitivity analysis is to identify the drivers in the system.

The transient model has been calibrated for aquifer hydraulic parameters and recharge, and only requires sensitivity testing of issues of major concern and to comply with the Murray Darling Basin Modelling Guideline (2000). In the Loxton area there is some uncertainty regarding the:

1. Nature and extent of the aquitards, ie the existence of low vertical hydraulic conductivity between the aquifers. In particular, the frequent absence of the Bookpurnong Formation on the floodplain, and the relatively thin nature of the Finnis Formation, raises doubts as to the effectiveness of the confinement of the Upper Mannum Formation.
2. River pool level that influences the flux of saline groundwater to the River Murray.
3. The magnitude of groundwater flux from the Loxton Sands to the Monoman Formation, and directly to the River Murray where the Monoman Formation does not exist. This is controlled by the aquifer hydraulic parameters.
4. The impact of variations in the aquifer hydraulic parameters of the Loxton Sands on the magnitude of salt load from the Loxton Sands to the Monoman Formation.

8.2 TRANSIENT MODEL SENSITIVITY ANALYSIS

8.2.1 SENSITIVITY TEST-1: REMOVAL OF ALL AQUITARDS

This sensitivity test was conducted to test the hypothesis that the dominant contribution of salt to the River Murray occurs from the Upper Mannum Formation, rather that from the Loxton Sands and Monoman Formation. Determination of the target aquifer(s) for salt interception is critical to successful implementation of any SIS.

8.2.1.1 Sensitivity test-1: Conditions

Scenario-5 (pre-1988 irrigation development + IIP + RH) was selected for sensitivity testing. Sensitivity testing was conducted by removing all aquitards from the model and running the model 100 years into the future.

8.2.1.2 Sensitivity test-1: Results

Sensitivity results (App. A-9 [Loxton]) indicate:

1. The removal of all aquitards resulted in the potentiometric head in the Loxton area in the Pata Formation, Glenforslan Formation and Upper Mannum Formation reaching a similar elevation to that of the modelled Loxton Sands potentiometric head (22 m AHD).

   It must be emphasised that the observed potentiometric heads indicate that this scenario is impossible. Note that the 2004 observed potentiometric head at the centre of the Loxton groundwater mound in the Loxton Sands is nearly 27 m AHD, compared to 18.8 m AHD in the Upper Mannum Formation.

2. The following changes in salt load:
   a. The salt load moving vertically from the Upper Mannum Formation into the River Murray in the Loxton area increases by a maximum 25 tonnes/day.
   b. The salt load entering the River Murray laterally, from the Loxton Sands and Monoman Formation in the Loxton area, reduces by 25 tonnes/day.

   It should be noted that the existence of any aquitard will result in the increased vertical salt load being significantly reduced. It is clear from both the drilling and pumping tests that have been conducted in the Loxton area that the Pata Formation, Glenforslan Formation and Upper Mannum Formation exhibit at least some level of confinement.

8.2.2 SENSITIVITY TEST-2: REMOVAL OF ALL AQUITARDS + PRODUCTION WELLS IN THE UPPER MANNUM FORMATION

This test builds on Sensitivity test-1 (removal of all aquitards), with the addition of production wells completed in the Upper Mannum Formation. This test was conducted to determine whether pumping from the Upper Mannum Formation would control the salt load entering the River Murray, one of the potential Loxton SIS options proposed in AWE (2003).

8.2.2.1 Sensitivity test-2: Conditions

Scenario-5 (pre-1988 irrigation development + IIP + RH) was selected for sensitivity testing. Sensitivity testing was conducted by removing all aquitards from the model, and adding eight production wells screened over the Upper Mannum Formation in the Loxton area pumping at rates of 7 L/s, and running the model until 2105.

8.2.2.2 Sensitivity test-2: Results

Sensitivity test results (App. A-10 [Loxton]) indicate that a reduction in the salt load entering the River Murray (from all sources, not just the Upper Mannum Formation) of 20 tonnes/day occurred in comparison the Sensitivity test-1.

The results indicate that even with the removal of all aquitards, the production wells can only reduce the salt load entering the River Murray by 20 tonnes/day. It is clear, from both the drilling and pumping tests that have been conducted in the Loxton area, that the aquitards will result in at least some level of confinement of the Upper Mannum Formation thus reducing the modelled salt load benefit (of 20 tonnes/day) significantly.

8.2.3 SENSITIVITY TEST-3: VARIATION OF RIVER POOL LEVEL

This sensitivity test was conducted to determine the effect of an elevated river pool level on the salt load entering the River Murray in the Loxton area.

8.2.3.1 Sensitivity test-3: Conditions

Scenario-2 (historical 1945–2004) was selected for sensitivity testing. Sensitivity testing was conducted by varying the river pool level between Lock-3 and Lock-4 from the general working value of 9.8 m AHD (that used for all modelling) to 10 m AHD.

8.2.3.2 Sensitivity test-3: Results

Sensitivity test results (App. A-11 [Loxton]) indicate that elevation of the river pool level results in a reduction in the salt load entering the River Murray, from all sources, of

2–4 tonnes/day. It must be noted that this test indicates the order of magnitude of the reduction in the salt load, ie 1–10 tonnes/day, not 10–100 tonnes/day.

8.2.4 SENSITIVITY TEST-4: VARIATION OF LOXTON SANDS AQUIFER HYDRAULIC PARAMETERS BY INCREASING / DECREASING BY +/- 15%

This sensitivity test was conducted to test the impact of variations in the aquifer hydraulic parameters of the Loxton Sands on the magnitude of salt load from the Loxton Sands to the Monoman Formation, and the River Murray where the Monoman Formation does not exist.

8.2.4.1 Sensitivity test-4: Conditions

Scenario-6 ('post-1988' irrigation development) was selected for sensitivity testing, as it is a worst-case scenario of full future irrigation development in Loxton area. Sensitivity testing was conducted by varying the Loxton Sands component of Layer-1 aquifer hydraulic parameters by ~+/-15% of the predominant calibrated value (hydraulic conductivity (of the major zones) = 3.5 and 10 m/day, specific yield = 0.15) in accordance with Murray Darling basin Commission (2000), and running the model 100 years into the future.

8.2.4.2 Sensitivity test-4: Results

Sensitivity test results (Table 17) indicate that:

1. Changes of +/-15% to the calibrated Loxton Sands hydraulic conductivity of 10 m/day (+15% = 11.5 m/day and -15% = 8.5 m/day) and 3.5 m/day (+15% = 4 m/day and –15% = 3 m/day) result in a maximum of 6 tonnes/day change in the salt load entering the Monoman Formation and River Murray 100 years into the future, which is insignificant in comparison to the total salt load of 77 tonnes/day (an 8% change).
2. Changes of ~=+/- 15% to the calibrated Loxton Sands specific yield of 0.15 (+15% ~= 0.2 and –15% ~= 0.1) result in a maximum 1 tonne/day change in the salt load entering the Monoman Formation and River Murray 100 years into the future, which is insignificant.

The results given in Table 17 indicates that the salt load from the Loxton Sands to the Monoman Formation and River Murray is only slightly affected by changes in aquifer hydraulic paramteres, and this provides confidence in extrapolating the calibrated values at sites near Loxton to other areas.

Table 17. Results of sensitivity testing of variation in Loxton Sands (Layer-1) aquifer hydraulic parameters - predicted salt load entering River Murray 100 years into the future

	K_h (m/day)			S_Y		
Parameters value	K_{h1} = 8.5 K_{h2} = 3	K_{h1} = 10 K_{h2} = 3.5	K_{h1} = 11.5 K_{h2} = 4	0.1	0.15	0.2
Predicted salt load (tonnes/day)	70.95	76.79	80.33	77.37	76.79	75.97
Difference (tonnes/day)	5.84	–	3.54	0.57	–	0.83

9. MODEL LIMITATIONS

Hugh Middlemis (lead author Murray Darling Basin Commission 2000 Groundwater Modelling Guideline) stated in 2004 that:- It is important to recognise that there is no such thing as a perfect model, and all models should be regarded as works in progress of continuous improvement as hydrogeological understanding and data availability improves. By definition, model limitations comprise relatively negative statements, and they should not necessarily be viewed as serious flaws that affect the fitness for purpose of the model, but rather as a guide to where improvements should be made during work.

The following limitations of the model may lead to a component of error being associated with the results of the predictive modelling:

1. The model layers are a simplified representation of the natural aquifers and aquitards thickness and hydraulic parameters, and may not reflect the natural conditions with sufficient accuracy.
2. The model is qualitatively calibrated to 2002 potentiometric heads in the Bookpurnong area. Further quantitative calibration of the model should be undertaken in the Bookpurnong area if more confidence is required for predictions of the flux of saline groundwater entering the River Murray.
3. Daily pool level fluctuation were not simulated in the model, which results in average values of salt load entering the River Murray.
4. Flood events were not simulated in the model.
5. Groundwater salinity in the Bookpurnong area was provided by AWE (pers. comm. N Watkins AWE) as a single value for the Loxton Sands and a single value for the Pata Formation. A more accurate groundwater salinity distribution should be applied in the model for the Bookpurnong area, as has been done for the Loxton area.
6. The proposed SIS is based on generalised aquifer hydraulic parameters and the production well spacing is conservative (close). It is likely that the final production well spacing will be different to that modelled.
7. Due to the fact that no Katarapko Island disposal basin water level data was available, an estimated high basin water level was applied in the model, consistent with maximum observed (historical) potentiometric heads in the surrounding aquifer. This modelling approach results in a maximum flux of saline groundwater entering the River Murray from the western side that may be greater than that currently occurring.

10. CONCLUSION

DWLBC has developed a numerical groundwater flow model that is capable of simulating the regional aquifer system in the Loxton – Bookpurnong area. This model is an impact assessment model in the terminology of the MDBC (2002) and is of moderate complexity. The model accommodates the Loxton – Bookpurnong area within a broad regional context. The model also accounts for the hydraulic interaction of the sediments with the deeper confined Upper Mannum Formation aquifer.

The model has been accurately calibrated for the Loxton area using observed (historical) potentiometric heads. However, due to the limited time, the model was not accurately calibrated for the Bookpurnong area. Sensitivity analysis, in terms of some major uncertainties, has been undertaken for transient conditions.

The model was accredited by the MDBC for the Loxton area, but not the Bookpurnong area, in 2004.

10.1 GENERAL MODELLING RESULTS

The modelling that has been undertaken has resulted in an improved understanding of the hydrogeology of the regional aquifer system and the flux of saline groundwater and salt load entering the River Murray in the Loxton – Bookpurnong area and its source aquifers.

In particular modelling indicates that for the Loxton area:

1. Irrigation development in the Loxton area resulted in the salt load entering the River Murray increasing from the natural base salt load of 7 tonnes/day to 92 tonnes/day (2002) following irrigation development and enhanced recharge to the Loxton Sands.
2. If a SIS is not constructed in the Loxton area, the model predicts the salt load entering the River Murray will increase to 100 tonnes/day by 2104 (Scenario-6).
3. The lateral flux of saline groundwater entering the River Murray in the Loxton area dominates the vertical flux, and comprises ~80% of the total flux to the river.
4. The target aquifers for salt interception in the Loxton – Bookpurnong area are the Loxton Sands and Monoman Formation.
5. The lateral flux of saline groundwater that enters the River Murray from the western side is mobilized by the disposal of irrigation drainage water to the Katarapko Island disposal basin. When the disposal basin is removed from the model, and replaced with evapotranspiration simulating what is believed to be the natural floodplain conditions on Katarapko Island, the salt load from the western side reduces to zero.

10.2 GROUNDWATER MANAGEMENT SCHEMES

At the time of writing, the Loxton SIS is under investigation, and the full details of this scheme will be reported separately. In general terms, this scheme involves the construction of a curtain of production wells completed within the Loxton Sands and Monoman Formation on the eastern side of the River Murray to control the flux of saline groundwater.

Scenario-8 indicates that the concept SIS-2 will reduce the 2104 salt load of 100 tonnes/day entering the River Murray to 12 tonnes/day, a reduction of 87%. This represents an in-river benefit at Morgan of 22 EC.

10.3 MODEL PREDICTIONS OF SALT LOAD ENTERING THE RIVER MURRAY

The pre-1988 irrigation development area predictions for salt loads entering the River Murray in the Loxton - Bookpurnong area from 1945–2104 (Fig. 64, App. C) clearly indicates the benefits to the river that result from intervention.

The post-1988 irrigation development area predictions for the salt loads entering the River Murray in the Loxton - Bookpurnong area (Fig. 65) from 1988–2104 indicates:

- ~20 additional tonnes/day in the Loxton area.
- ~115 additional tonnes/day in the Bookpurnong area.

The maximum predicted impact of the construction of SIS-2 on salt loads entering the River Murray in Loxton - Bookpurnong area from 2004–2104 is indicated in Figure 66.

The average annual impact, in terms of salt load entering the River Murray in the Loxton - Bookpurnong area in tonnes/year and EC/year for the forthcoming thirty years (as required in *Schedule 'C', Murray Darling Basin Agreement 1992* and the *Basin Salinity Management Strategy Operational Protocols 2003*) are given in Tables 18 and 19 respectively.

10.4 RECOMMENDATIONS

The following work is recommended to address some of the model limitations:

1. Simplification of the model layers if possible to reduce model complexity and increase processing speed.
2. Accurate calibration of the model in the Bookpurnong area.
3. Refinement of the groundwater salinity in the Bookpurnong area to determine the effect on the salt load entering the River Murray.
4. More accurate representation of the operation of the Katarapko Island disposal basin to determine the effect on the salt load entering the River Murray.
5. Application of the recently acquired recharge data for the dryland farming areas obtained by CSIRO and DEH.

Table 18. Predicted salt load entering the River Murray at Loxton and in-river EC benefit at Morgan

30 year averages (tonnes/day)-Bookpurnong Area

Year (start)	Year (end)	Mallee (SST)	Pre88-IIP (S4–S1)	IIP on Pre88 (S3–S4)	Post 88 (S6–S4)	SIS (S6–S8)
2004	**2034**	9.2	66.6	20.7	49.1	110.2
2009	**2039**	9.2	63.8	26.1	64.4	125.6
2014	**2044**	9.2	59.8	31.6	80.0	136.4
2019	**2049**	9.2	55.4	37.0	91.0	142.5
2024	**2054**	9.2	54.1	38.8	98.3	148.1
2029	**2059**	9.2	53.9	39.1	102.2	151.6
2034	**2064**	9.2	54.0	39.2	104.6	153.9
2039	**2069**	9.2	54.1	39.3	106.1	155.3
2044	**2074**	9.2	54.2	39.3	106.9	156.2
2049	**2079**	9.2	54.2	39.3	107.4	156.8
2054	**2084**	9.2	54.3	39.3	107.8	157.2
2059	**2089**	9.2	54.4	39.3	108.0	157.5
2064	**2094**	9.2	54.5	39.3	108.2	157.7
2069	**2099**	9.2	54.6	39.3	108.3	157.9
2074	**2104**	9.2	54.6	39.2	108.4	158.0

Morgan in-river EC equivalent (Bookpurnong Area)

Year (start)	Year (end)	Mallee (SST)	Pre88-IIP (S4–S1)	IIP on Pre88 (S3–S4)	Post 88 (S6–S4)	SIS (S6–S8)
2004	**2034**	2.0	14.6	4.5	10.8	24.3
2009	**2039**	2.0	14.0	5.8	14.2	27.6
2014	**2044**	2.0	13.2	7.0	17.6	30.0
2019	**2049**	2.0	12.2	8.1	20.0	31.4
2024	**2054**	2.0	11.9	8.5	21.6	32.6
2029	**2059**	2.0	11.9	8.6	22.5	33.4
2034	**2064**	2.0	11.9	8.6	23.0	33.9
2039	**2069**	2.0	11.9	8.6	23.3	34.2
2044	**2074**	2.0	11.9	8.6	23.5	34.4
2049	**2079**	2.0	11.9	8.6	23.6	34.5
2054	**2084**	2.0	12.0	8.6	23.7	34.6
2059	**2089**	2.0	12.0	8.6	23.8	34.6
2064	**2094**	2.0	12.0	8.6	23.8	34.7
2069	**2099**	2.0	12.0	8.6	23.8	34.7
2074	**2104**	2.0	12.0	8.6	23.9	34.8

Table 19. Predicted salt load entering the River Murray at Bookpurnong and in-river EC benefit at Morgan

30 year averages (tonnes/day)-Loxton Area

Year (start)	Year (end)	Mallee (SST)	Pre88-IIP-RH (S5–S1)	RH on Pre88 (S4–S5)	IIP on Pre88 (S3–S4)	Post88 (S6–S5)	SIS (S6–S8)
2004	**2034**	6.7	77.5	13.2	10.7	3.9	73.6
2009	**2039**	6.7	76.0	15.3	11.0	5.8	77.9
2014	**2044**	6.7	74.9	16.7	11.2	8.0	78.9
2019	**2049**	6.7	74.2	17.9	11.4	10.2	80.1
2024	**2054**	6.7	73.6	18.8	11.5	12.2	81.3
2029	**2059**	6.7	73.2	19.5	11.5	14.0	82.5
2034	**2064**	6.7	72.9	20.0	11.5	15.4	83.5
2039	**2069**	6.7	72.7	20.4	11.5	16.6	84.3
2044	**2074**	6.7	72.6	20.8	11.5	17.5	85.0
2049	**2079**	6.7	72.5	21.1	11.5	18.2	85.5
2054	**2084**	6.7	72.5	21.3	11.4	18.7	85.9
2059	**2089**	6.7	72.5	21.4	11.4	19.1	86.2
2064	**2094**	6.7	72.5	21.6	11.4	19.4	86.5
2069	**2099**	6.7	72.6	21.7	11.3	19.6	86.7
2074	**2104**	6.7	72.6	21.8	11.3	19.8	86.8

Morgan in-river EC equivalent (Loxton Area)

Year (start)	Year (end)	Mallee (SST)	Pre88-IIP-RH (S5–S1)	RH on Pre88 (S4–S5)	IIP on Pre88 (S3–S4)	Post88 (S6–S5)	SIS (S6–S8)
2004	**2034**	1.5	17.1	2.9	2.4	0.9	16.2
2009	**2039**	1.5	16.7	3.4	2.4	1.3	17.1
2014	**2044**	1.5	16.5	3.7	2.5	1.8	17.4
2019	**2049**	1.5	16.3	3.9	2.5	2.2	17.6
2024	**2054**	1.5	16.2	4.1	2.5	2.7	17.9
2029	**2059**	1.5	16.1	4.3	2.5	3.1	18.1
2034	**2064**	1.5	16.0	4.4	2.5	3.4	18.4
2039	**2069**	1.5	16.0	4.5	2.5	3.7	18.5
2044	**2074**	1.5	16.0	4.6	2.5	3.8	18.7
2049	**2079**	1.5	16.0	4.6	2.5	4.0	18.8
2054	**2084**	1.5	15.9	4.7	2.5	4.1	18.9
2059	**2089**	1.5	15.9	4.7	2.5	4.2	19.0
2064	**2094**	1.5	16.0	4.7	2.5	4.3	19.0
2069	**2099**	1.5	16.0	4.8	2.5	4.3	19.1
2074	**2104**	1.5	16.0	4.8	2.5	4.4	19.1

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12. FIGURES

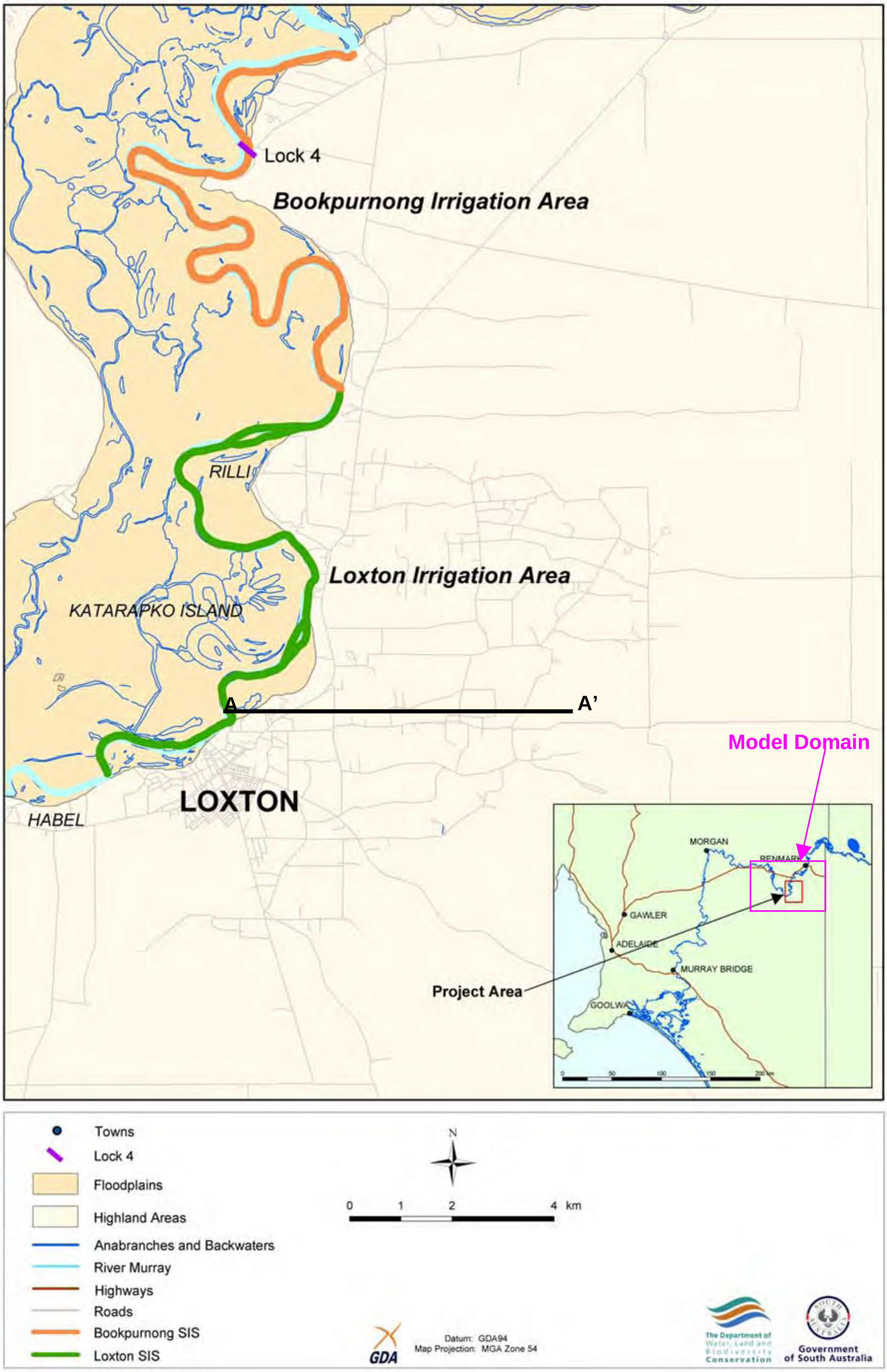


Figure 1: Location of project area and project site map

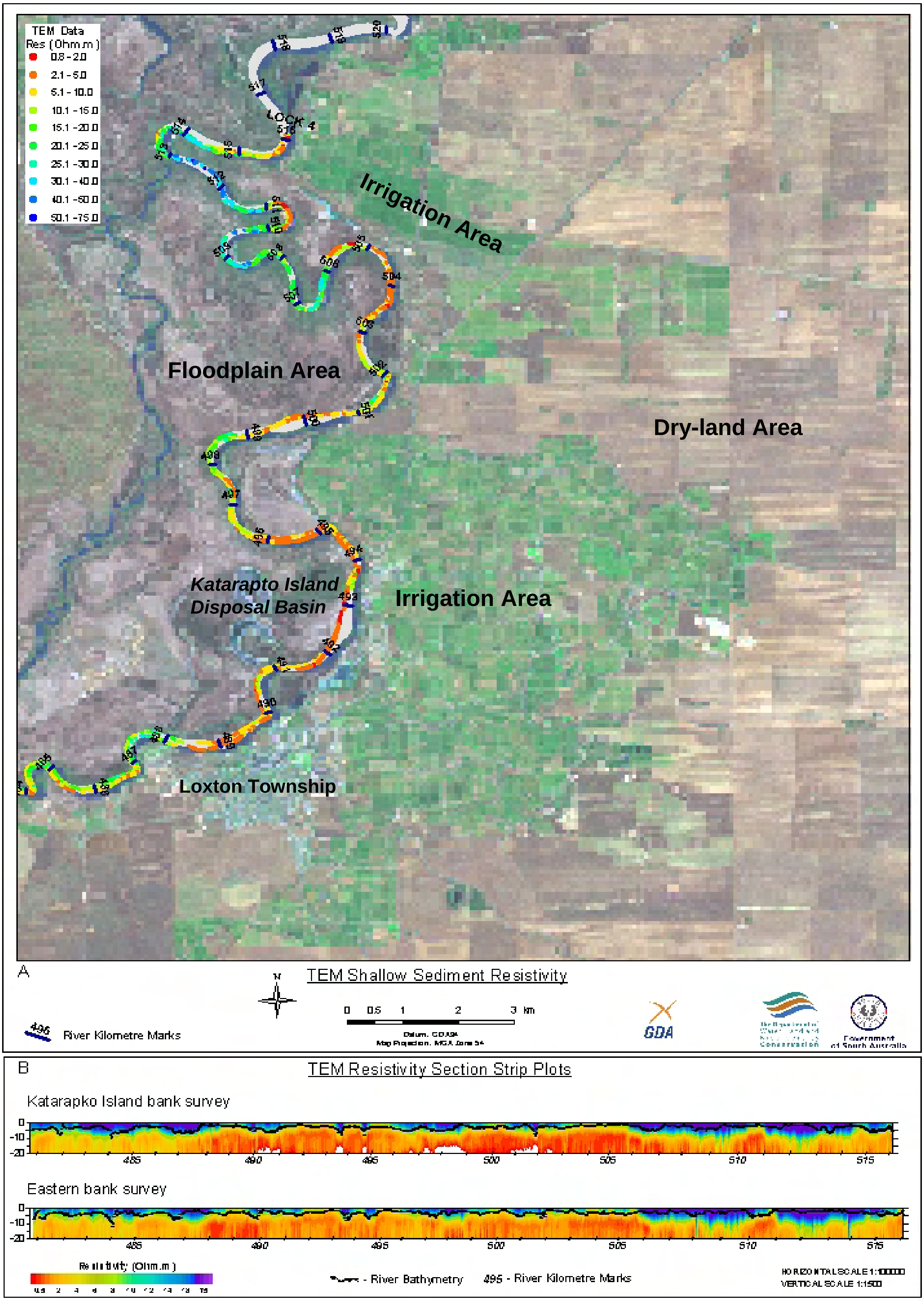


Figure 2: Aerial photography and transient electro-magnetics results

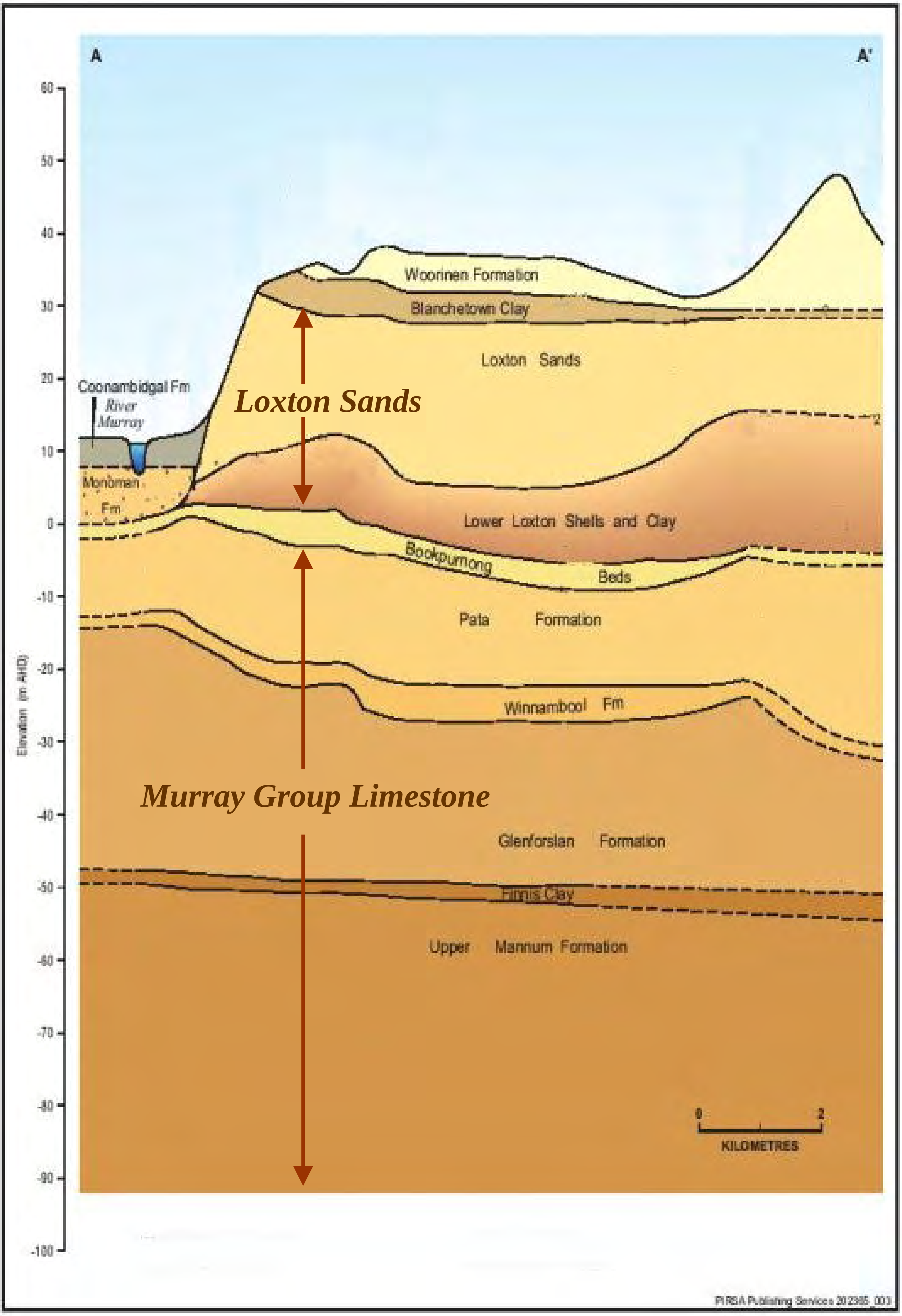
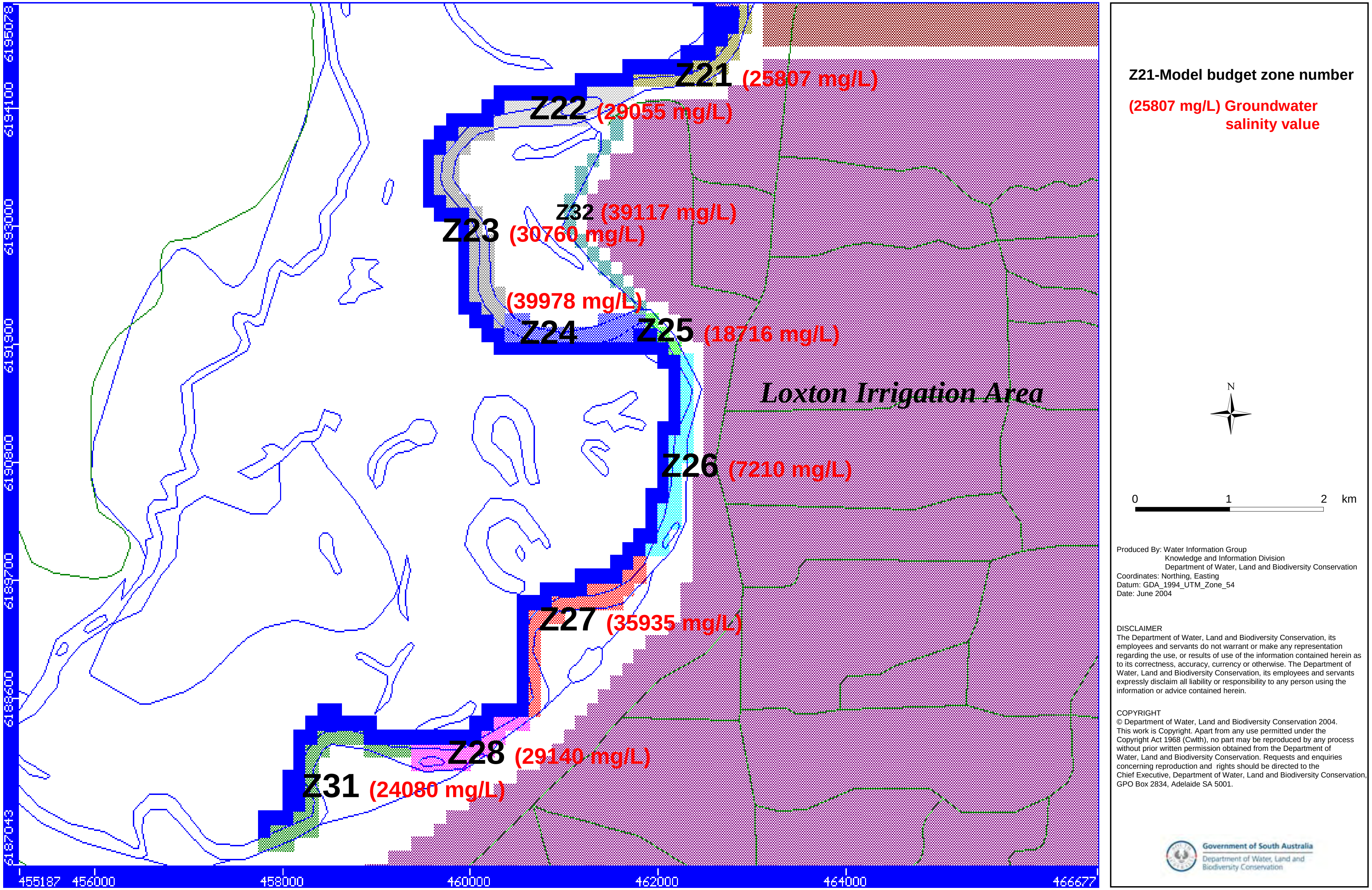


Figure 3: Hydrogeological cross-section (See Figure 1 for line of section)



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Date: June 2004

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Department of Water, Land and Biodiversity Conservation

Figure 4: Flow budget zones in model Layer-1 (Loxton Sands) and groundwater salinity values (TDS mg/L) in Loxton are

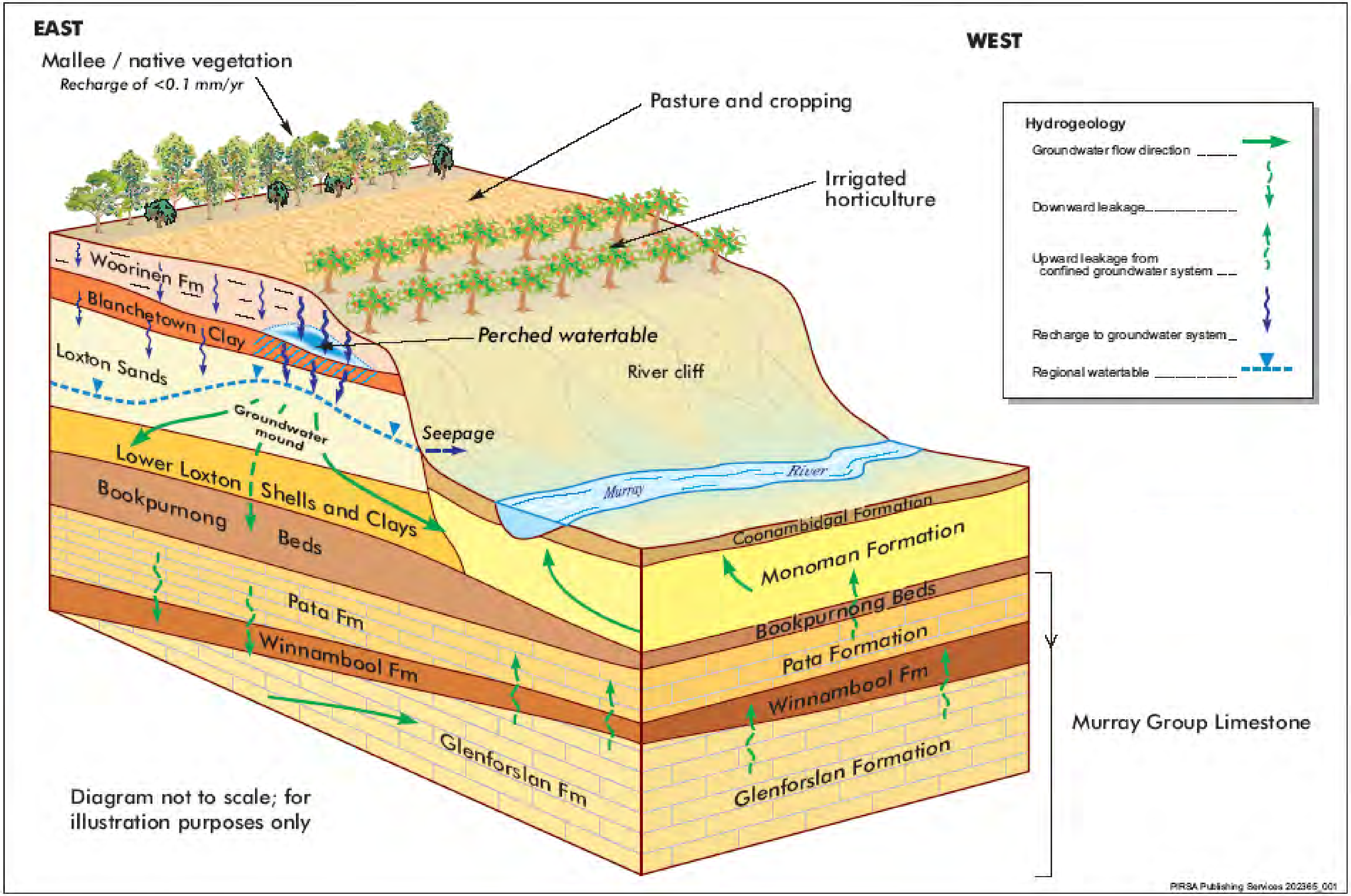

Figure 5: Elementary conceptual hydrogeological model

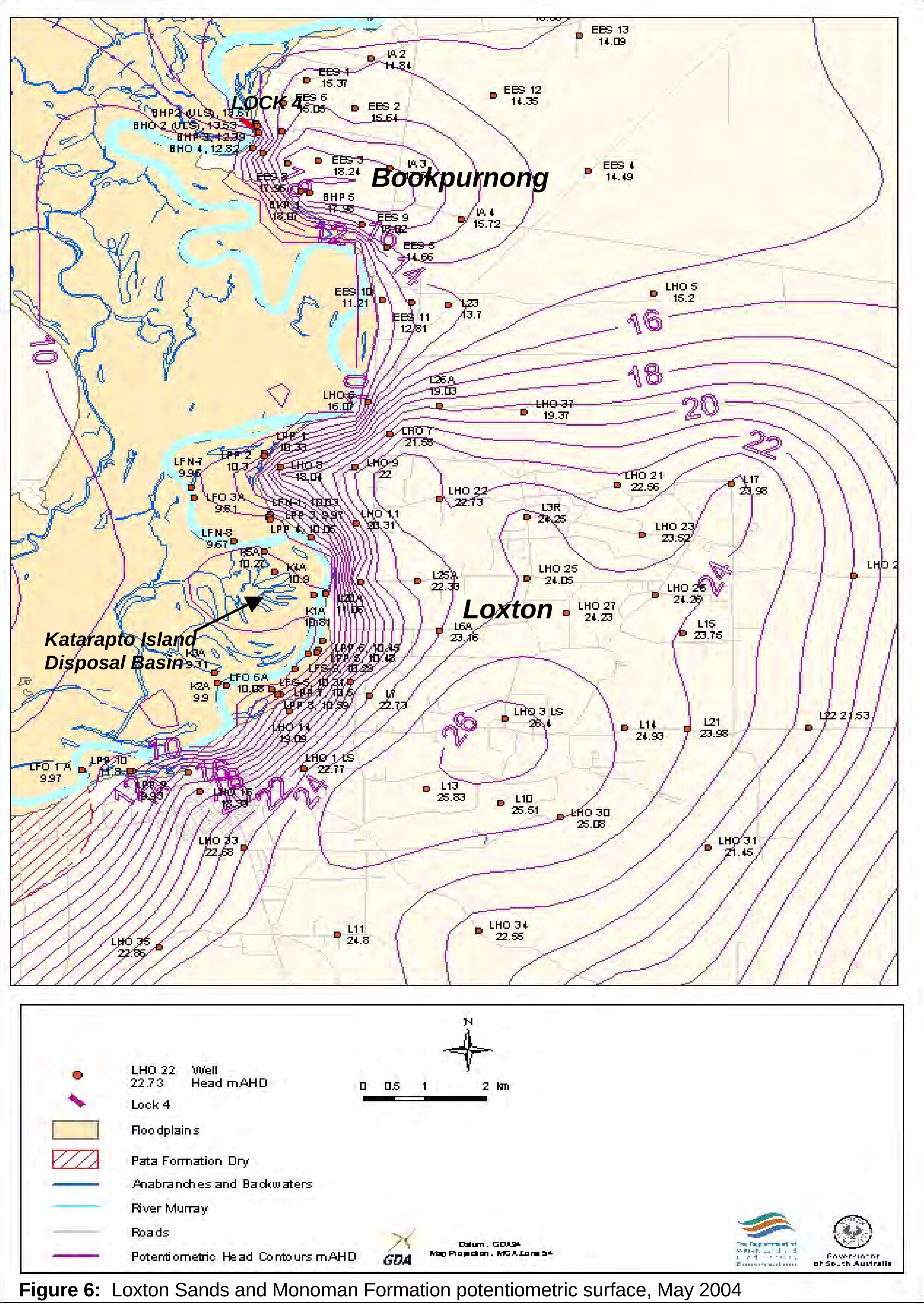

Figure 6: Loxton Sands and Monoman Formation potentiometric surface, May 2004

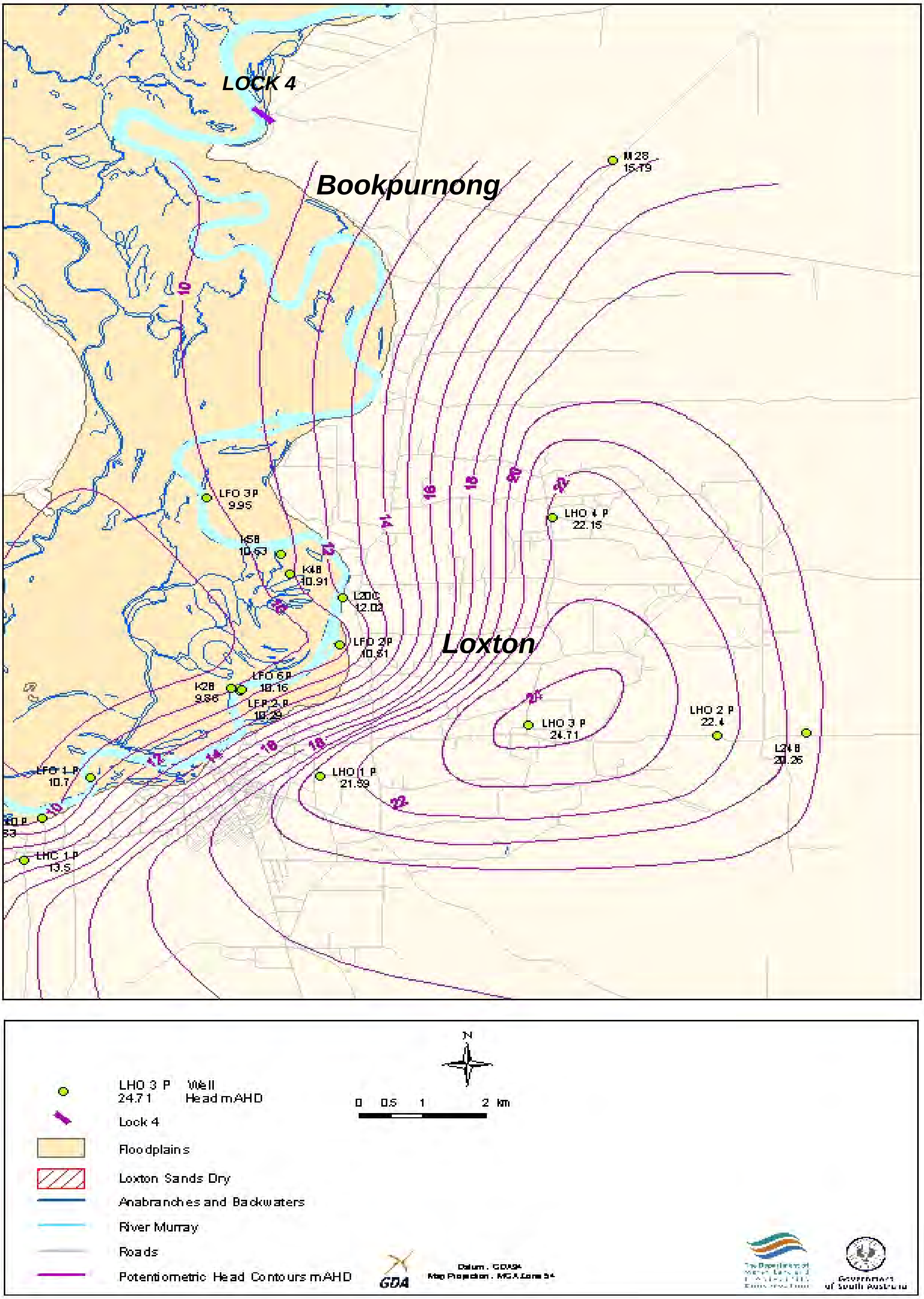

Figure 7: Pata Formation potentiometric surface, May 2004

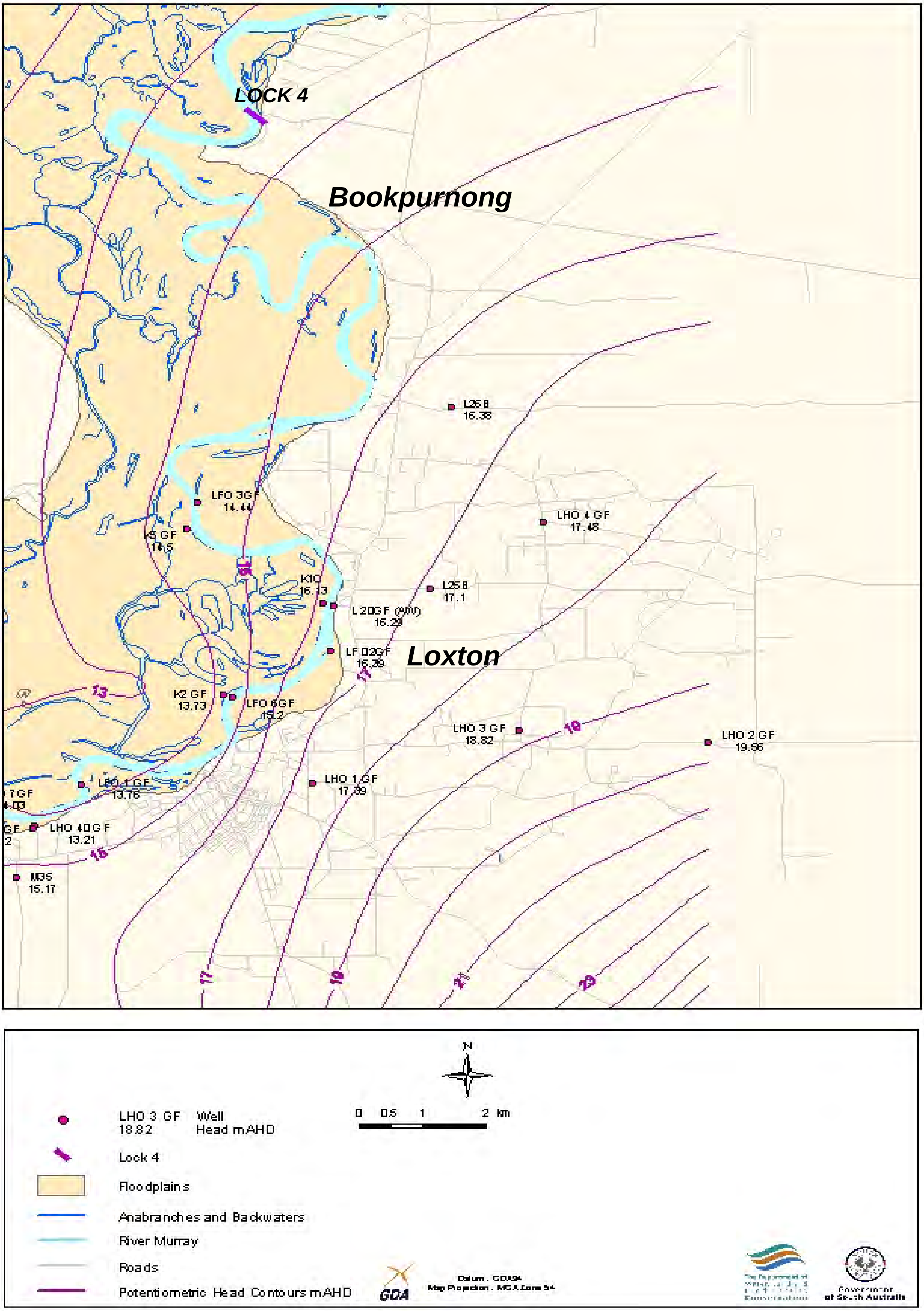

Figure 8: Glenforslan Formation potentiometric surface, May 2004

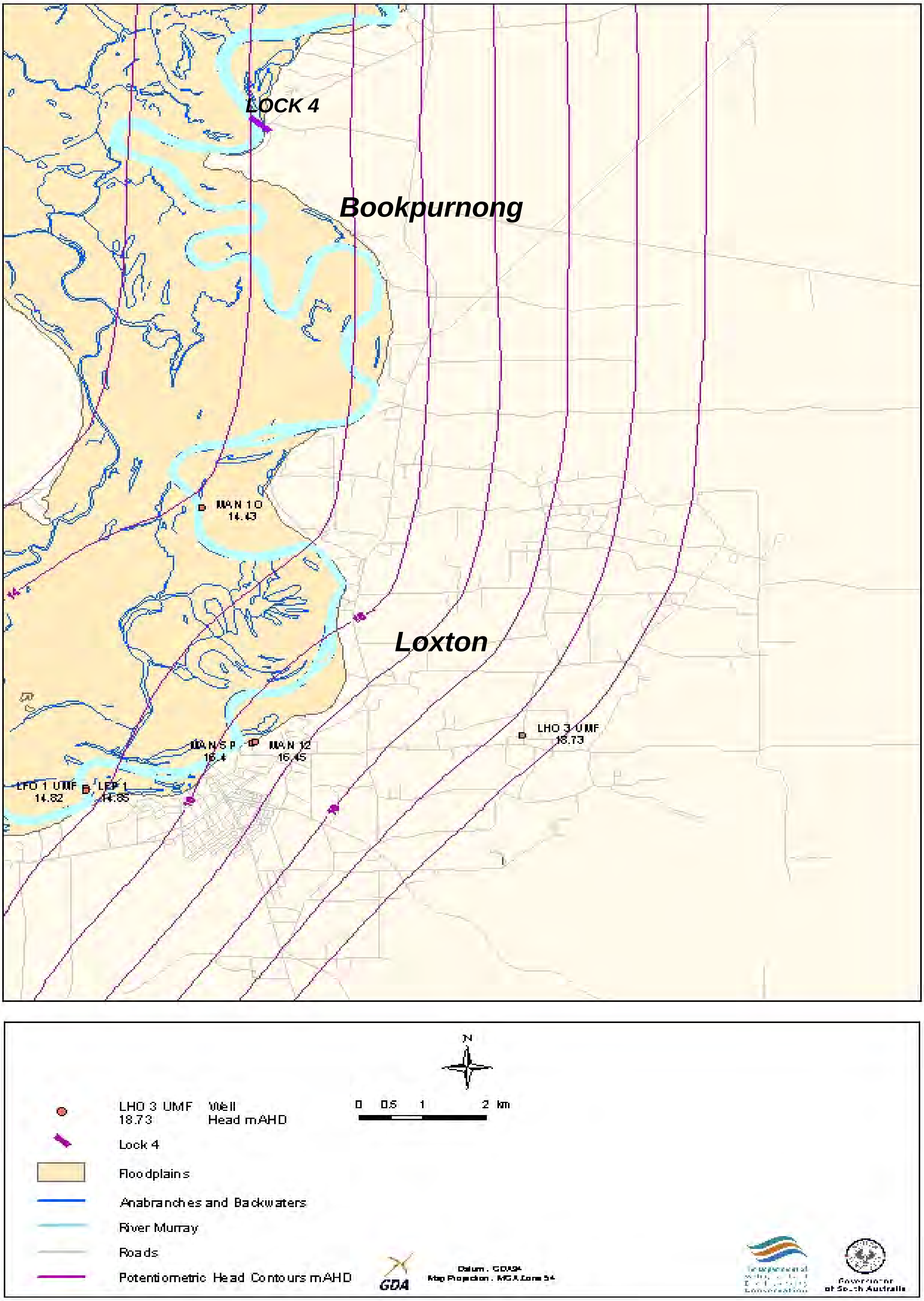

Figure 9: Upper Mannum Formation potentiometric surface, May 2004

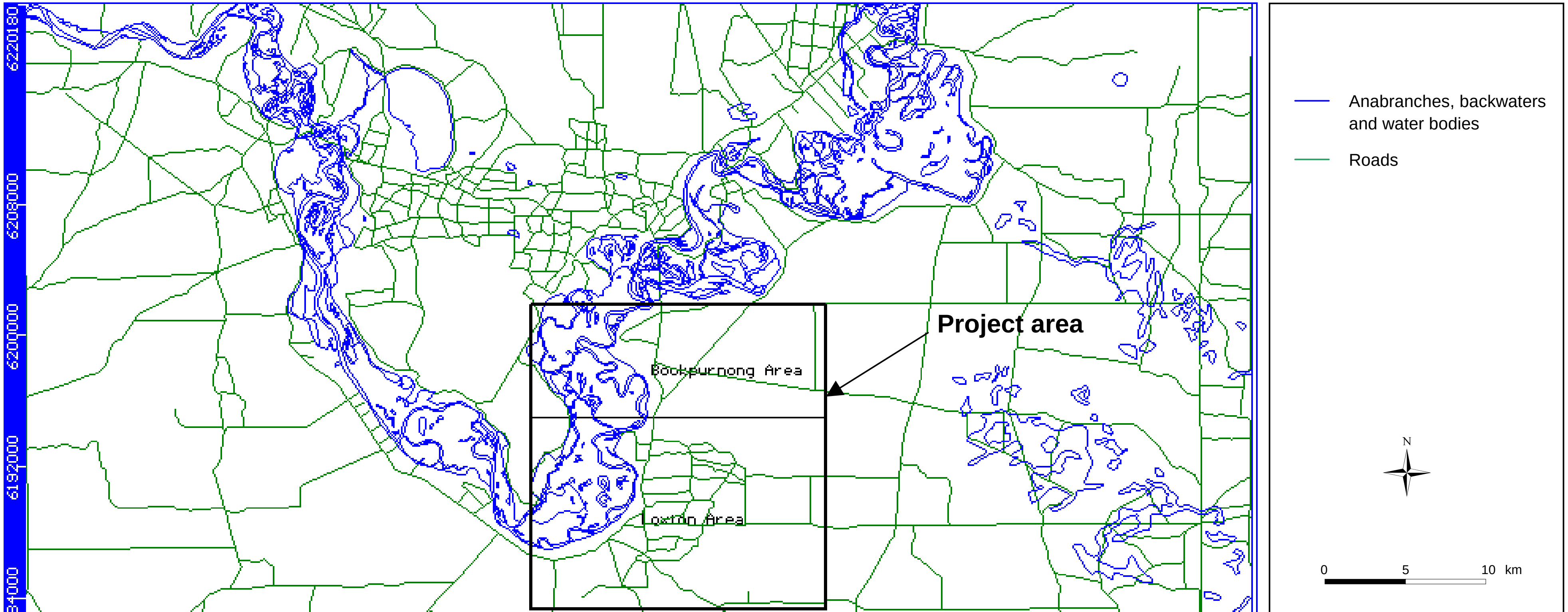

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Figure 10: Regional model domain and project area

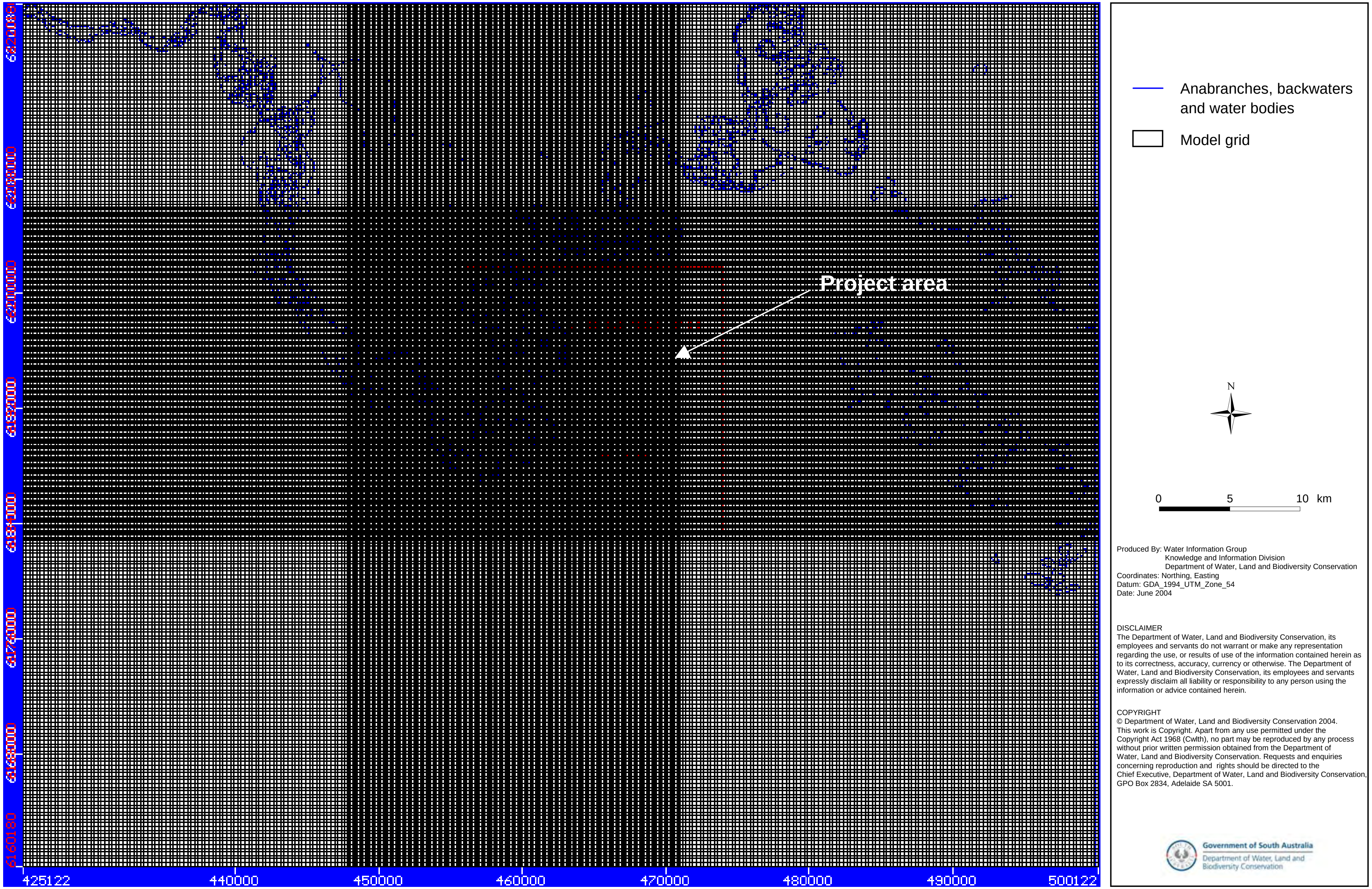
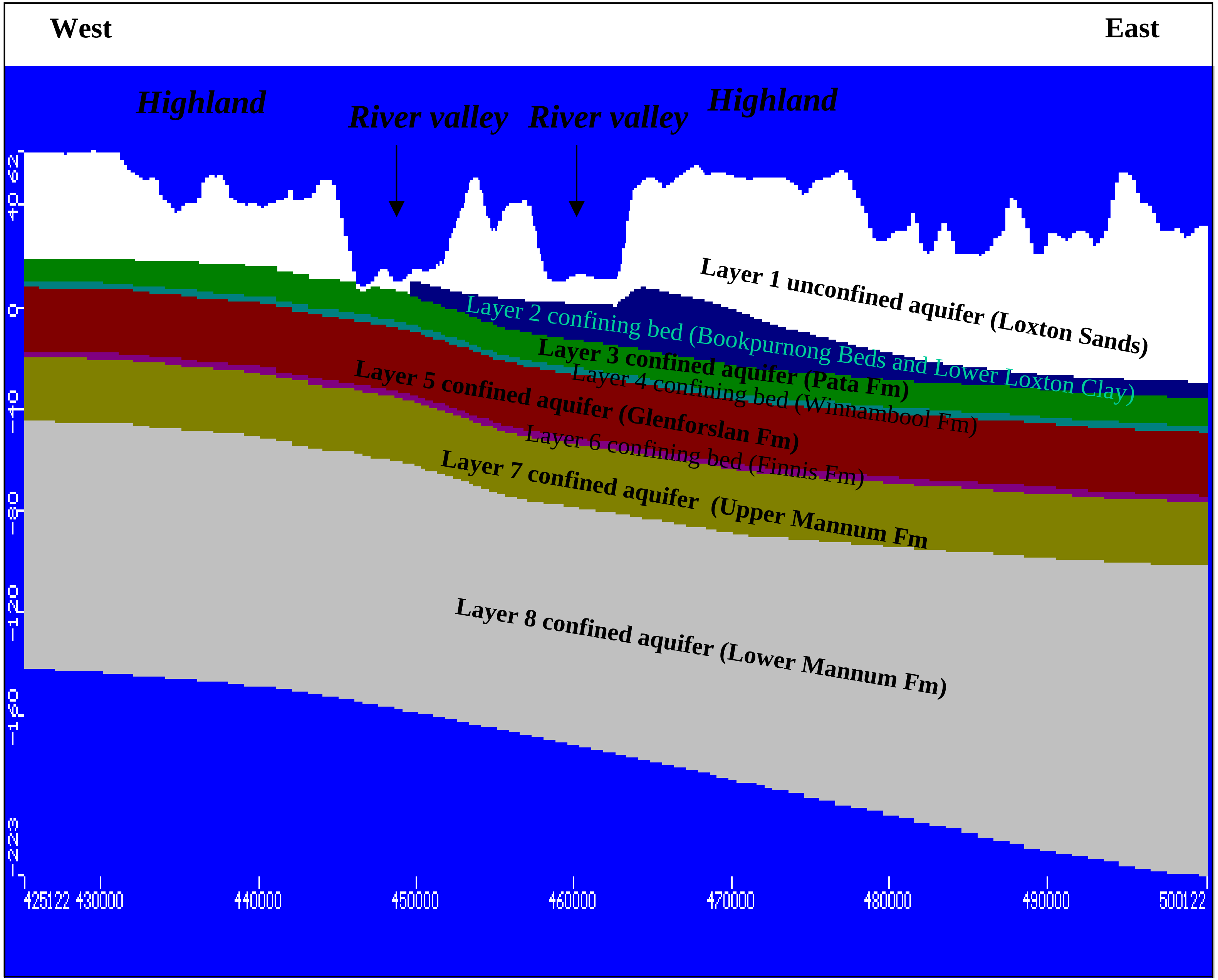


Figure 11: Model grids



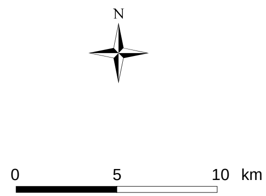


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Figure 12: Model layers

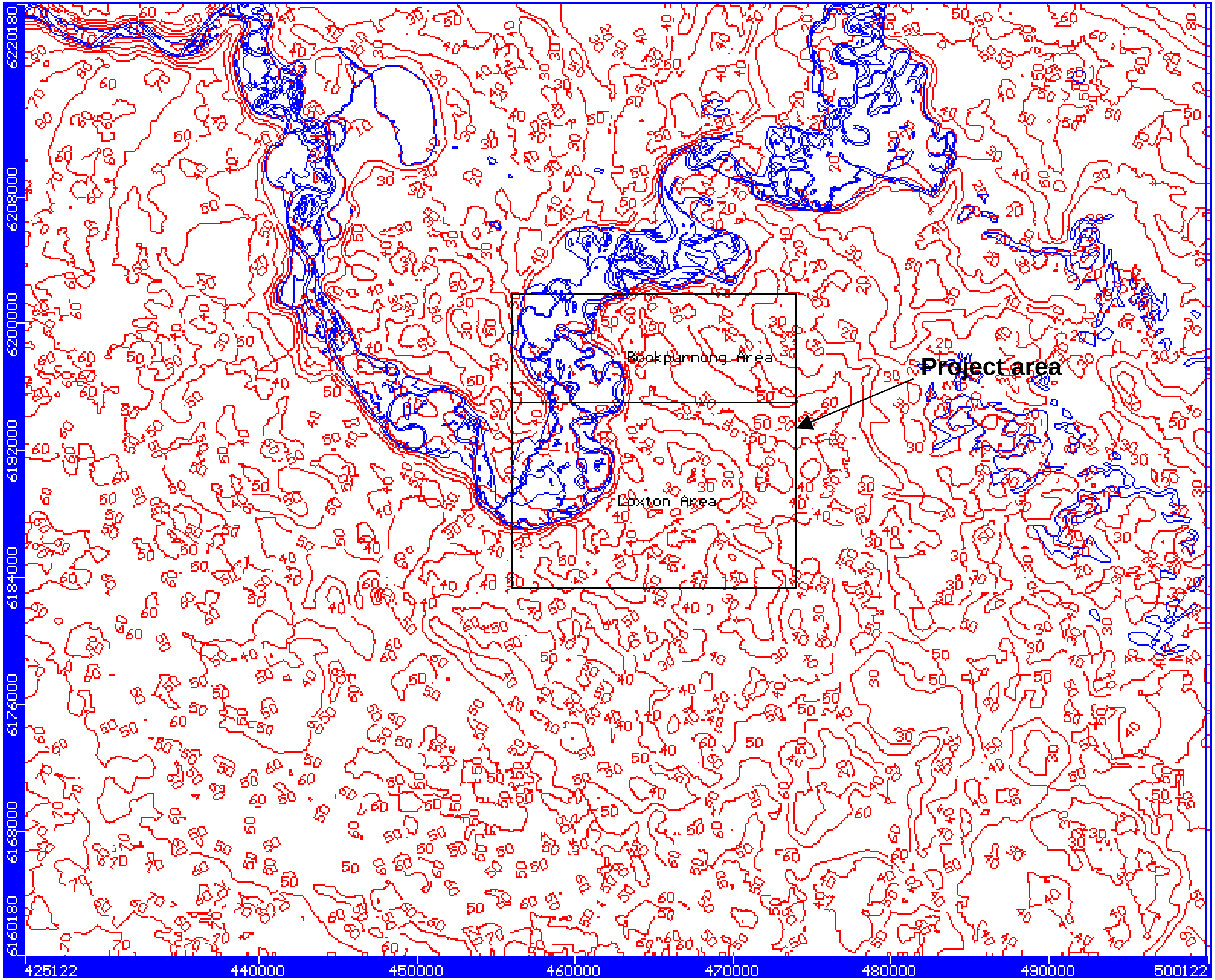

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Figure 13: Ground surface elevation contours (m AHD)

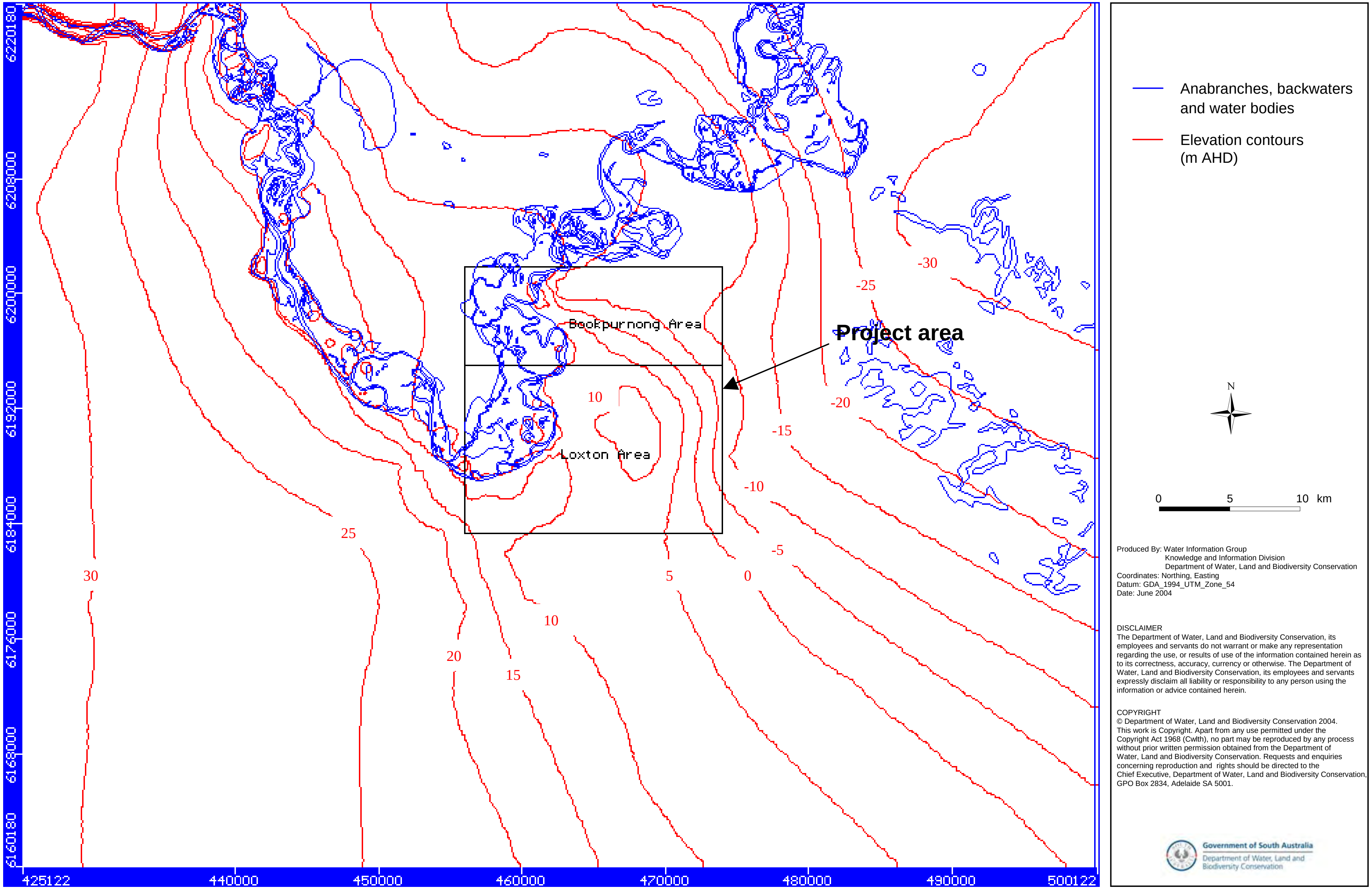

Figure 14: Top of model Layer-2 elevation contours (m AHD)

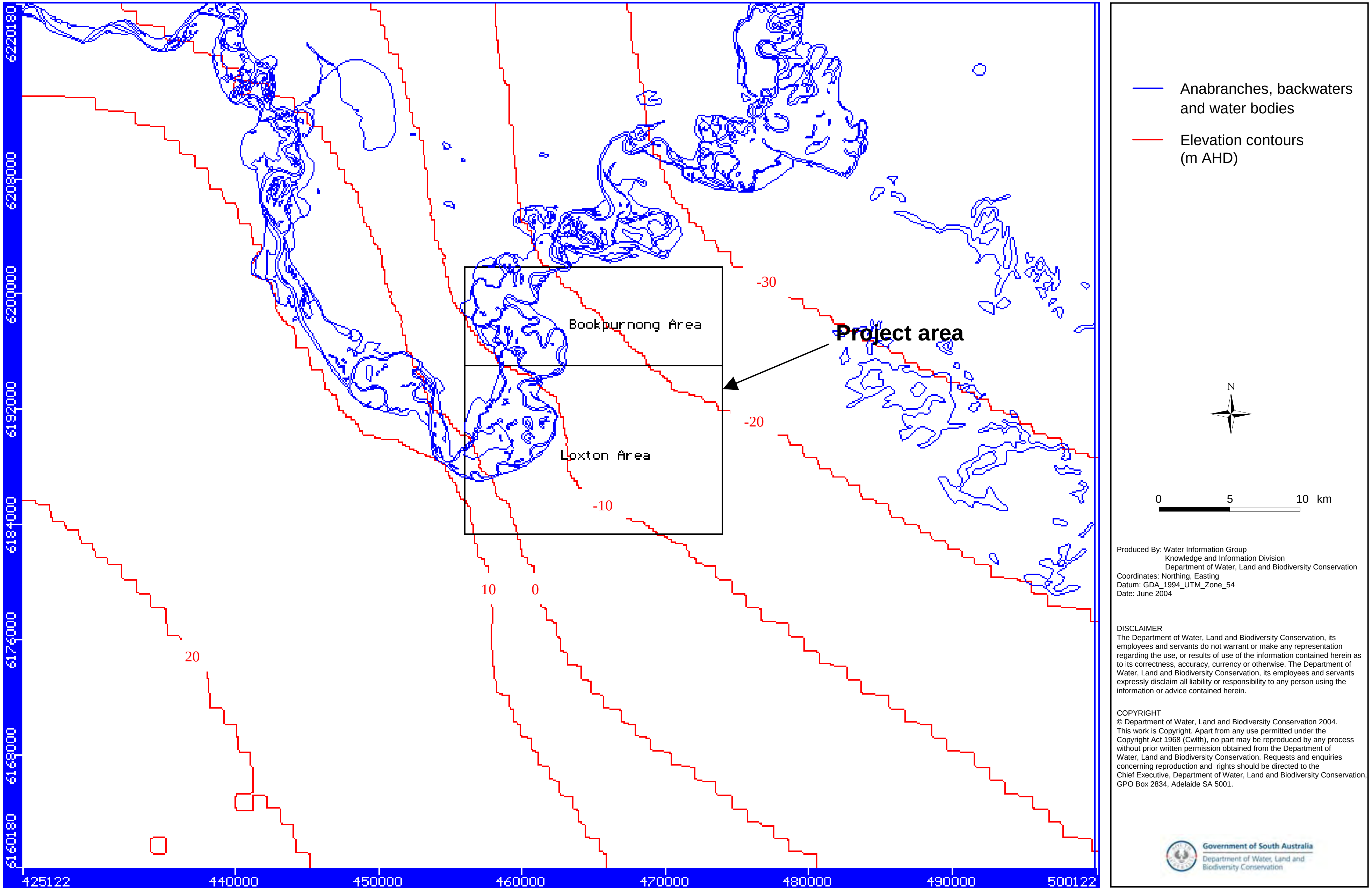

Figure 15: Top of model Layer-3 elevation contours (m AHD)

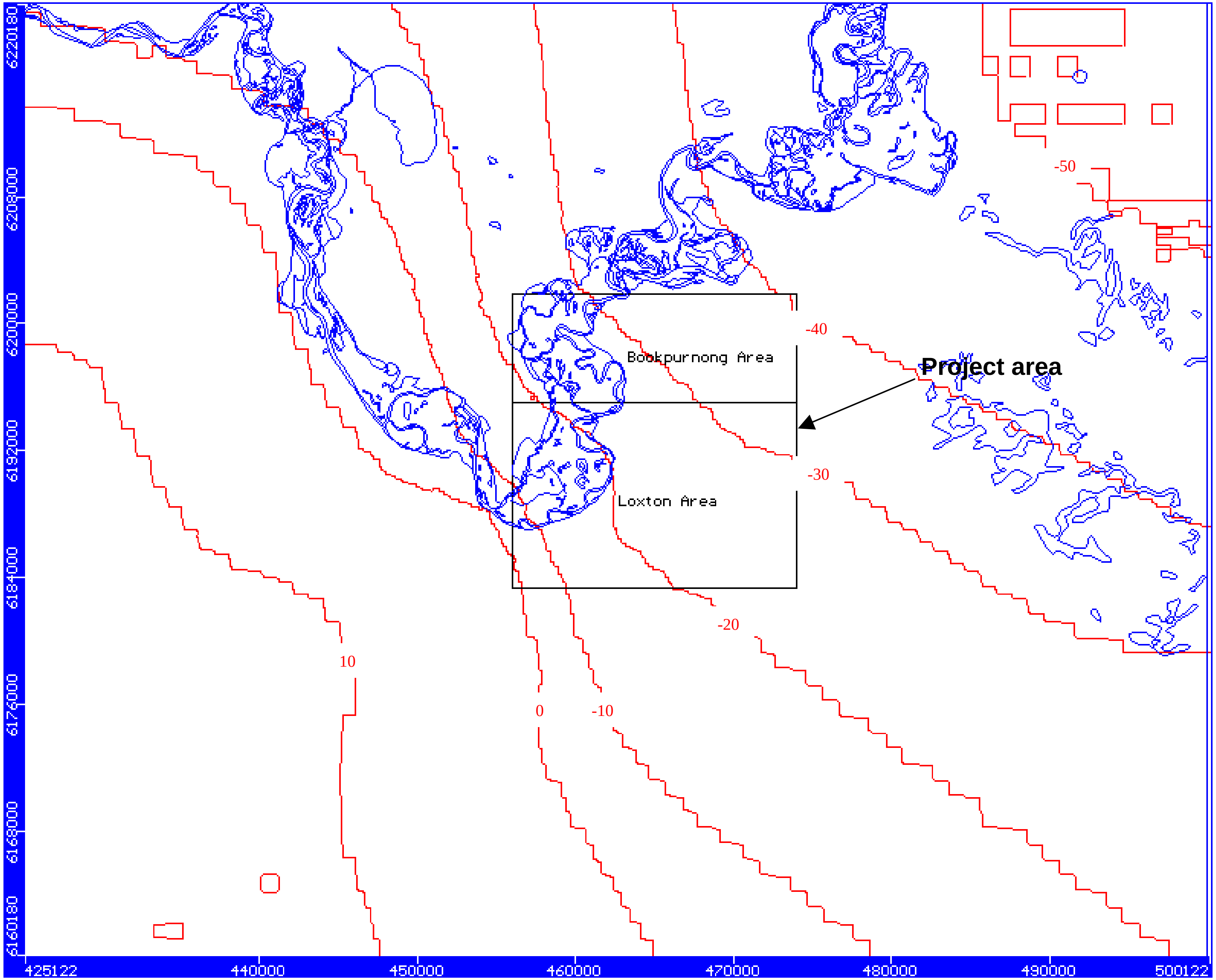

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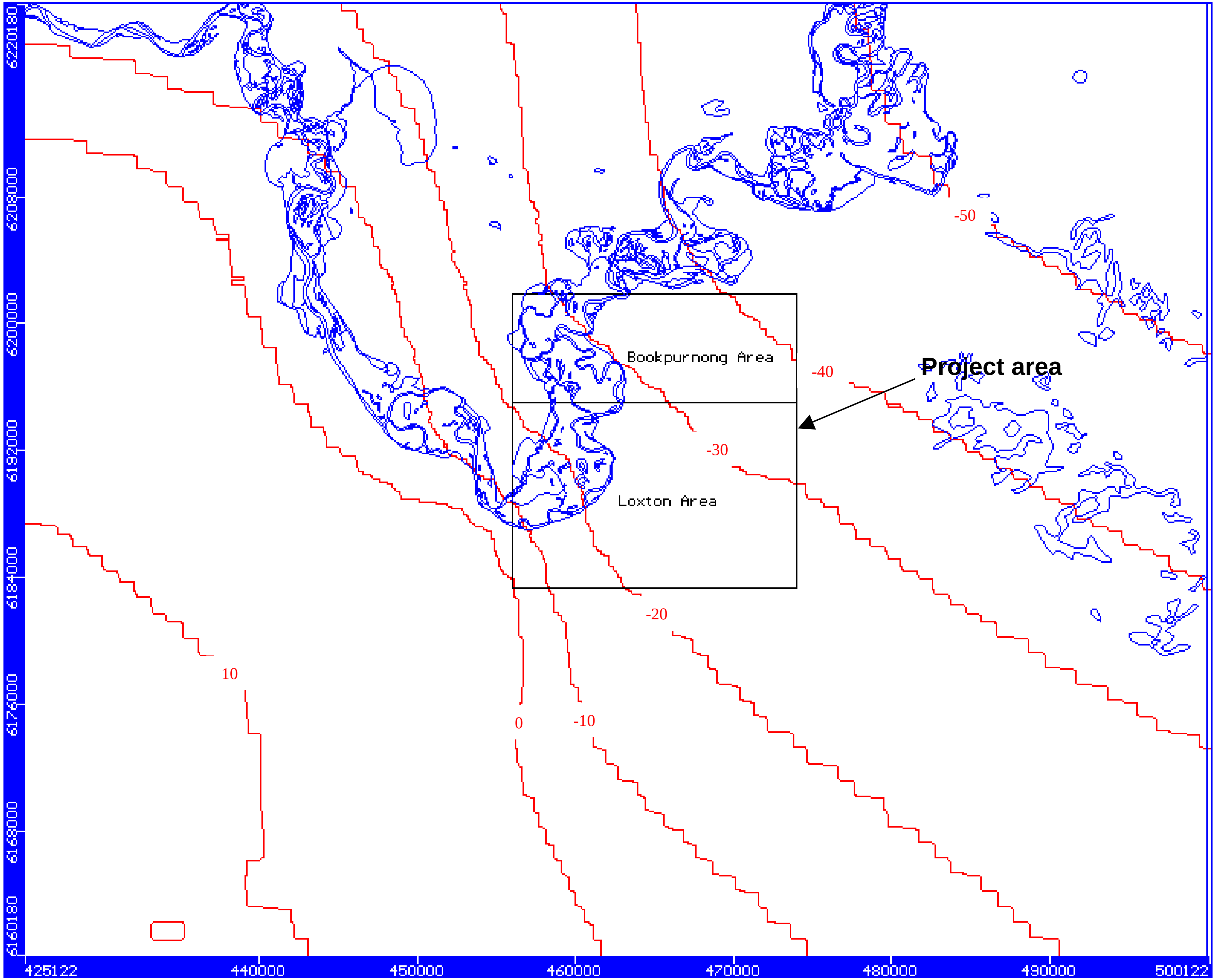
Figure 16: Top of model Layer-4 elevation contours (m AHD)



Anabranches, backwaters and water bodies

Elevation contours (m AHD)

N

0 5 10 km

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Figure 17: Top of model Layer-5 elevation contours (m AHD)

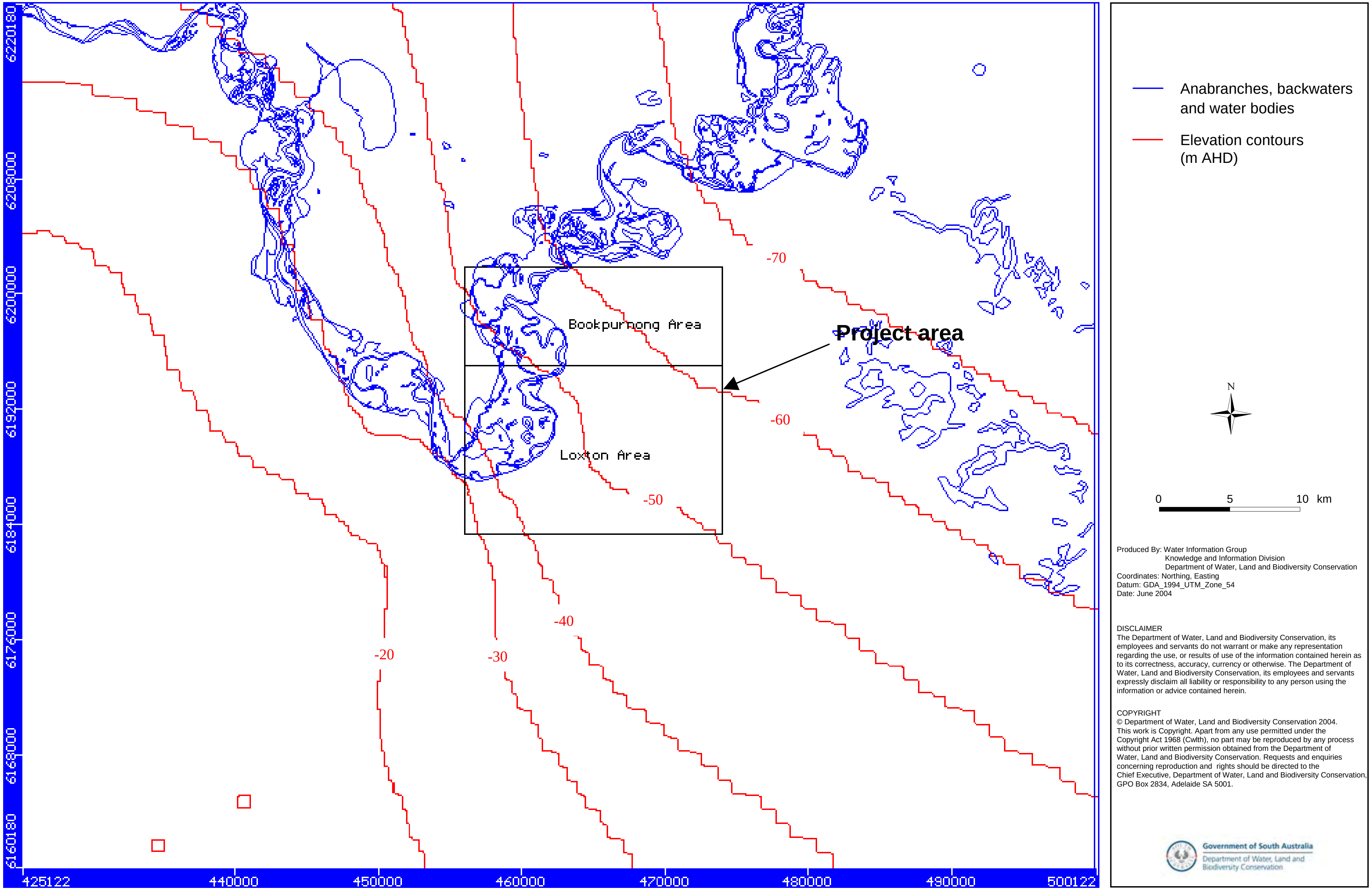


Figure 18: Top of model Layer-6 elevation contours (m AHD)

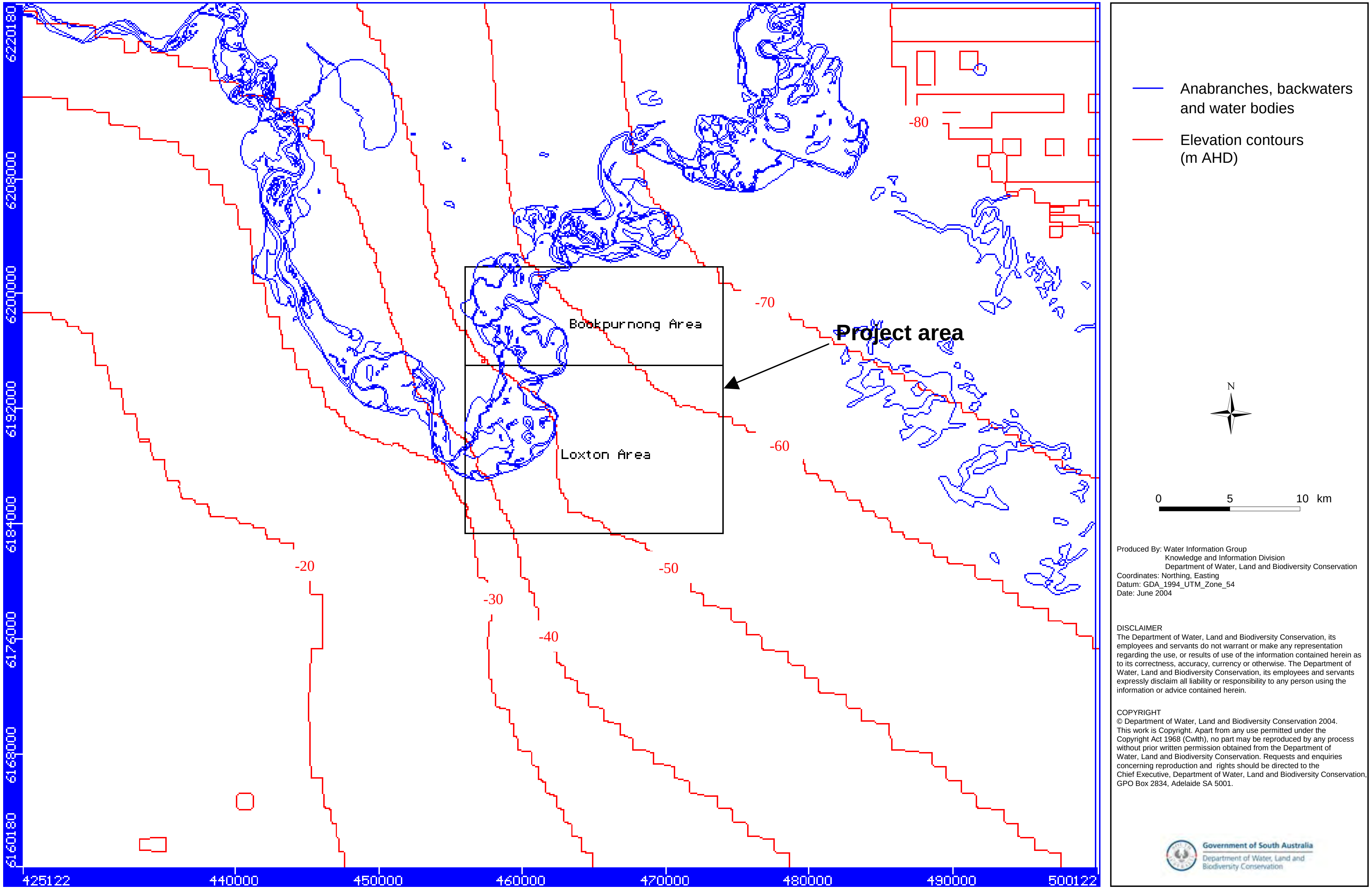


Figure 19: Top of model Layer-7 elevation contours (m AHD)

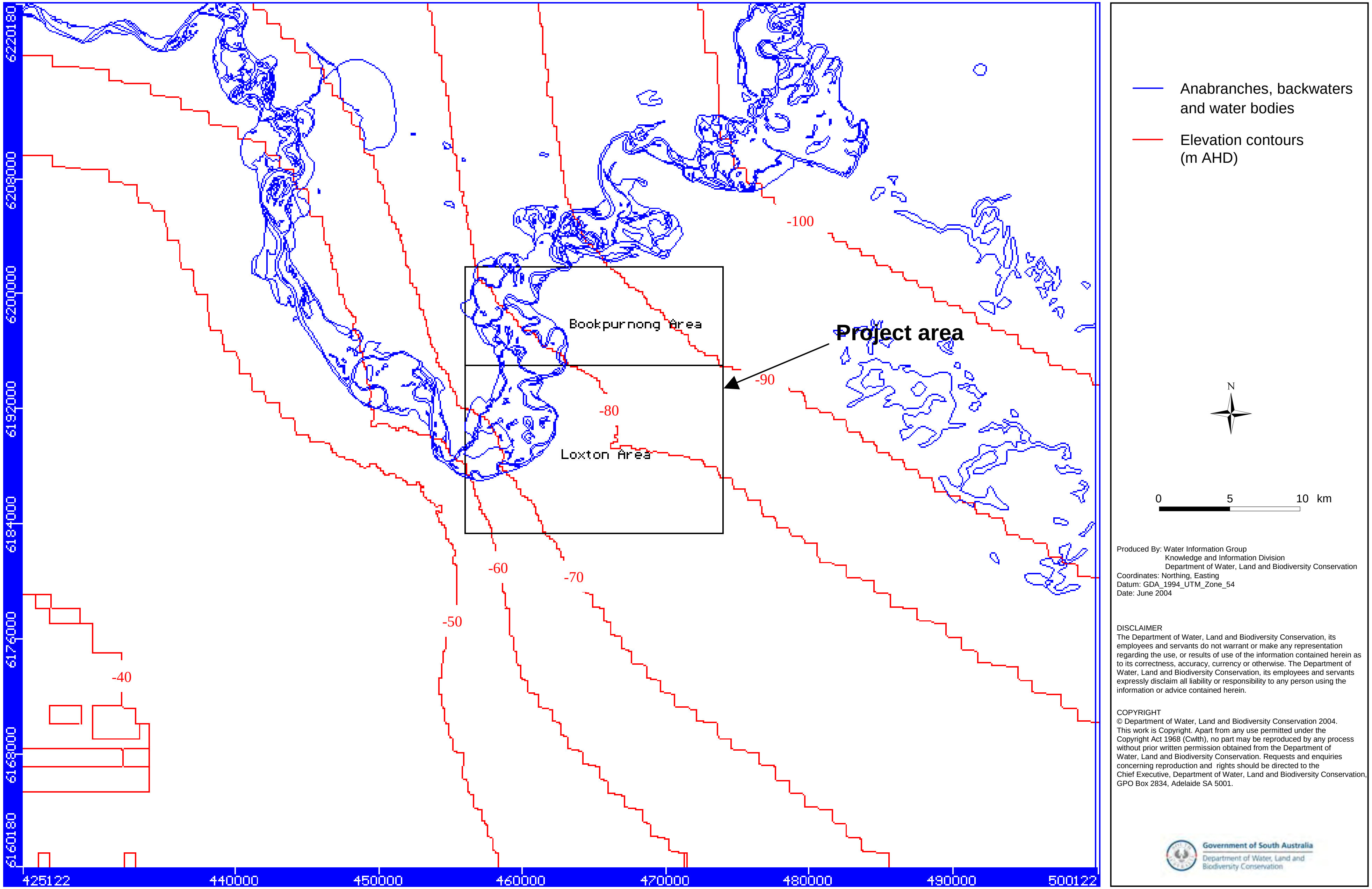
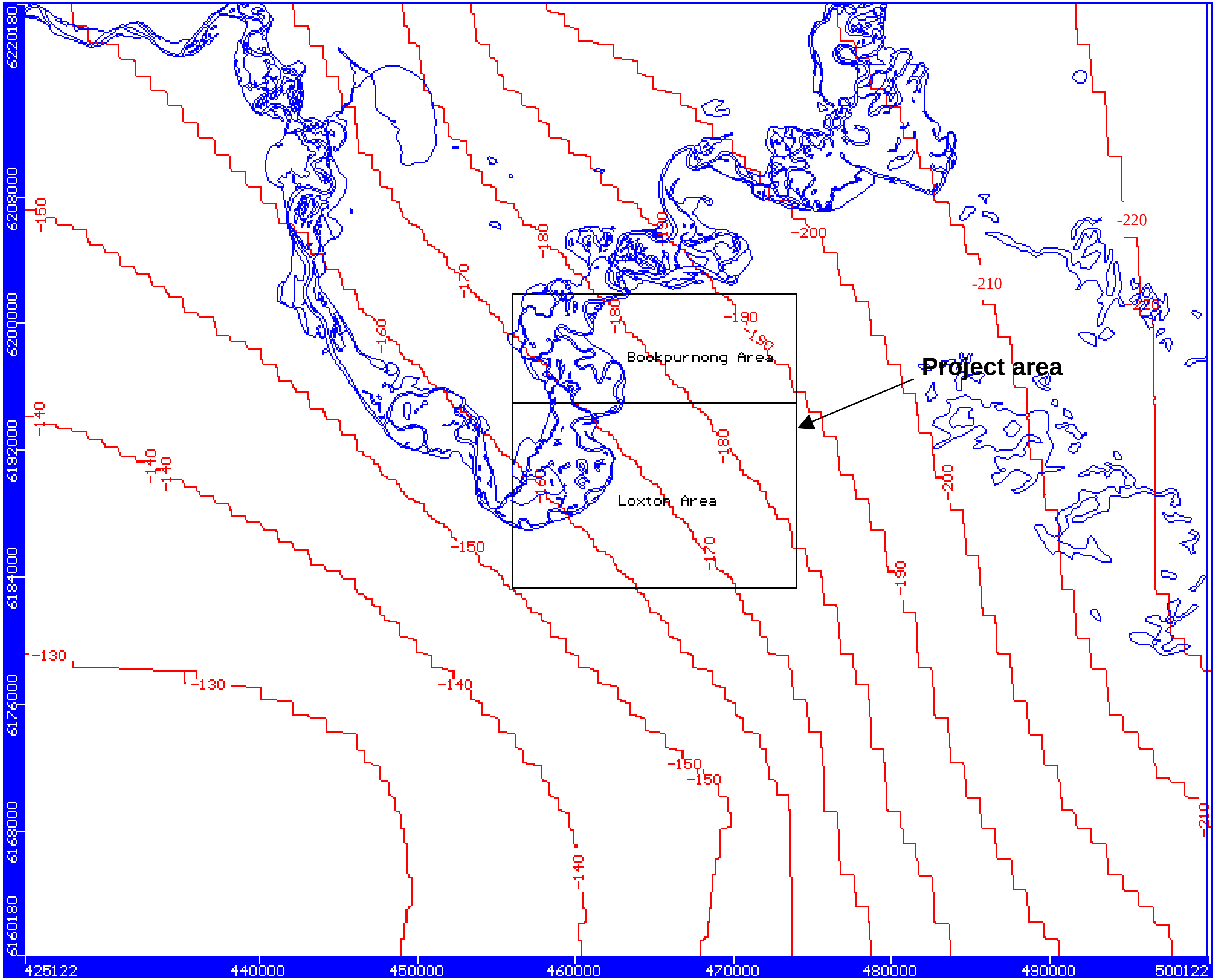


Figure 20: Top of model Layer-8 elevation contours (m AHD)



Anabranches, backwaters and water bodies

Elevation contours (m AHD)

N

0 5 10 km

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Figure 21: Base of model Layer-8 elevation contours (m AHD)

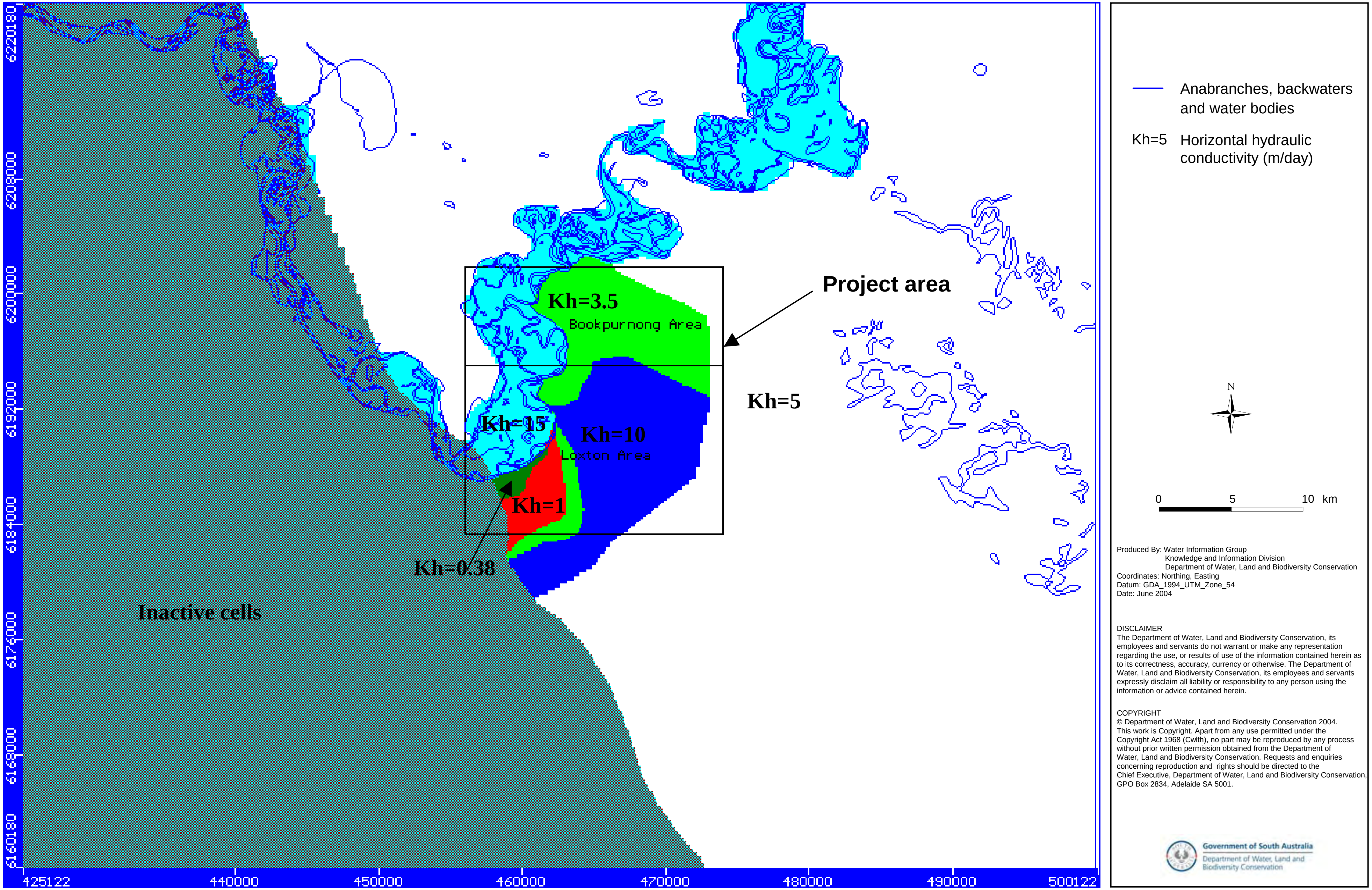

Figure 22: Model hydraulic conductivity zones and values (Layer-1)

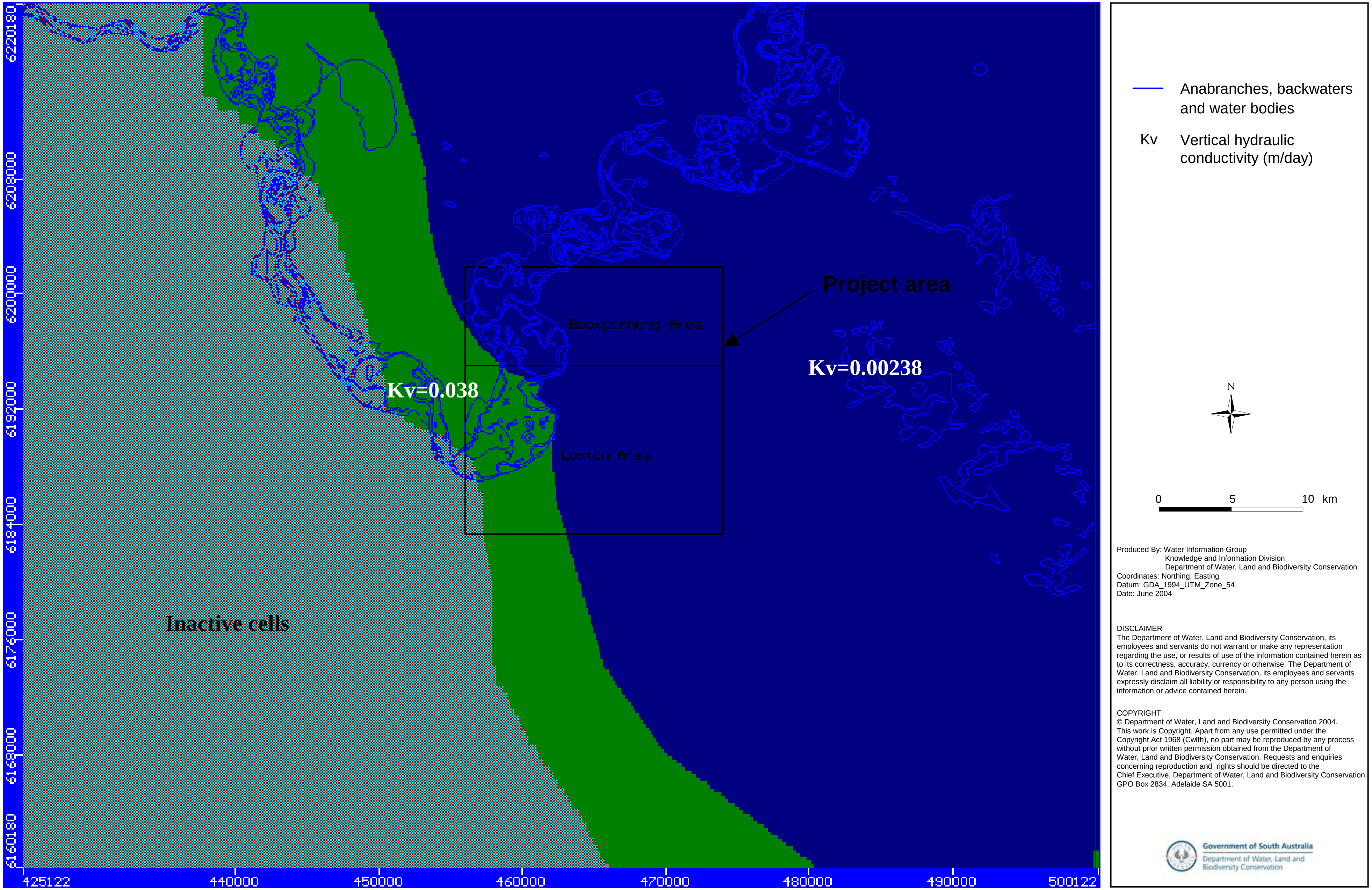

Figure 23: Model hydraulic conductivity zones and values (Layer-2)

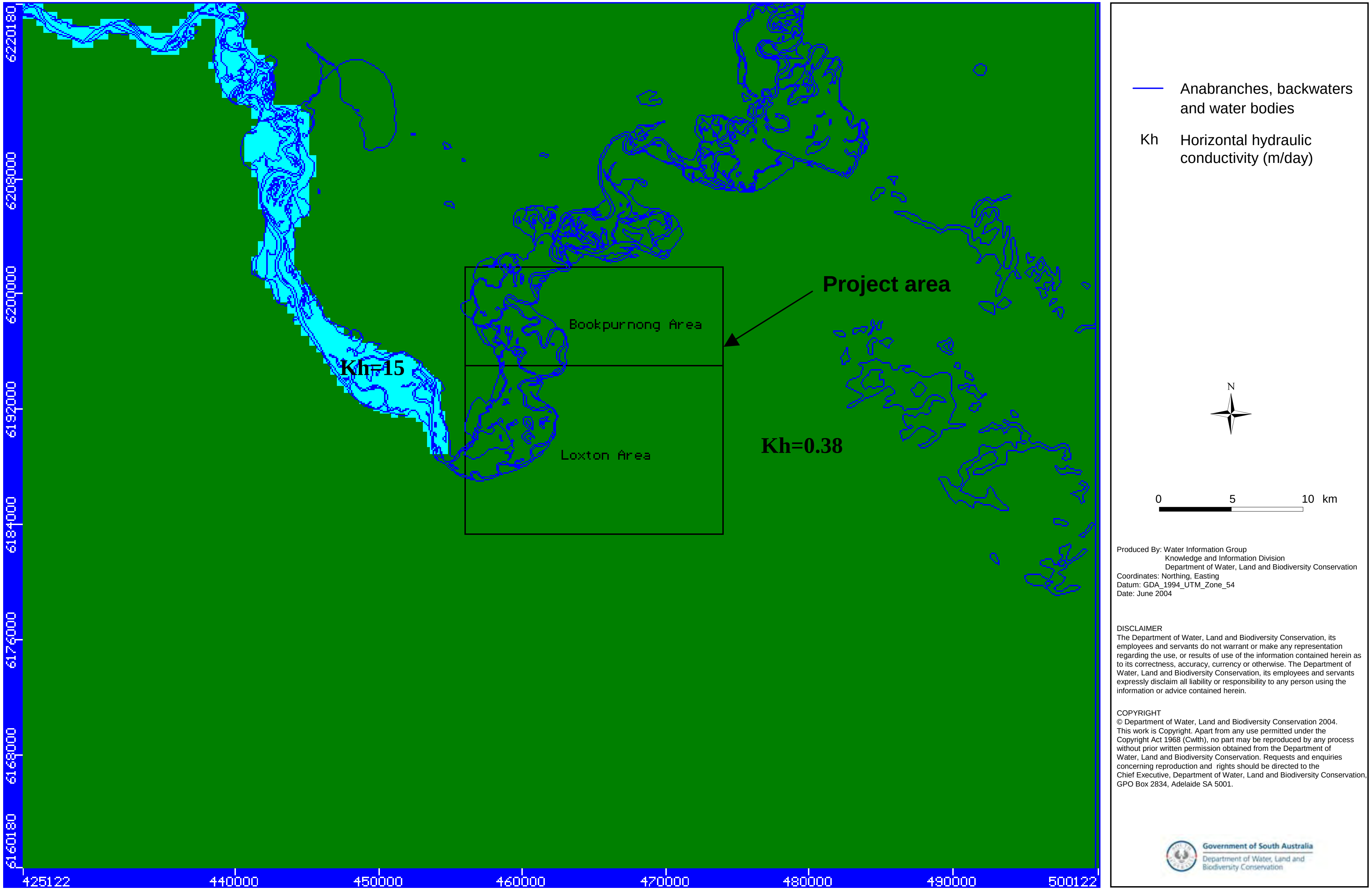

Figure 24: Model hydraulic conductivity zones and values (Layer-3)

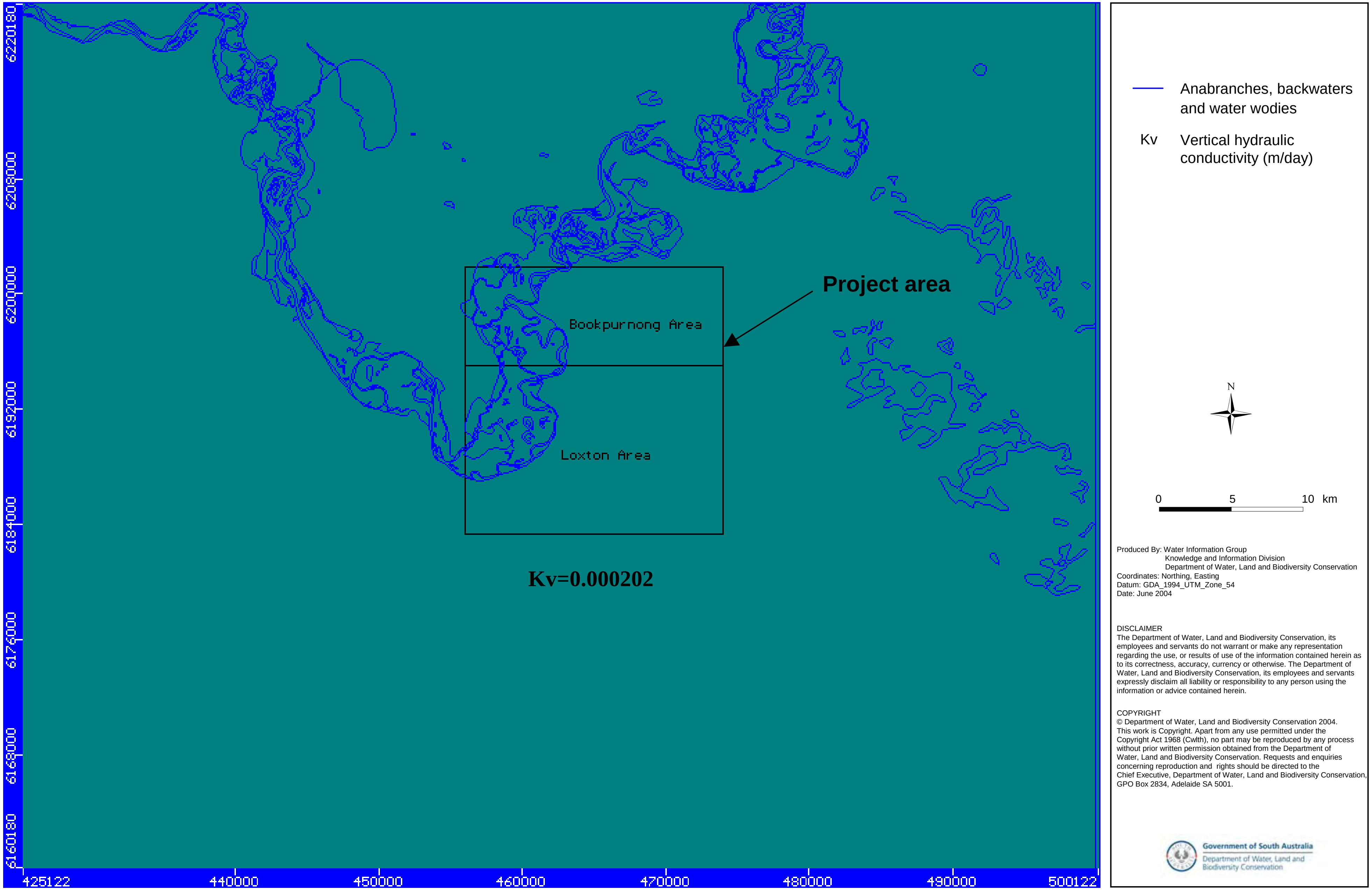

Figure 25: Model hydraulic conductivity zones and values (Layer-4)

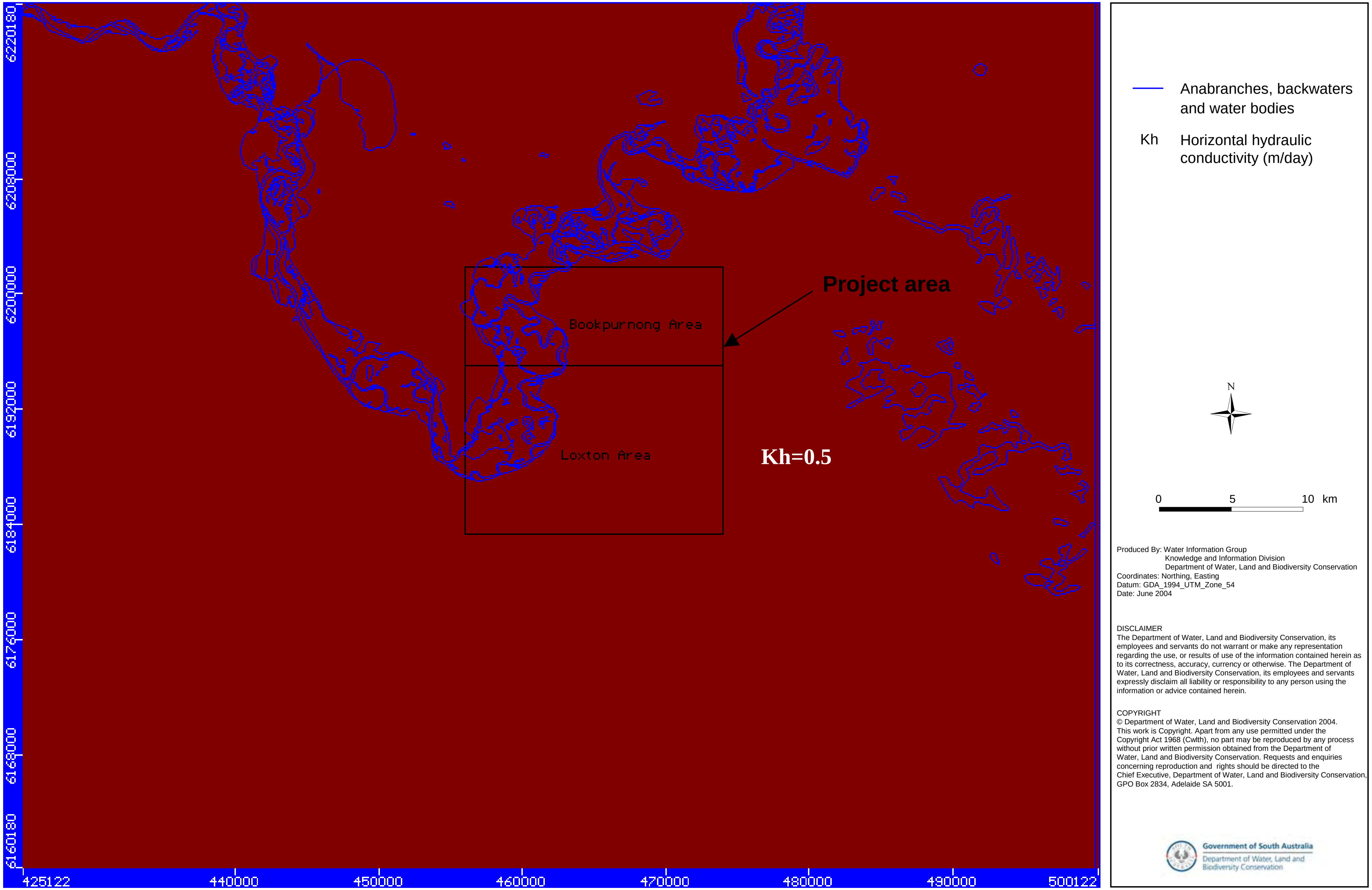

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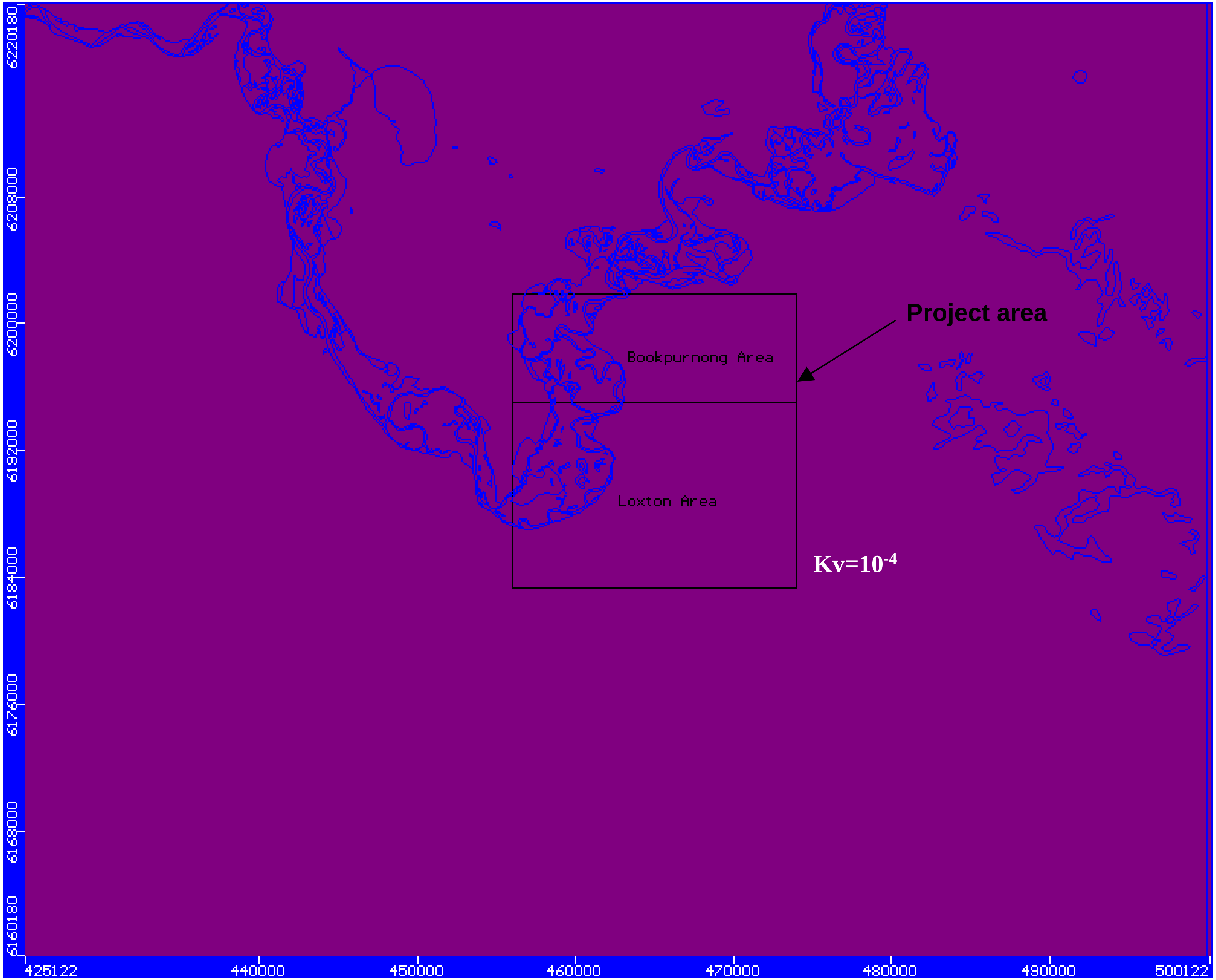
Figure 26: Model hydraulic conductivity zones and values (Layer-5)



Anabranches, backwaters and water bodies

Kv Vertical hydraulic conductivity (m/day)

N

0 5 10 km

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Figure 27: Model hydraulic conductivity zones and values (Layer-6)

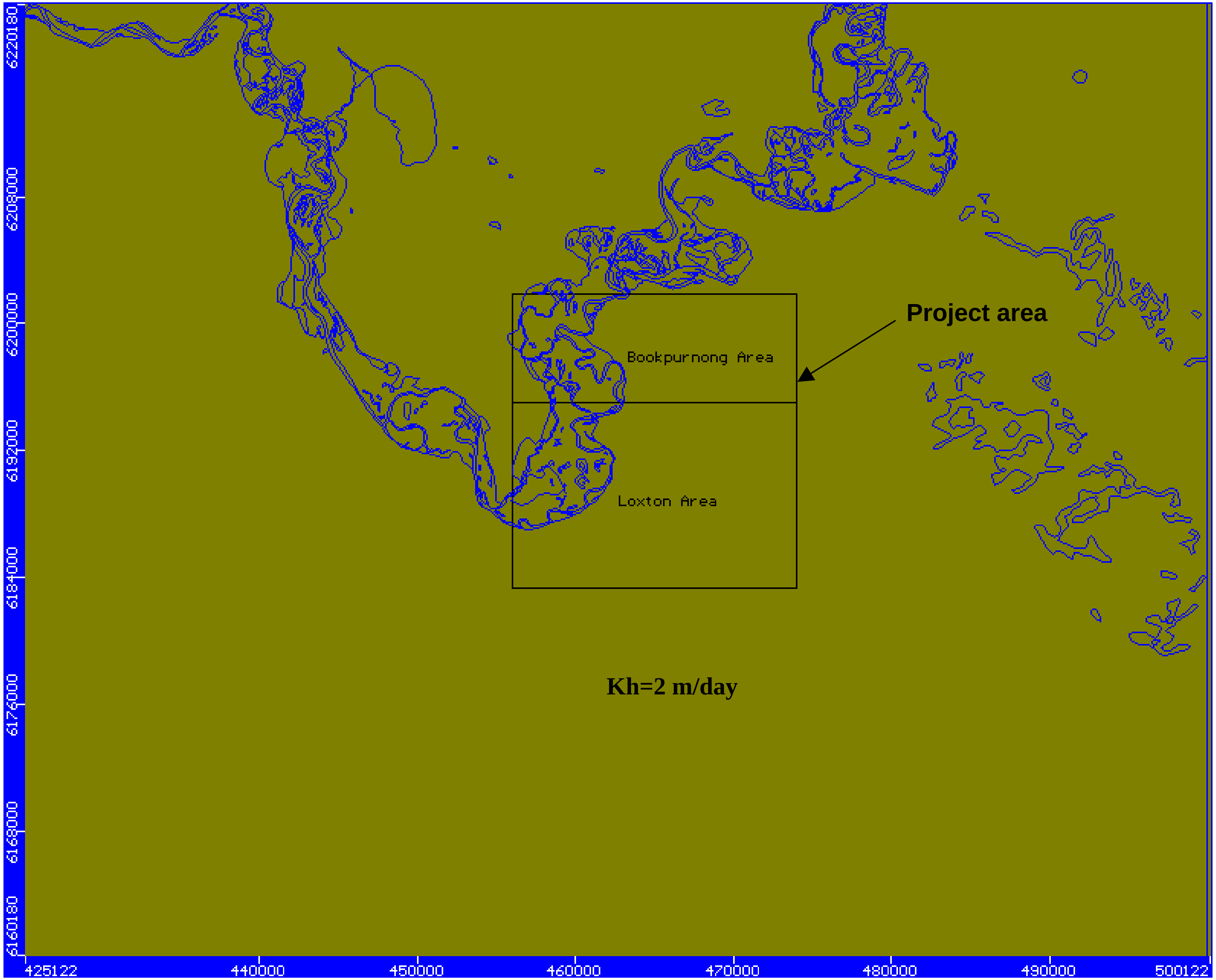

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Figure 28: Model hydraulic conductivity zones and values (Layer-7)

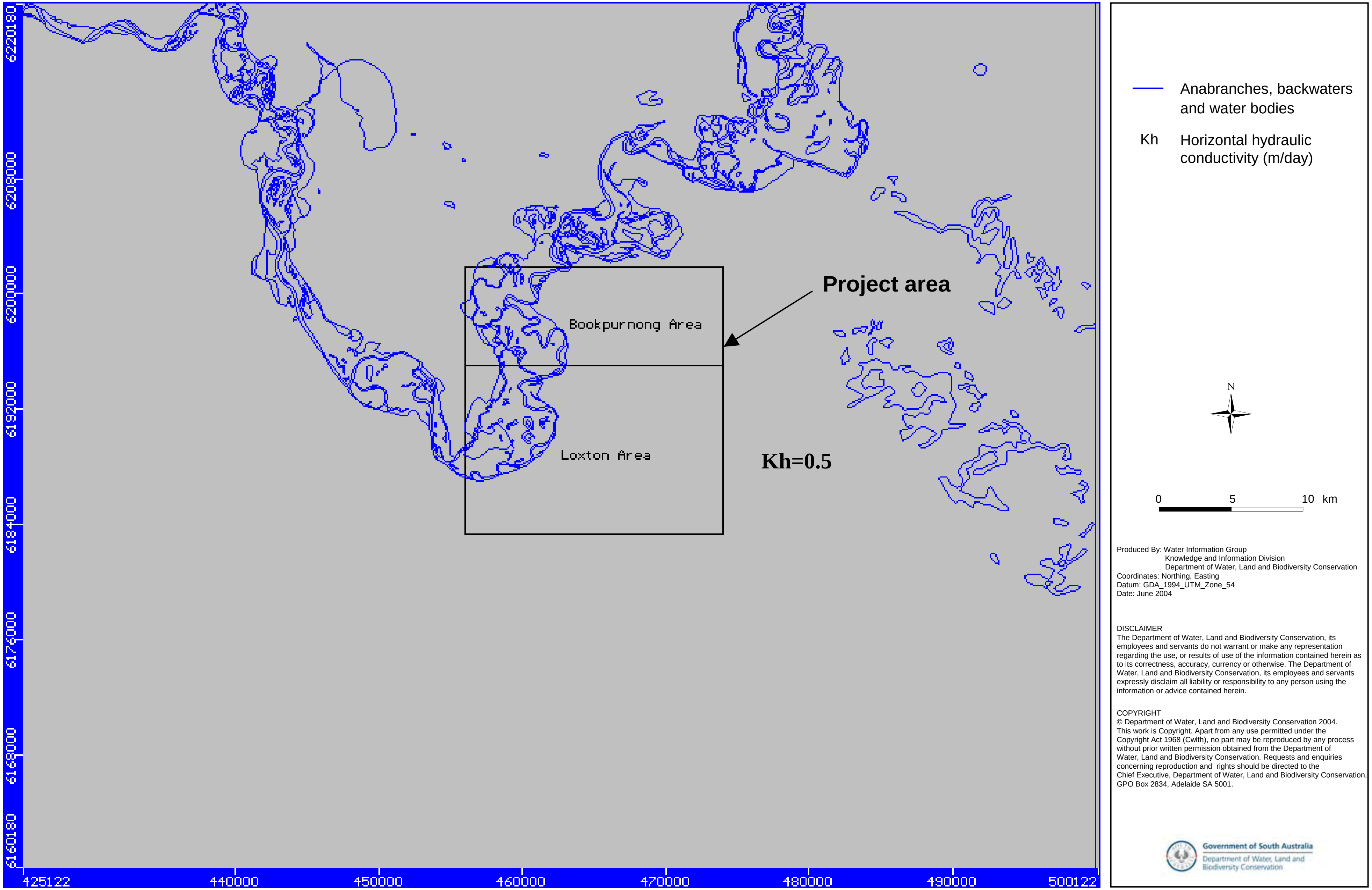

Figure 29: Model hydraulic conductivity zones and values (Layer-8)

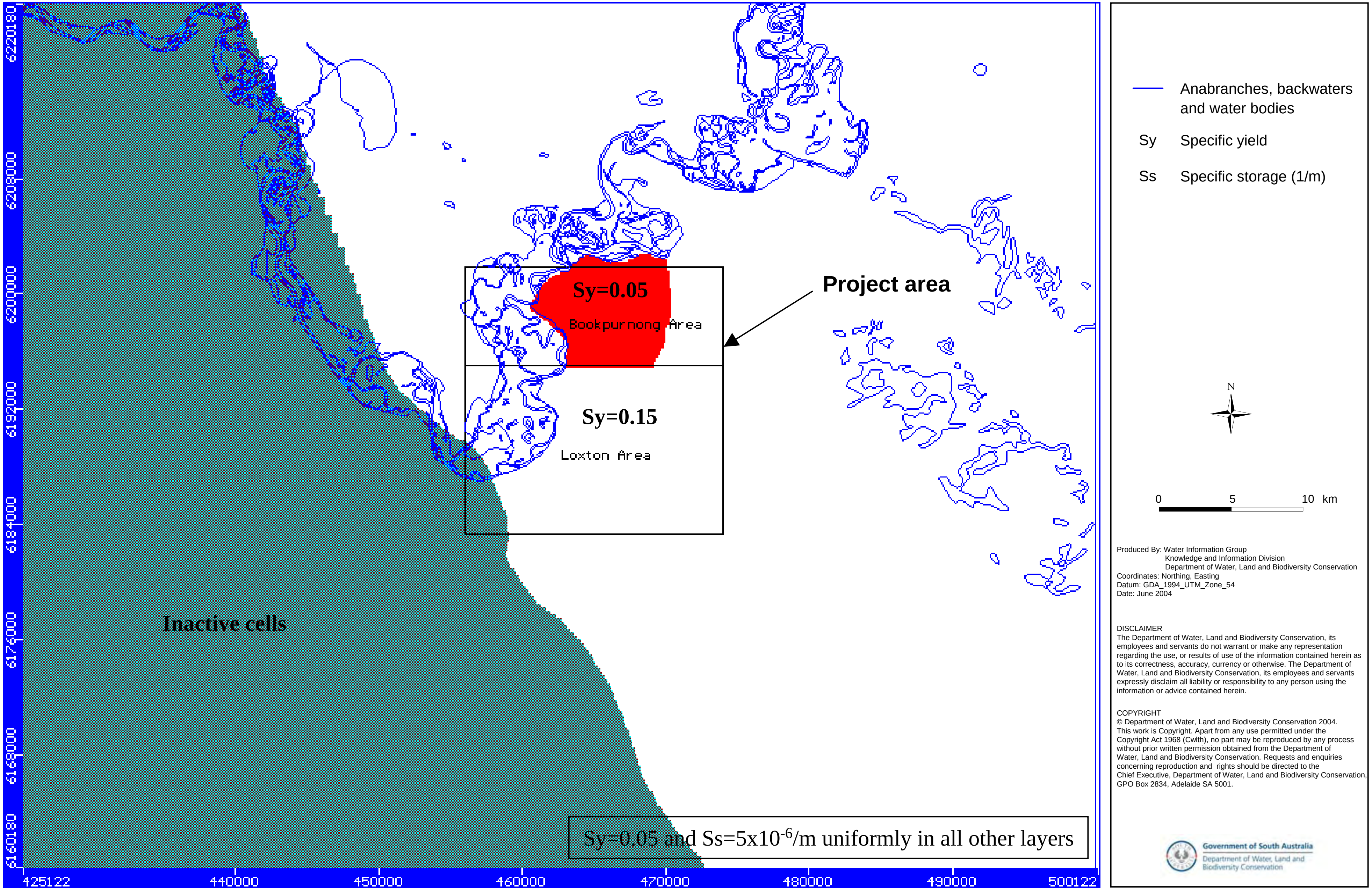

Figure 30: Model specific yield zones and values (Layer-1)

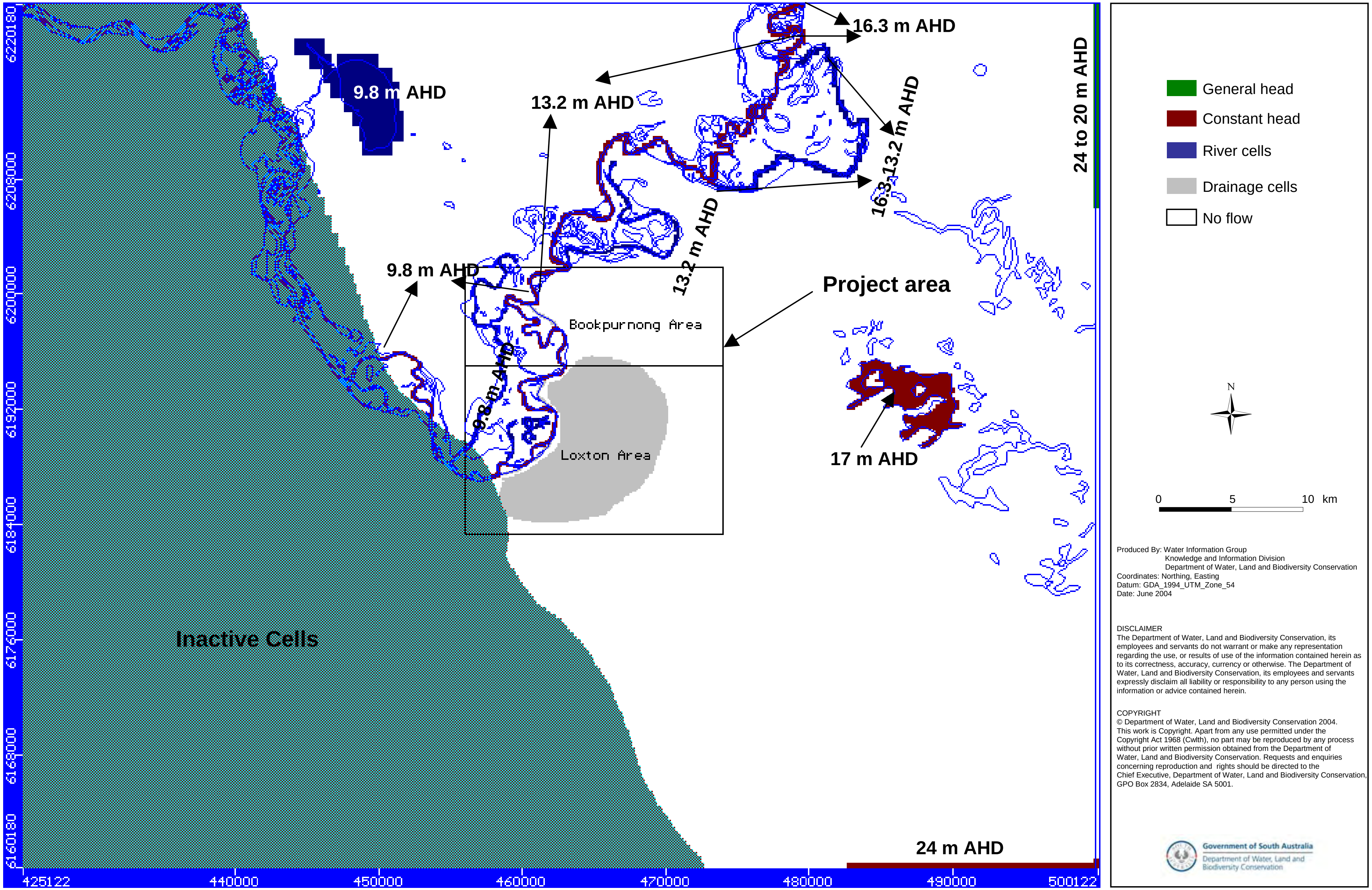

Figure 31: Model boundary conditions (Layer-1)

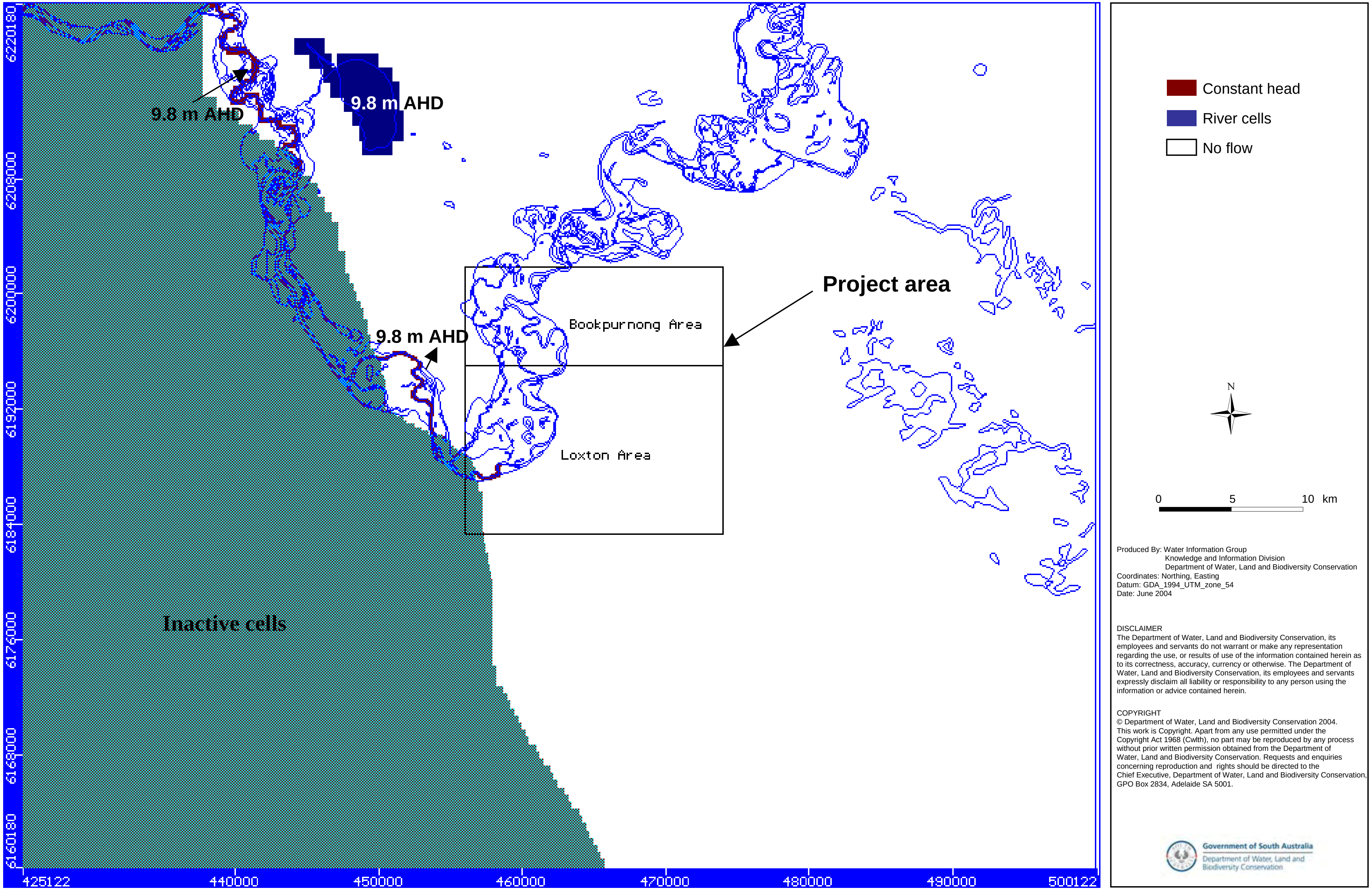

Figure 32: Model boundary conditions (Layer-2)

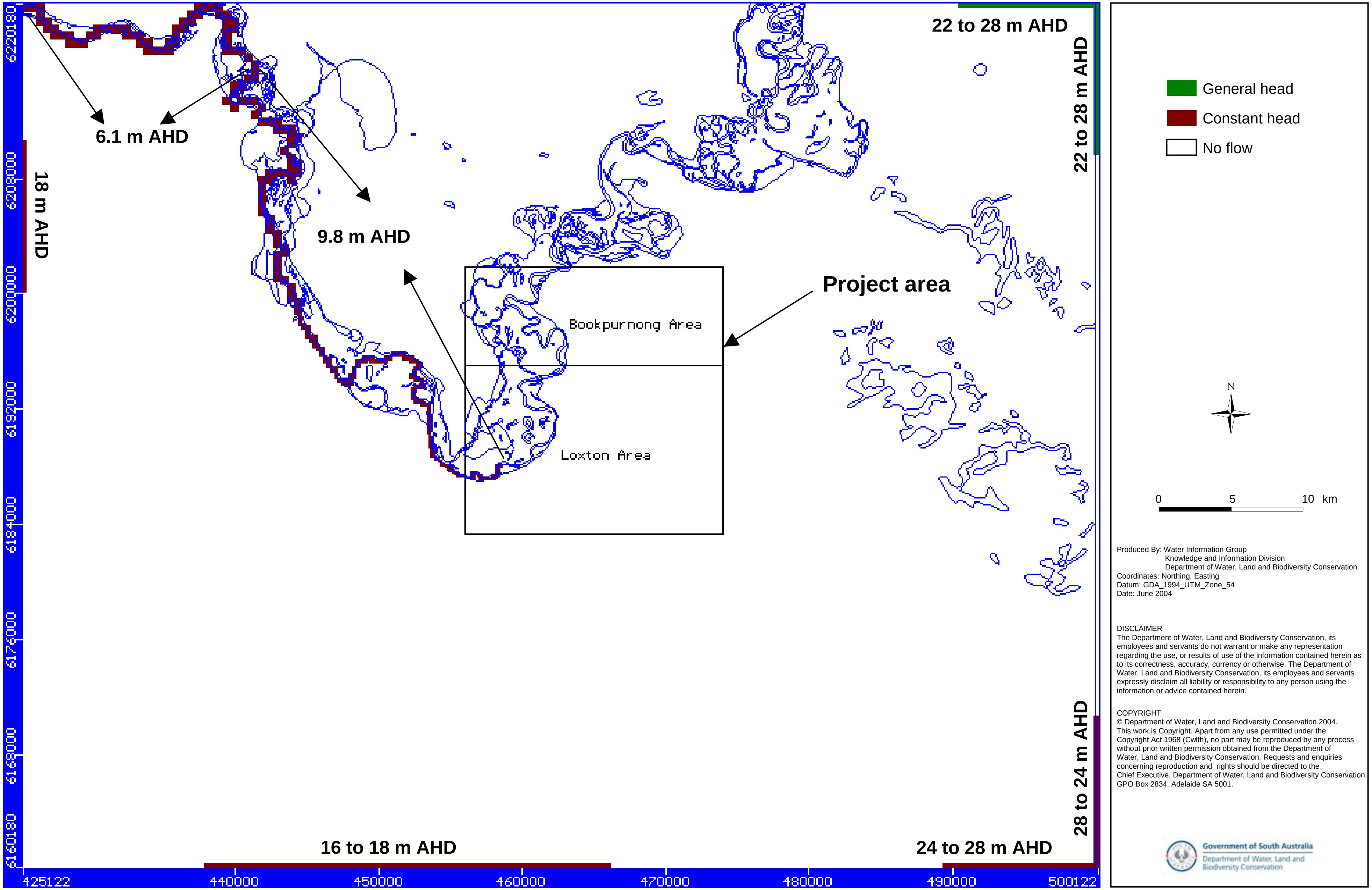

Figure 33: Model boundary conditions (Layer-3)

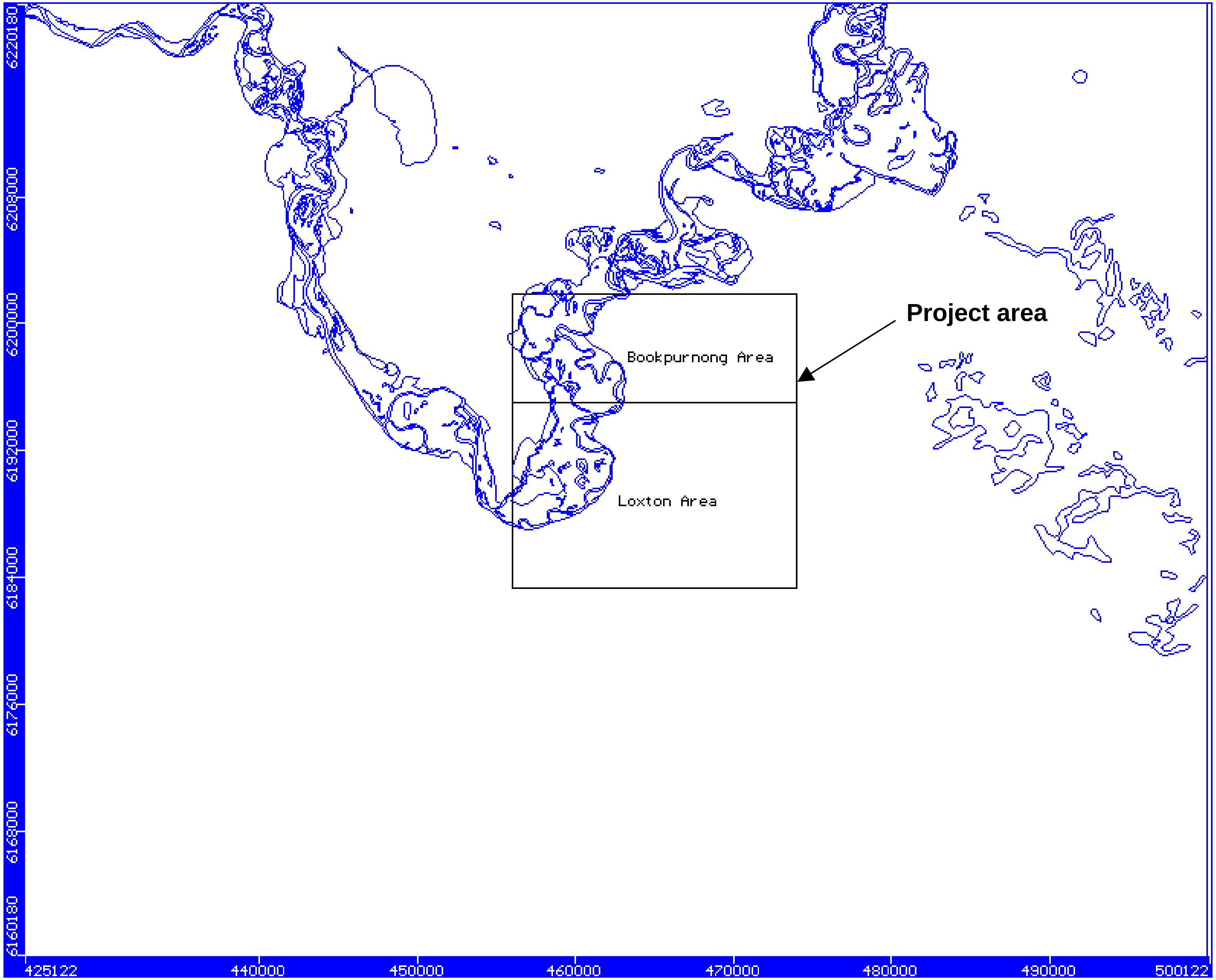

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Figure 34: Model boundary conditions (Layer-4 and Layer-6)

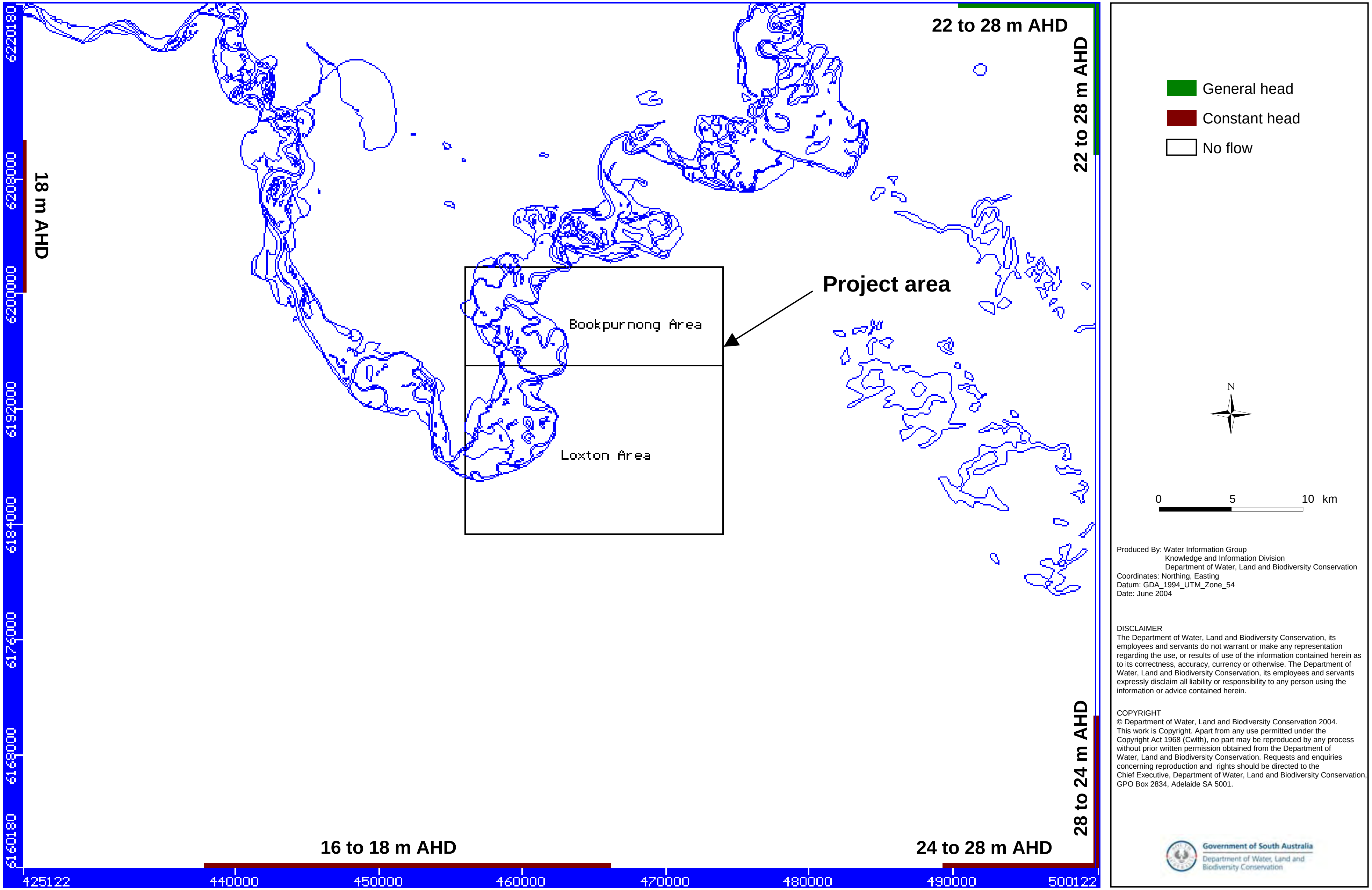


Figure 35: Model boundary conditions (Layer-5, Layer-7 and Layer-8)

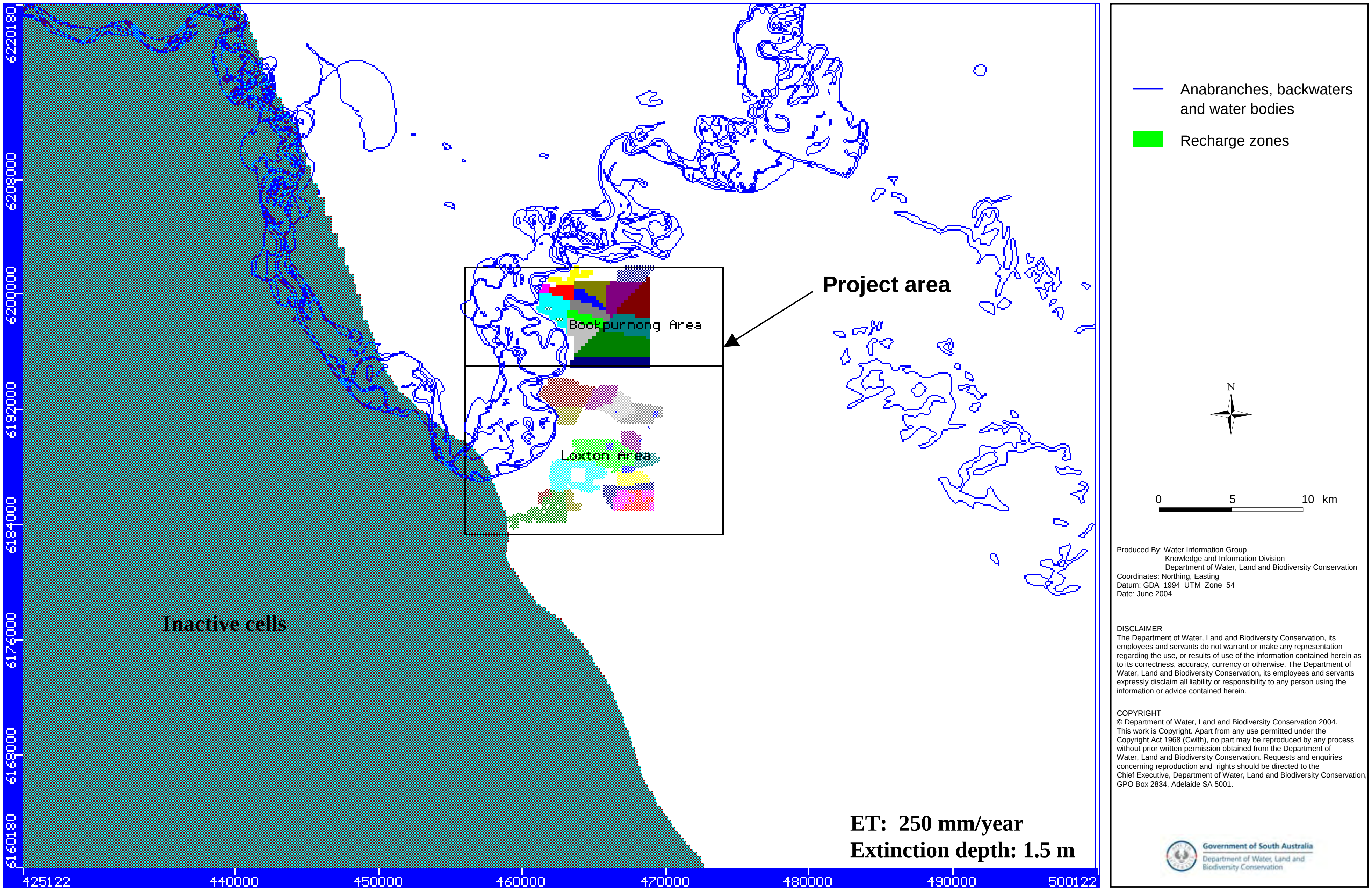


Figure 36a: Regional model recharge zones (Figure36b shows recharge zones in project area)

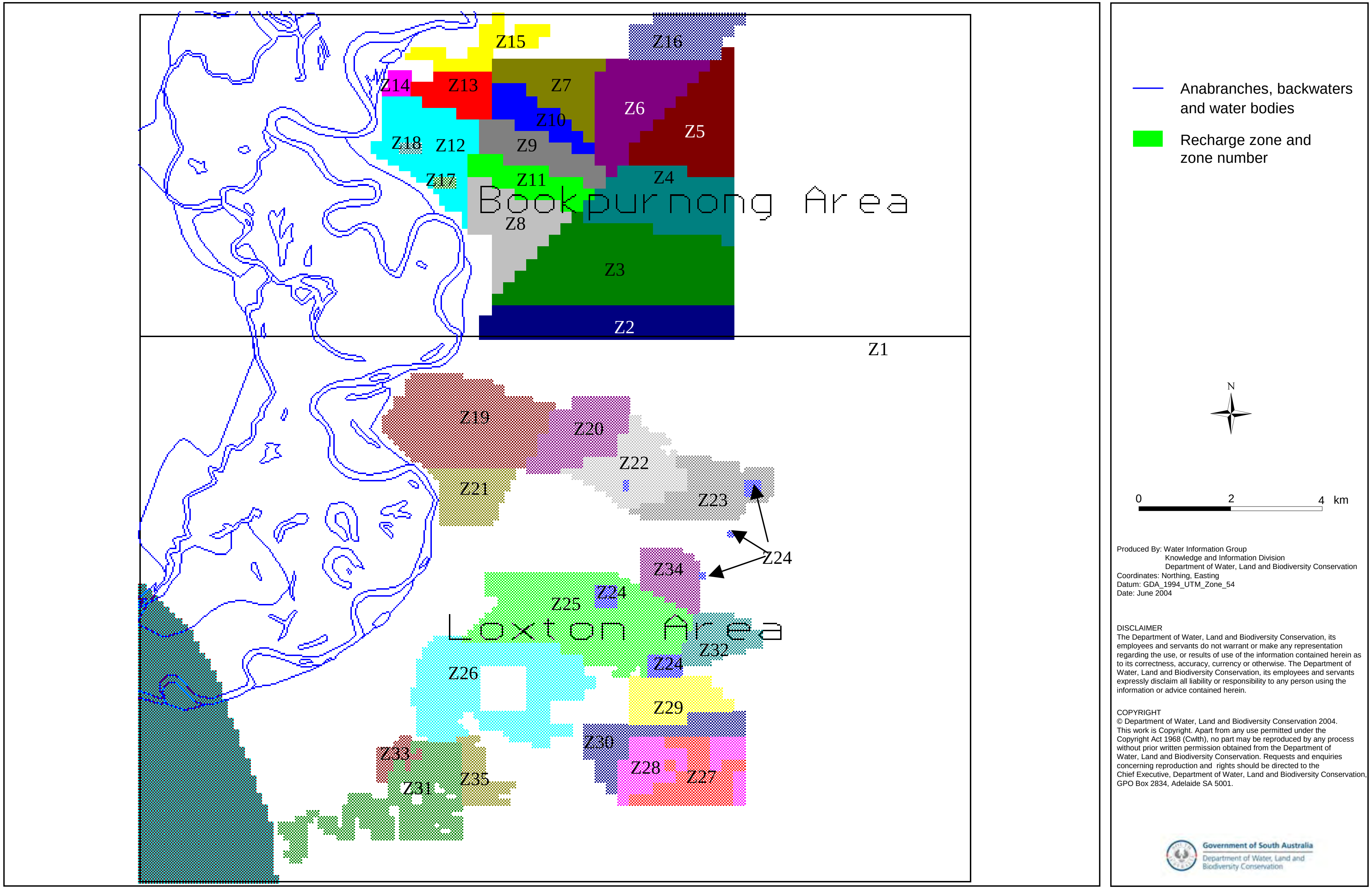


Figure 36b: Model recharge zones in project area (recharge rates in each zone against time are listed in the appendix A1 and B1)

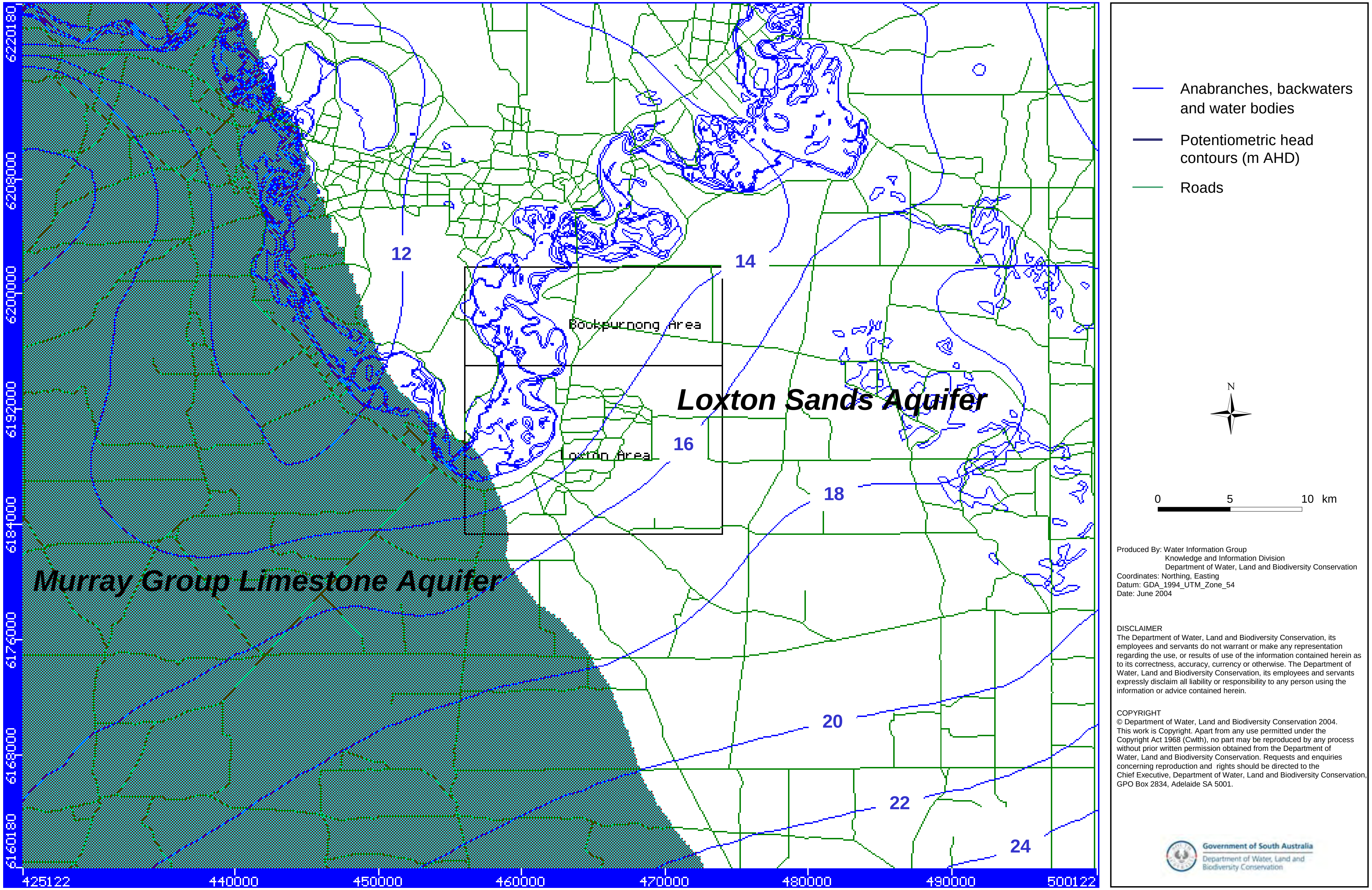


Figure 37: Pre-Irrigation development potentiometric surface (Barnett 2003)

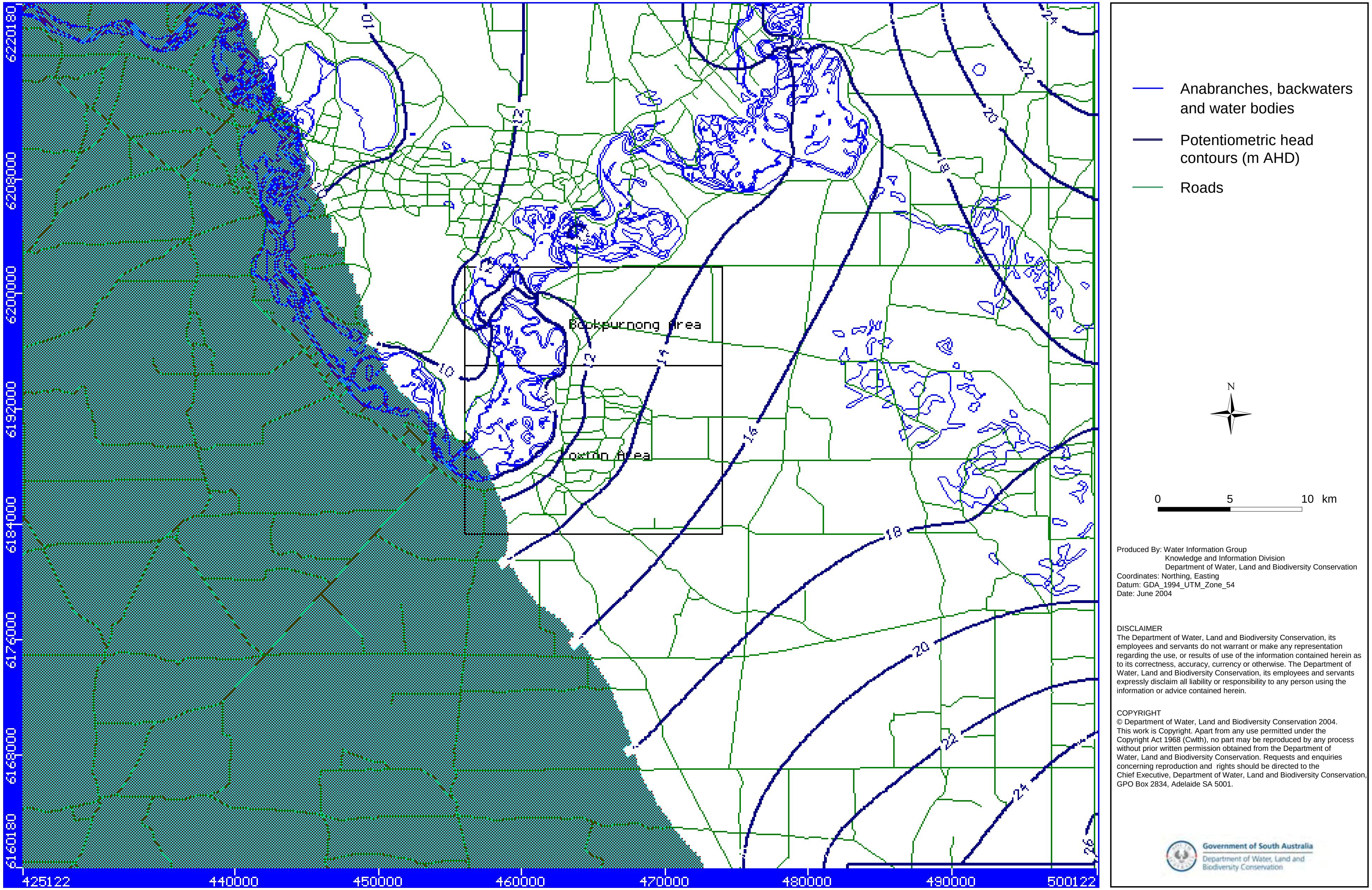
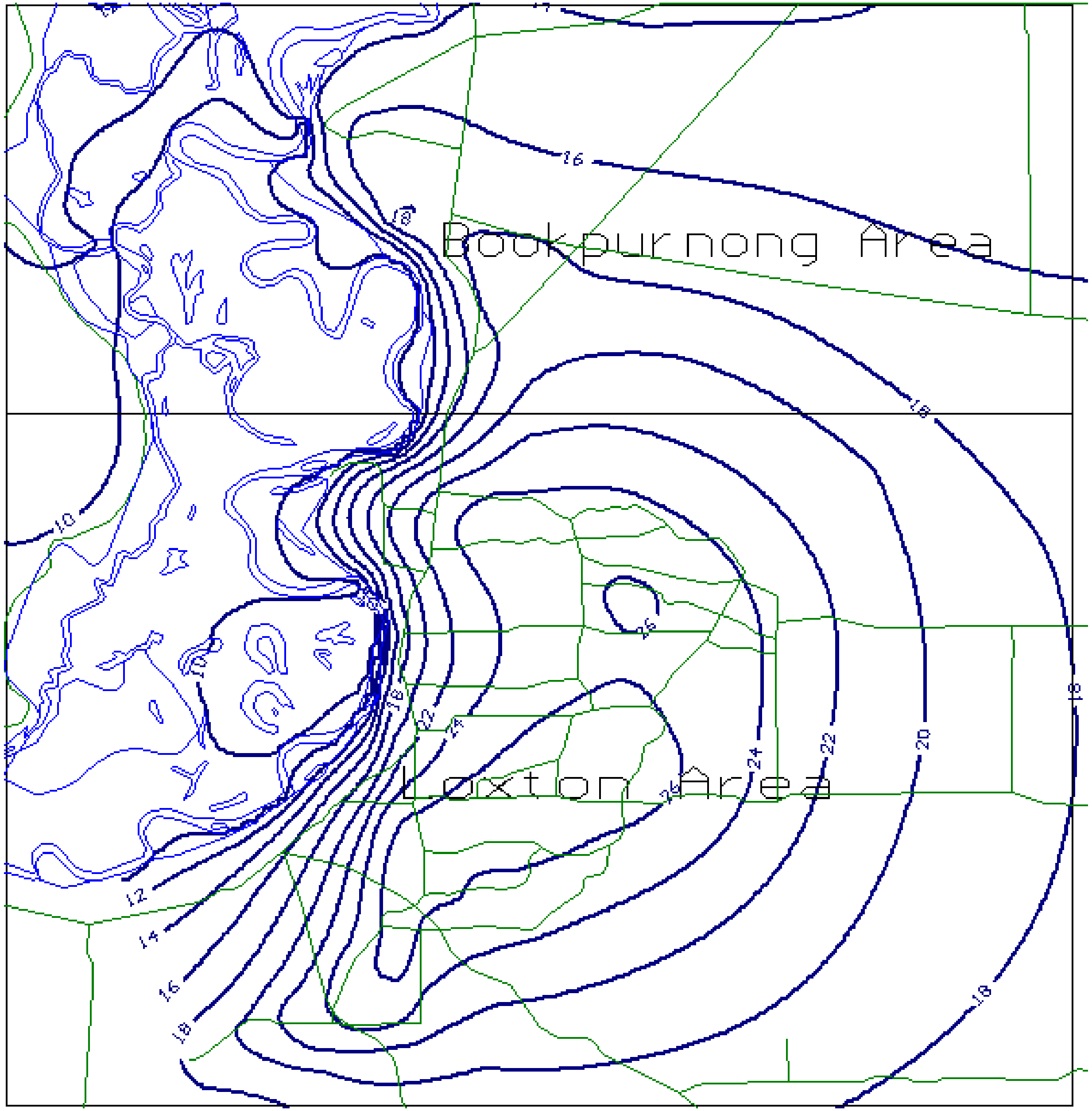


Figure 38: Modelled post-regulation of the River Murray and pre-irrigation development potentiometric surface Layer-1



Anabranches, backwaters and water bodies

Potentiometric head contours (m AHD)

Roads

Observation wells

N

0 2 4 km

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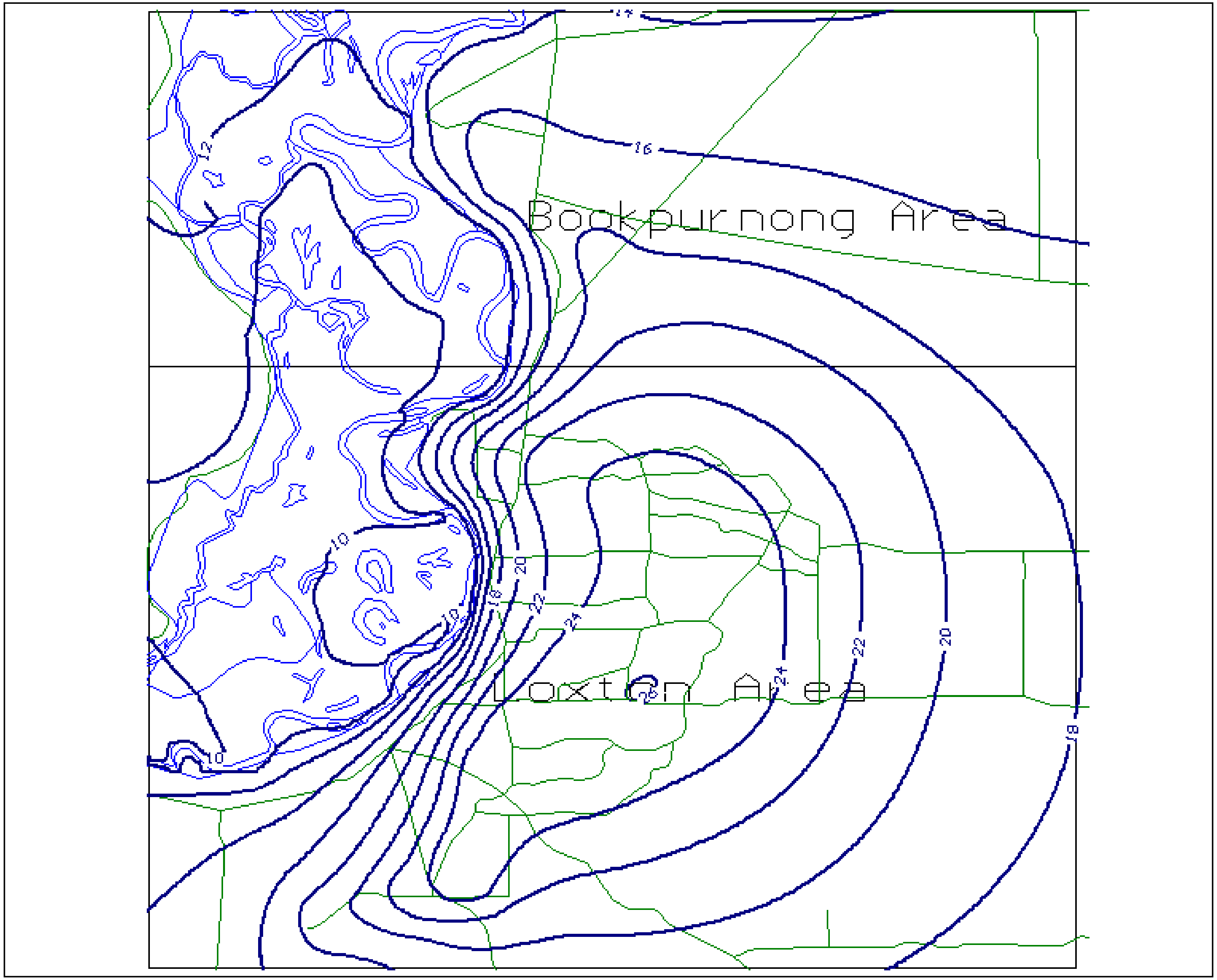
Figure 39: Modelled 2004 potentiometric surface in project area (Layer-1 Loxton Sands)



Anabranches, Backwaters and Water Bodies

Potentiometric Head Contours (m AHD)

Roads

N

0 2 4 km

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Figure 40: Modelled 2004 potentiometric surface in project area (Layer-3 Pata Formation)

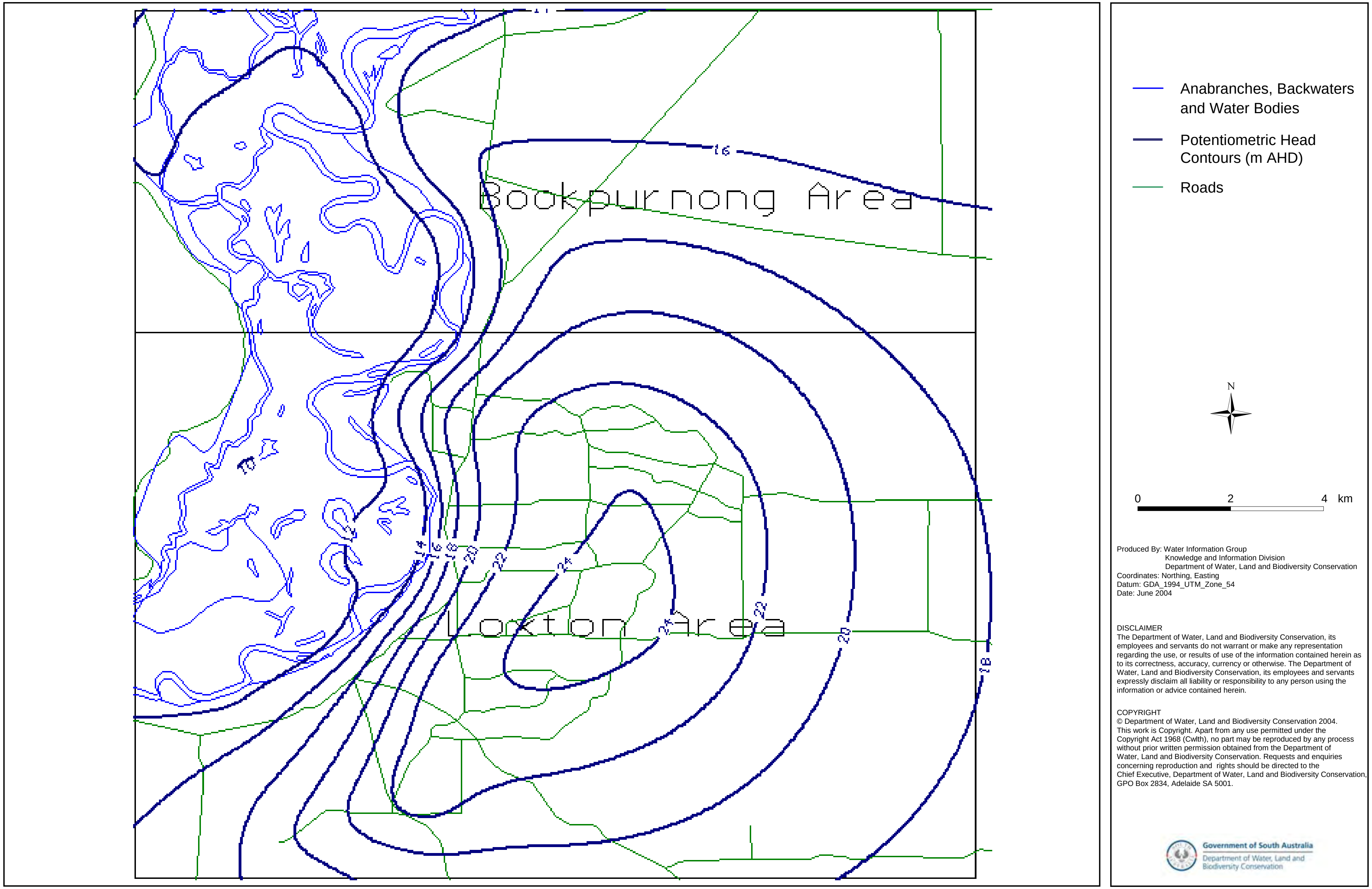

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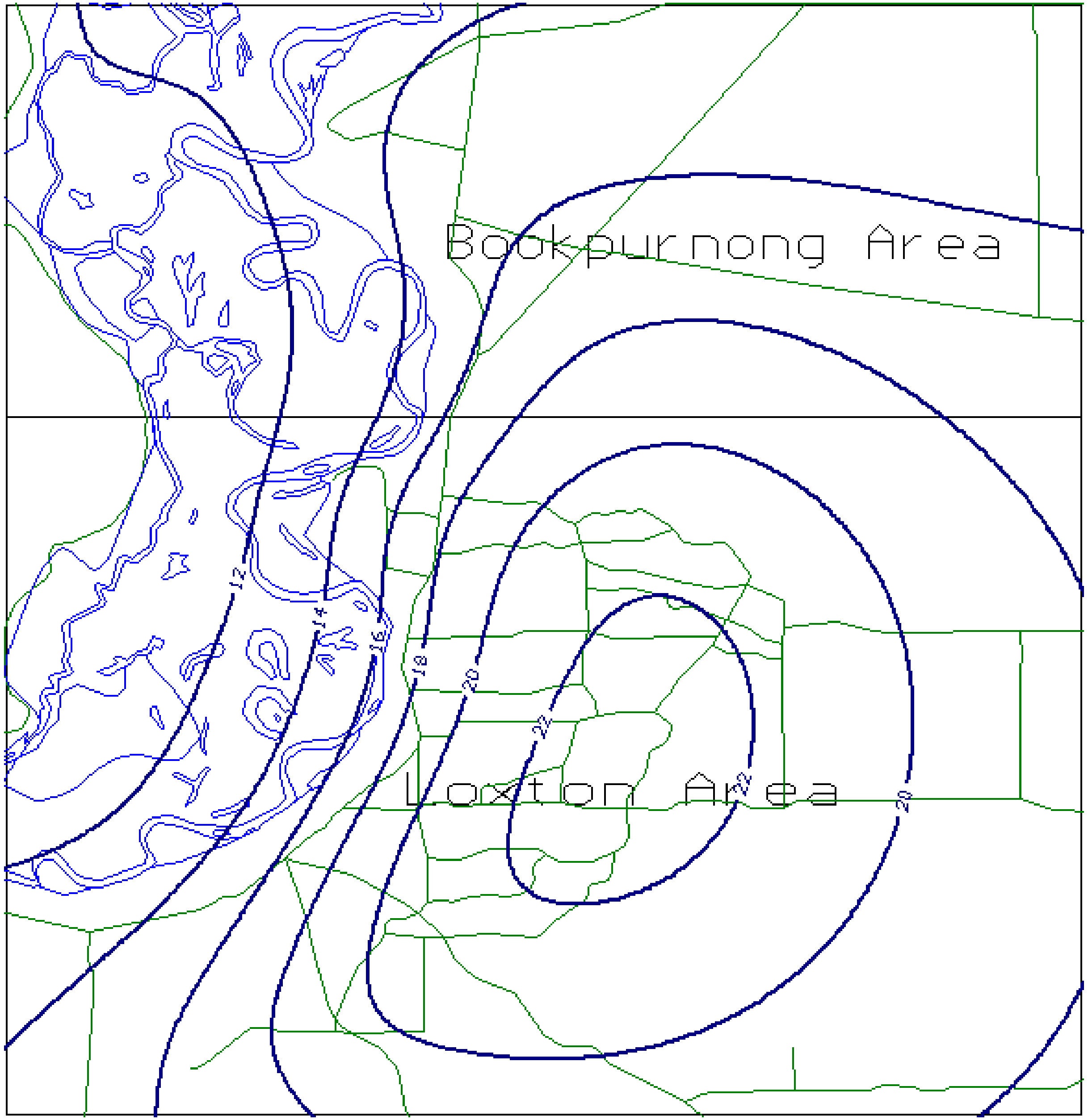
Figure 41: Modelled 2004 potentiometric surface in project area (Layer-5 Glenforslan Formation)



Anabranches, Backwaters and Water Bodies

Potentiometric Head Contours (m AHD)

Roads

N

0 2 4 km

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Figure 42: Modelled 2004 potentiometric surface (Layer-7 Upper Mannum Formation)

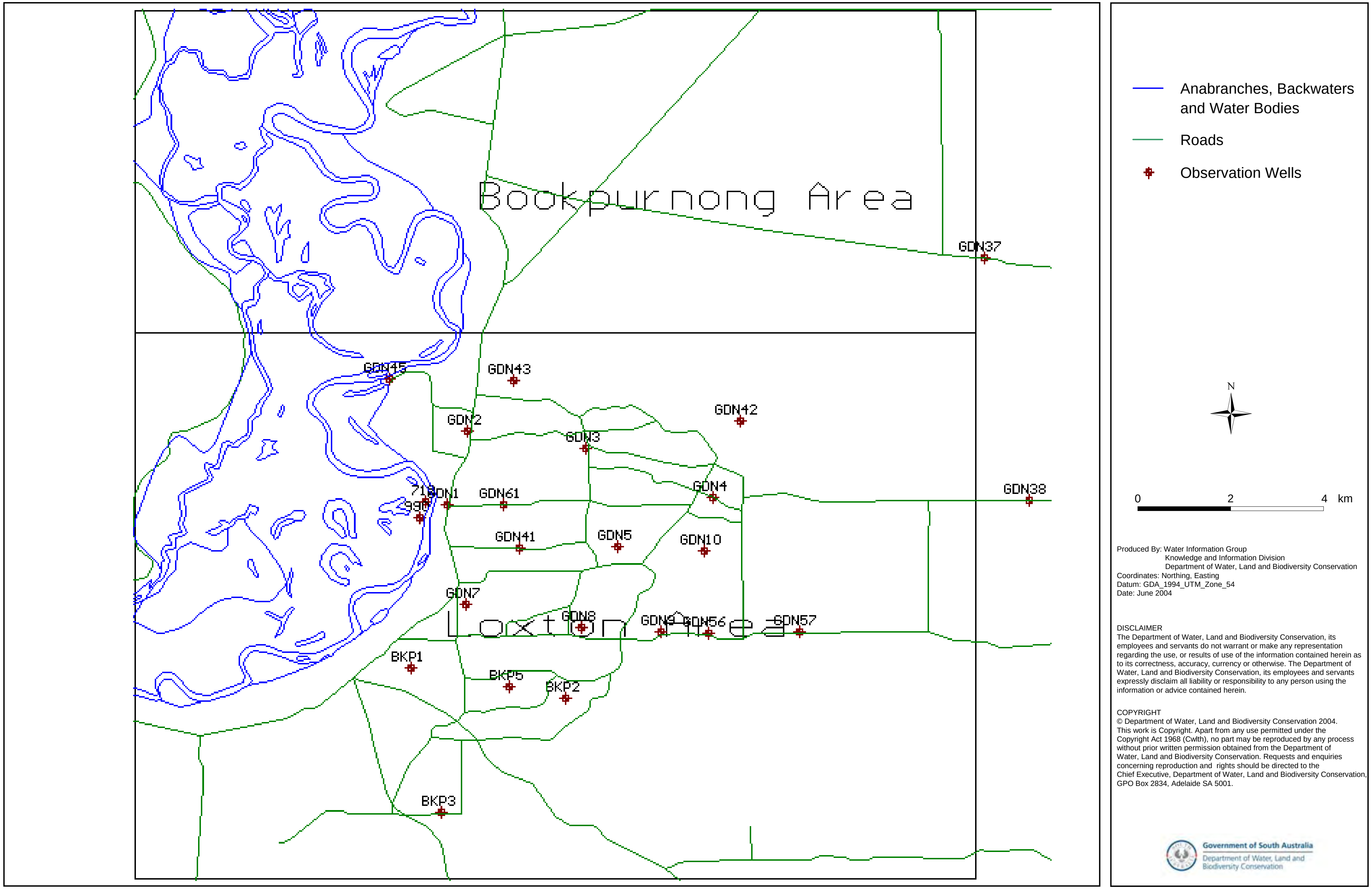
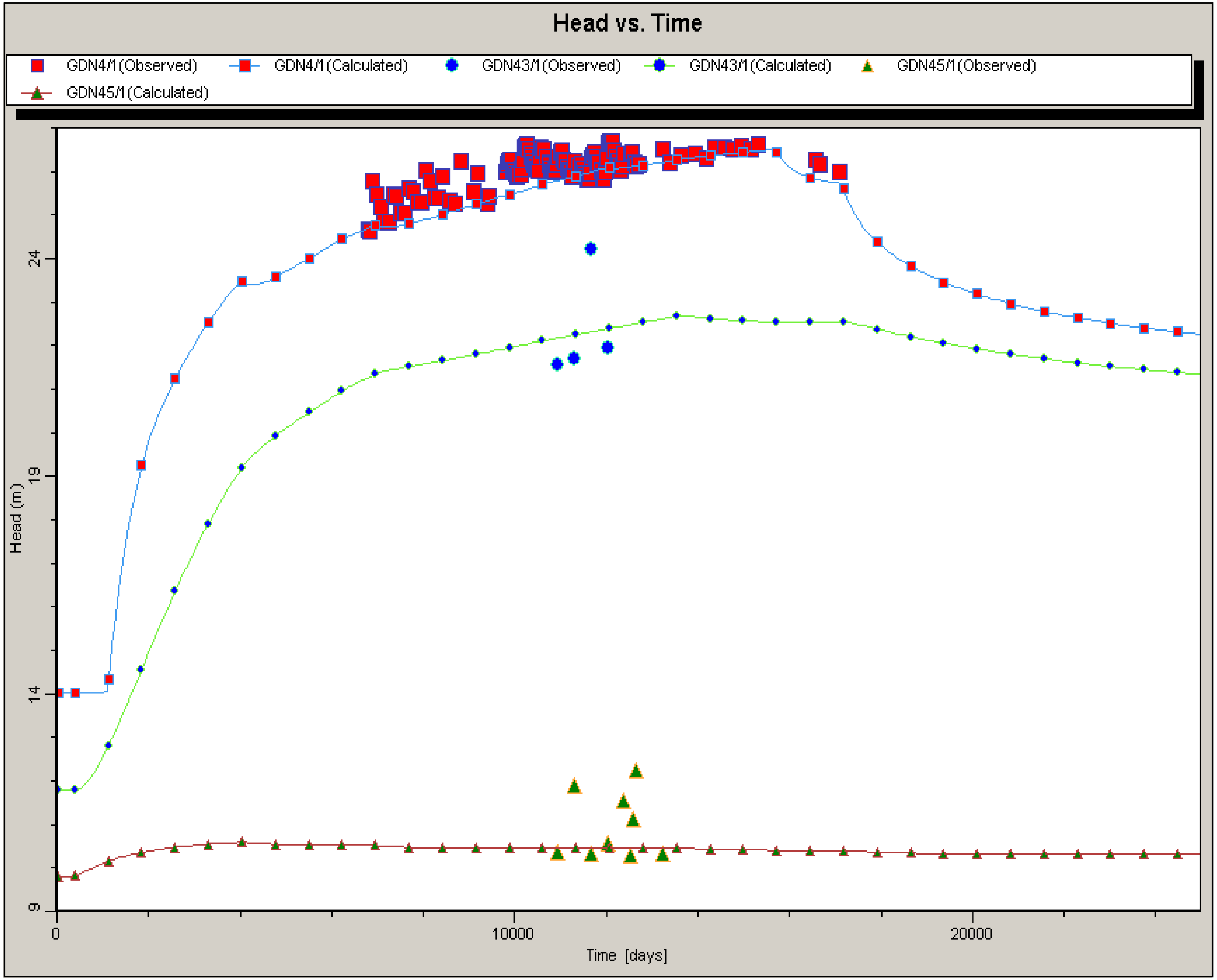


Figure 43: Loxton area location of long term monitored observation wells on project area (only in Loxton Sands)



Modelled and observed potentiometric heads (m AHD)

-Observation wells GDN4, GDN43 and GDN45

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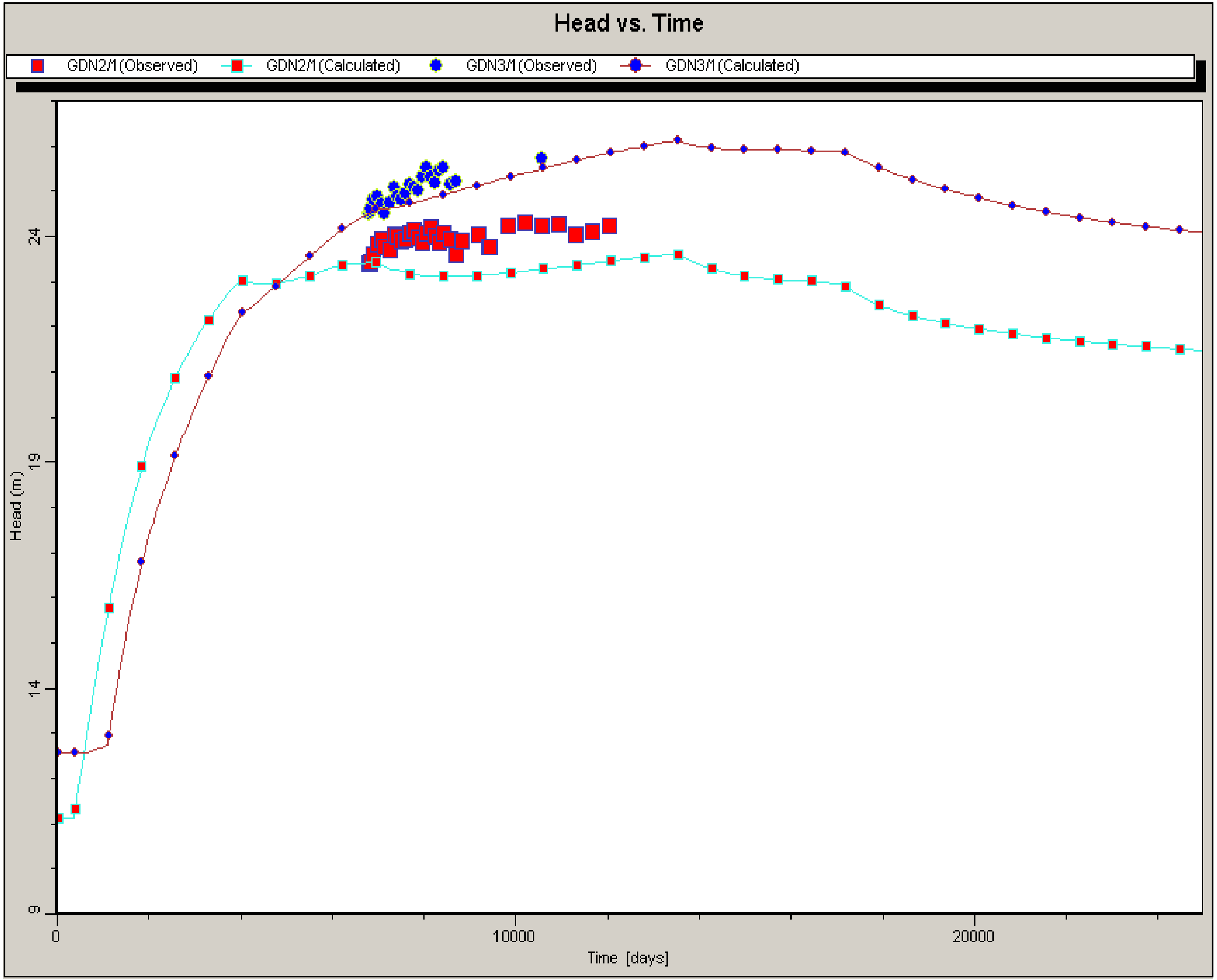
Figure 44: Calibration results – Modelled and observed potentiometric heads (Observation wells GDN4, GDN43 and GDN45)



Modelled and observed potentiometric heads (m AHD)

-Observation wells GDN2 and GDN3

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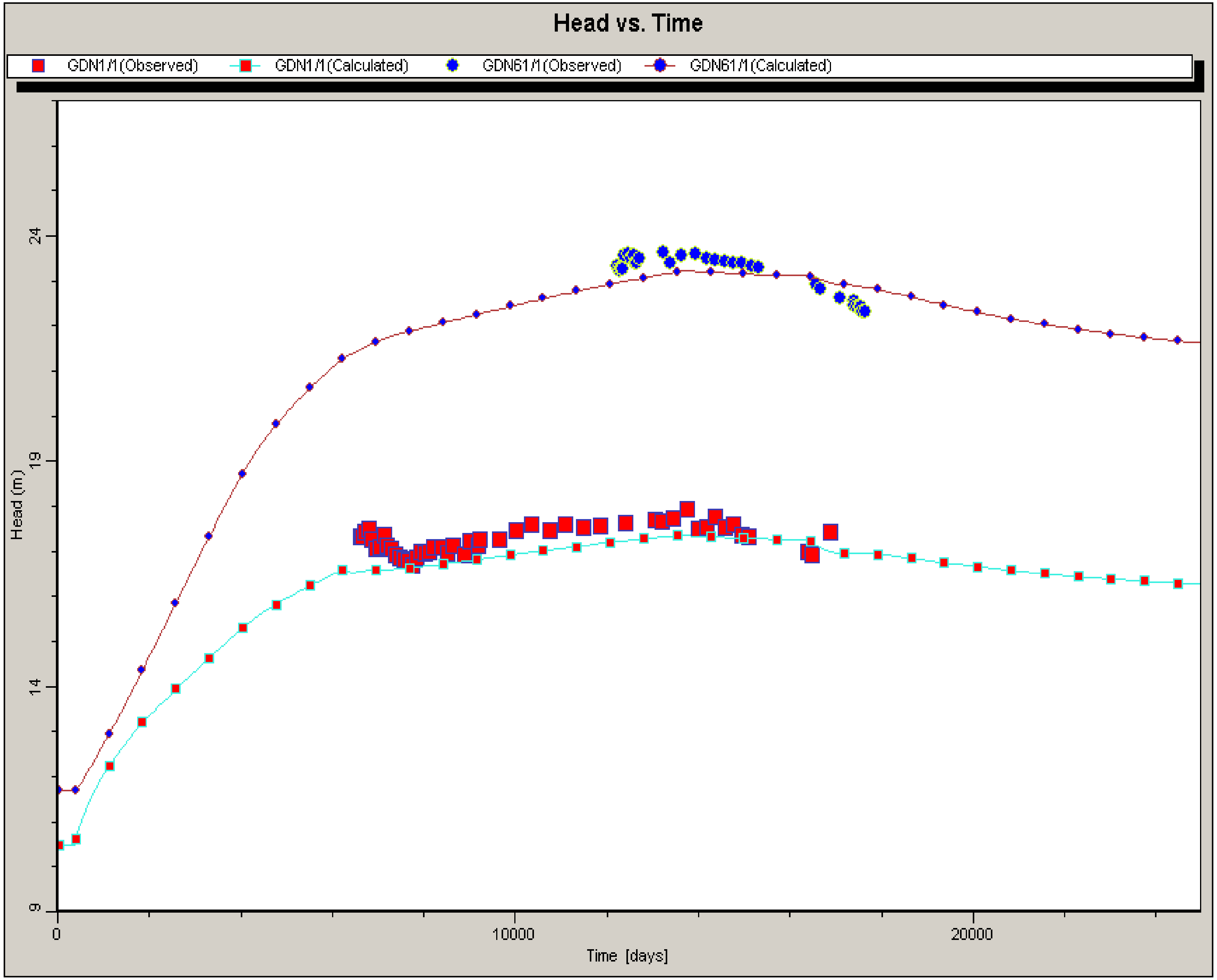
Figure 45: Calibration results – Modelled and observed potentiometric head (Observation wells GDN2 and GDN3)



Modelled and observed potentiometric heads (m AHD)

-Observation wells GDN1 and GDN61

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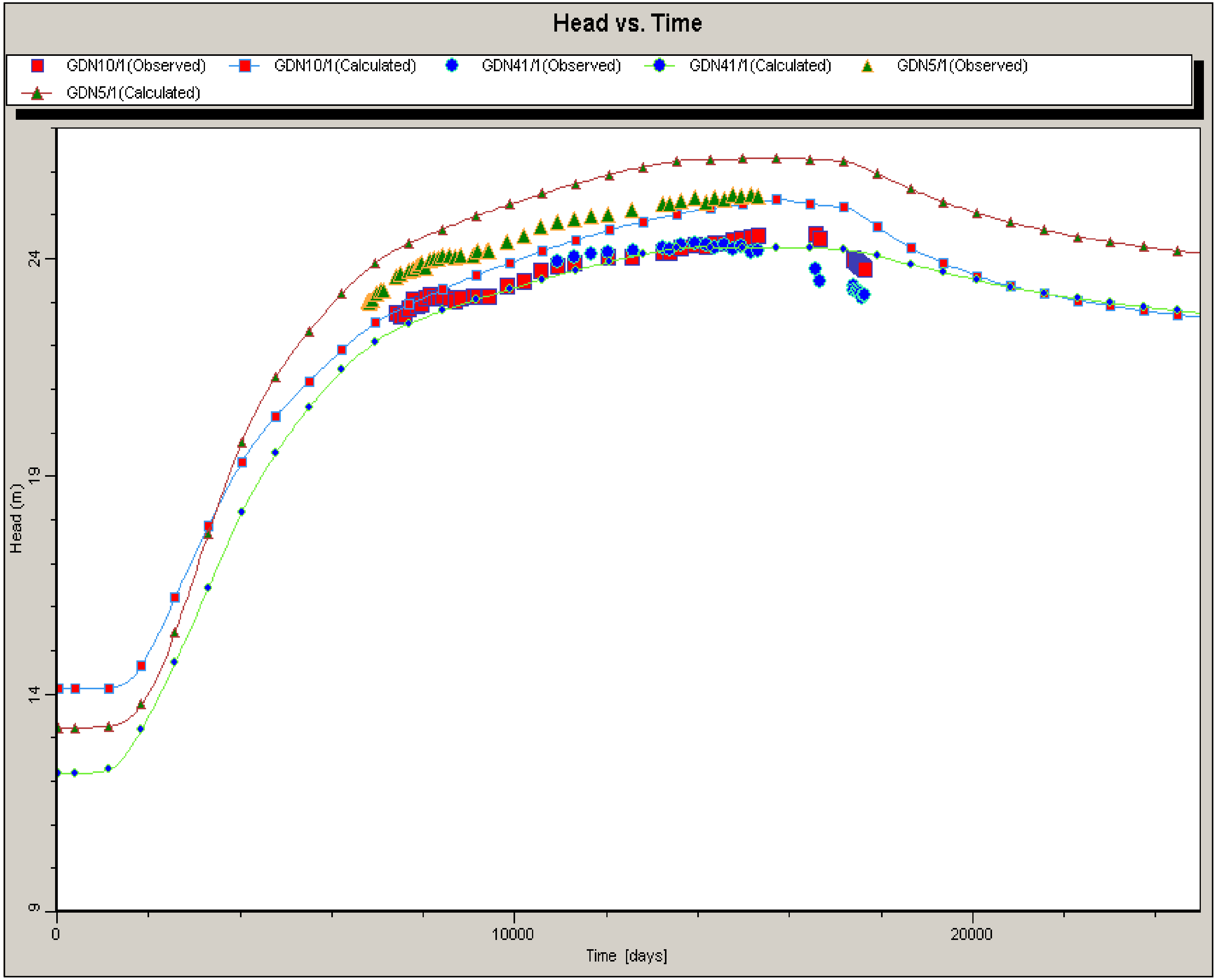
Figure 46: Calibration results – Modelled and observed potentiometric heads (Observation wells GDN1, GDN61)



Modelled and observed potentiometric heads (m AHD)

-Observation wells GDN41, GDN5 and GDN10

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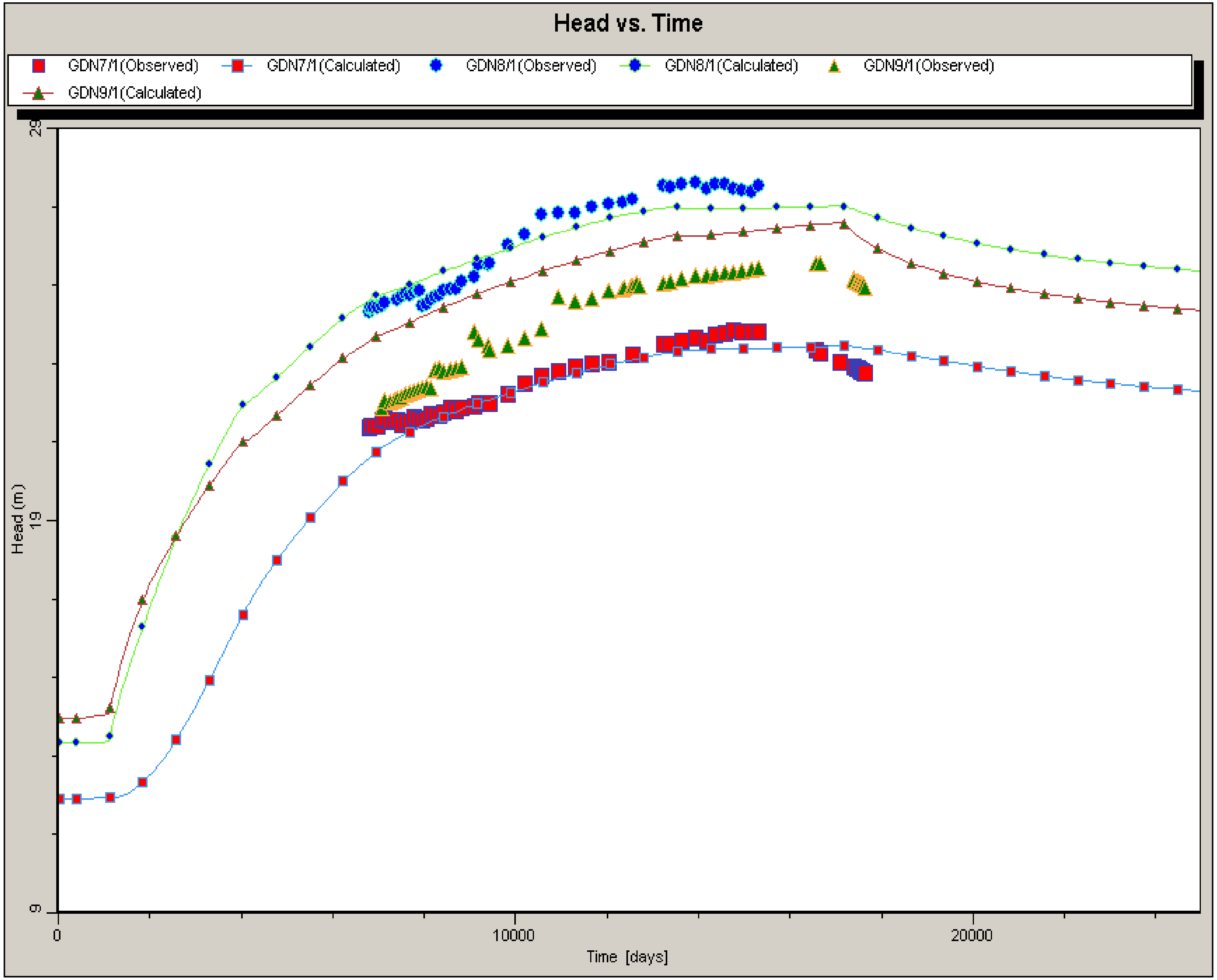
Figure 47: Calibration results – Modelled and observed potentiometric heads (Observation wells GDN41, GDN5 and GDN10)



Modelled and observed potentiometric heads (m AHD)

-Observation wells GDN7, GDN8 and GDN9

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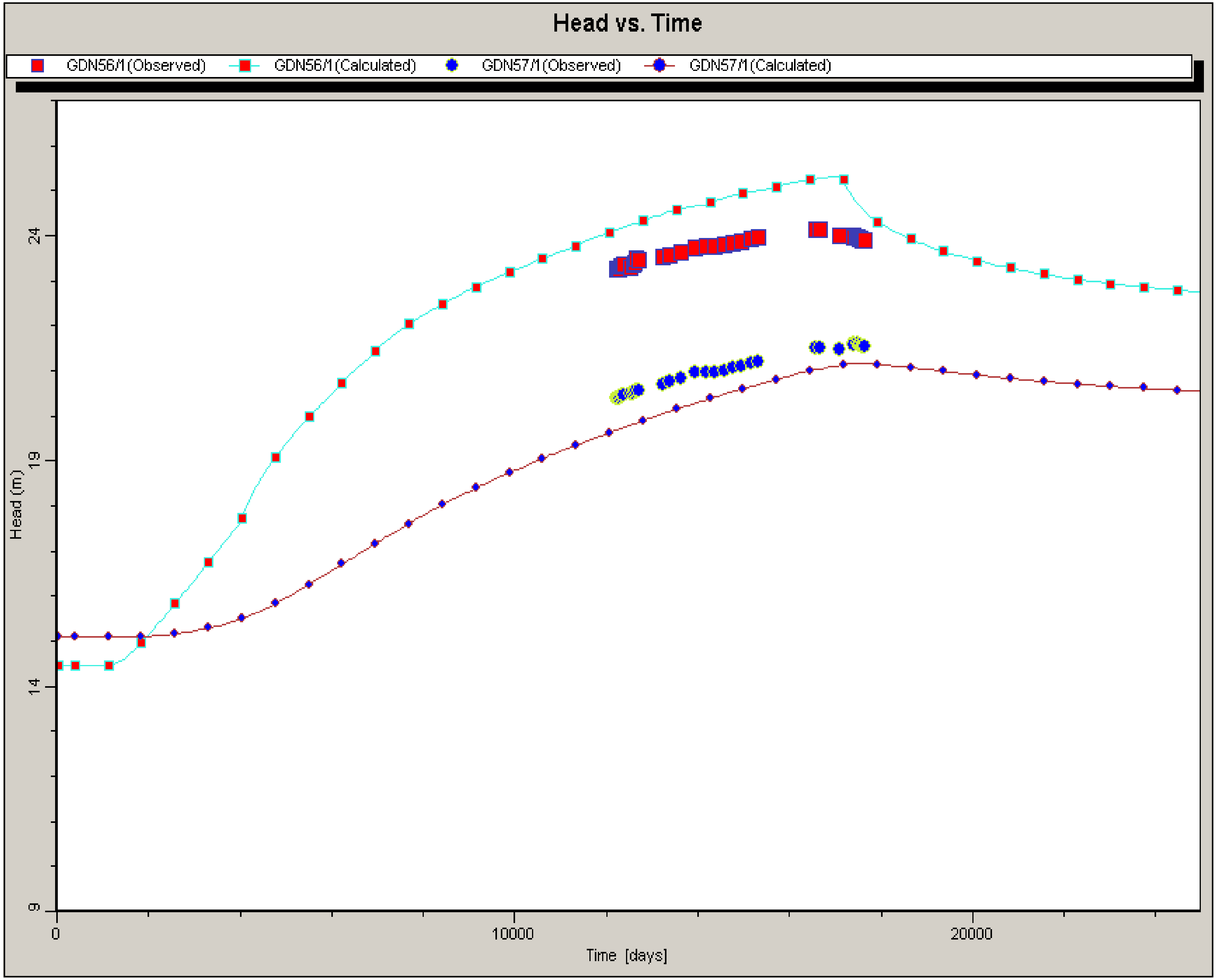
Figure 48: Calibration results – Modelled and observed potentiometric heads (Observation wells GDN7, GDN8 and GDN9)



Modelled and observed potentiometric heads (m AHD)

-Observation wells GDN56 and GDN57

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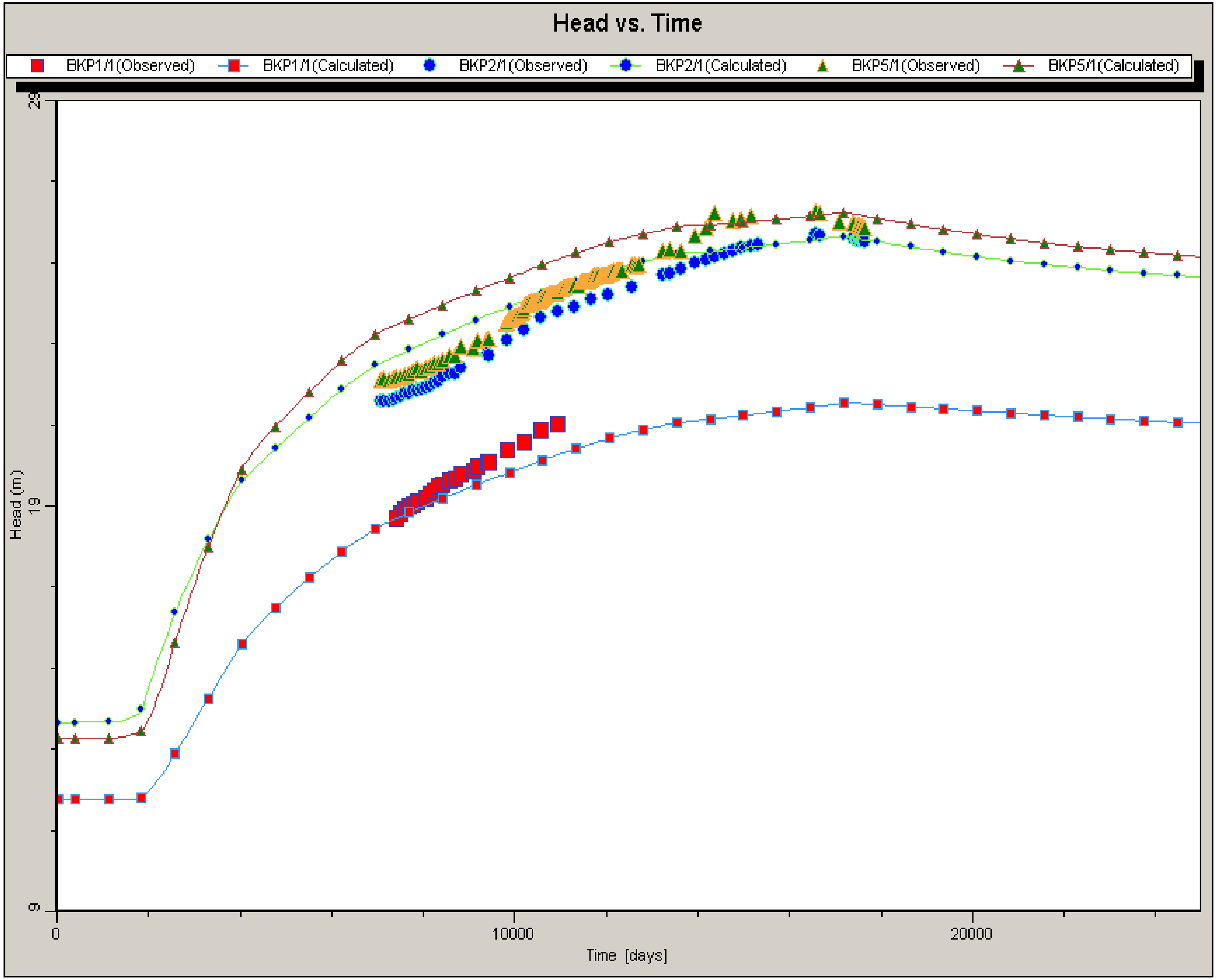
Figure 49: Calibration results – Modelled and observed potentiometric heads (Observation wells GDN56 and GDN57)



Modelled and observed potentiometric heads (m AHD)

-Observation wells BKP1, BKP2 and BKP5

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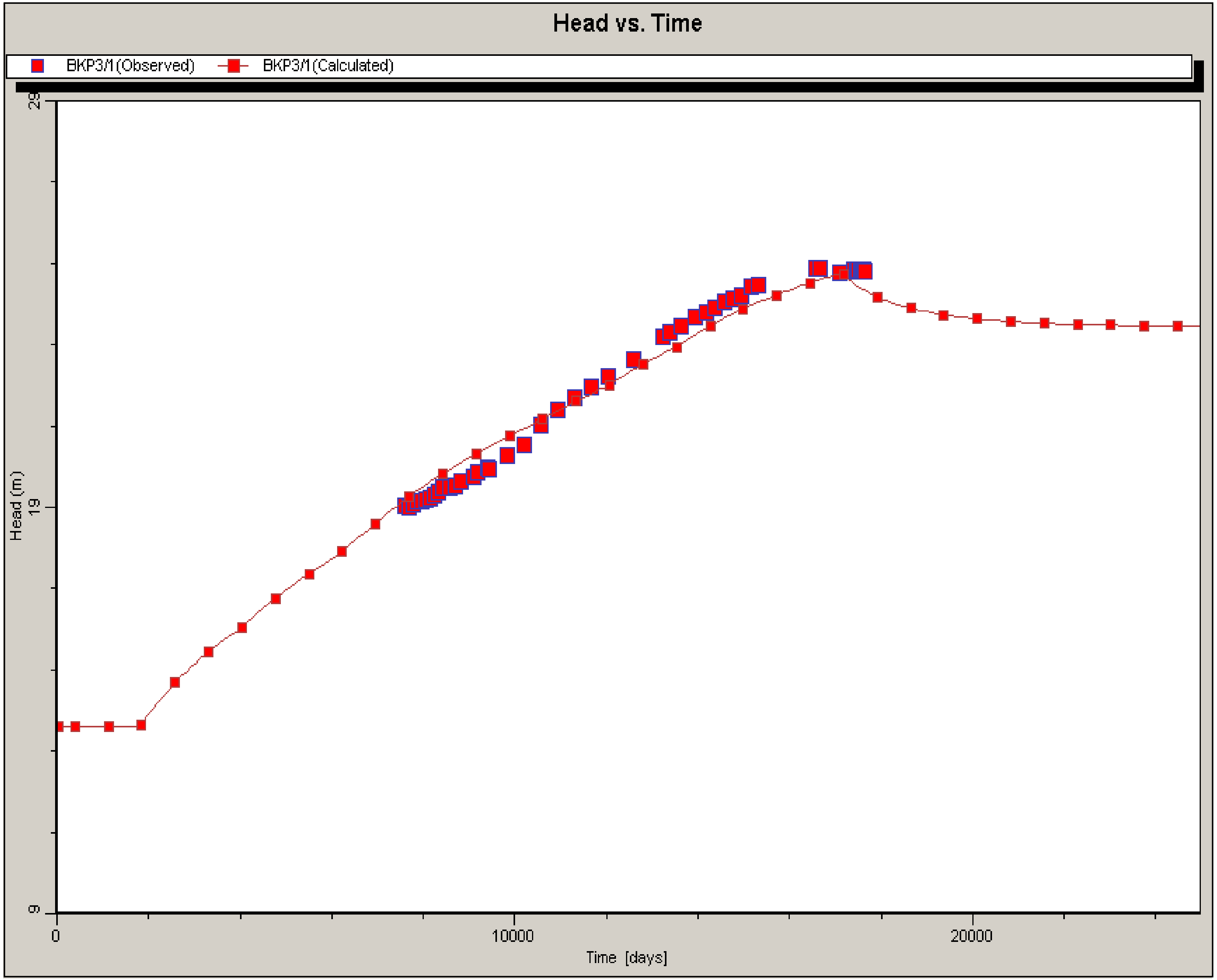
Figure 50: Calibration results – Modelled and observed potentiometric heads (Observation wells BKP1, BKP2 and BKP5)



Modelled and observed potentiometric heads (m AHD)

-Observation well BKP3

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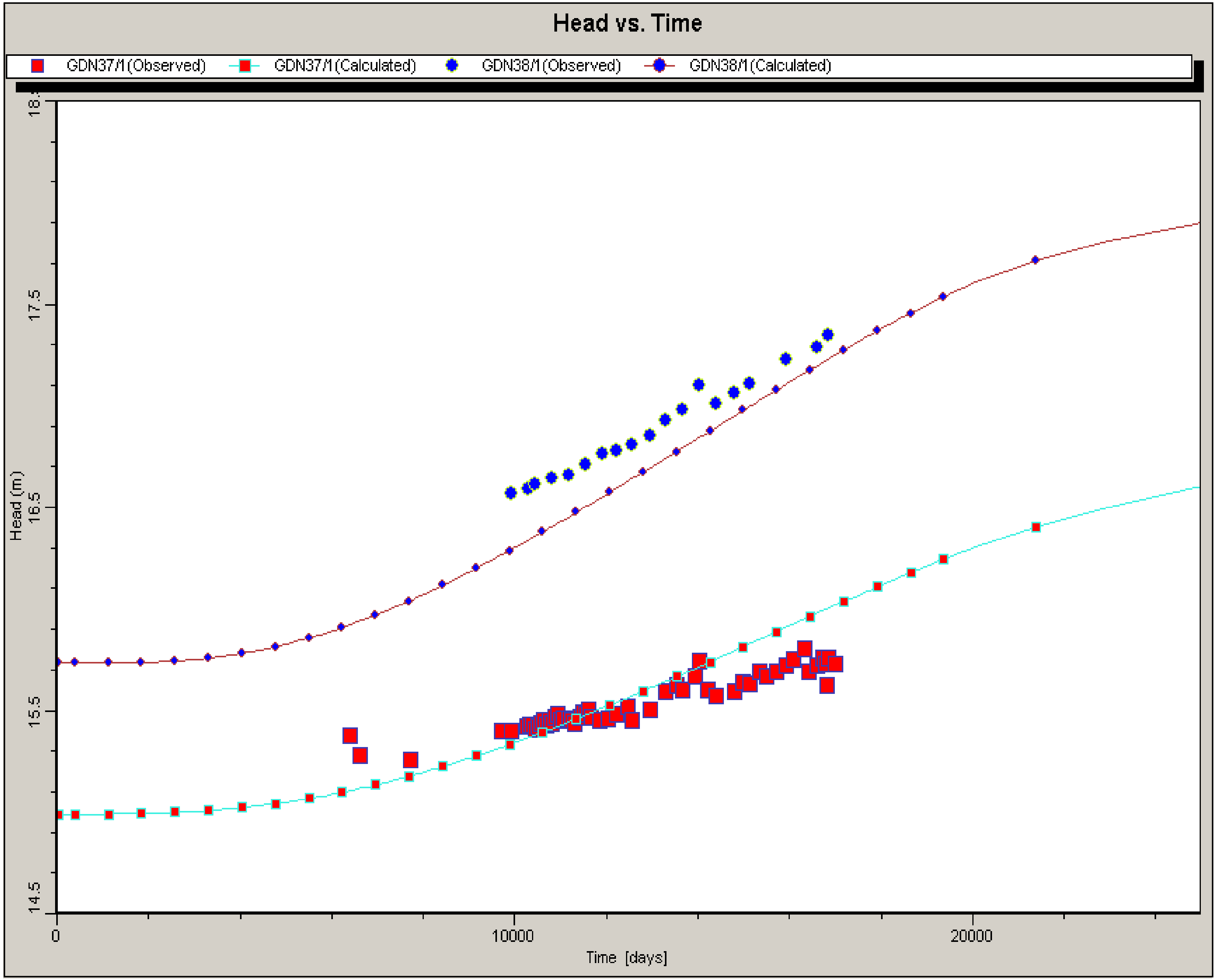
Figure 51: Calibration results – Modelled and observed potentiometric heads (Observation well BKP3)



Modelled and observed potentiometric heads (m AHD)

-Observation wells GDN37 and GDN38

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Figure 52: Calibration results – Modelled and observed potentiometric heads (Observation wells GDN37 and GDN38)

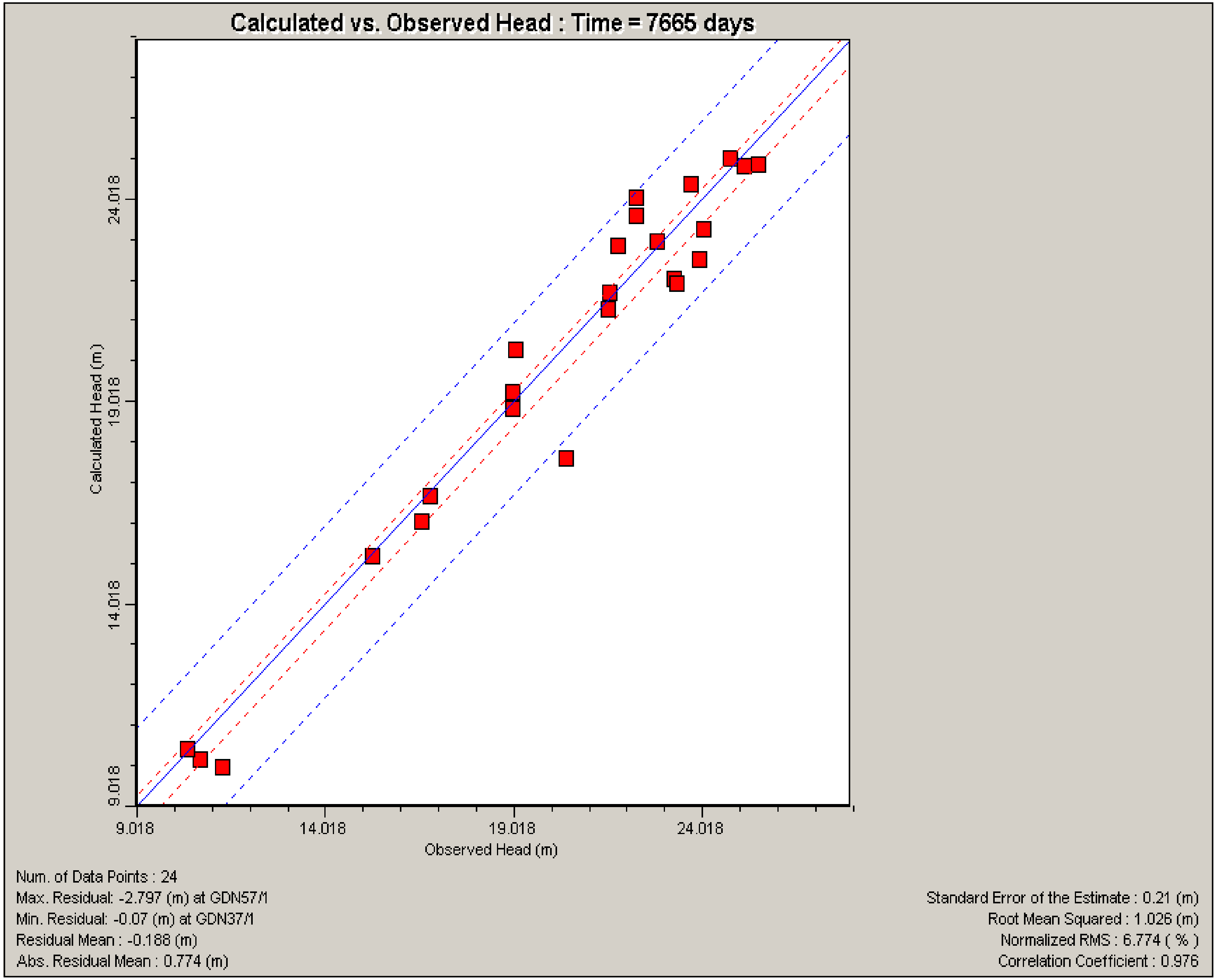

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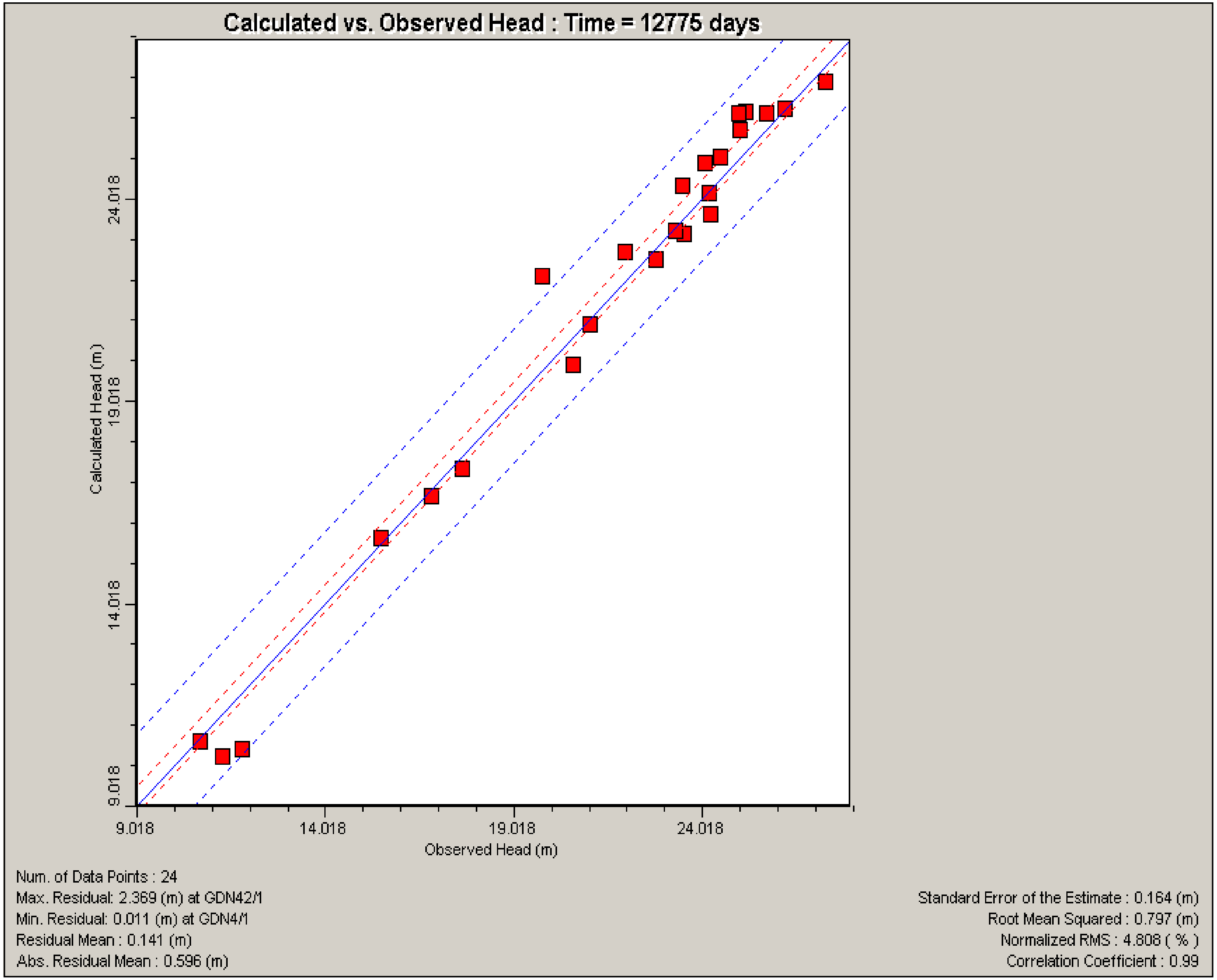
Figure 53: Calibration results (1976)



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Knowledge and Information Division
Department of Water, Land and Biodiversity Conservation
Coordinates: Northing, Easting
Datum: GDA_1994_UTM_Zone_54
Date: June 2004

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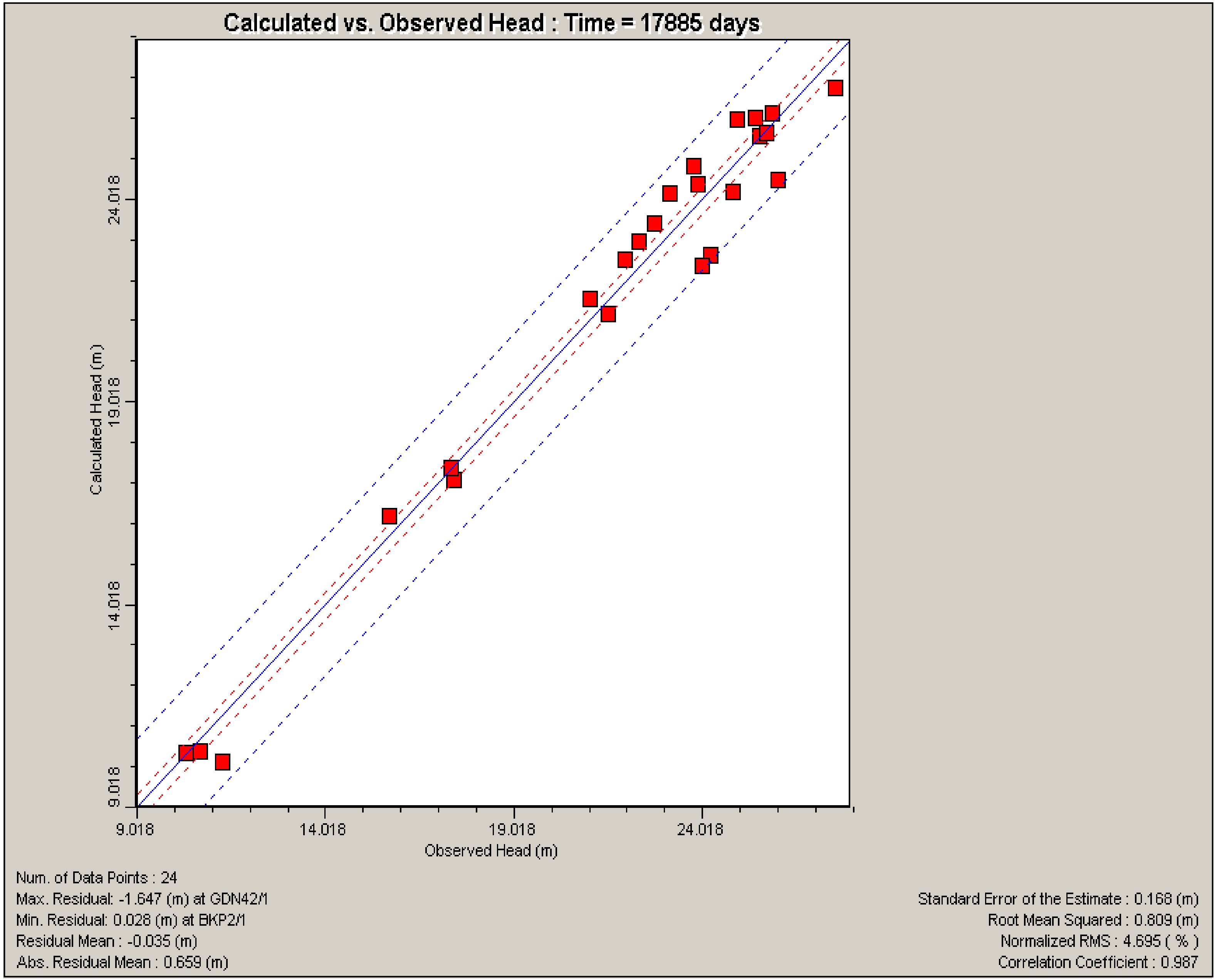
Figure 54: Calibration results (1990)



Produced By: Water Information Group
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Department of Water, Land and Biodiversity Conservation
Coordinates: Northing, Easting
Datum: GDA_1994_UTM_Zone_54
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Figure 55: Validation results (2004)

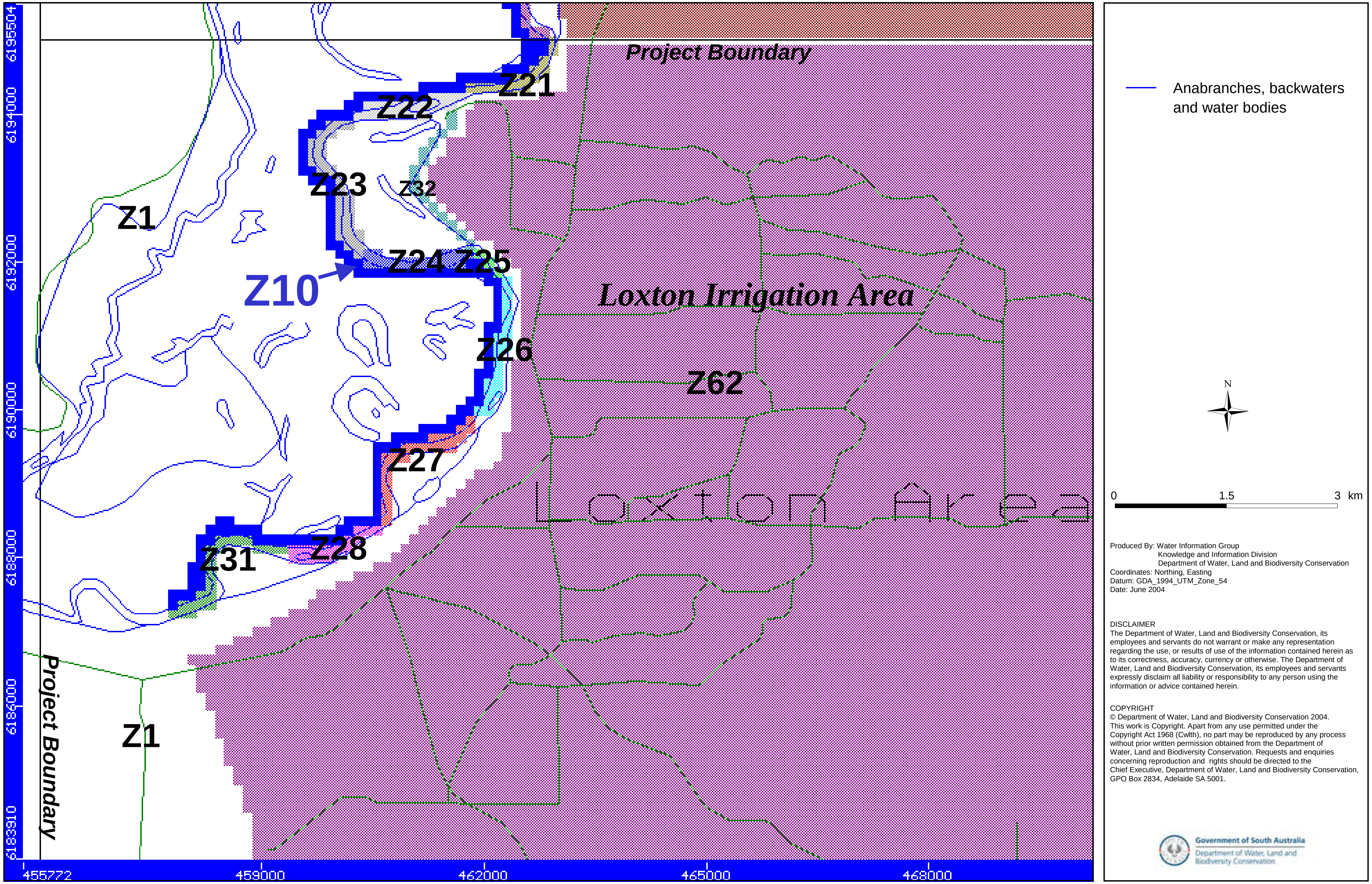


Figure 56: Model flow budget zones (Loxton Area)

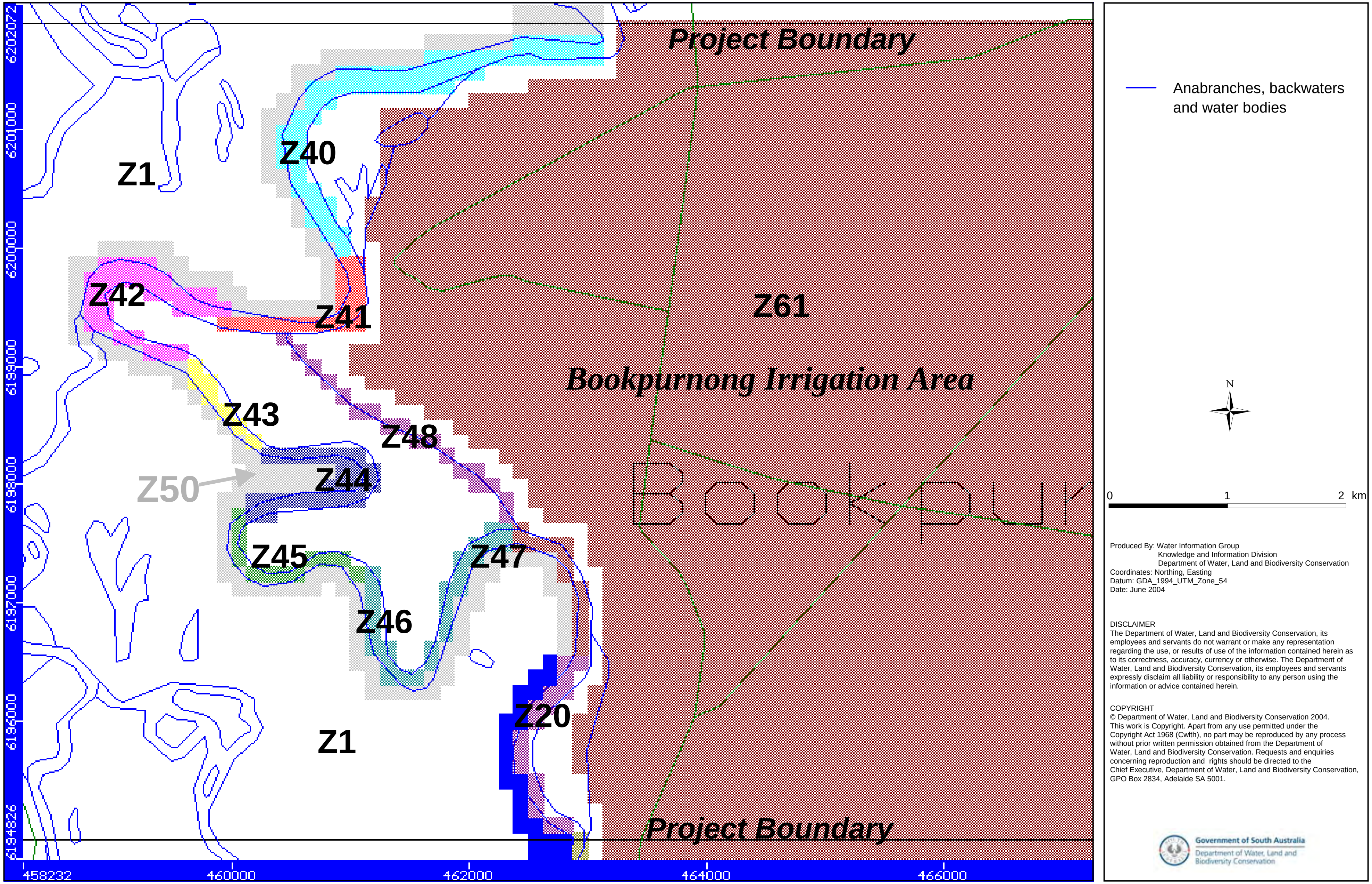


Figure 57: Model flow budget zones (Bookpurnong Area)

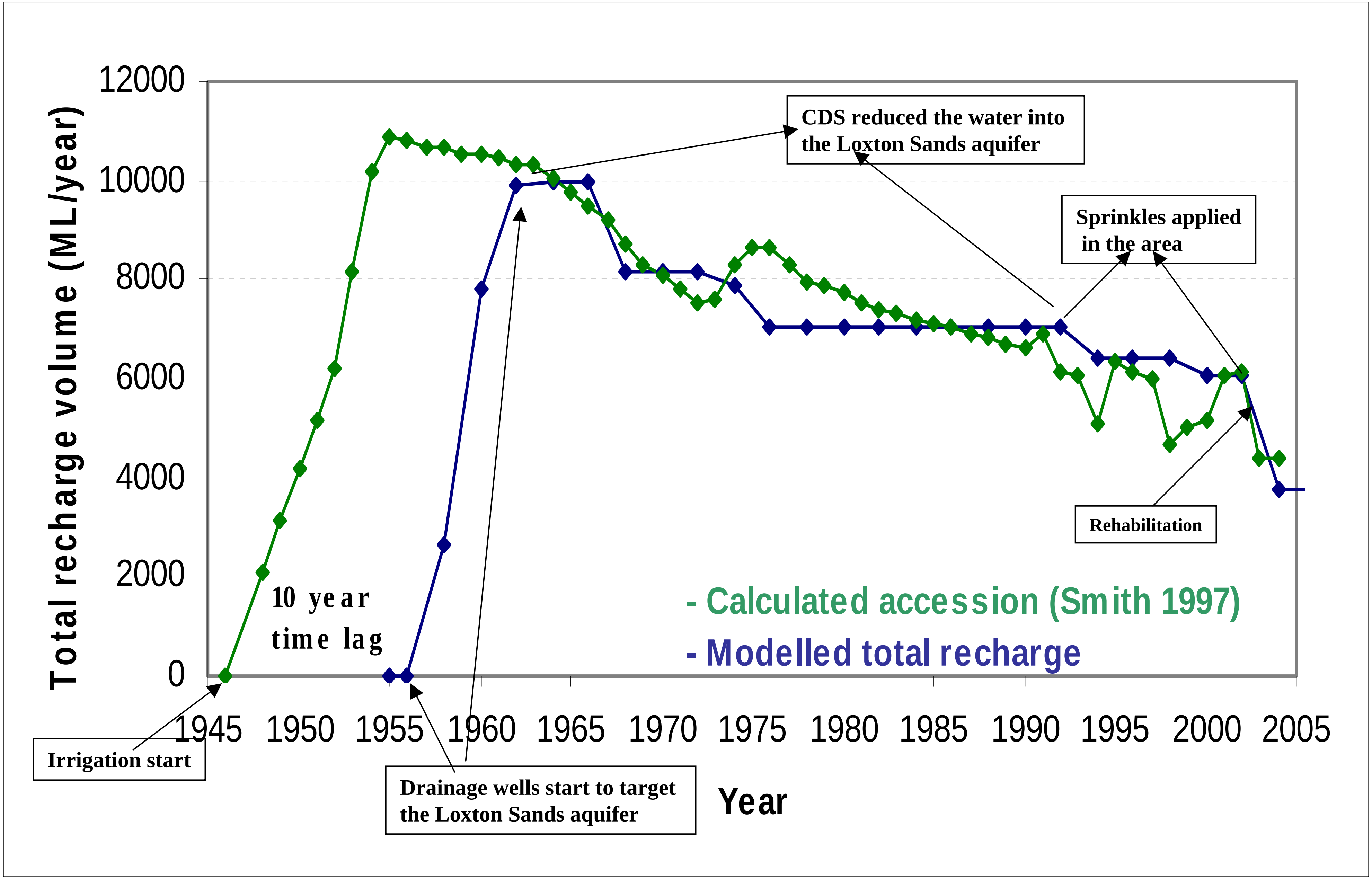


Figure 58: Modelled recharge volume to the Loxton Sands vs accession

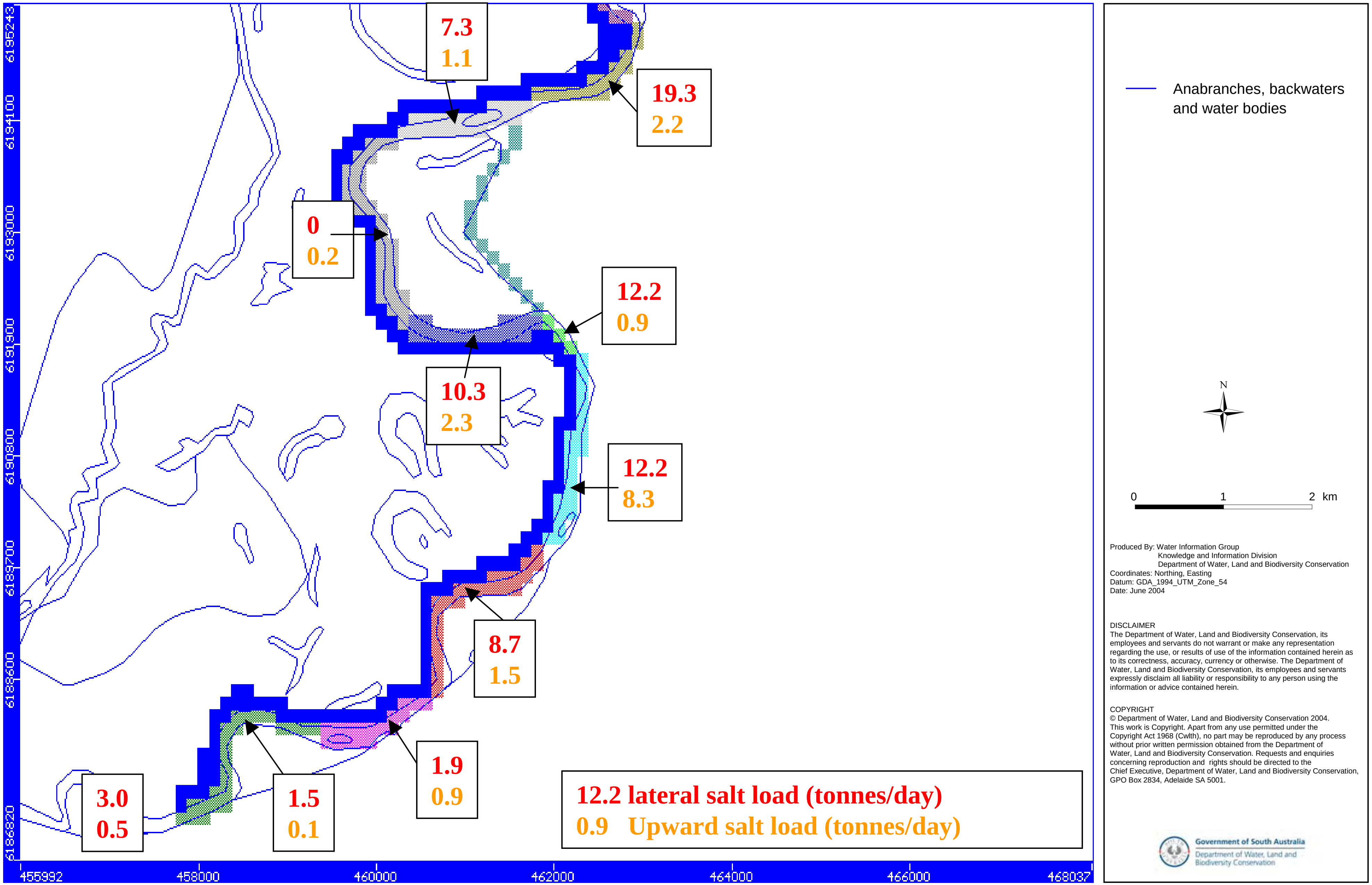


Figure 59: Model flow budget zones and modelled salt load at 2002 (tonnes/day) in Loxton Area

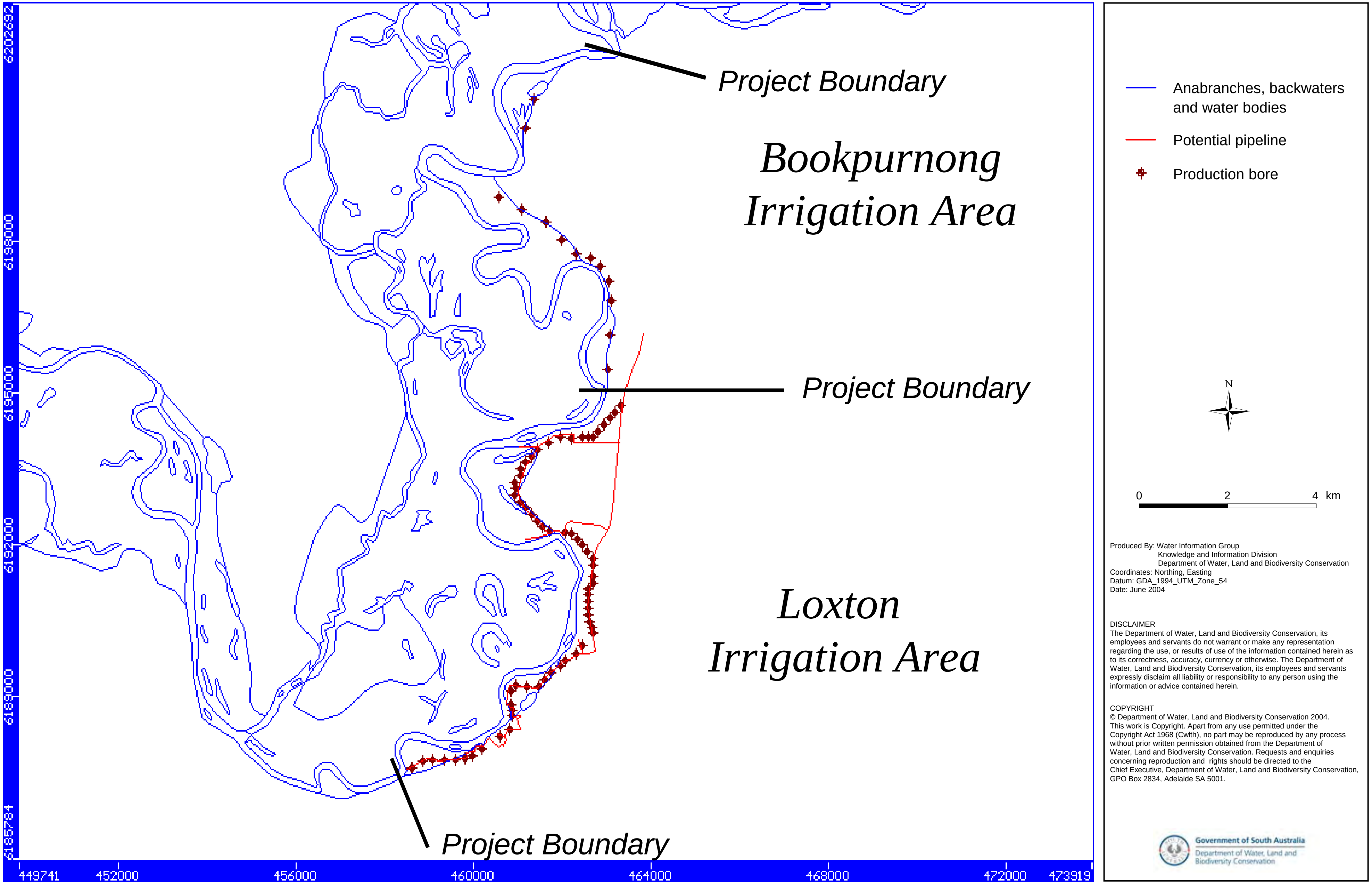


Figure 60a: Concept SIS -1 wellfield Loxton and Bookpurnong Areas (Scenario-7)

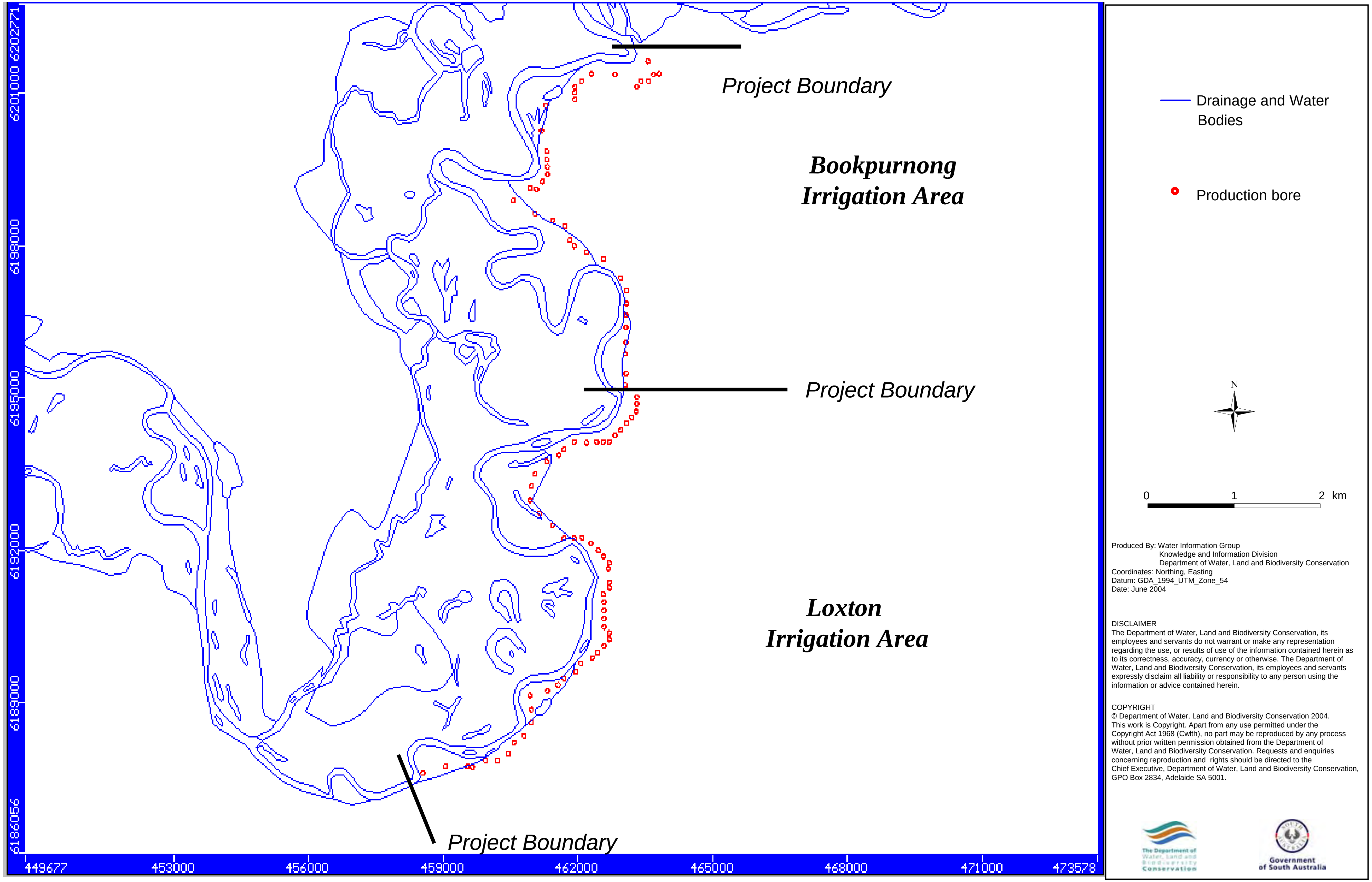


Figure 60b: Concept SIS -2 wellfield Loxton and Bookpurnong Areas (Scenario-8)

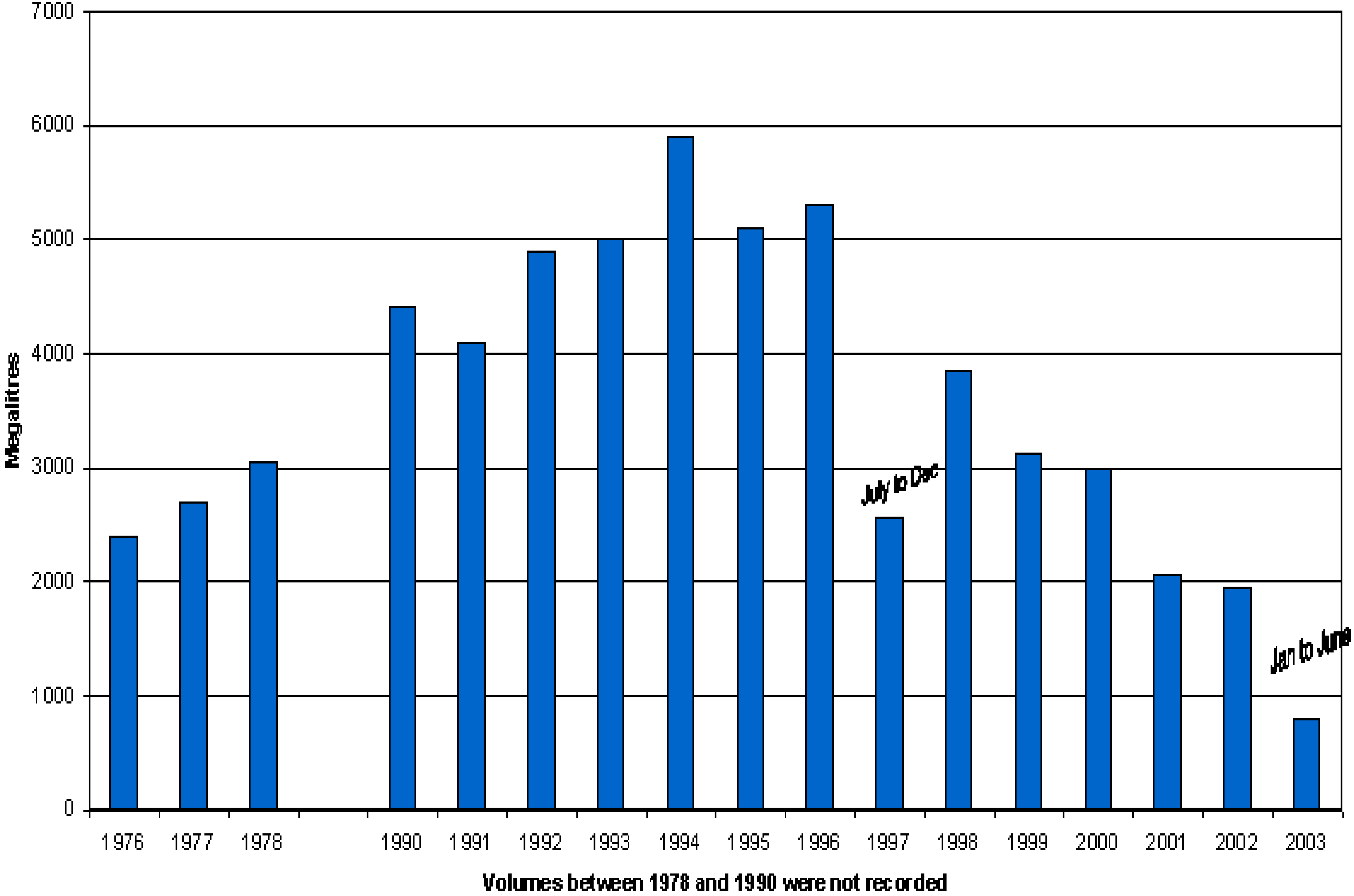


Figure 61: Annual pumped discharge from Loxton CDS

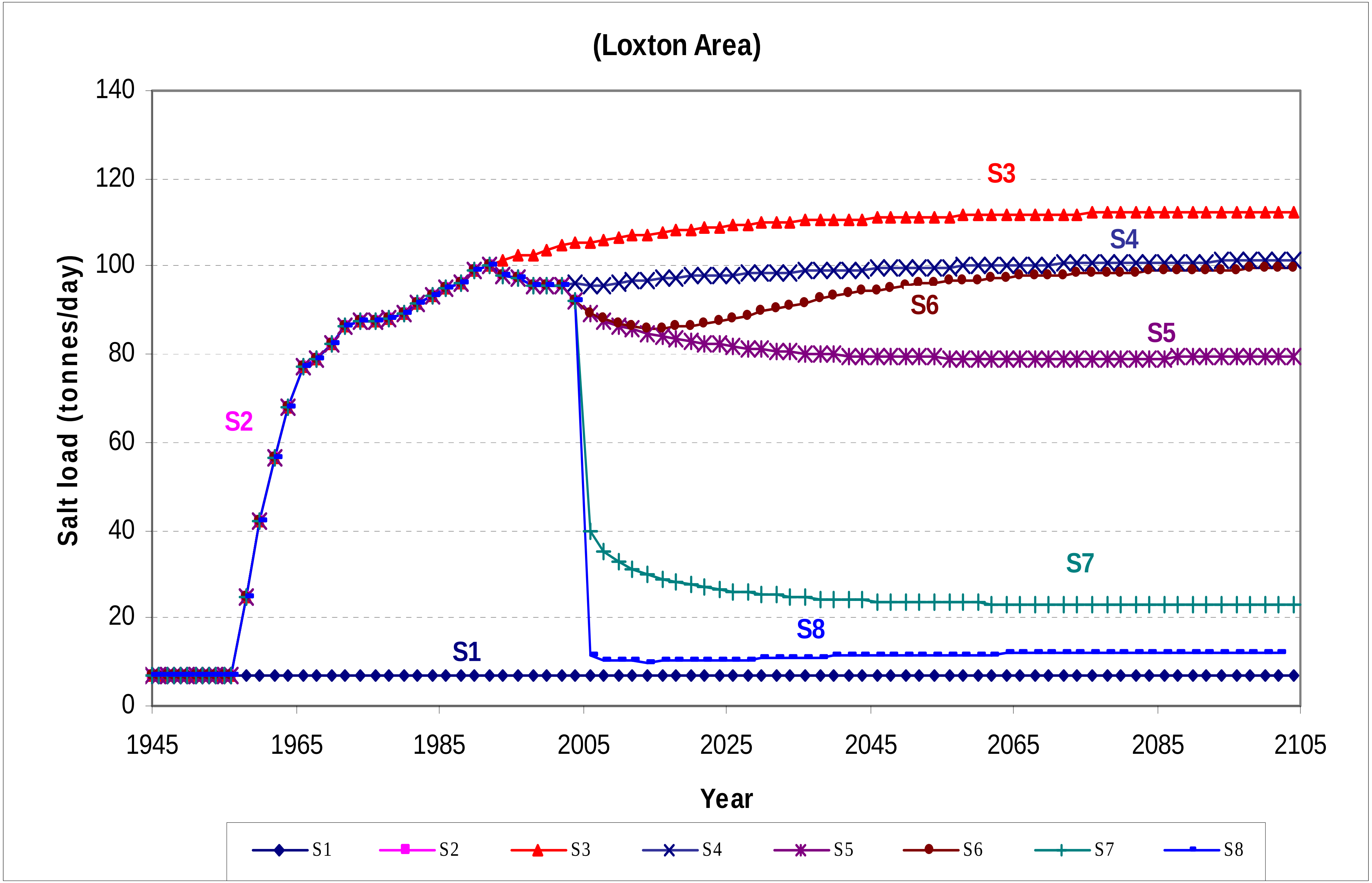


Figure 62: Predicted salt loads entering the River Murray all scenarios (Loxton Area)

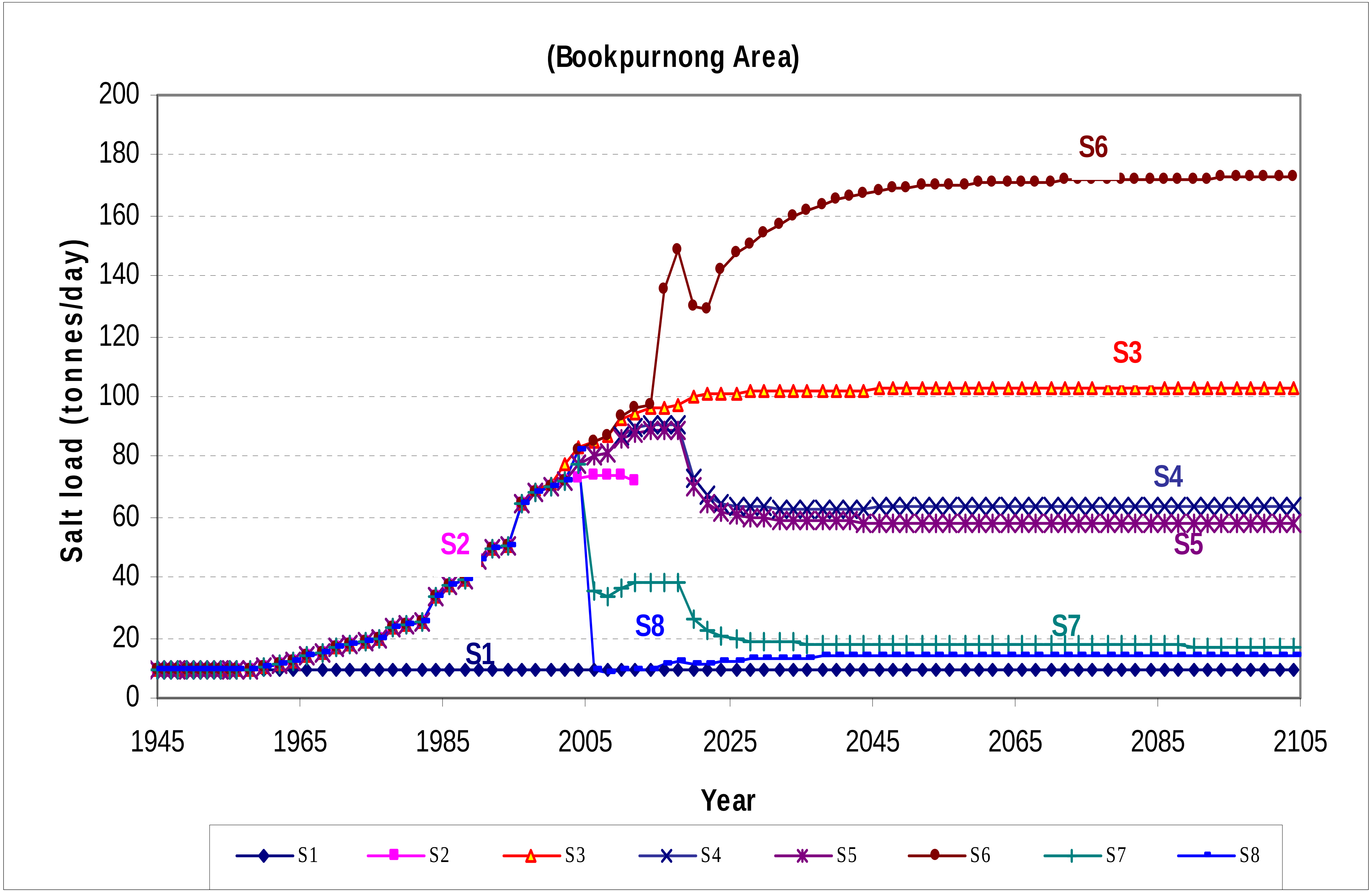
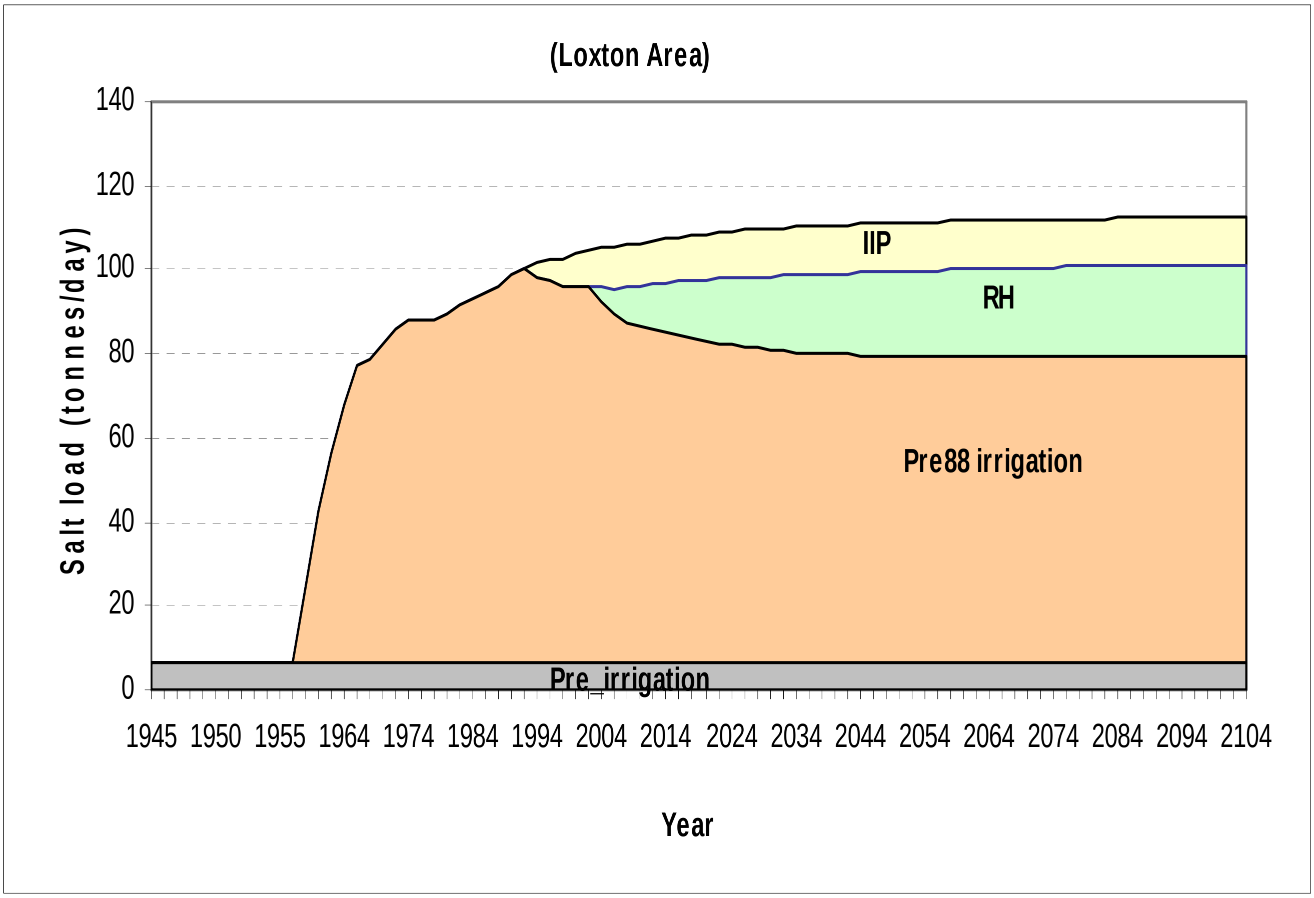


Figure 63: Predicted salt loads entering the River Murray all scenarios (Bookpurnong Area)



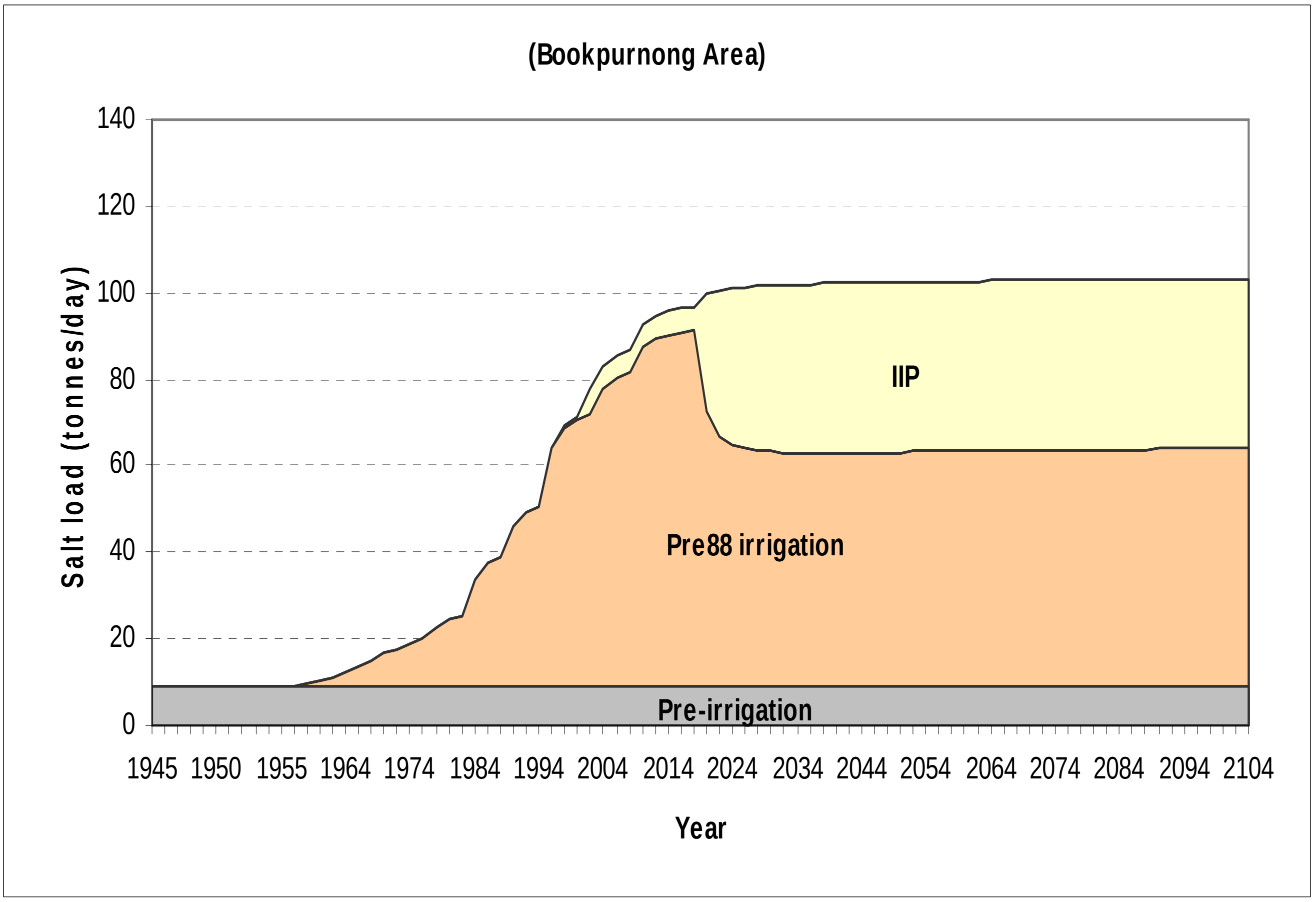
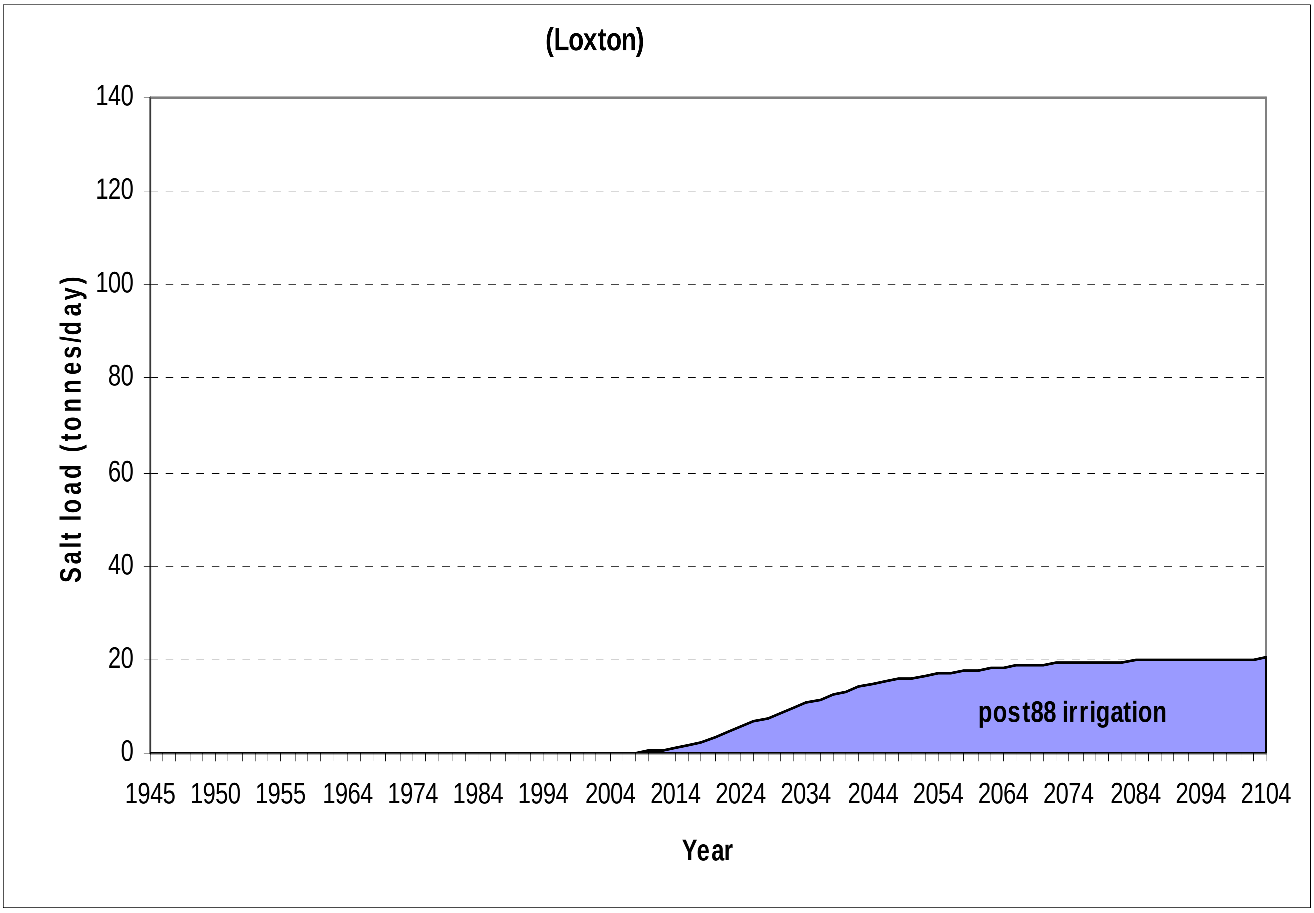


Figure 64: Predicted salt loads entering the River Murray resulting from pre 1988 irrigation development



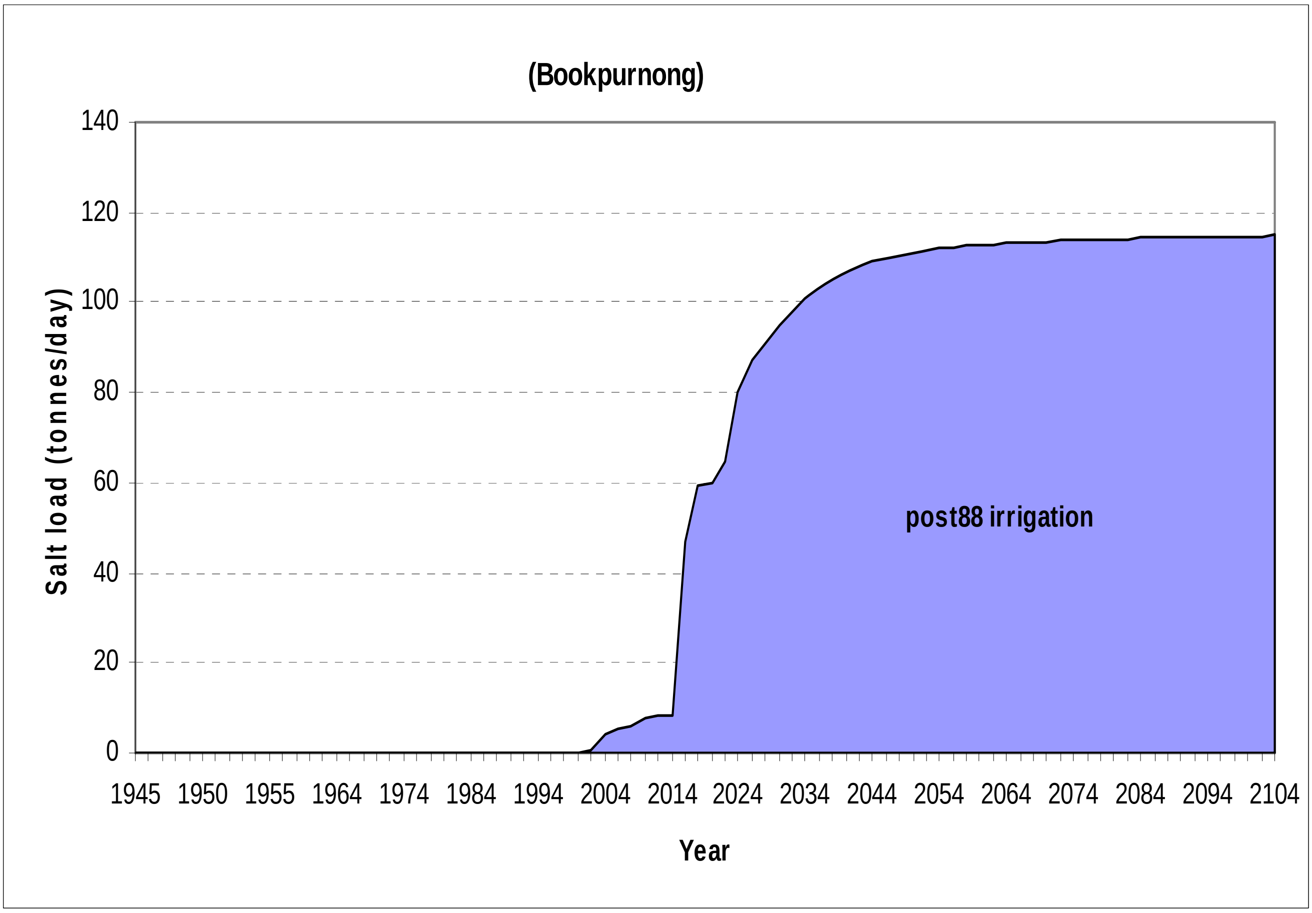
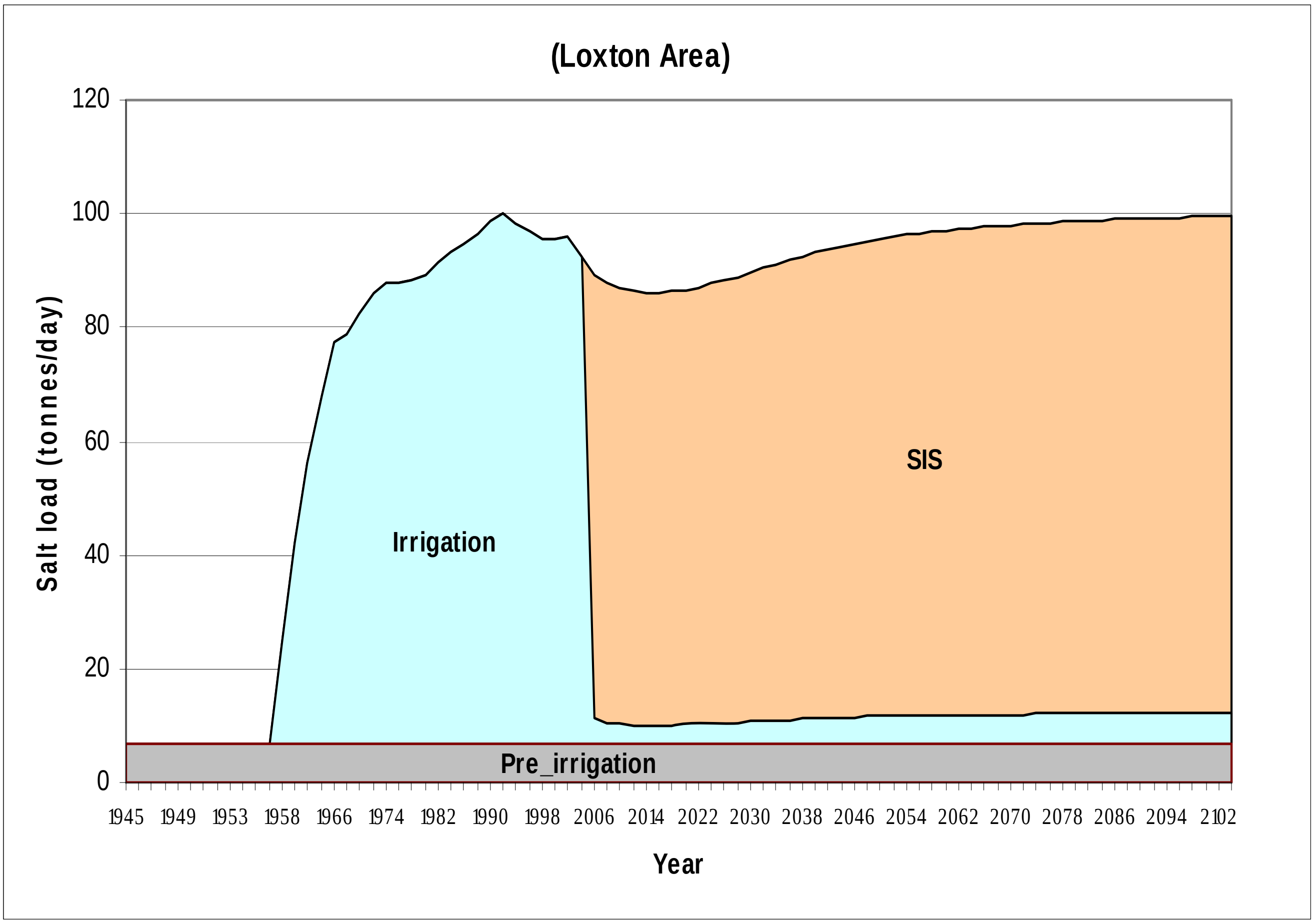


Figure 65: Predicted salt loads entering the River Murray resulting from post 1988 irrigation development



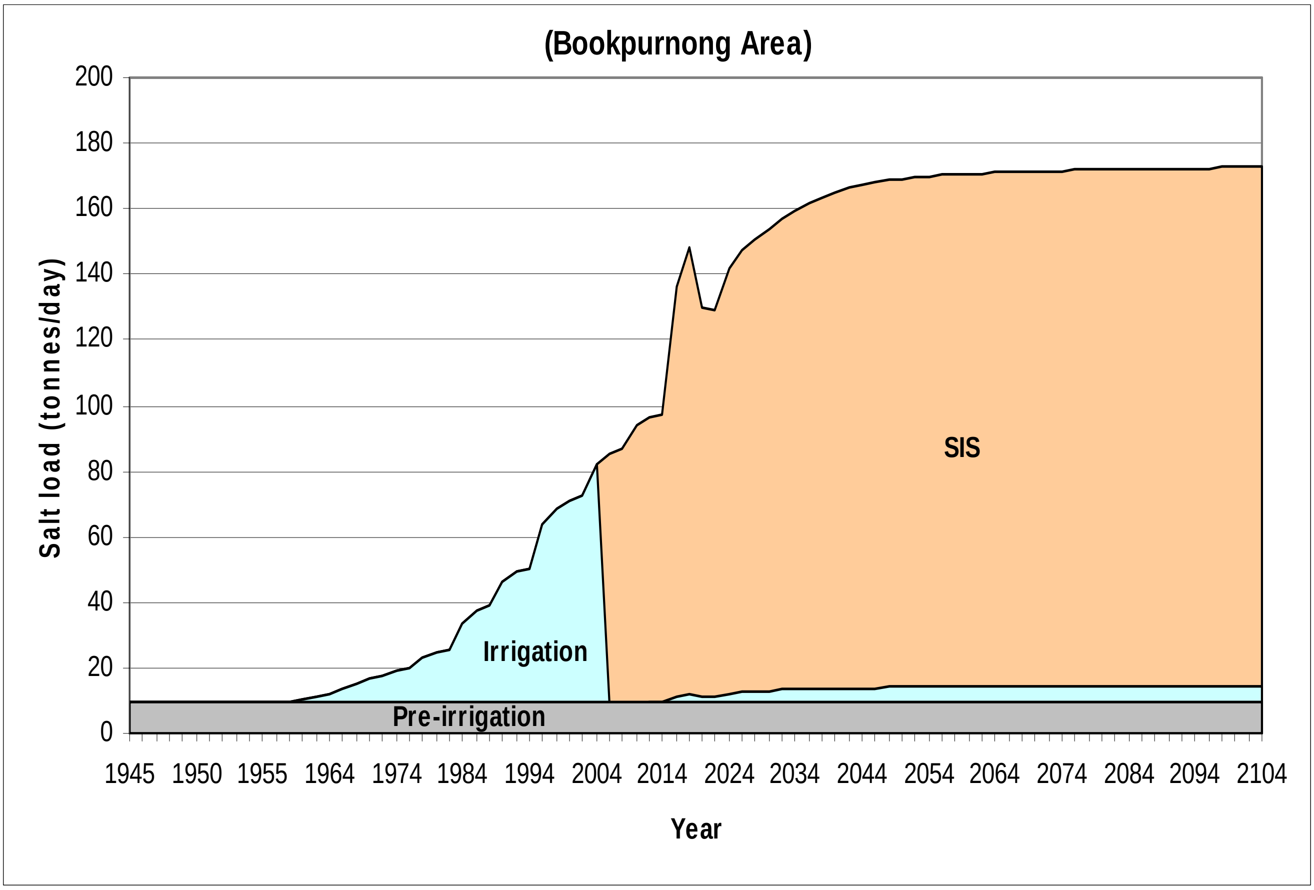


Figure 66: Predicted SIS benefits

Loxton Numerical Groundwater Model 2004

W Yan, SR Howles and AJ Hill

Knowledge and Information Division

Department of Water, Land and Biodiversity Conservation

August 2005

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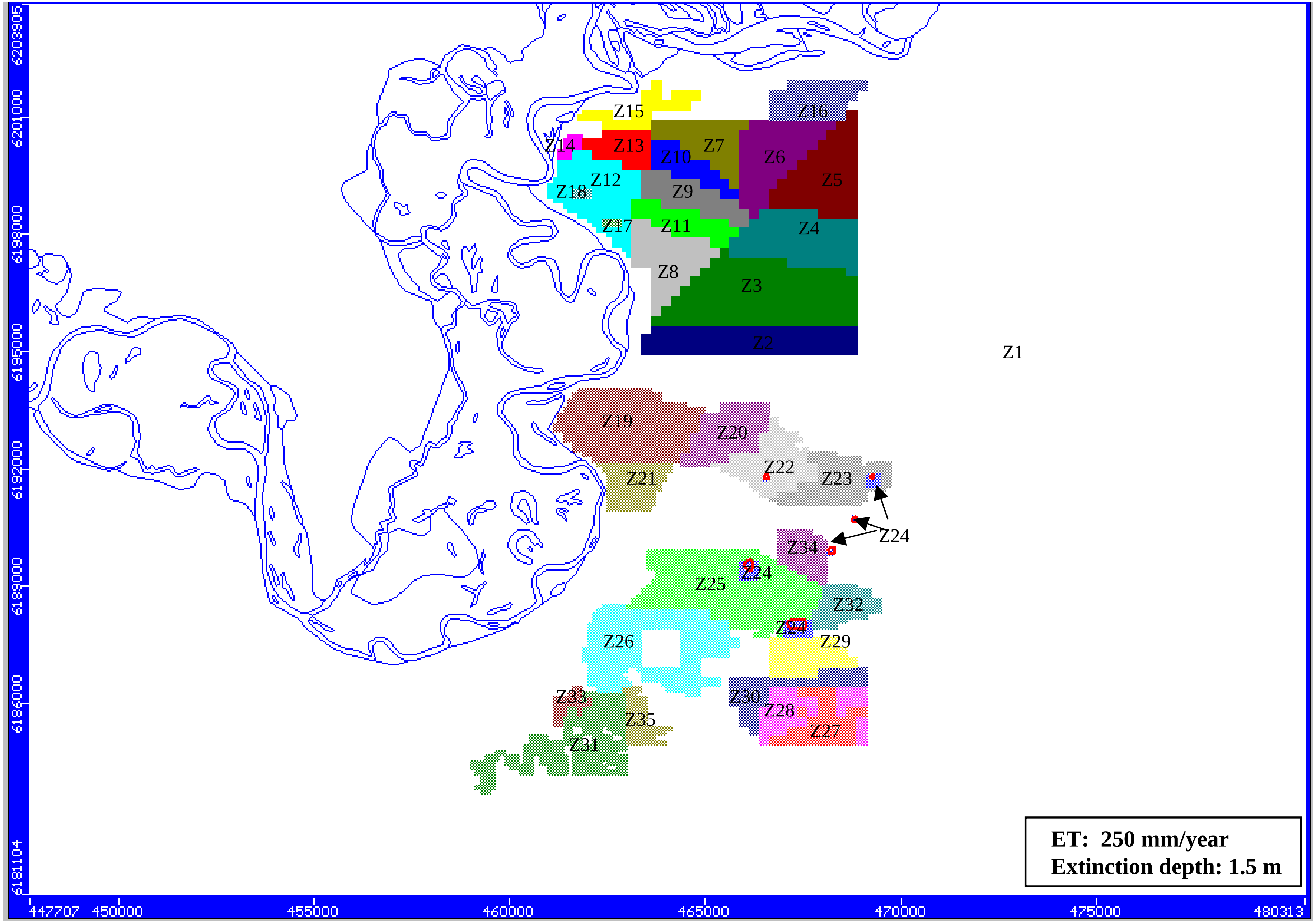
13. APPENDIXES

13.1 APPENDIX A

A-1 Model Inputs and Outputs (Loxton Area)

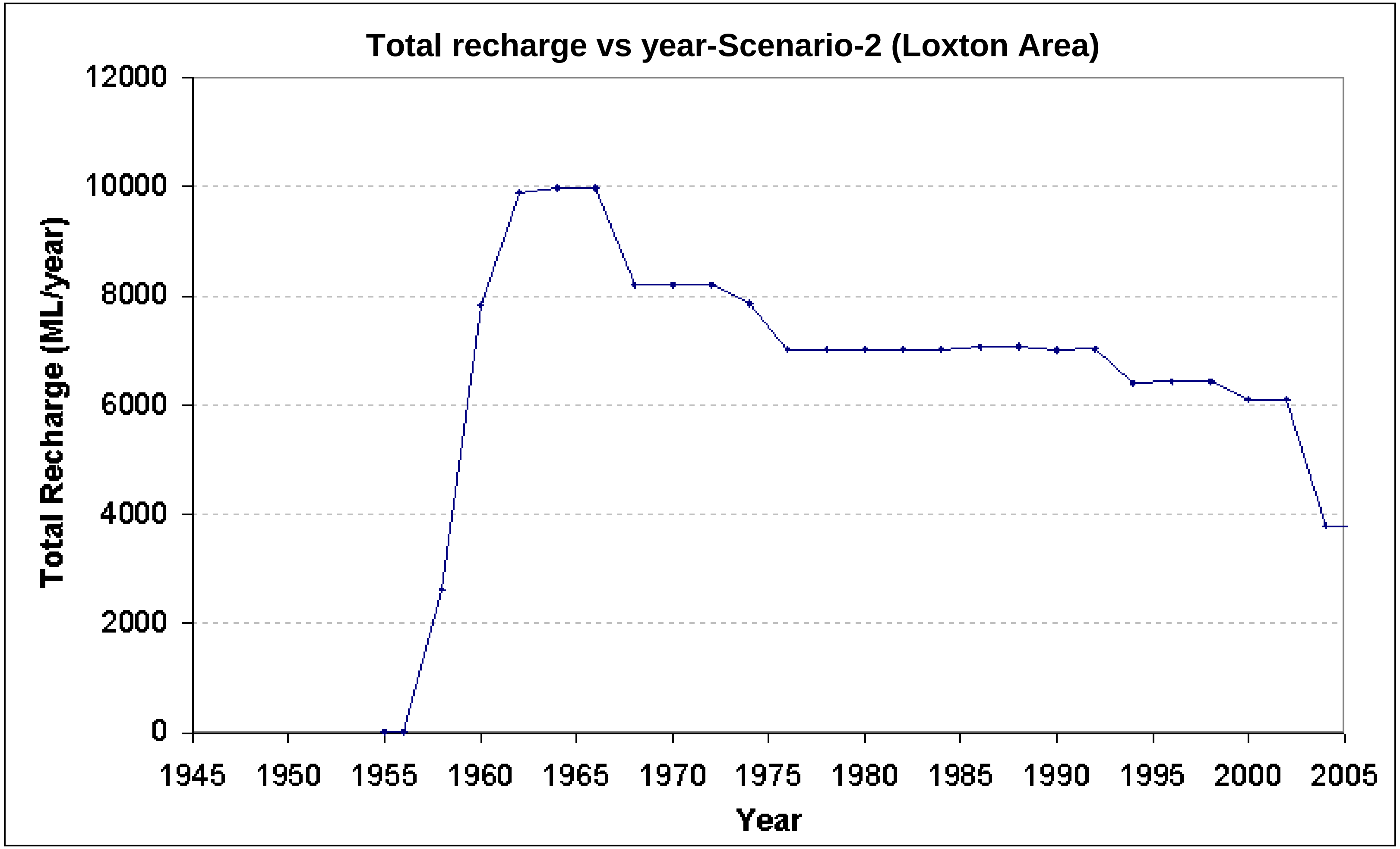
- Model recharge zones.
- Zone number and recharge rates (mm/year).
- Total recharge volumes (ML/year).



Appendix A-1-1 Model recharge zones

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
30	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	372.7	0.1	243.3	0.1	0.1	100.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	372.7	339.9	242.8	339.9	582.7	200.0	279.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	372.7	326.1	233.0	326.1	559.1	300.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1960
2555	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1962
3285	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1964
4015	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1966
4745	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1968
5475	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1970
6205	276.2	241.6	172.6	241.6	414.2	400.0	207.1	207.1	0.1	0.1	0.1	0.1	140.0	120.0	0.1	0.1	0.1	1972
6935	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1974
7665	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1976
8395	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1978
9125	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1980
9855	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1982
10585	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	140.0	0.1	0.1	0.1	1984
11315	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	150.0	0.1	0.1	0.1	1986
12045	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	150.0	0.1	0.1	0.1	1988
12775	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	160.0	0.1	0.1	0.1	1990
13505	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1992
14235	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1994
14965	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1996
15695	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	1998
16425	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2000
17155	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2002
17885	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2004

Appendix A-1-2a Model recharge zones and recharge rates (mm/year) Scenario-2 (Loxton Area)



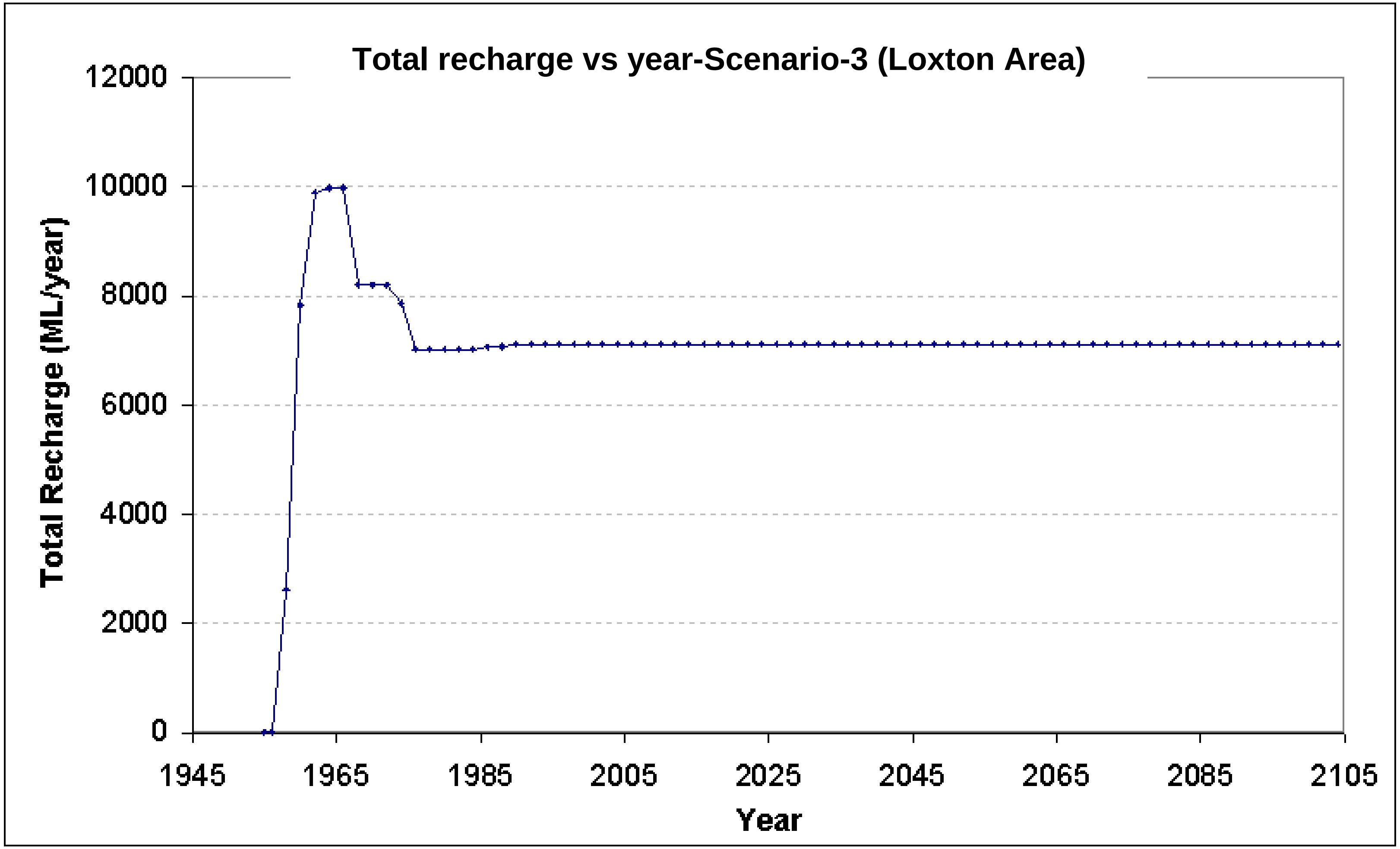
Appendix A-1-2b Total recharge volume to the Loxton Sands from all sources in Scenario-2 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
30	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	372.7	0.1	243.3	0.1	0.1	100.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	372.7	339.9	242.8	339.9	582.7	200.0	279.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	372.7	326.1	233.0	326.1	559.1	300.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1960
2555	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1962
3285	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1964
4015	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1966
4745	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1968
5475	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1970
6205	276.2	241.6	172.6	241.6	414.2	400.0	207.1	207.1	0.1	0.1	0.1	0.1	140.0	120.0	0.1	0.1	0.1	1972
6935	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1974
7665	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1976
8395	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1978
9125	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1980
9855	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1982
10585	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	140.0	0.1	0.1	0.1	1984
11315	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	150.0	0.1	0.1	0.1	1986
12045	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1988
12775	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1990
13505	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1992
14235	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1994
14965	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1996
15695	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1998
16425	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2000
17155	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2002
17885	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2004
18615	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2006
19345	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2008
20075	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2010
20805	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2012
21535	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2014
22265	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2016
22995	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2018
23725	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2020
24455	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2022
25185	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2024
25915	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2026
26645	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2028

Appendix A-1-3a Recharge zones and rates (mm/year) in Scenario-3 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
27375	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2030
28105	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2032
28835	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2034
29565	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2036
30295	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2038
31025	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2040
31755	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2042
32485	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2044
33215	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2046
33945	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2048
34675	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2050
35405	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2052
36135	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2054
36865	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2056
37595	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2058
38325	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2060
39055	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2062
39785	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2064
40515	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2066
41245	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2068
41975	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2070
42705	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2072
43435	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2074
44165	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2076
44895	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2078
45625	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2080
46355	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2082
47085	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2084
47815	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2086
48545	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2088
49275	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2090
50005	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2092
50735	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2094
51465	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2096
52195	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2098
52925	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2100
53655	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2102
54385	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	2104

Appendix A-1-3b Recharge zones and rates (mm/year) in Scenario-3 (Loxton Area)



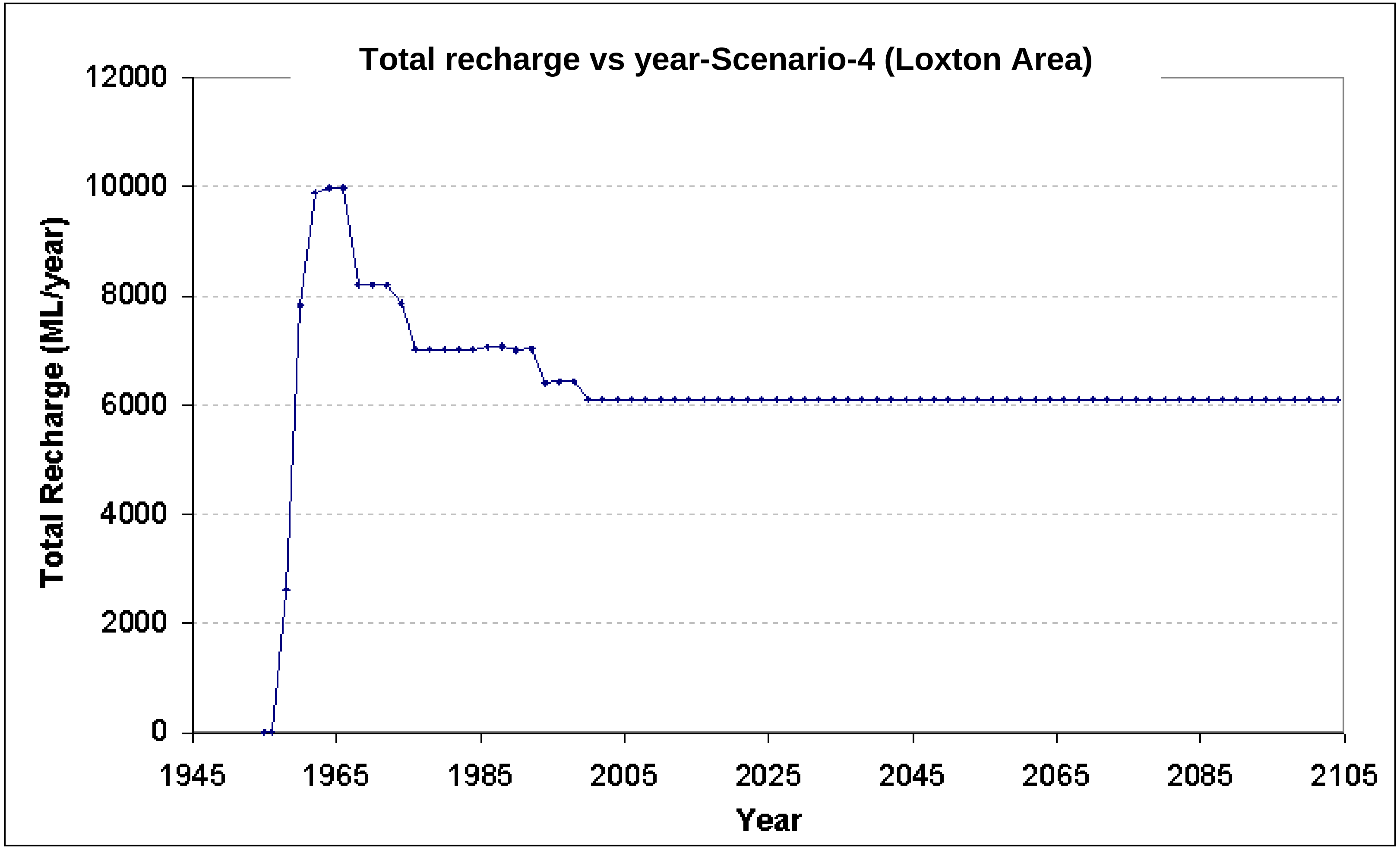
Appendix A-1-3c Total recharge volume to the Loxton Sands from all sources in Scenario-3 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
30	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	372.7	0.1	243.3	0.1	0.1	100.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	372.7	339.9	242.8	339.9	582.7	200.0	279.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	372.7	326.1	233.0	326.1	559.1	300.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1960
2555	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1962
3285	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1964
4015	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1966
4745	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1968
5475	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1970
6205	276.2	241.6	172.6	241.6	414.2	400.0	207.1	207.1	0.1	0.1	0.1	0.1	140.0	120.0	0.1	0.1	0.1	1972
6935	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1974
7665	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1976
8395	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1978
9125	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1980
9855	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1982
10585	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	140.0	0.1	0.1	0.1	1984
11315	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	150.0	0.1	0.1	0.1	1986
12045	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	150.0	0.1	0.1	0.1	1988
12775	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	160.0	0.1	0.1	0.1	1990
13505	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1992
14235	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1994
14965	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1996
15695	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	1998
16425	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2000
17155	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2002
17885	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2004
18615	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2006
19345	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2008
20075	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2010
20805	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2012
21535	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2014
22265	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2016
22995	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2018
23725	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2020
24455	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2022
25185	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2024
25915	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2026
26645	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2028

Appendix A-1-4a Recharge zones and rates (mm/year) in Scenario-4 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
27375	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2030
28105	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2032
28835	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2034
29565	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2036
30295	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2038
31025	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2040
31755	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2042
32485	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2044
33215	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2046
33945	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2048
34675	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2050
35405	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2052
36135	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2054
36865	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2056
37595	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2058
38325	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2060
39055	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2062
39785	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2064
40515	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2066
41245	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2068
41975	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2070
42705	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2072
43435	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2074
44165	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2076
44895	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2078
45625	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2080
46355	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2082
47085	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2084
47815	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2086
48545	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2088
49275	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2090
50005	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2092
50735	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2094
51465	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2096
52195	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2098
52925	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2100
53655	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2102
54385	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2104

Appendix A-1-4b Recharge zones and rates (mm/year) in Scenario-4 (Loxton Area)



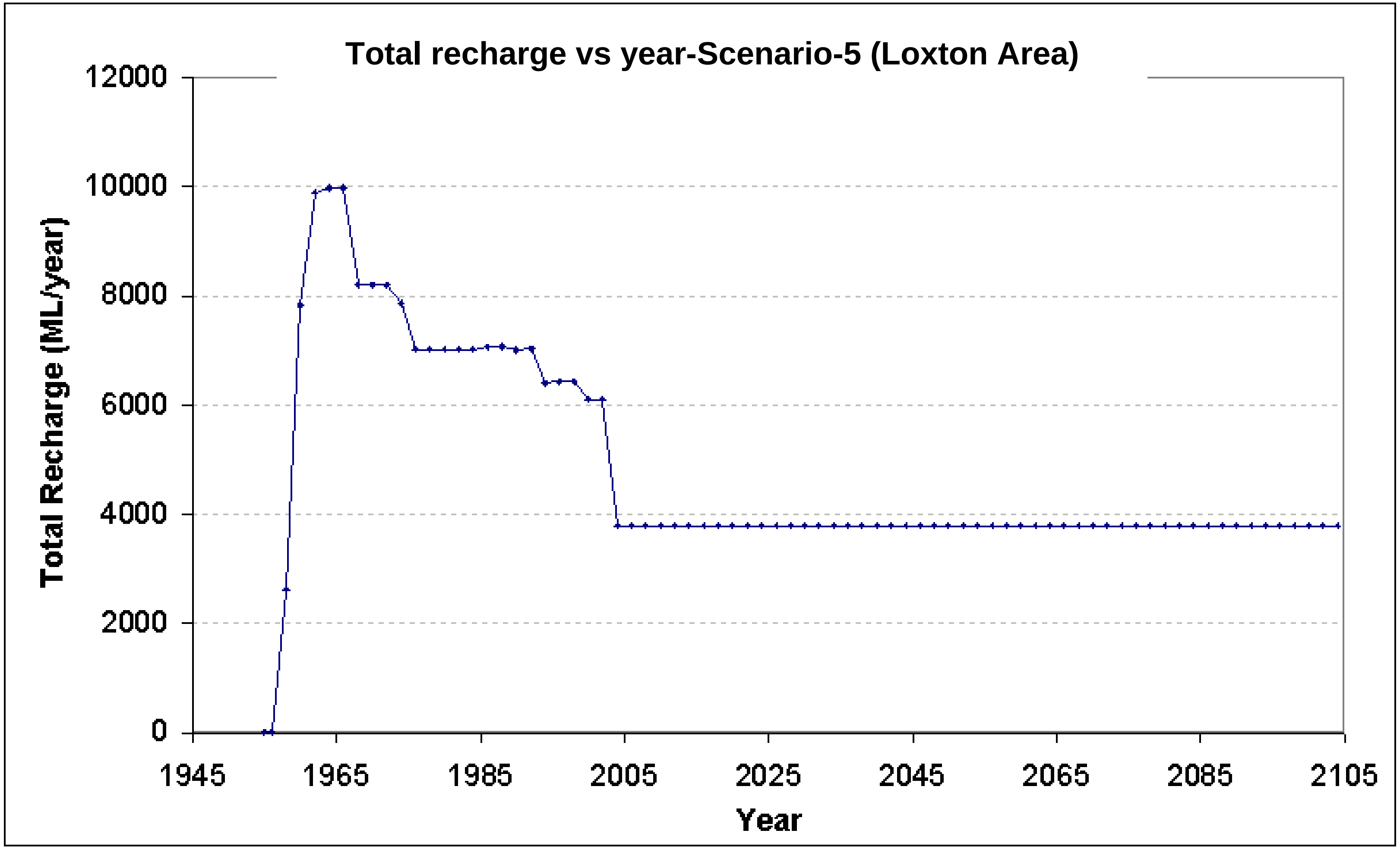
Appendix A-1-4c Total recharge volume to the Loxton Sands from all sources in Scenario-4 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
30	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	372.7	0.1	243.3	0.1	0.1	100.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	372.7	339.9	242.8	339.9	582.7	200.0	279.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	372.7	326.1	233.0	326.1	559.1	300.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1960
2555	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1962
3285	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1964
4015	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1966
4745	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1968
5475	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1970
6205	276.2	241.6	172.6	241.6	414.2	400.0	207.1	207.1	0.1	0.1	0.1	0.1	140.0	120.0	0.1	0.1	0.1	1972
6935	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1974
7665	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1976
8395	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1978
9125	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1980
9855	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1982
10585	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	140.0	0.1	0.1	0.1	1984
11315	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	150.0	0.1	0.1	0.1	1986
12045	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	150.0	0.1	0.1	0.1	1988
12775	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	160.0	0.1	0.1	0.1	1990
13505	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1992
14235	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1994
14965	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1996
15695	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	1998
16425	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2000
17155	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2002
17885	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2004
18615	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2006
19345	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2008
20075	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2010
20805	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2012
21535	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2014
22265	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2016
22995	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2018
23725	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2020
24455	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2022
25185	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2024
25915	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2026
26645	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2028

Appendix A-1-5a Recharge zones and rates (mm/year) in Scenario-5 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
27375	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2030
28105	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2032
28835	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2034
29565	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2036
30295	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2038
31025	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2040
31755	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2042
32485	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2044
33215	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2046
33945	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2048
34675	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2050
35405	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2052
36135	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2054
36865	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2056
37595	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2058
38325	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2060
39055	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2062
39785	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2064
40515	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2066
41245	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2068
41975	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2070
42705	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2072
43435	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2074
44165	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2076
44895	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2078
45625	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2080
46355	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2082
47085	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2084
47815	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2086
48545	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2088
49275	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2090
50005	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2092
50735	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2094
51465	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2096
52195	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2098
52925	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2100
53655	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2102
54385	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2104

Appendix A-1-5b Recharge zones and rates (mm/year) in Scenario-5 (Loxton Area)



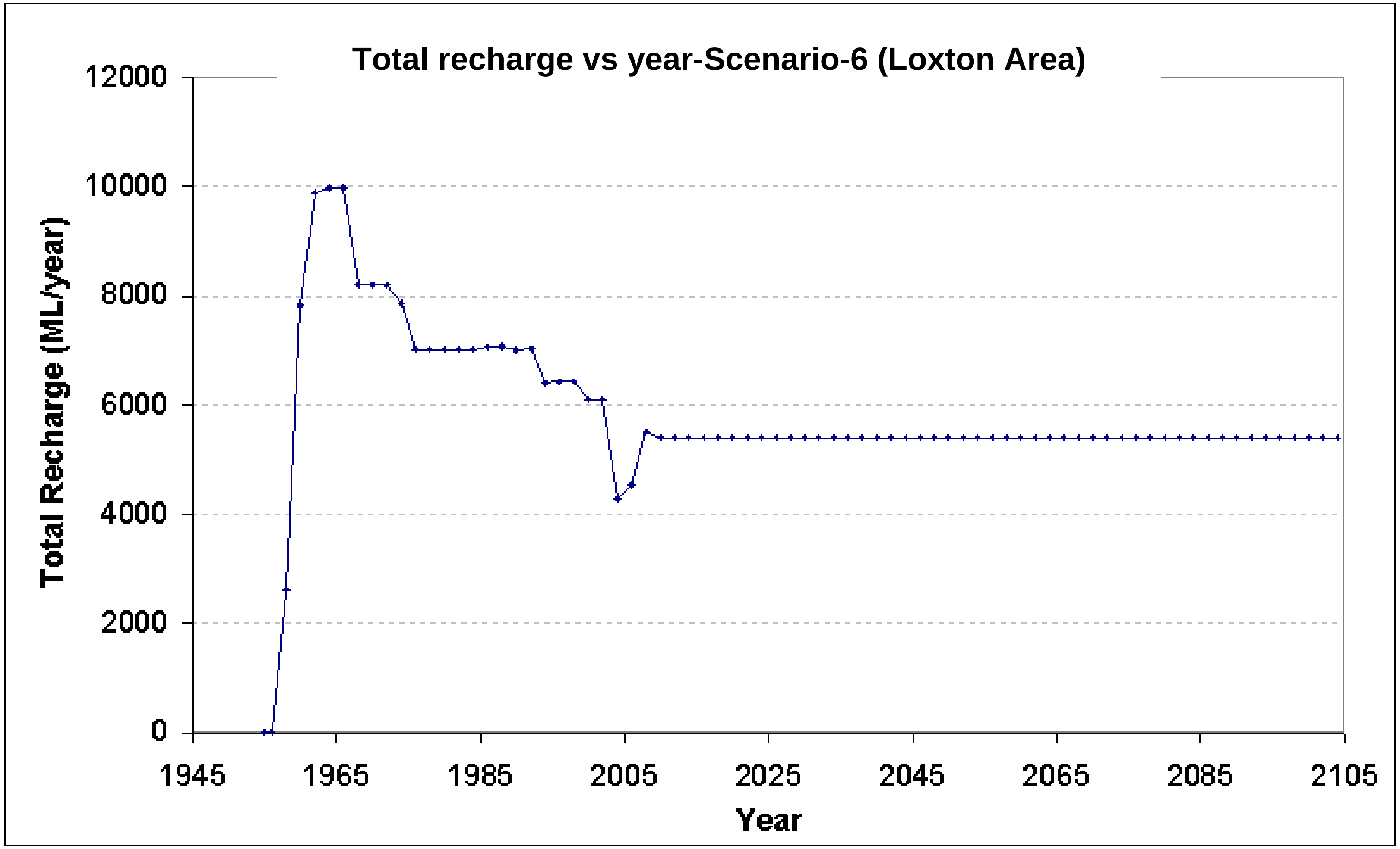
Appendix A-1-5c Total recharge volume to the Loxton Sands from all sources in Scenario-5 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
30	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	372.7	0.1	243.3	0.1	0.1	100.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	372.7	339.9	242.8	339.9	582.7	200.0	279.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	372.7	326.1	233.0	326.1	559.1	300.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1960
2555	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1962
3285	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1964
4015	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1966
4745	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1968
5475	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1970
6205	276.2	241.6	172.6	241.6	414.2	400.0	207.1	207.1	0.1	0.1	0.1	0.1	140.0	120.0	0.1	0.1	0.1	1972
6935	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1974
7665	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1976
8395	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1978
9125	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1980
9855	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1982
10585	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	140.0	0.1	0.1	0.1	1984
11315	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	150.0	0.1	0.1	0.1	1986
12045	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	150.0	0.1	0.1	0.1	1988
12775	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	160.0	0.1	0.1	0.1	1990
13505	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1992
14235	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1994
14965	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1996
15695	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	1998
16425	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2000
17155	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	246.0	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2002
17885	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	187.5	187.5	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2004
18615	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	187.5	187.5	187.5	2006
19345	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2008
20075	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2010
20805	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2012
21535	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2014
22265	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2016
22995	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2018
23725	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2020
24455	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2022
25185	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2024
25915	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2026
26645	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2028

Appendix A-1-6a Recharge zones and rates (mm/year) in Scenario-6 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
27375	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2030
28105	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2032
28835	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2034
29565	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2036
30295	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2038
31025	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2040
31755	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2042
32485	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2044
33215	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2046
33945	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2048
34675	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2050
35405	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2052
36135	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2054
36865	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2056
37595	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2058
38325	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2060
39055	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2062
39785	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2064
40515	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2066
41245	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2068
41975	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2070
42705	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2072
43435	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2074
44165	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2076
44895	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2078
45625	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2080
46355	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2082
47085	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2084
47815	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2086
48545	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2088
49275	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2090
50005	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2092
50735	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2094
51465	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2096
52195	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2098
52925	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2100
53655	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2102
54385	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	153.1	153.1	153.1	153.1	110.0	0.1	150.0	150.0	150.0	2104

Appendix A-1-6b Recharge zones and rates (mm/year) in Scenario-6 (Loxton Area)



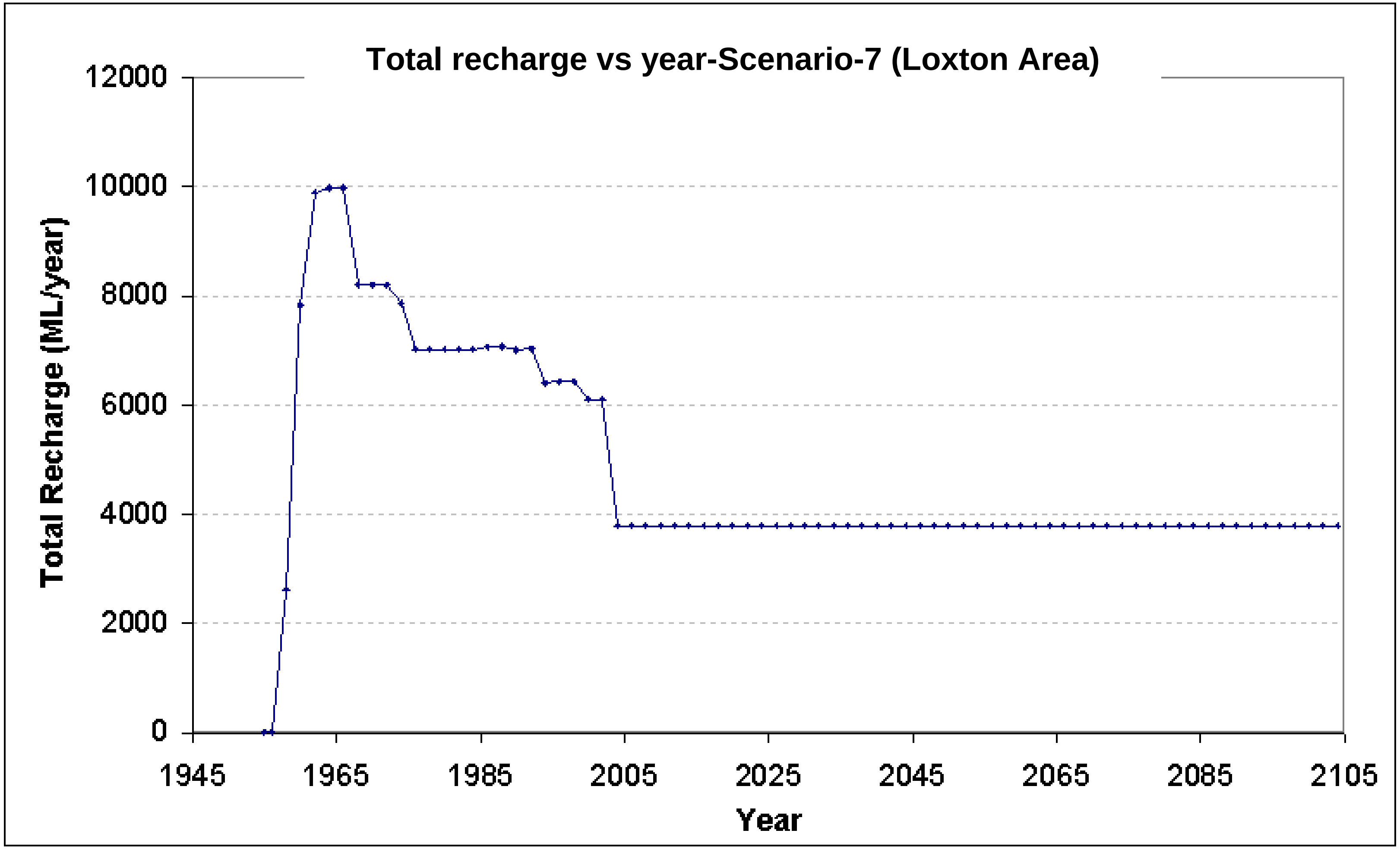
Appendix A-1-6c Total recharge volume to the Loxton Sands from all sources in Scenario-6 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
30	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	372.7	0.1	243.3	0.1	0.1	100.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	372.7	339.9	242.8	339.9	582.7	200.0	279.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	372.7	326.1	233.0	326.1	559.1	300.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1960
2555	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1962
3285	372.7	326.1	233.0	326.1	559.1	400.0	279.5	295.0	0.1	0.1	0.1	0.1	100.0	0.1	0.1	0.1	0.1	1964
4015	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1966
4745	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1968
5475	290.8	254.5	233.0	254.5	436.2	400.0	218.1	218.1	0.1	0.1	0.1	0.1	120.0	100.0	0.1	0.1	0.1	1970
6205	276.2	241.6	172.6	241.6	414.2	400.0	207.1	207.1	0.1	0.1	0.1	0.1	140.0	120.0	0.1	0.1	0.1	1972
6935	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1974
7665	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1976
8395	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1978
9125	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1980
9855	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	150.0	140.0	0.1	0.1	0.1	1982
10585	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	140.0	0.1	0.1	0.1	1984
11315	238.9	209.0	149.3	209.0	358.3	400.0	179.2	179.2	0.1	0.1	0.1	0.1	160.0	150.0	0.1	0.1	0.1	1986
12045	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	150.0	0.1	0.1	0.1	1988
12775	238.9	209.0	149.3	209.0	335.0	400.0	177.0	167.5	0.1	0.1	0.1	0.1	180.0	160.0	0.1	0.1	0.1	1990
13505	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	160.0	0.1	0.1	0.1	1992
14235	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1994
14965	198.9	174.0	139.6	174.0	335.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	180.0	0.1	0.1	0.1	1996
15695	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	1998
16425	198.9	174.0	139.6	174.0	200.0	400.0	150.0	149.2	0.1	0.1	0.1	0.1	200.0	190.0	0.1	0.1	0.1	2000
17155	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2002
17885	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2004
18615	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2006
19345	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2008
20075	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2010
20805	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2012
21535	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2014
22265	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2016
22995	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2018
23725	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2020
24455	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2022
25185	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2024
25915	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2026
26645	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2028

Appendix A-1-7a Recharge zones and rates (mm/year) in Scenario-7 (Loxton Area)

Day	Zone19	Zone20	Zone21	Zone22	Zone23	Zone24	Zone25	Zone26	Zone27	Zone28	Zone29	Zone30	Zone31	Zone32	Zone33	Zone34	Zone35	Model year
27375	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2030
28105	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2032
28835	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2034
29565	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2036
30295	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2038
31025	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2040
31755	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2042
32485	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2044
33215	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2046
33945	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2048
34675	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2050
35405	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2052
36135	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2054
36865	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2056
37595	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2058
38325	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2060
39055	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2062
39785	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2064
40515	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2066
41245	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2068
41975	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2070
42705	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2072
43435	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2074
44165	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2076
44895	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2078
45625	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2080
46355	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2082
47085	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2084
47815	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2086
48545	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2088
49275	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2090
50005	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2092
50735	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2094
51465	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2096
52195	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2098
52925	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2100
53655	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2102
54385	160.0	140.0	100.0	140.0	0.1	0.1	120.0	120.0	0.1	0.1	0.1	0.1	110.0	0.1	0.1	0.1	0.1	2104

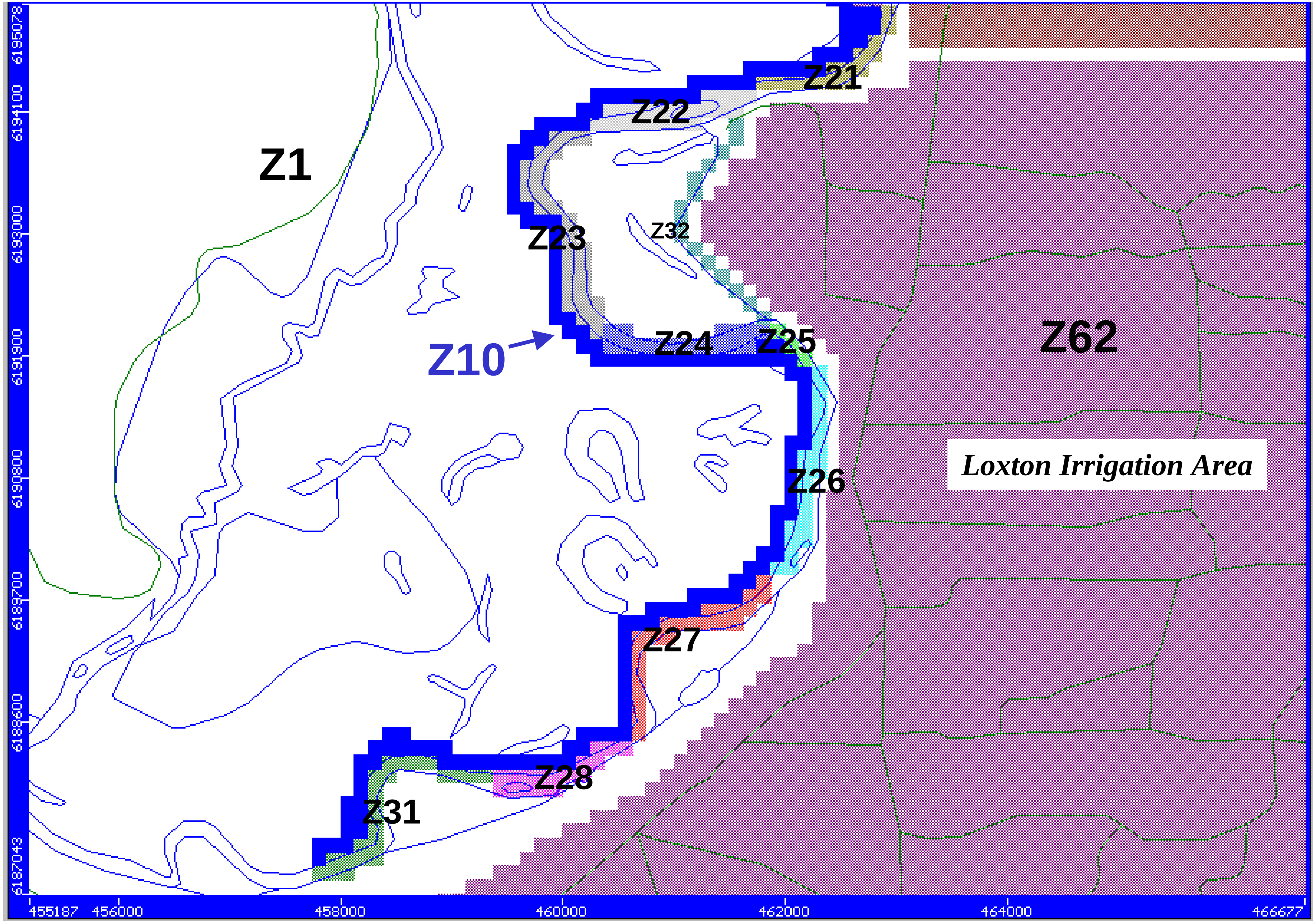
Appendix A-1-7b Recharge zones and rates (mm/year) in Scenario-7 (Loxton Area)



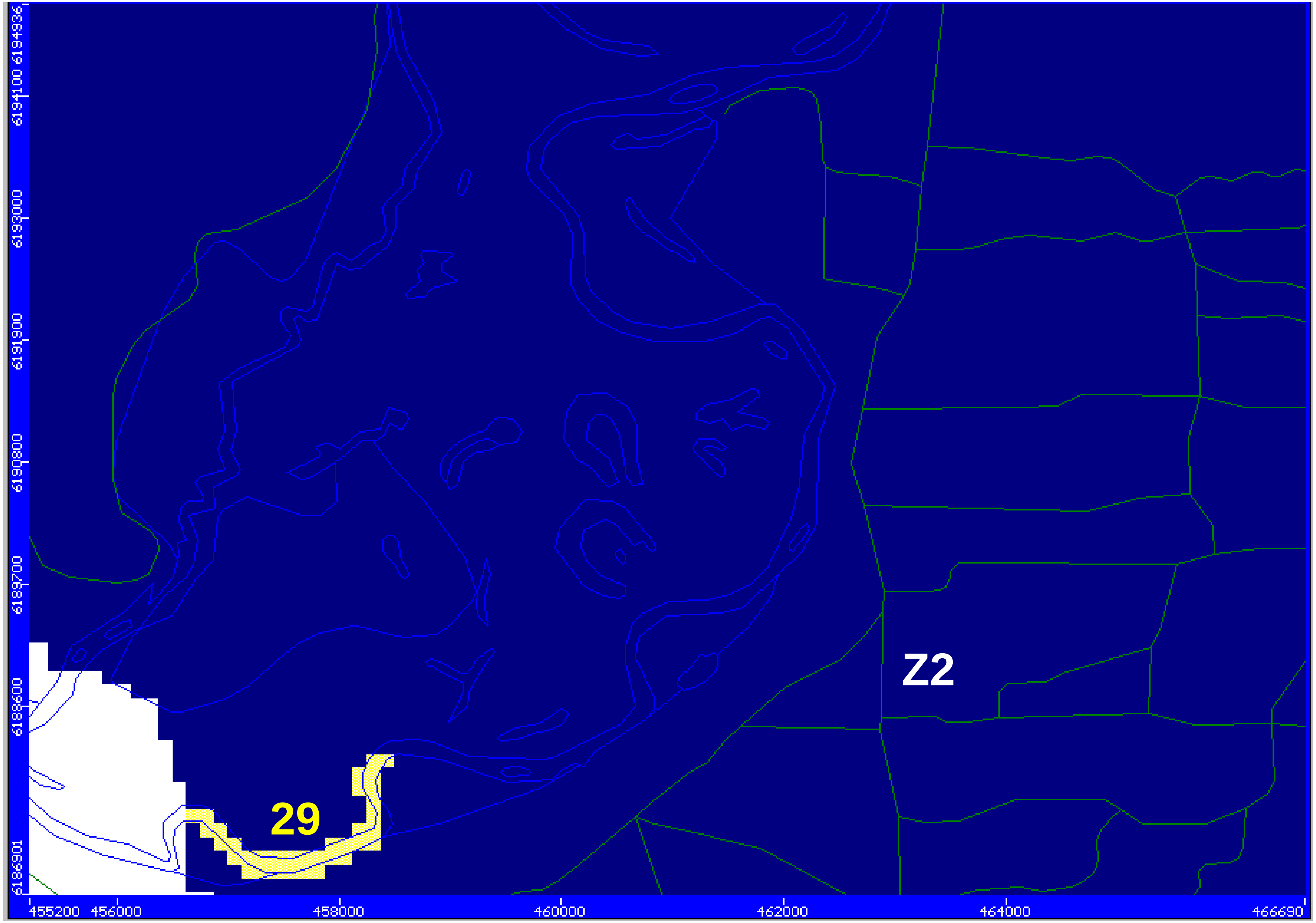
Appendix A-1-7c Total recharge volume to the Loxton Sands from all sources in Scenario-7 (Loxton Area)

A-2 Groundwater flux and salt load entering the River Murray Scenario-2 (Loxton Area)

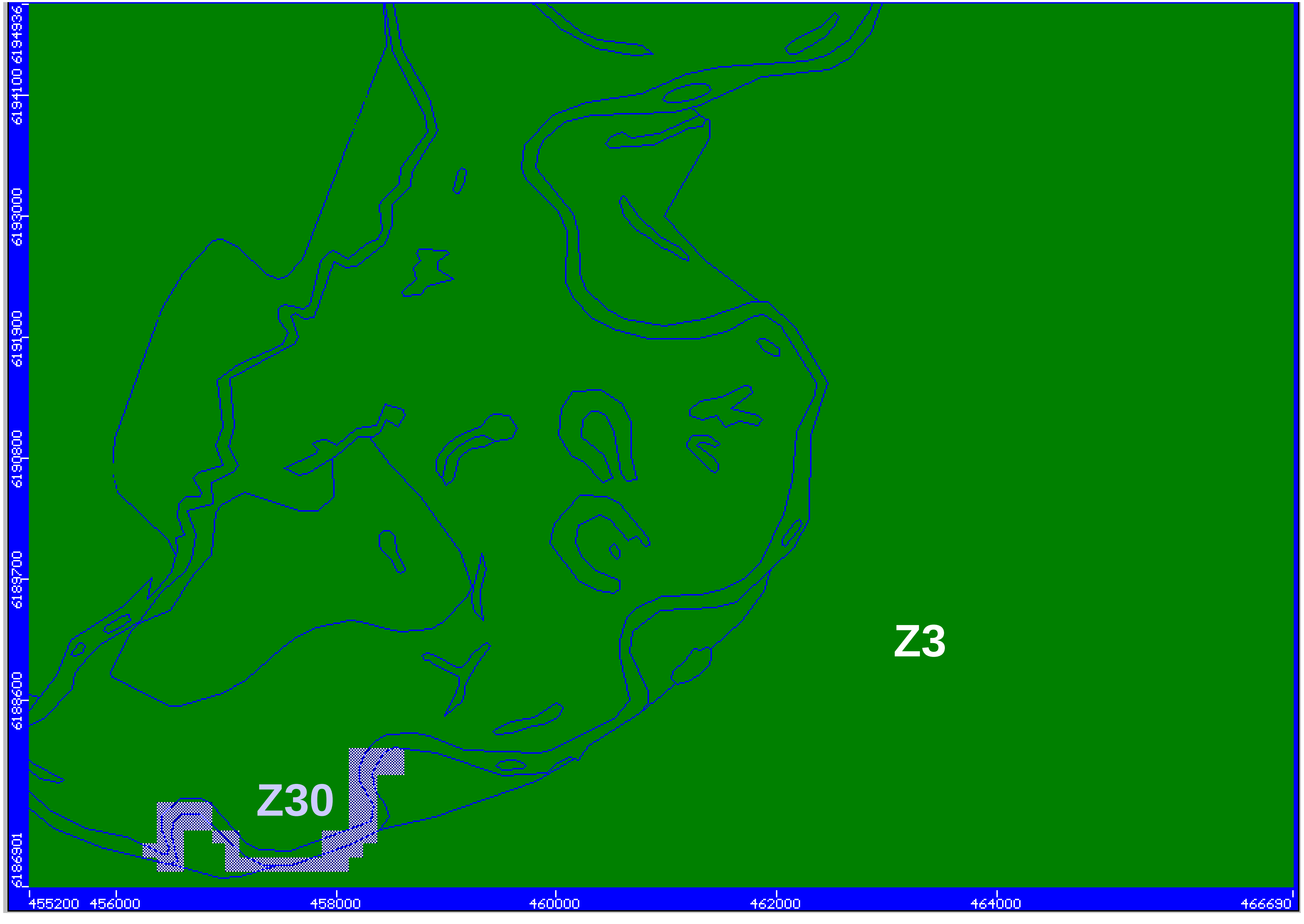
- Flow budget zones (Loxton Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix A-2-1a Flow budget zones in model Layer-1 (Loxton Area)



Appendix A-2-1b Flow budget zones in model Layer-2 (Loxton Area)



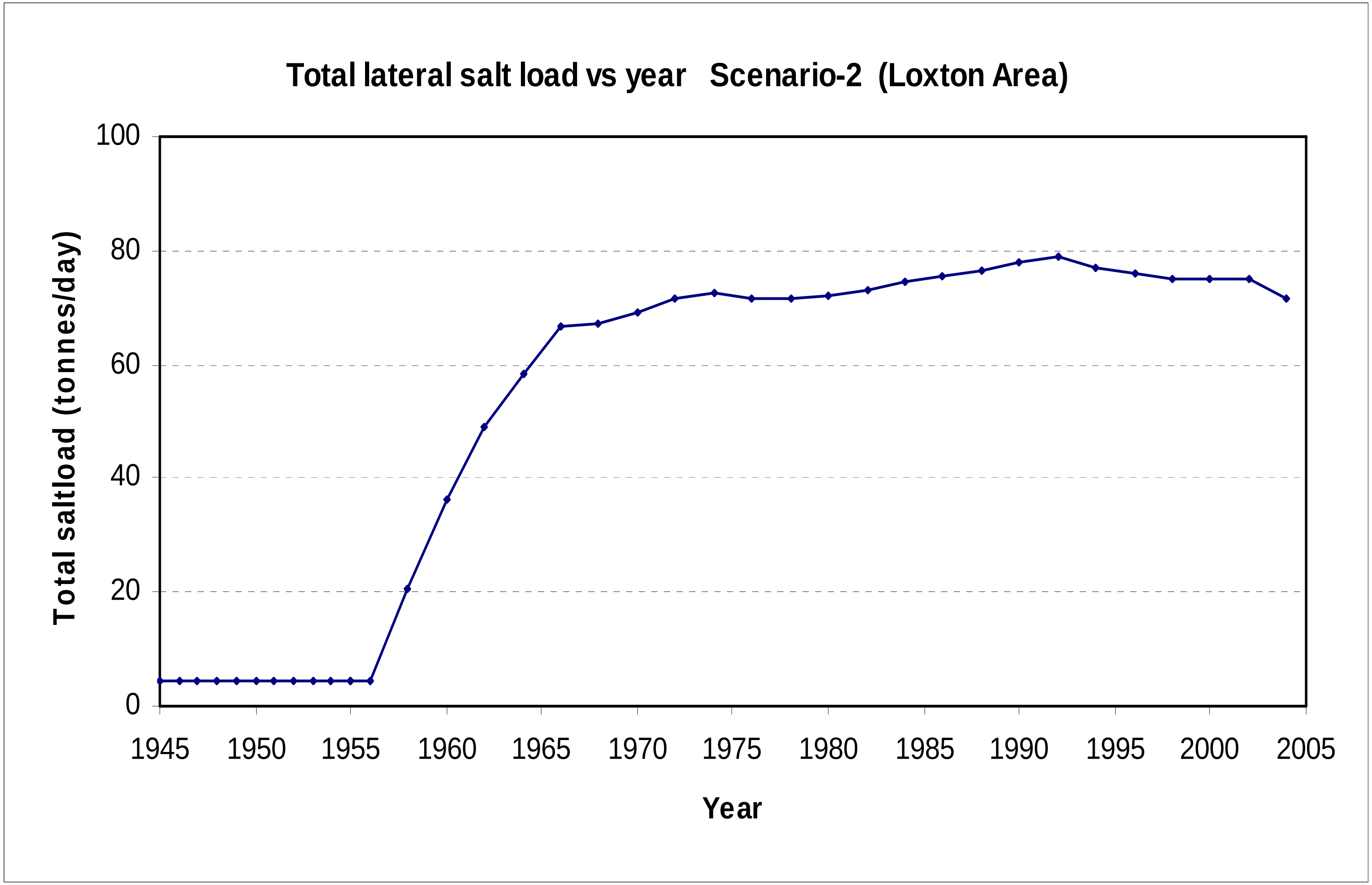
Appendix A-2-1c Flow budget zones in model Layer-3 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
30	1955	39.1	4.1	0.0	3.0	25.8	95.4	26.3	16.8	0.0	16.9	227
365	1956	39.1	4.1	0.0	3.1	26.1	95.9	26.3	16.8	0.0	16.9	228
1095	1958	200.1	106.7	0.0	96.1	228.4	292.2	27.1	16.9	0.0	17.1	985
1825	1960	366.5	210.9	0.0	187.2	386.3	459.2	29.7	17.3	14.0	17.5	1689
2555	1962	510.0	276.9	0.0	245.1	498.3	605.0	35.9	18.2	39.8	18.7	2248
3285	1964	624.4	317.4	1.1	284.6	581.9	758.0	47.5	19.8	59.2	20.4	2714
4015	1966	714.6	343.8	3.1	311.1	647.6	918.4	63.0	21.7	72.8	22.3	3118
4745	1968	720.9	325.9	2.6	296.9	648.3	1061.2	81.3	23.9	61.1	24.2	3246
5475	1970	735.1	318.0	2.3	294.2	664.7	1186.5	102.3	26.3	57.1	26.3	3413
6205	1972	755.5	317.9	2.4	296.7	686.5	1298.5	123.3	28.8	57.1	28.4	3595
6935	1974	766.6	314.3	2.4	294.5	679.8	1335.1	142.4	31.5	54.9	30.5	3652
7665	1976	751.0	298.3	1.7	281.4	656.5	1363.4	160.0	34.3	46.0	32.7	3625
8395	1978	745.3	290.3	1.3	275.0	651.9	1397.6	173.4	37.1	42.2	34.8	3649
9125	1980	746.6	287.5	1.2	273.4	654.4	1431.0	184.3	39.8	40.9	37.0	3696
9855	1982	751.9	287.5	1.3	275.7	660.6	1464.8	194.9	42.6	40.9	39.2	3759
10585	1984	760.0	288.6	1.4	277.4	667.6	1496.0	203.0	45.3	41.3	41.6	3822
11315	1986	769.3	290.1	1.6	279.5	675.0	1525.7	210.2	47.8	42.0	43.9	3885
12045	1988	778.7	291.8	1.8	281.7	682.3	1554.0	216.8	50.3	42.8	46.2	3946
12775	1990	788.6	293.9	2.2	285.6	690.1	1582.3	224.5	52.9	43.7	48.6	4012
13505	1992	798.2	295.8	2.4	287.8	697.0	1606.4	229.9	55.3	44.5	51.0	4068
14235	1994	774.8	280.7	1.5	273.6	672.9	1604.0	234.3	57.6	36.5	53.3	3989
14965	1996	760.6	271.9	1.1	265.7	661.1	1597.1	237.8	59.8	32.4	55.5	3943
15695	1998	753.3	267.5	0.9	260.6	654.3	1589.8	239.0	61.7	30.6	57.5	3915
16425	2000	749.8	265.4	0.8	258.8	651.0	1586.6	241.3	63.6	29.7	59.5	3907
17155	2002	748.5	264.5	0.8	258.1	649.5	1585.5	243.4	65.5	29.3	61.5	3906
17885	2004	718.3	248.0	0.2	241.8	610.1	1532.4	244.4	67.0	21.8	63.1	3747
18615	2006	696.0	236.8	0.0	230.2	588.2	1494.0	242.7	68.2	17.6	64.2	3638
19345	2008	680.0	230.6	0.0	224.3	574.1	1462.5	241.9	69.2	15.3	65.3	3563
20075	2010	668.0	226.8	0.0	220.5	563.8	1434.8	240.7	70.0	13.9	66.2	3505
54385	2104	597.7	211.7	0.0	203.8	506.7	1253.8	227.0	74.2	9.2	74.5	3159
TDS	*mg/L*	*25807*	*29055*	*30760*	*39978*	*18716*	*7710*	*35935*	*29140*	*39117*	*24080*	

Appendix A-2-2 Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-2 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1946	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1947	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1948	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1949	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1950	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1951	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1952	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1953	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1954	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
30	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
365	1956	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
1095	1958	5.2	3.1	0.0	3.8	4.3	2.3	1.0	0.5	0.0	0.4	21
1825	1960	9.5	6.1	0.0	7.5	7.2	3.5	1.1	0.5	0.5	0.4	38
2555	1962	13.2	8.0	0.0	9.8	9.3	4.7	1.3	0.5	1.6	0.5	49
3285	1964	16.1	9.2	0.0	11.4	10.9	5.8	1.7	0.6	2.3	0.5	59
4015	1966	18.4	10.0	0.1	12.4	12.1	7.1	2.3	0.6	2.8	0.5	66
4745	1968	18.6	9.5	0.1	11.9	12.1	8.2	2.9	0.7	2.4	0.6	67
5475	1970	19.0	9.2	0.1	11.8	12.4	9.1	3.7	0.8	2.2	0.6	69
6205	1972	19.5	9.2	0.1	11.9	12.8	10.0	4.4	0.8	2.2	0.7	72
6935	1974	19.8	9.1	0.1	11.8	12.7	10.3	5.1	0.9	2.1	0.7	73
7665	1976	19.4	8.7	0.1	11.3	12.3	10.5	5.7	1.0	1.8	0.8	71
8395	1978	19.2	8.4	0.0	11.0	12.2	10.8	6.2	1.1	1.6	0.8	71
9125	1980	19.3	8.4	0.0	10.9	12.2	11.0	6.6	1.2	1.6	0.9	72
9855	1982	19.4	8.4	0.0	11.0	12.4	11.3	7.0	1.2	1.6	0.9	73
10585	1984	19.6	8.4	0.0	11.1	12.5	11.5	7.3	1.3	1.6	1.0	74
11315	1986	19.9	8.4	0.0	11.2	12.6	11.8	7.6	1.4	1.6	1.1	76
12045	1988	20.1	8.5	0.1	11.3	12.8	12.0	7.8	1.5	1.7	1.1	77
12775	1990	20.4	8.5	0.1	11.4	12.9	12.2	8.1	1.5	1.7	1.2	78
13505	1992	20.6	8.6	0.1	11.5	13.0	12.4	8.3	1.6	1.7	1.2	79
14235	1994	20.0	8.2	0.0	10.9	12.6	12.4	8.4	1.7	1.4	1.3	77
14965	1996	19.6	7.9	0.0	10.6	12.4	12.3	8.5	1.7	1.3	1.3	76
15695	1998	19.4	7.8	0.0	10.4	12.2	12.3	8.6	1.8	1.2	1.4	75
16425	2000	19.4	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.2	1.4	75
17155	2002	19.3	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.1	1.5	75
17885	2004	18.5	7.2	0.0	9.7	11.4	11.8	8.8	2.0	0.9	1.5	72
18615	2006	18.0	6.9	0.0	9.2	11.0	11.5	8.7	2.0	0.7	1.5	70
19345	2008	17.5	6.7	0.0	9.0	10.7	11.3	8.7	2.0	0.6	1.6	68
20075	2010	17.2	6.6	0.0	8.8	10.6	11.1	8.7	2.0	0.5	1.6	67
54385	2104	15.4	6.2	0.0	8.1	9.5	9.7	8.2	2.2	0.4	1.8	61
TDS	mg/L	25807	29055	30760	39978	18718	7710	35935	29140	39117	24050	

Appendix A-2-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-2 (Loxton Area)



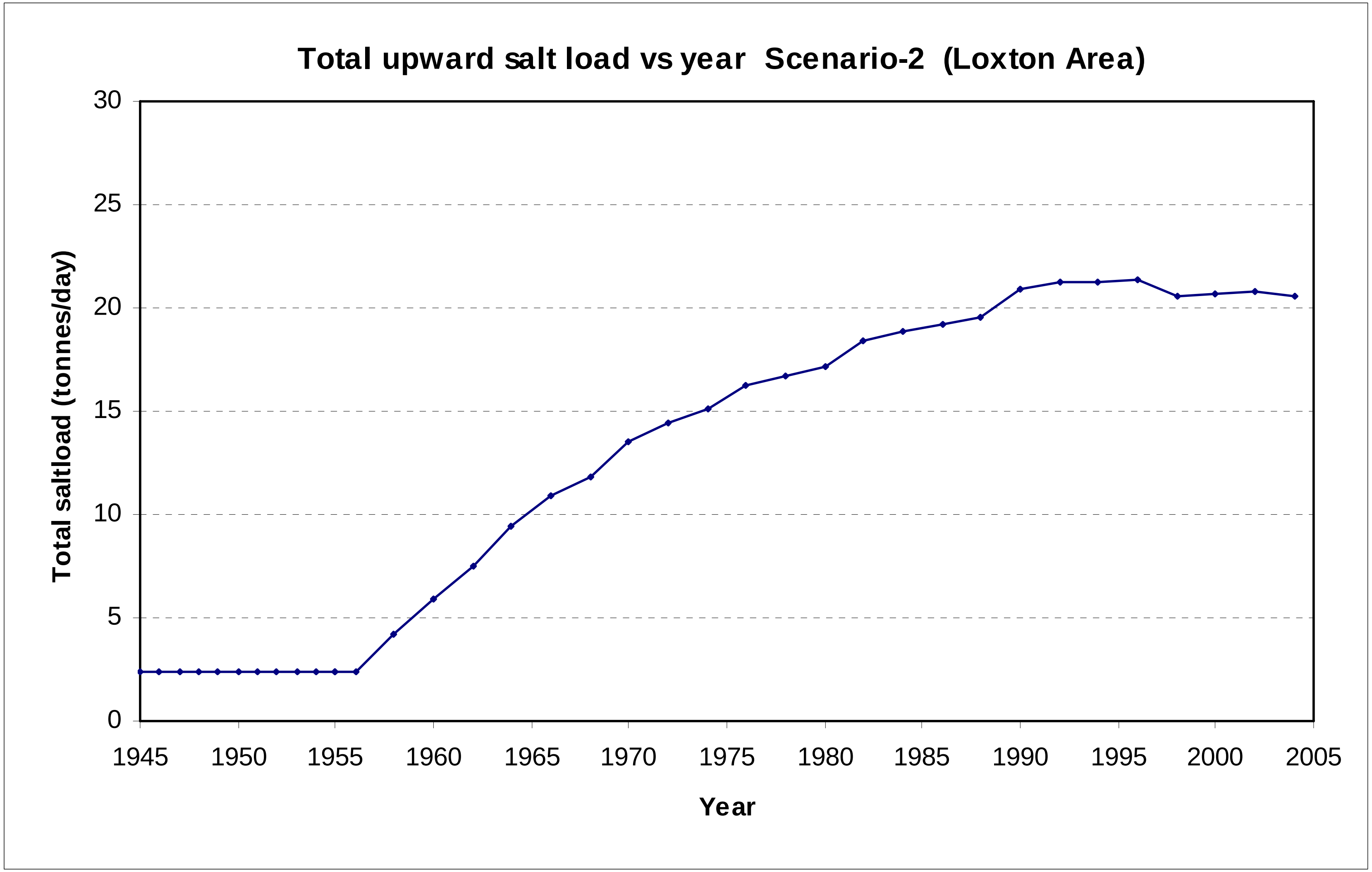
Appendix A-2-3b Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-2 (Loxton Area)

Day	Year	Z2 to Z21 (m^3/day)	Z2 to Z22 (m^3/day)	Z2 to Z23 (m^3/day)	Z2 to Z24 (m^3/day)	Z2 to Z25 (m^3/day)	Z2 to Z26 (m^3/day)	Z2 to Z27 (m^3/day)	Z2 to Z28 (m^3/day)	Z2 to Z29 (m^3/day)	Z3 to Z29 (m^3/day)	Z2 to Z31 (m^3/day)	Z3 to Z30 (m^3/day)	Total Lateral (m^3/day)
30	1955	6.7	0.9	0.0	0.7	1.1	11.0	10.4	21.2	6.8	3.8	0.0	40.5	63
365	1956	6.7	0.9	0.0	1.2	1.6	12.9	10.4	21.0	6.8	3.8	0.0	40.5	65
1095	1958	21.5	9.6	0.0	10.3	9.2	28.9	11.1	21.3	6.8	3.9	0.0	40.8	123
1825	1960	33.8	17.7	0.0	19.3	14.3	46.2	13.0	22.2	6.9	4.1	0.0	41.4	178
2555	1962	43.3	23.3	1.0	26.6	17.8	65.1	16.8	24.7	7.3	4.6	0.1	43.3	231
3285	1964	50.8	27.4	2.4	37.2	20.8	95.1	26.5	28.5	7.7	5.2	0.3	46.7	302
4015	1966	56.6	30.4	3.2	41.8	22.8	119.2	35.6	32.8	8.2	5.7	0.4	48.1	357
4745	1968	58.0	30.3	3.4	42.0	23.1	141.6	46.2	37.4	8.7	6.2	0.6	50.5	396
5475	1970	59.7	30.9	3.9	50.0	24.2	174.3	64.4	42.9	9.2	6.7	0.9	53.0	467
6205	1972	61.6	31.8	4.2	51.5	24.9	192.2	74.3	48.3	9.7	7.2	1.1	55.4	507
6935	1974	62.8	32.2	4.4	52.2	25.0	203.8	82.9	53.9	10.2	7.7	1.4	57.9	537
7665	1976	62.6	31.8	5.1	59.3	25.2	225.6	99.9	60.2	10.7	8.2	1.7	60.5	590
8395	1978	62.8	31.8	5.2	59.3	25.2	232.8	106.0	65.6	11.2	8.6	2.1	62.9	611
9125	1980	63.3	32.0	5.3	59.8	25.3	238.9	111.1	70.8	11.7	9.0	2.4	65.3	630
9855	1982	63.9	32.5	6.3	68.6	26.1	259.0	126.1	76.8	12.2	9.5	2.8	67.9	684
10585	1984	64.9	33.1	6.5	69.3	26.4	264.0	130.0	81.8	12.7	9.9	3.2	70.2	702
11315	1986	65.7	33.6	6.7	70.0	26.6	268.7	133.7	86.5	13.2	10.3	3.6	72.6	719
12045	1988	66.5	34.1	6.9	70.6	26.9	273.0	137.0	91.0	13.7	10.7	4.0	74.9	734
12775	1990	67.4	34.8	8.2	79.7	27.7	292.7	151.1	96.4	14.2	11.1	4.5	77.4	788
13505	1992	68.2	35.2	8.4	80.3	27.9	296.2	153.8	100.7	14.7	11.5	4.8	79.7	802
14235	1994	67.1	34.3	8.2	79.1	27.4	297.3	155.8	104.6	15.2	11.9	5.1	81.9	806
14965	1996	66.8	34.1	8.2	78.6	27.1	297.6	157.5	108.2	15.6	12.3	5.4	84.1	811
15695	1998	66.6	33.9	7.1	69.9	26.4	282.2	148.0	110.4	16.0	12.6	5.6	86.1	779
16425	2000	66.6	33.9	7.1	69.8	26.4	282.4	149.2	113.4	16.5	12.9	5.9	88.1	784
17155	2002	66.6	33.9	7.2	69.9	26.4	282.7	150.3	116.3	16.9	13.2	6.1	90.1	790
17885	2004	65.0	32.7	6.9	68.0	25.4	279.1	150.4	118.4	17.2	13.4	6.3	91.4	783
18615	2006	63.7	31.7	5.6	58.4	24.3	260.6	139.5	118.9	17.4	13.5	6.2	92.3	740
19345	2008	62.8	31.1	5.4	57.6	23.9	257.2	138.9	120.1	17.6	13.6	6.3	93.2	734
20075	2010	62.1	30.7	5.3	57.0	23.6	254.0	138.2	121.0	17.8	13.6	6.4	94.0	730
54385	2104	57.4	28.5	4.7	53.7	21.9	231.8	131.9	123.9	20.1	15.4	7.2	105.9	696
TDS	*mg/L*	*32267*	*32267*	*32267*	*32267*	*32267*	*29405*	*9700*	*7550*	*3300*	*32267*	*32267*	*32267*	

Appendix A-2-4 Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-2 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z29 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1946	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1947	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1948	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1949	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1950	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1951	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1952	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1953	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1954	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
30	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
365	1956	0.2	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.0	0.1	0.0	1.3	2
1095	1958	0.7	0.3	0.0	0.3	0.3	0.8	0.1	0.2	0.0	0.1	0.0	1.3	4
1825	1960	1.1	0.6	0.0	0.6	0.5	1.4	0.1	0.2	0.0	0.1	0.0	1.3	6
2555	1962	1.4	0.8	0.0	0.9	0.6	1.9	0.2	0.2	0.0	0.1	0.0	1.4	7
3285	1964	1.6	0.9	0.1	1.2	0.7	2.8	0.3	0.2	0.0	0.2	0.0	1.5	9
4015	1966	1.8	1.0	0.1	1.3	0.7	3.5	0.3	0.2	0.0	0.2	0.0	1.6	11
4745	1968	1.9	1.0	0.1	1.4	0.7	4.2	0.4	0.3	0.0	0.2	0.0	1.6	12
5475	1970	1.9	1.0	0.1	1.6	0.8	5.1	0.6	0.3	0.0	0.2	0.0	1.7	14
6205	1972	2.0	1.0	0.1	1.7	0.8	5.7	0.7	0.4	0.0	0.2	0.0	1.8	14
6935	1974	2.0	1.0	0.1	1.7	0.8	6.0	0.8	0.4	0.0	0.2	0.0	1.9	15
7665	1976	2.0	1.0	0.2	1.9	0.8	6.6	1.0	0.5	0.0	0.3	0.1	2.0	16
8395	1978	2.0	1.0	0.2	1.9	0.8	6.8	1.0	0.5	0.0	0.3	0.1	2.0	17
9125	1980	2.0	1.0	0.2	1.9	0.8	7.0	1.1	0.5	0.0	0.3	0.1	2.1	17
9855	1982	2.1	1.0	0.2	2.2	0.8	7.6	1.2	0.6	0.0	0.3	0.1	2.2	18
10585	1984	2.1	1.1	0.2	2.2	0.9	7.8	1.3	0.6	0.0	0.3	0.1	2.3	19
11315	1986	2.1	1.1	0.2	2.3	0.9	7.9	1.3	0.7	0.0	0.3	0.1	2.3	19
12045	1988	2.1	1.1	0.2	2.3	0.9	8.0	1.3	0.7	0.0	0.3	0.1	2.4	20
12775	1990	2.2	1.1	0.3	2.6	0.9	8.6	1.5	0.7	0.0	0.4	0.1	2.5	21
13505	1992	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.0	0.4	0.2	2.6	21
14235	1994	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.1	0.4	0.2	2.6	21
14965	1996	2.2	1.1	0.3	2.5	0.9	8.8	1.5	0.8	0.1	0.4	0.2	2.7	21
15695	1998	2.2	1.1	0.2	2.3	0.9	8.3	1.4	0.8	0.1	0.4	0.2	2.8	21
16425	2000	2.1	1.1	0.2	2.3	0.9	8.3	1.4	0.9	0.1	0.4	0.2	2.8	21
17155	2002	2.2	1.1	0.2	2.3	0.9	8.3	1.5	0.9	0.1	0.4	0.2	2.9	21
17885	2004	2.1	1.1	0.2	2.2	0.8	8.2	1.5	0.9	0.1	0.4	0.2	3.0	21
18615	2006	2.1	1.0	0.2	1.9	0.8	7.7	1.4	0.9	0.1	0.4	0.2	3.0	20
19345	2008	2.0	1.0	0.2	1.9	0.8	7.6	1.3	0.9	0.1	0.4	0.2	3.0	19
20075	2010	2.0	1.0	0.2	1.8	0.8	7.5	1.3	0.9	0.1	0.4	0.2	3.0	19
54385	2104	1.9	0.9	0.2	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	19
TDS	mg/L	32267	32267	32267	32267	32267	29405	9700	7550	3300	32267	32267	32267	

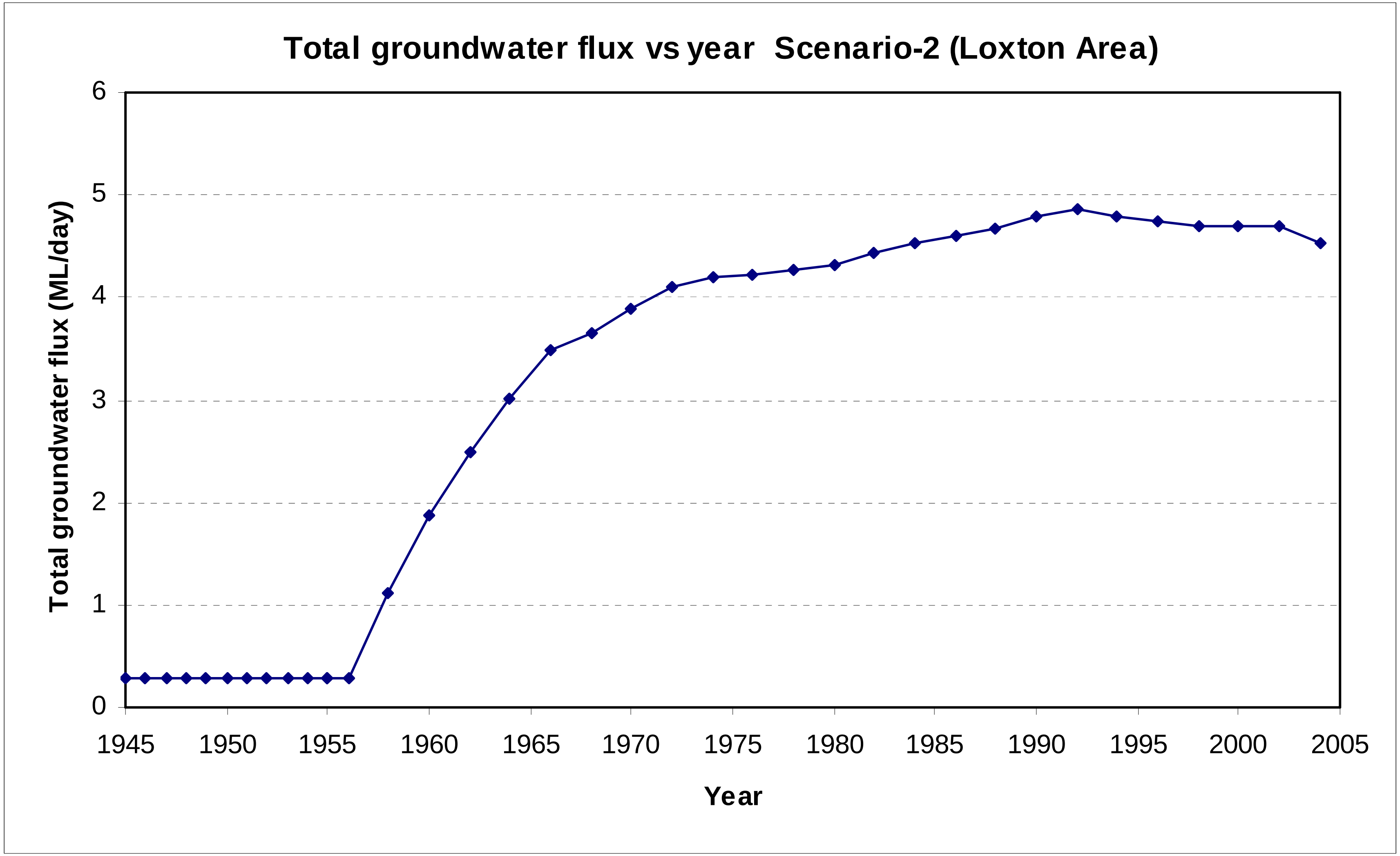
Appendix A-2-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-2 (Loxton Area)



Appendix A-2-5b Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-2 (Loxton Area)

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
0	1945	0.23	0.06	0.29
0	1946	0.23	0.06	0.29
0	1947	0.23	0.06	0.29
0	1948	0.23	0.06	0.29
0	1949	0.23	0.06	0.29
0	1950	0.23	0.06	0.29
0	1951	0.23	0.06	0.29
0	1952	0.23	0.06	0.29
0	1953	0.23	0.06	0.29
0	1954	0.23	0.06	0.29
0	1955	0.23	0.06	0.29
30	1955	0.23	0.06	0.29
365	1956	0.23	0.07	0.29
1095	1958	0.98	0.12	1.11
1825	1960	1.69	0.18	1.87
2555	1962	2.25	0.23	2.48
3285	1964	2.71	0.30	3.02
4015	1966	3.12	0.36	3.48
4745	1968	3.25	0.40	3.64
5475	1970	3.41	0.47	3.88
6205	1972	3.60	0.51	4.10
6935	1974	3.65	0.54	4.19
7665	1976	3.63	0.59	4.22
8395	1978	3.65	0.61	4.26
9125	1980	3.70	0.63	4.33
9855	1982	3.76	0.68	4.44
10585	1984	3.82	0.70	4.52
11315	1986	3.89	0.72	4.60
12045	1988	3.95	0.73	4.68
12775	1990	4.01	0.79	4.80
13505	1992	4.07	0.80	4.87
14235	1994	3.99	0.81	4.80
14965	1996	3.94	0.81	4.75
15695	1998	3.91	0.78	4.69
16425	2000	3.91	0.78	4.69
17155	2002	3.91	0.79	4.70
17885	2004	3.75	0.78	4.53

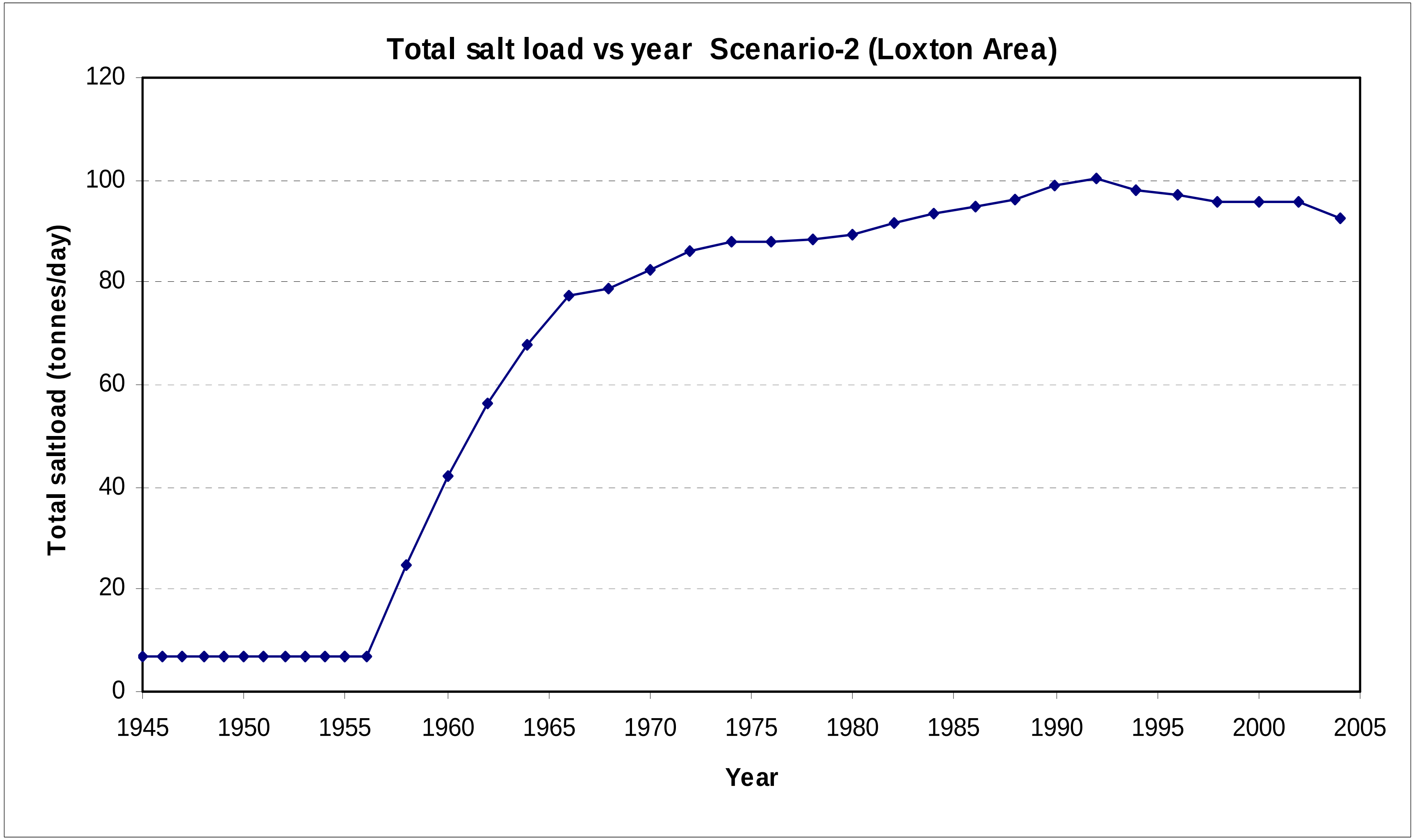
Appendix A-2-6a Predicted total groundwater flux (ML/day) in Scenario-2 (Loxton Area)



Appendix A-2-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-2 (Loxton Area)

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
0	1846	4.31	2.34	8.86
0	1848	4.31	2.34	8.86
0	1847	4.31	2.34	8.86
0	1843	4.31	2.34	8.86
0	1848	4.31	2.34	8.86
0	1860	4.31	2.34	8.86
0	1861	4.31	2.34	8.86
0	1862	4.31	2.34	8.86
0	1863	4.31	2.34	8.86
0	1864	4.31	2.34	8.86
0	1866	4.31	2.34	8.86
30	1866	4.31	2.34	8.86
386	1868	4.32	2.43	8.74
1086	1863	20.61	4.22	24.73
1326	1880	38.33	6.38	42.27
2666	1882	43.33	7.46	68.23
3286	1884	63.63	8.41	87.88
4016	1888	88.46	10.37	77.82
4746	1883	88.82	11.32	72.74
6476	1870	83.84	13.60	32.44
8206	1872	71.72	14.44	38.18
8836	1874	72.70	16.10	37.30
7886	1878	71.48	18.30	37.78
8386	1873	71.43	18.73	33.20
8126	1880	72.14	17.14	38.23
8366	1882	73.28	13.42	81.88
10636	1884	74.38	13.33	83.22
11316	1888	76.66	18.22	84.73
12046	1883	78.83	18.68	88.23
12776	1880	77.83	20.37	83.36
13606	1882	78.04	21.21	100.26
14236	1884	78.80	21.28	83.18
14886	1888	76.78	21.38	87.13
16886	1883	76.12	20.67	86.88
16426	2000	74.87	20.88	86.88
17166	2002	76.00	20.82	86.82
17886	2004	71.76	20.68	82.34

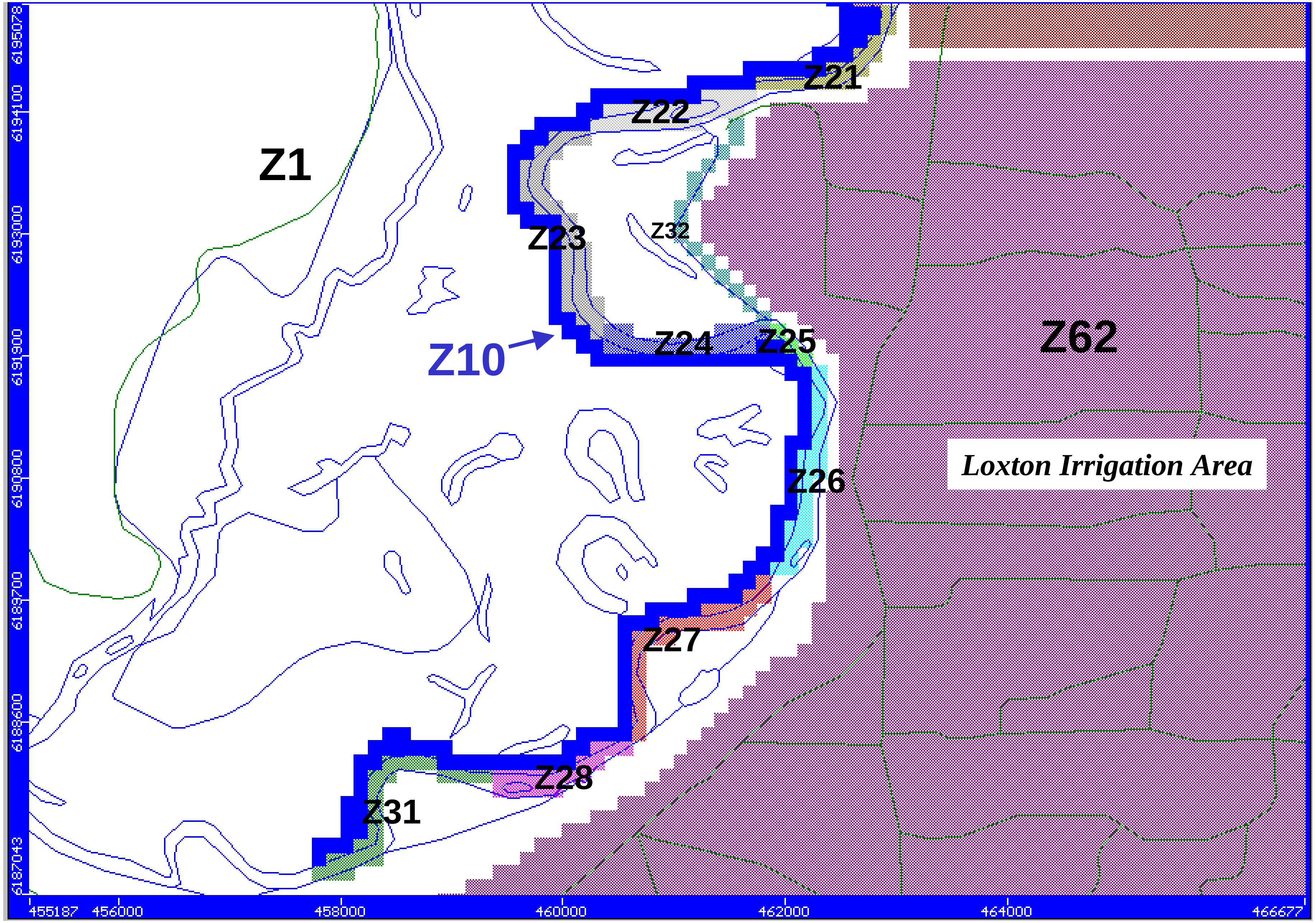
Appendix A-2-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-2 (Loxton Area)



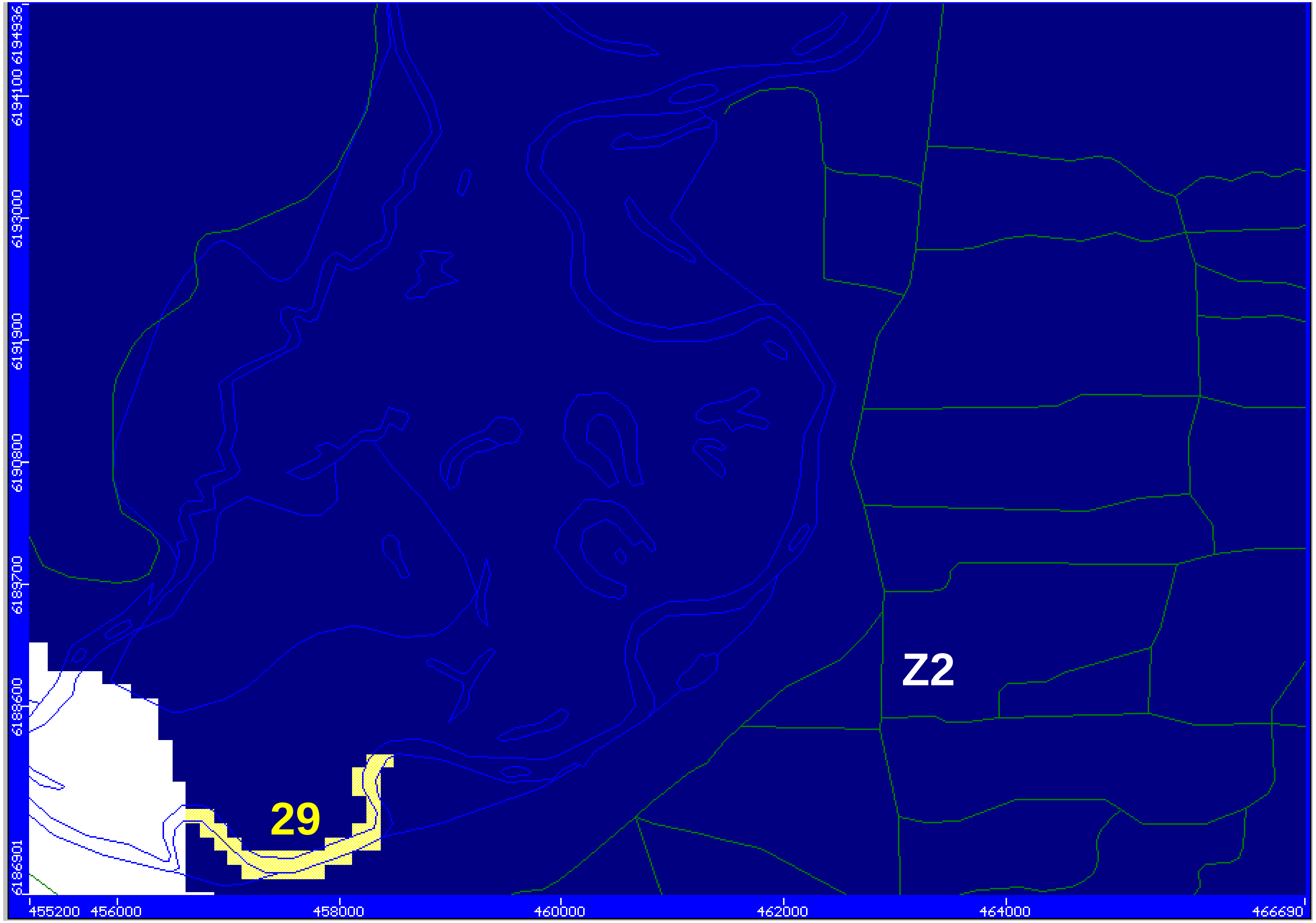
Appendix A-2-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-2 (Loxton Area)

A-3 Groundwater flux and salt load entering the River Murray Scenario-3 (Loxton Area)

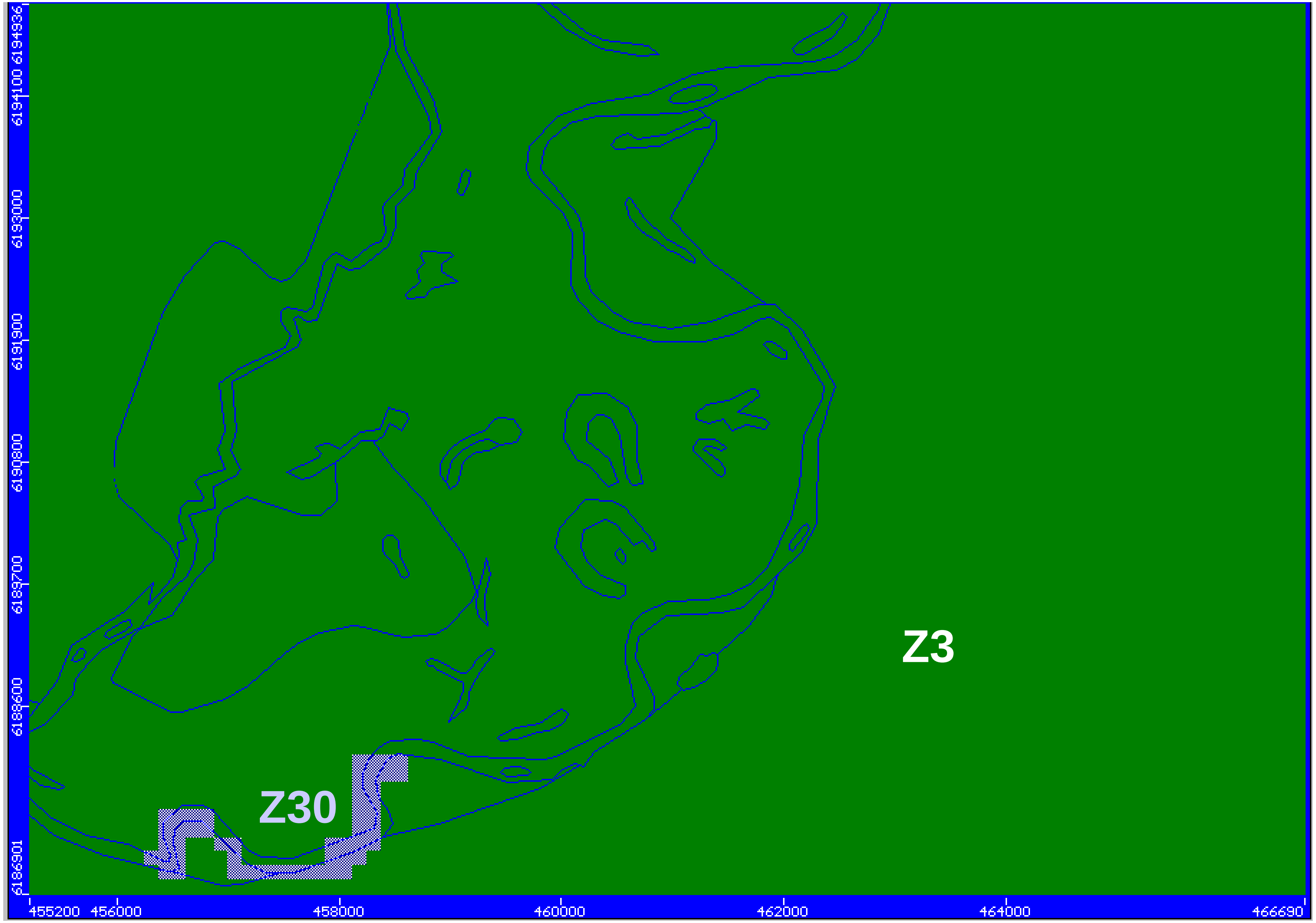
- Flow budget zones (Loxton Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix A-3-1a Flow budget zones in model Layer-1 (Loxton Area)



Appendix A-3-1b Flow budget zones in model Layer-2 (Loxton Area)



Appendix A-3-1c Flow budget zones in model Layer-3 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
30	1955	39.1	4.1	0.0	3.0	25.8	95.4	26.3	16.8	0.0	16.9	227
365	1956	39.1	4.1	0.0	3.1	26.1	95.9	26.3	16.8	0.0	16.9	228
1095	1958	200.1	106.7	0.0	96.1	228.4	292.2	27.1	16.9	0.0	17.1	985
1825	1960	366.5	210.9	0.0	187.2	386.3	459.2	29.7	17.3	14.0	17.5	1689
2555	1962	510.0	276.9	0.0	245.1	498.3	605.0	35.9	18.2	39.8	18.7	2248
3285	1964	624.4	317.4	1.1	284.6	581.9	758.0	47.5	19.8	59.2	20.4	2714
4015	1966	714.6	343.8	3.1	311.1	647.6	918.4	63.0	21.7	72.8	22.3	3118
4745	1968	720.9	325.9	2.6	296.9	648.3	1061.2	81.3	23.9	61.1	24.2	3246
5475	1970	735.1	318.0	2.3	294.2	664.7	1186.5	102.3	26.3	57.1	26.3	3413
6205	1972	755.5	317.9	2.4	296.7	686.5	1298.5	123.3	28.8	57.1	28.4	3595
6935	1974	766.6	314.3	2.4	294.5	679.8	1335.1	142.4	31.5	54.9	30.5	3652
7665	1976	751.0	298.3	1.7	281.4	656.5	1363.4	160.0	34.3	46.0	32.7	3625
8395	1978	745.3	290.3	1.3	275.0	651.9	1397.6	173.4	37.1	42.2	34.8	3649
9125	1980	746.6	287.5	1.2	273.4	654.4	1431.0	184.3	39.8	40.9	37.0	3696
9855	1982	751.9	287.5	1.3	275.7	660.6	1464.8	194.9	42.6	40.9	39.2	3759
10585	1984	760.0	288.6	1.4	277.4	667.6	1496.0	203.0	45.3	41.3	41.6	3822
11315	1986	769.3	290.1	1.6	279.5	675.0	1525.7	210.2	47.8	42.0	43.9	3885
12045	1988	778.7	291.8	1.8	281.7	682.3	1554.0	216.8	50.3	42.8	46.2	3946
12775	1990	788.6	293.9	2.2	285.6	690.1	1582.3	224.5	52.9	43.7	48.7	4012
13505	1992	798.3	295.8	2.4	287.8	697.0	1606.5	230.1	55.4	44.5	51.1	4069
14235	1994	807.1	297.5	2.5	289.8	703.2	1627.7	234.9	57.8	45.3	53.5	4119
14965	1996	816.4	299.3	2.7	291.8	708.8	1645.8	239.4	60.1	46.0	55.9	4166
15695	1998	825.2	300.6	2.8	291.8	713.1	1659.2	241.6	62.1	46.5	58.0	4201
16425	2000	833.0	301.9	2.9	293.2	717.2	1671.4	245.1	64.2	47.1	60.1	4236
17155	2002	840.4	303.1	3.0	294.6	720.8	1681.5	248.2	66.2	47.7	62.2	4268
17885	2004	848.1	304.4	3.1	295.8	724.0	1689.9	250.9	68.1	48.2	64.2	4297
18615	2006	855.0	305.1	3.1	295.3	726.1	1695.1	251.6	69.7	48.5	65.9	4315
19345	2008	860.8	305.9	3.2	296.1	728.3	1700.6	253.6	71.4	48.8	67.7	4336
20075	2010	866.3	306.8	3.3	296.9	730.3	1705.4	255.4	72.9	49.2	69.3	4356
20805	2012	871.2	307.6	3.4	297.7	732.1	1709.6	257.0	74.4	49.5	71.0	4373
21535	2014	875.3	308.2	3.4	298.4	733.6	1713.2	258.4	75.7	49.8	72.5	4388
22265	2016	878.7	308.7	3.5	298.9	735.0	1716.4	259.7	77.0	50.0	74.0	4402
22995	2018	881.5	309.2	3.5	299.4	736.1	1719.2	260.8	78.1	50.2	75.4	4413
23725	2020	884.2	309.7	3.6	299.9	737.1	1721.6	261.8	79.1	50.4	76.7	4424
24455	2022	886.6	310.1	3.6	300.3	738.0	1723.7	262.8	80.1	50.6	77.9	4434
25185	2024	888.7	310.4	3.6	300.6	738.8	1725.6	263.6	80.9	50.7	79.0	4442
25915	2026	890.4	310.7	3.7	300.9	739.5	1727.3	264.4	81.7	50.8	80.1	4450
26645	2028	891.8	311.0	3.7	301.2	740.1	1728.8	265.1	82.4	51.0	81.0	4456

Appendix A-3-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-3 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
27375	2030	893.1	311.2	3.7	301.4	740.7	1730.1	265.7	83.1	51.1	81.9	4462
28105	2032	894.2	311.4	3.7	301.6	741.2	1731.3	266.3	83.7	51.1	82.7	4467
28835	2034	895.1	311.6	3.8	301.8	741.6	1732.3	266.8	84.3	51.2	83.5	4472
29565	2036	895.9	311.7	3.8	302.0	742.0	1733.3	267.3	84.8	51.3	84.2	4476
30295	2038	896.6	311.9	3.8	302.2	742.3	1734.2	267.8	85.3	51.3	84.9	4480
31025	2040	897.3	312.0	3.8	302.3	742.6	1734.9	268.2	85.8	51.4	85.5	4484
31755	2042	897.9	312.1	3.8	302.5	742.9	1735.7	268.7	86.2	51.5	86.1	4487
32485	2044	898.4	312.2	3.8	302.6	743.1	1736.3	269.0	86.6	51.5	86.7	4490
33215	2046	898.9	312.3	3.9	302.7	743.4	1737.0	269.4	87.0	51.5	87.2	4493
33945	2048	899.4	312.4	3.9	302.8	743.6	1737.5	269.7	87.3	51.6	87.7	4496
34675	2050	899.8	312.5	3.9	302.9	743.8	1738.1	270.0	87.6	51.6	88.2	4498
35405	2052	900.2	312.6	3.9	303.0	744.0	1738.6	270.3	88.0	51.7	88.6	4501
36135	2054	900.6	312.7	3.9	303.1	744.2	1739.1	270.6	88.2	51.7	89.0	4503
36865	2056	900.9	312.7	3.9	303.2	744.3	1739.5	270.9	88.5	51.7	89.4	4505
37595	2058	901.2	312.8	3.9	303.2	744.5	1739.9	271.1	88.8	51.8	89.7	4507
38325	2060	901.5	312.9	3.9	303.3	744.6	1740.3	271.4	89.0	51.8	90.1	4509
39055	2062	901.8	312.9	3.9	303.4	744.8	1740.7	271.6	89.3	51.8	90.4	4511
39785	2064	902.1	313.0	3.9	303.5	744.9	1741.1	271.8	89.5	51.8	90.7	4512
40515	2066	902.4	313.1	4.0	303.5	745.0	1741.4	272.0	89.7	51.9	91.0	4514
41245	2068	902.6	313.1	4.0	303.6	745.2	1741.7	272.2	89.9	51.9	91.3	4515
41975	2070	902.8	313.2	4.0	303.6	745.3	1742.1	272.4	90.1	51.9	91.6	4517
42705	2072	903.1	313.2	4.0	303.7	745.4	1742.4	272.6	90.3	51.9	91.8	4518
43435	2074	903.3	313.3	4.0	303.7	745.5	1742.7	272.7	90.4	51.9	92.1	4520
44165	2076	903.5	313.3	4.0	303.8	745.6	1742.9	272.9	90.6	52.0	92.3	4521
44895	2078	903.7	313.3	4.0	303.9	745.7	1743.2	273.1	90.8	52.0	92.5	4522
45625	2080	903.9	313.4	4.0	303.9	745.8	1743.5	273.2	90.9	52.0	92.8	4523
46355	2082	904.0	313.4	4.0	303.9	745.9	1743.7	273.4	91.1	52.0	93.0	4524
47085	2084	904.2	313.5	4.0	304.0	745.9	1743.9	273.5	91.2	52.0	93.2	4525
47815	2086	904.4	313.5	4.0	304.0	746.0	1744.2	273.6	91.3	52.0	93.4	4527
48545	2088	904.5	313.5	4.0	304.1	746.1	1744.4	273.8	91.5	52.1	93.6	4528
49275	2090	904.7	313.6	4.0	304.1	746.2	1744.6	273.9	91.6	52.1	93.7	4528
50005	2092	904.8	313.6	4.0	304.2	746.3	1744.8	274.0	91.7	52.1	93.9	4529
50735	2094	905.0	313.6	4.0	304.2	746.3	1745.0	274.1	91.8	52.1	94.1	4530
51465	2096	905.1	313.7	4.0	304.2	746.4	1745.2	274.3	91.9	52.1	94.2	4531
52195	2098	905.2	313.7	4.0	304.3	746.5	1745.4	274.4	92.1	52.1	94.4	4532
52925	2100	905.4	313.7	4.0	304.3	746.5	1745.5	274.5	92.2	52.1	94.6	4533
53655	2102	905.5	313.8	4.0	304.3	746.6	1745.7	274.6	92.3	52.1	94.7	4534
54385	2104	905.6	313.8	4.0	304.4	746.6	1745.9	274.7	92.4	52.2	94.8	4534
TDS	*mg/L*	*25807*	*29055*	*30760*	*39978*	*18716*	*7710*	*35935*	*29140*	*39117*	*24080*	

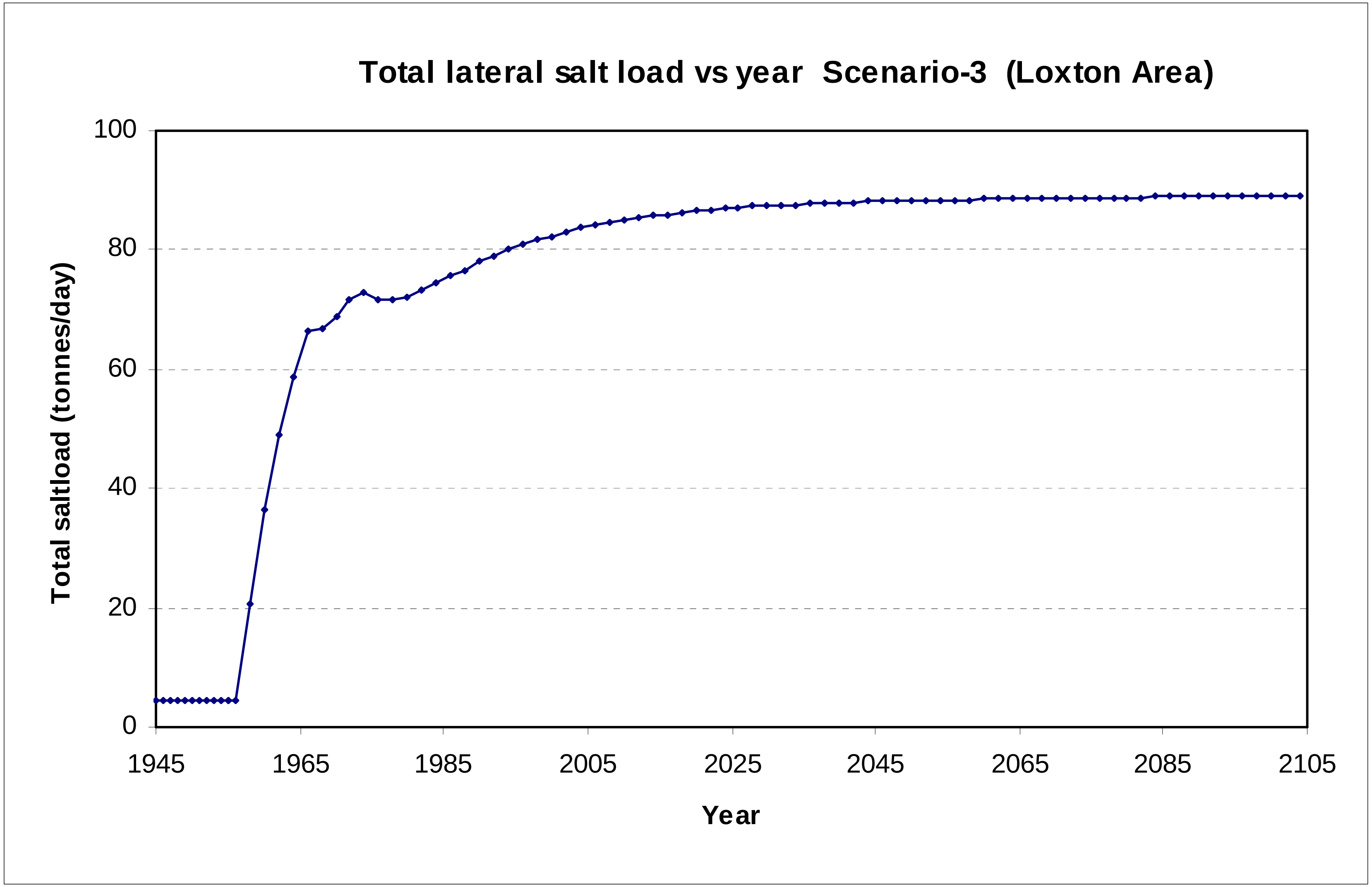
Appendix A-3-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-3 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1946	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1947	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1948	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1949	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1950	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1951	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1952	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1953	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1954	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
30	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
365	1956	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
1095	1958	5.2	3.1	0.0	3.8	4.3	2.3	1.0	0.5	0.0	0.4	21
1825	1960	9.5	6.1	0.0	7.5	7.2	3.5	1.1	0.5	0.5	0.4	36
2555	1962	13.2	8.0	0.0	9.8	9.3	4.7	1.3	0.5	1.6	0.5	49
3285	1964	16.1	9.2	0.0	11.4	10.9	5.8	1.7	0.6	2.3	0.5	59
4015	1966	18.4	10.0	0.1	12.4	12.1	7.1	2.3	0.6	2.8	0.5	66
4745	1968	18.6	9.5	0.1	11.9	12.1	8.2	2.9	0.7	2.4	0.6	67
5475	1970	19.0	9.2	0.1	11.8	12.4	9.1	3.7	0.8	2.2	0.6	69
6205	1972	19.5	9.2	0.1	11.9	12.8	10.0	4.4	0.8	2.2	0.7	72
6935	1974	19.8	9.1	0.1	11.8	12.7	10.3	5.1	0.9	2.1	0.7	73
7665	1976	19.4	8.7	0.1	11.3	12.3	10.5	5.7	1.0	1.8	0.8	71
8395	1978	19.2	8.4	0.0	11.0	12.2	10.8	6.2	1.1	1.6	0.8	71
9125	1980	19.3	8.4	0.0	10.9	12.2	11.0	6.6	1.2	1.6	0.9	72
9855	1982	19.4	8.4	0.0	11.0	12.4	11.3	7.0	1.2	1.6	0.9	73
10585	1984	19.6	8.4	0.0	11.1	12.5	11.5	7.3	1.3	1.6	1.0	74
11315	1986	19.9	8.4	0.0	11.2	12.6	11.8	7.6	1.4	1.6	1.1	76
12045	1988	20.1	8.5	0.1	11.3	12.8	12.0	7.8	1.5	1.7	1.1	77
12775	1990	20.4	8.5	0.1	11.4	12.9	12.2	8.1	1.5	1.7	1.2	78
13505	1992	20.6	8.6	0.1	11.5	13.0	12.4	8.3	1.6	1.7	1.2	79
14235	1994	20.8	8.6	0.1	11.6	13.2	12.5	8.4	1.7	1.8	1.3	80
14965	1996	21.1	8.7	0.1	11.7	13.3	12.7	8.6	1.7	1.8	1.3	81
15695	1998	21.3	8.7	0.1	11.7	13.3	12.8	8.7	1.8	1.8	1.4	82
16425	2000	21.5	8.8	0.1	11.7	13.4	12.9	8.8	1.9	1.8	1.4	82
17155	2002	21.7	8.8	0.1	11.8	13.5	13.0	8.9	1.9	1.9	1.5	83
17885	2004	21.9	8.8	0.1	11.8	13.5	13.0	9.0	2.0	1.9	1.5	84
18615	2006	22.1	8.9	0.1	11.8	13.6	13.1	9.0	2.0	1.9	1.6	84
19345	2008	22.2	8.9	0.1	11.8	13.6	13.1	9.1	2.1	1.9	1.6	85
20075	2010	22.4	8.9	0.1	11.9	13.7	13.1	9.2	2.1	1.9	1.7	85
20805	2012	22.5	8.9	0.1	11.9	13.7	13.2	9.2	2.2	1.9	1.7	85
21535	2014	22.6	9.0	0.1	11.9	13.7	13.2	9.3	2.2	1.9	1.7	86
22265	2016	22.7	9.0	0.1	11.9	13.8	13.2	9.3	2.2	2.0	1.8	86

Appendix A-3-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-3 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	22.7	9.0	0.1	12.0	13.8	13.3	9.4	2.3	2.0	1.8	86
23725	2020	22.8	9.0	0.1	12.0	13.8	13.3	9.4	2.3	2.0	1.8	87
24455	2022	22.9	9.0	0.1	12.0	13.8	13.3	9.4	2.3	2.0	1.9	87
25185	2024	22.9	9.0	0.1	12.0	13.8	13.3	9.5	2.4	2.0	1.9	87
25915	2026	23.0	9.0	0.1	12.0	13.8	13.3	9.5	2.4	2.0	1.9	87
26645	2028	23.0	9.0	0.1	12.0	13.9	13.3	9.5	2.4	2.0	2.0	87
27375	2030	23.0	9.0	0.1	12.1	13.9	13.3	9.5	2.4	2.0	2.0	87
28105	2032	23.1	9.0	0.1	12.1	13.9	13.3	9.6	2.4	2.0	2.0	88
28835	2034	23.1	9.1	0.1	12.1	13.9	13.4	9.6	2.5	2.0	2.0	88
29565	2036	23.1	9.1	0.1	12.1	13.9	13.4	9.6	2.5	2.0	2.0	88
30295	2038	23.1	9.1	0.1	12.1	13.9	13.4	9.6	2.5	2.0	2.0	88
31025	2040	23.2	9.1	0.1	12.1	13.9	13.4	9.6	2.5	2.0	2.1	88
31755	2042	23.2	9.1	0.1	12.1	13.9	13.4	9.7	2.5	2.0	2.1	88
32485	2044	23.2	9.1	0.1	12.1	13.9	13.4	9.7	2.5	2.0	2.1	88
33215	2046	23.2	9.1	0.1	12.1	13.9	13.4	9.7	2.5	2.0	2.1	88
33945	2048	23.2	9.1	0.1	12.1	13.9	13.4	9.7	2.5	2.0	2.1	88
34675	2050	23.2	9.1	0.1	12.1	13.9	13.4	9.7	2.6	2.0	2.1	88
35405	2052	23.2	9.1	0.1	12.1	13.9	13.4	9.7	2.6	2.0	2.1	88
36135	2054	23.2	9.1	0.1	12.1	13.9	13.4	9.7	2.6	2.0	2.1	88
36865	2056	23.2	9.1	0.1	12.1	13.9	13.4	9.7	2.6	2.0	2.2	88
37595	2058	23.3	9.1	0.1	12.1	13.9	13.4	9.7	2.6	2.0	2.2	88
38325	2060	23.3	9.1	0.1	12.1	13.9	13.4	9.8	2.6	2.0	2.2	88
39055	2062	23.3	9.1	0.1	12.1	13.9	13.4	9.8	2.6	2.0	2.2	89
39785	2064	23.3	9.1	0.1	12.1	13.9	13.4	9.8	2.6	2.0	2.2	89
40515	2066	23.3	9.1	0.1	12.1	13.9	13.4	9.8	2.6	2.0	2.2	89
41245	2068	23.3	9.1	0.1	12.1	13.9	13.4	9.8	2.6	2.0	2.2	89
41975	2070	23.3	9.1	0.1	12.1	13.9	13.4	9.8	2.6	2.0	2.2	89
42705	2072	23.3	9.1	0.1	12.1	14.0	13.4	9.8	2.6	2.0	2.2	89
43435	2074	23.3	9.1	0.1	12.1	14.0	13.4	9.8	2.6	2.0	2.2	89
44165	2076	23.3	9.1	0.1	12.1	14.0	13.4	9.8	2.6	2.0	2.2	89
44895	2078	23.3	9.1	0.1	12.1	14.0	13.4	9.8	2.6	2.0	2.2	89
45625	2080	23.3	9.1	0.1	12.1	14.0	13.4	9.8	2.6	2.0	2.2	89
46355	2082	23.3	9.1	0.1	12.2	14.0	13.4	9.8	2.7	2.0	2.2	89
47085	2084	23.3	9.1	0.1	12.2	14.0	13.4	9.8	2.7	2.0	2.2	89
47815	2086	23.3	9.1	0.1	12.2	14.0	13.4	9.8	2.7	2.0	2.2	89
48545	2088	23.3	9.1	0.1	12.2	14.0	13.4	9.8	2.7	2.0	2.3	89
49275	2090	23.3	9.1	0.1	12.2	14.0	13.5	9.8	2.7	2.0	2.3	89
50005	2092	23.4	9.1	0.1	12.2	14.0	13.5	9.8	2.7	2.0	2.3	89
50735	2094	23.4	9.1	0.1	12.2	14.0	13.5	9.9	2.7	2.0	2.3	89
51465	2096	23.4	9.1	0.1	12.2	14.0	13.5	9.9	2.7	2.0	2.3	89
52195	2098	23.4	9.1	0.1	12.2	14.0	13.5	9.9	2.7	2.0	2.3	89
52925	2100	23.4	9.1	0.1	12.2	14.0	13.5	9.9	2.7	2.0	2.3	89
53655	2102	23.4	9.1	0.1	12.2	14.0	13.5	9.9	2.7	2.0	2.3	89
54385	2104	23.4	9.1	0.1	12.2	14.0	13.5	9.9	2.7	2.0	2.3	89
TDS	mg/L	25807	29056	30760	39678	18718	7710	35935	29140	39117	24080	

Appendix A-3-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-3 (Loxton Area)



Appendix A-3-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-3 (Loxton Area)

Day	Year	Z2 to Z21 (m^3/day)	Z2 to Z22 (m^3/day)	Z2 to Z23 (m^3/day)	Z2 to Z24 (m^3/day)	Z2 to Z25 (m^3/day)	Z2 to Z26 (m^3/day)	Z2 to Z27 (m^3/day)	Z2 to Z28 (m^3/day)	Z2 to Z29 (m^3/day)	Z3 to Z29 (m^3/day)	Z2 to Z31 (m^3/day)	Z3 to Z30 (m^3/day)	Total Lateral (m^3/day)
30	1955	6.7	0.9	0.0	0.7	1.1	11.0	10.4	21.2	6.8	3.8	0.0	40.5	63
365	1956	6.7	0.9	0.0	1.2	1.6	12.9	10.4	21.0	6.8	3.8	0.0	40.5	65
1095	1958	21.5	9.6	0.0	10.3	9.2	28.9	11.1	21.3	6.8	3.9	0.0	40.8	123
1825	1960	33.8	17.7	0.0	19.3	14.3	46.2	13.0	22.2	6.9	4.1	0.0	41.4	178
2555	1962	43.3	23.3	1.0	26.6	17.8	65.1	16.8	24.7	7.3	4.6	0.1	43.3	231
3285	1964	50.8	27.4	2.4	37.2	20.8	95.1	26.5	28.5	7.7	5.2	0.3	45.7	302
4015	1966	56.6	30.4	3.2	41.8	22.8	119.2	35.6	32.8	8.2	5.7	0.4	48.1	357
4745	1968	58.0	30.3	3.4	42.0	23.1	141.6	45.2	37.4	8.7	6.2	0.6	50.5	396
5475	1970	59.7	30.9	3.9	50.0	24.2	174.3	64.4	42.9	9.2	6.7	0.9	53.0	467
6205	1972	61.6	31.8	4.2	51.5	24.9	192.2	74.3	48.3	9.7	7.2	1.1	55.4	507
6935	1974	62.8	32.2	4.4	52.2	25.0	203.8	82.9	53.9	10.2	7.7	1.4	57.9	537
7665	1976	62.6	31.8	5.1	59.3	25.2	225.6	99.9	60.2	10.7	8.2	1.7	60.5	590
8395	1978	62.8	31.8	5.2	59.3	25.2	232.8	106.0	65.6	11.2	8.6	2.1	62.9	611
9125	1980	63.3	32.0	5.3	59.8	25.3	238.9	111.1	70.8	11.7	9.0	2.4	65.3	630
9855	1982	63.9	32.5	6.3	68.6	26.1	259.0	126.1	76.8	12.2	9.5	2.8	67.9	684
10585	1984	64.9	33.1	6.5	69.3	26.4	264.0	130.0	81.8	12.7	9.9	3.2	70.2	702
11315	1986	65.7	33.6	6.7	70.0	26.6	268.7	133.7	86.5	13.2	10.3	3.6	72.6	719
12045	1988	66.5	34.1	6.9	70.6	26.9	273.0	137.0	91.0	13.7	10.7	4.0	74.9	734
12775	1990	67.4	34.8	8.2	79.7	27.7	292.7	151.1	96.5	14.2	11.2	4.5	77.5	788
13505	1992	68.2	35.2	8.4	80.3	27.9	296.3	153.9	100.9	14.7	11.6	4.9	79.9	802
14235	1994	68.8	35.6	8.6	80.8	28.2	299.4	156.4	105.0	15.2	12.0	5.2	82.3	815
14965	1996	69.7	36.1	8.7	81.4	28.3	302.1	158.7	108.9	15.7	12.4	5.6	84.6	828
15695	1998	70.3	36.4	7.8	73.3	27.9	288.6	149.7	111.4	16.2	12.7	5.7	86.7	800
16425	2000	70.9	36.7	7.9	73.7	28.1	290.4	151.4	114.8	16.6	13.0	6.0	88.8	810
17155	2002	71.5	37.1	8.1	74.0	28.2	291.9	153.0	118.0	17.0	13.4	6.3	90.8	819
17885	2004	72.2	37.4	8.2	74.4	28.3	293.2	154.4	120.9	17.5	13.7	6.6	92.8	827
18615	2006	72.6	37.5	7.2	66.3	27.8	279.4	145.0	122.6	17.8	13.9	6.7	94.5	797
19345	2008	73.0	37.7	7.3	66.6	27.9	280.2	146.1	125.1	18.2	14.2	6.9	96.3	803
20075	2010	73.5	38.0	7.4	66.8	28.0	281.0	147.0	127.4	18.5	14.5	7.1	98.0	809
20805	2012	73.8	38.2	7.5	67.0	28.1	281.6	147.8	129.5	18.9	14.7	7.3	99.6	814
21535	2014	74.1	38.4	7.5	67.2	28.1	282.2	148.6	131.4	19.2	15.0	7.5	101.1	819
22265	2016	74.3	38.5	7.6	67.3	28.2	282.7	149.3	133.2	19.5	15.2	7.7	102.6	823
22995	2018	74.5	38.6	7.6	67.4	28.2	283.2	149.9	134.8	19.8	15.4	7.9	103.9	827
23725	2020	74.8	38.7	7.7	67.6	28.2	283.6	150.4	136.3	20.1	15.6	8.0	105.3	831
24455	2022	74.9	38.8	7.7	67.7	28.3	283.9	151.0	137.6	20.3	15.8	8.1	106.5	834
25185	2024	75.1	38.9	7.8	67.8	28.3	284.3	151.4	138.8	20.6	16.0	8.3	107.7	837
25915	2026	75.2	39.0	7.8	67.8	28.3	284.6	151.8	139.9	20.8	16.2	8.4	108.8	840
26645	2028	75.3	39.0	7.8	67.9	28.4	284.8	152.2	141.0	21.0	16.3	8.5	109.8	842

Appendix A-3-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-3 (Loxton Area)

Day	Year	Z2 to Z21 (m^3/day)	Z2 to Z22 (m^3/day)	Z2 to Z23 (m^3/day)	Z2 to Z24 (m^3/day)	Z2 to Z25 (m^3/day)	Z2 to Z26 (m^3/day)	Z2 to Z27 (m^3/day)	Z2 to Z28 (m^3/day)	Z2 to Z29 (m^3/day)	Z3 to Z29 (m^3/day)	Z2 to Z31 (m^3/day)	Z3 to Z30 (m^3/day)	Total Lateral (m^3/day)
27375	2030	75.4	39.1	7.8	68.0	28.4	285.1	152.6	141.9	21.2	16.5	8.6	110.8	845
28105	2032	75.5	39.1	7.9	68.1	28.4	285.3	152.9	142.8	21.4	16.6	8.7	111.7	847
28835	2034	75.5	39.2	7.9	68.1	28.4	285.5	153.2	143.6	21.6	16.7	8.8	112.6	849
29565	2036	75.6	39.2	7.9	68.2	28.4	285.7	153.5	144.4	21.8	16.9	8.9	113.5	850
30295	2038	75.7	39.2	7.9	68.2	28.4	285.9	153.8	145.1	21.9	17.0	9.0	114.3	852
31025	2040	75.7	39.3	8.0	68.3	28.5	286.0	154.0	145.7	22.1	17.1	9.0	115.0	854
31755	2042	75.8	39.3	8.0	68.3	28.5	286.2	154.3	146.3	22.2	17.2	9.1	115.8	855
32485	2044	75.8	39.3	8.0	68.3	28.5	286.3	154.5	146.9	22.4	17.3	9.2	116.4	857
33215	2046	75.8	39.4	8.0	68.4	28.5	286.5	154.7	147.4	22.5	17.4	9.2	117.1	858
33945	2048	75.9	39.4	8.0	68.4	28.5	286.6	154.9	147.9	22.6	17.5	9.3	117.7	859
34675	2050	75.9	39.4	8.0	68.5	28.5	286.7	155.1	148.4	22.7	17.6	9.4	118.3	860
35405	2052	76.0	39.4	8.0	68.5	28.5	286.8	155.2	148.8	22.9	17.7	9.4	118.9	861
36135	2054	76.0	39.5	8.1	68.5	28.5	286.9	155.4	149.2	23.0	17.8	9.5	119.4	862
36865	2056	76.0	39.5	8.1	68.5	28.5	287.0	155.5	149.6	23.1	17.9	9.5	120.0	863
37595	2058	76.0	39.5	8.1	68.6	28.5	287.1	155.7	150.0	23.2	18.0	9.6	120.5	864
38325	2060	76.1	39.5	8.1	68.6	28.6	287.2	155.8	150.3	23.3	18.1	9.6	120.9	865
39055	2062	76.1	39.5	8.1	68.6	28.6	287.3	156.0	150.6	23.3	18.1	9.6	121.4	866
39785	2064	76.1	39.5	8.1	68.6	28.6	287.4	156.1	151.0	23.4	18.2	9.7	121.8	867
40515	2066	76.1	39.6	8.1	68.7	28.6	287.5	156.2	151.3	23.5	18.3	9.7	122.3	867
41245	2068	76.2	39.6	8.1	68.7	28.6	287.5	156.3	151.5	23.6	18.3	9.8	122.7	868
41975	2070	76.2	39.6	8.1	68.7	28.6	287.6	156.4	151.8	23.7	18.4	9.8	123.1	869
42705	2072	76.2	39.6	8.1	68.7	28.6	287.7	156.5	152.1	23.7	18.4	9.8	123.4	870
43435	2074	76.2	39.6	8.2	68.8	28.6	287.8	156.6	152.3	23.8	18.5	9.9	123.8	870
44165	2076	76.2	39.6	8.2	68.8	28.6	287.8	156.7	152.6	23.9	18.6	9.9	124.1	871
44895	2078	76.3	39.6	8.2	68.8	28.6	287.9	156.8	152.8	24.0	18.6	9.9	124.5	871
45625	2080	76.3	39.7	8.2	68.8	28.6	287.9	156.9	153.0	24.0	18.7	10.0	124.8	872
46355	2082	76.3	39.7	8.2	68.8	28.6	288.0	157.0	153.2	24.1	18.7	10.0	125.1	873
47085	2084	76.3	39.7	8.2	68.8	28.6	288.1	157.1	153.4	24.1	18.8	10.0	125.4	873
47815	2086	76.3	39.7	8.2	68.9	28.6	288.1	157.2	153.6	24.2	18.8	10.0	125.7	874
48545	2088	76.3	39.7	8.2	68.9	28.6	288.2	157.2	153.8	24.2	18.9	10.1	126.0	874
49275	2090	76.3	39.7	8.2	68.9	28.6	288.2	157.3	154.0	24.3	18.9	10.1	126.3	875
50005	2092	76.4	39.7	8.2	68.9	28.6	288.3	157.4	154.1	24.3	19.0	10.1	126.5	875
50735	2094	76.4	39.7	8.2	68.9	28.6	288.3	157.5	154.3	24.4	19.0	10.1	126.8	875
51465	2096	76.4	39.7	8.2	68.9	28.6	288.3	157.5	154.5	24.4	19.0	10.2	127.1	876
52195	2098	76.4	39.8	8.2	68.9	28.6	288.4	157.6	154.6	24.5	19.1	10.2	127.3	876
52925	2100	76.4	39.8	8.2	68.9	28.6	288.4	157.7	154.8	24.5	19.1	10.2	127.5	877
53655	2102	76.4	39.8	8.2	69.0	28.6	288.5	157.7	154.9	24.6	19.2	10.2	127.8	877
54385	2104	76.4	39.8	8.3	69.0	28.7	288.5	157.8	155.1	24.6	19.2	10.2	128.0	877
TDS	mg/L	32287	32287	32287	32287	32287	29405	9700	7550	3300	32287	32287	32287	

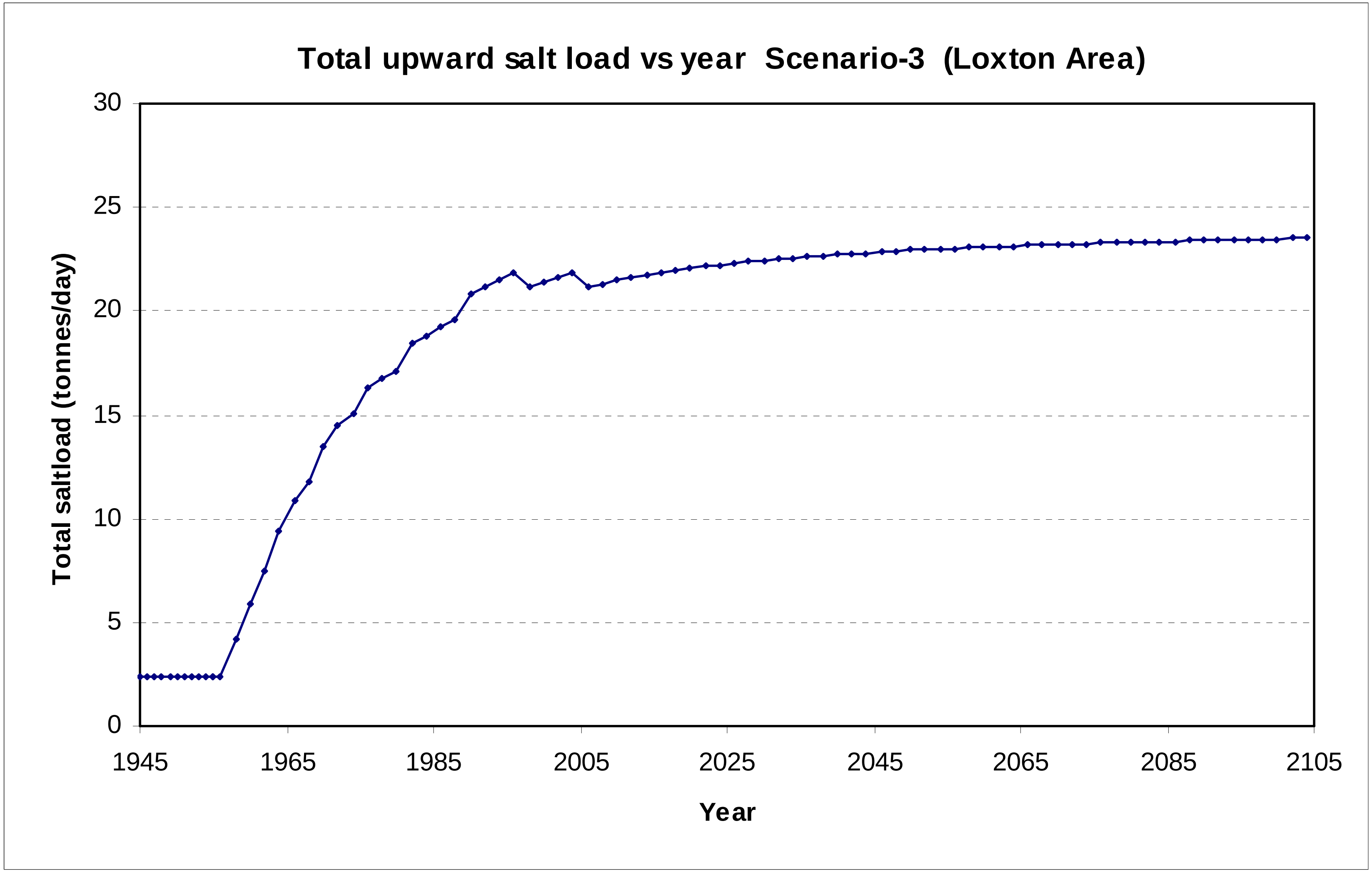
Appendix A-3-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-3 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z29 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1946	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1947	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1948	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1949	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1950	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1951	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1952	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1953	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1954	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
30	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
365	1956	0.2	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.0	0.1	0.0	1.3	2
1095	1958	0.7	0.3	0.0	0.3	0.3	0.8	0.1	0.2	0.0	0.1	0.0	1.3	4
1825	1960	1.1	0.6	0.0	0.6	0.5	1.4	0.1	0.2	0.0	0.1	0.0	1.3	6
2555	1962	1.4	0.8	0.0	0.9	0.6	1.9	0.2	0.2	0.0	0.1	0.0	1.4	7
3285	1964	1.6	0.9	0.1	1.2	0.7	2.8	0.3	0.2	0.0	0.2	0.0	1.5	9
4015	1966	1.8	1.0	0.1	1.3	0.7	3.5	0.3	0.2	0.0	0.2	0.0	1.6	11
4745	1968	1.9	1.0	0.1	1.4	0.7	4.2	0.4	0.3	0.0	0.2	0.0	1.6	12
5475	1970	1.9	1.0	0.1	1.6	0.8	5.1	0.6	0.3	0.0	0.2	0.0	1.7	14
6205	1972	2.0	1.0	0.1	1.7	0.8	5.7	0.7	0.4	0.0	0.2	0.0	1.8	14
6935	1974	2.0	1.0	0.1	1.7	0.8	6.0	0.8	0.4	0.0	0.2	0.0	1.9	15
7665	1976	2.0	1.0	0.2	1.9	0.8	6.6	1.0	0.5	0.0	0.3	0.1	2.0	16
8395	1978	2.0	1.0	0.2	1.9	0.8	6.8	1.0	0.5	0.0	0.3	0.1	2.0	17
9125	1980	2.0	1.0	0.2	1.9	0.8	7.0	1.1	0.5	0.0	0.3	0.1	2.1	17
9855	1982	2.1	1.0	0.2	2.2	0.8	7.6	1.2	0.6	0.0	0.3	0.1	2.2	18
10585	1984	2.1	1.1	0.2	2.2	0.9	7.8	1.3	0.6	0.0	0.3	0.1	2.3	19
11315	1986	2.1	1.1	0.2	2.3	0.9	7.9	1.3	0.7	0.0	0.3	0.1	2.3	19
12045	1988	2.1	1.1	0.2	2.3	0.9	8.0	1.3	0.7	0.0	0.3	0.1	2.4	20
12775	1990	2.2	1.1	0.3	2.6	0.9	8.6	1.5	0.7	0.0	0.4	0.1	2.5	21
13505	1992	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.0	0.4	0.2	2.6	21
14235	1994	2.2	1.1	0.3	2.6	0.9	8.8	1.5	0.8	0.1	0.4	0.2	2.7	22
14965	1996	2.2	1.2	0.3	2.6	0.9	8.9	1.5	0.8	0.1	0.4	0.2	2.7	22
15695	1998	2.3	1.2	0.3	2.4	0.9	8.5	1.5	0.8	0.1	0.4	0.2	2.8	21
16425	2000	2.3	1.2	0.3	2.4	0.9	8.5	1.5	0.9	0.1	0.4	0.2	2.9	21
17155	2002	2.3	1.2	0.3	2.4	0.9	8.6	1.5	0.9	0.1	0.4	0.2	2.9	22
17885	2004	2.3	1.2	0.3	2.4	0.9	8.6	1.5	0.9	0.1	0.4	0.2	3.0	22
18615	2006	2.3	1.2	0.2	2.1	0.9	8.2	1.4	0.9	0.1	0.4	0.2	3.0	21
19345	2008	2.4	1.2	0.2	2.1	0.9	8.2	1.4	0.9	0.1	0.5	0.2	3.1	21
20075	2010	2.4	1.2	0.2	2.2	0.9	8.3	1.4	1.0	0.1	0.5	0.2	3.2	21
20805	2012	2.4	1.2	0.2	2.2	0.9	8.3	1.4	1.0	0.1	0.5	0.2	3.2	22
21535	2014	2.4	1.2	0.2	2.2	0.9	8.3	1.4	1.0	0.1	0.5	0.2	3.3	22
22265	2016	2.4	1.2	0.2	2.2	0.9	8.3	1.4	1.0	0.1	0.5	0.2	3.3	22

Appendix A-3-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-3 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z29 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	2.4	1.2	0.2	2.2	0.9	8.3	1.5	1.0	0.1	0.5	0.3	3.4	22
23725	2020	2.4	1.2	0.2	2.2	0.9	8.3	1.5	1.0	0.1	0.5	0.3	3.4	22
24455	2022	2.4	1.3	0.2	2.2	0.9	8.3	1.5	1.0	0.1	0.5	0.3	3.4	22
25185	2024	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.0	0.1	0.5	0.3	3.5	22
25915	2026	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.5	0.3	3.5	22
26645	2028	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.5	0.3	3.5	22
27375	2030	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.5	0.3	3.6	22
28105	2032	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.5	0.3	3.6	23
28835	2034	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.5	0.3	3.6	23
29565	2036	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.5	0.3	3.7	23
30295	2038	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.5	0.3	3.7	23
31025	2040	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.7	23
31755	2042	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.7	23
32485	2044	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.8	23
33215	2046	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.8	23
33945	2048	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.8	23
34675	2050	2.4	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.8	23
35405	2052	2.5	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.8	23
36135	2054	2.5	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.9	23
36865	2056	2.5	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.9	23
37595	2058	2.5	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.9	23
38325	2060	2.5	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.9	23
39055	2062	2.5	1.3	0.3	2.2	0.9	8.4	1.5	1.1	0.1	0.6	0.3	3.9	23
39785	2064	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.1	0.1	0.6	0.3	3.9	23
40515	2066	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.1	0.1	0.6	0.3	3.9	23
41245	2068	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.1	0.1	0.6	0.3	4.0	23
41975	2070	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.1	0.1	0.6	0.3	4.0	23
42705	2072	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.1	0.1	0.6	0.3	4.0	23
43435	2074	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.0	23
44165	2076	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.0	23
44895	2078	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.0	23
45625	2080	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.0	23
46355	2082	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.0	23
47085	2084	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.0	23
47815	2086	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	23
48545	2088	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	23
49275	2090	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	23
50005	2092	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	23
50735	2094	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	23
51465	2096	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	23
52195	2098	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	23
52925	2100	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	23
53655	2102	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	23
54385	2104	2.5	1.3	0.3	2.2	0.9	8.5	1.5	1.2	0.1	0.6	0.3	4.1	24
TDS	mg/L	32267	32267	32267	32267	32267	29405	9700	7550	3300	32267	32267	32267	

Appendix A-3-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-3 (Loxton Area)

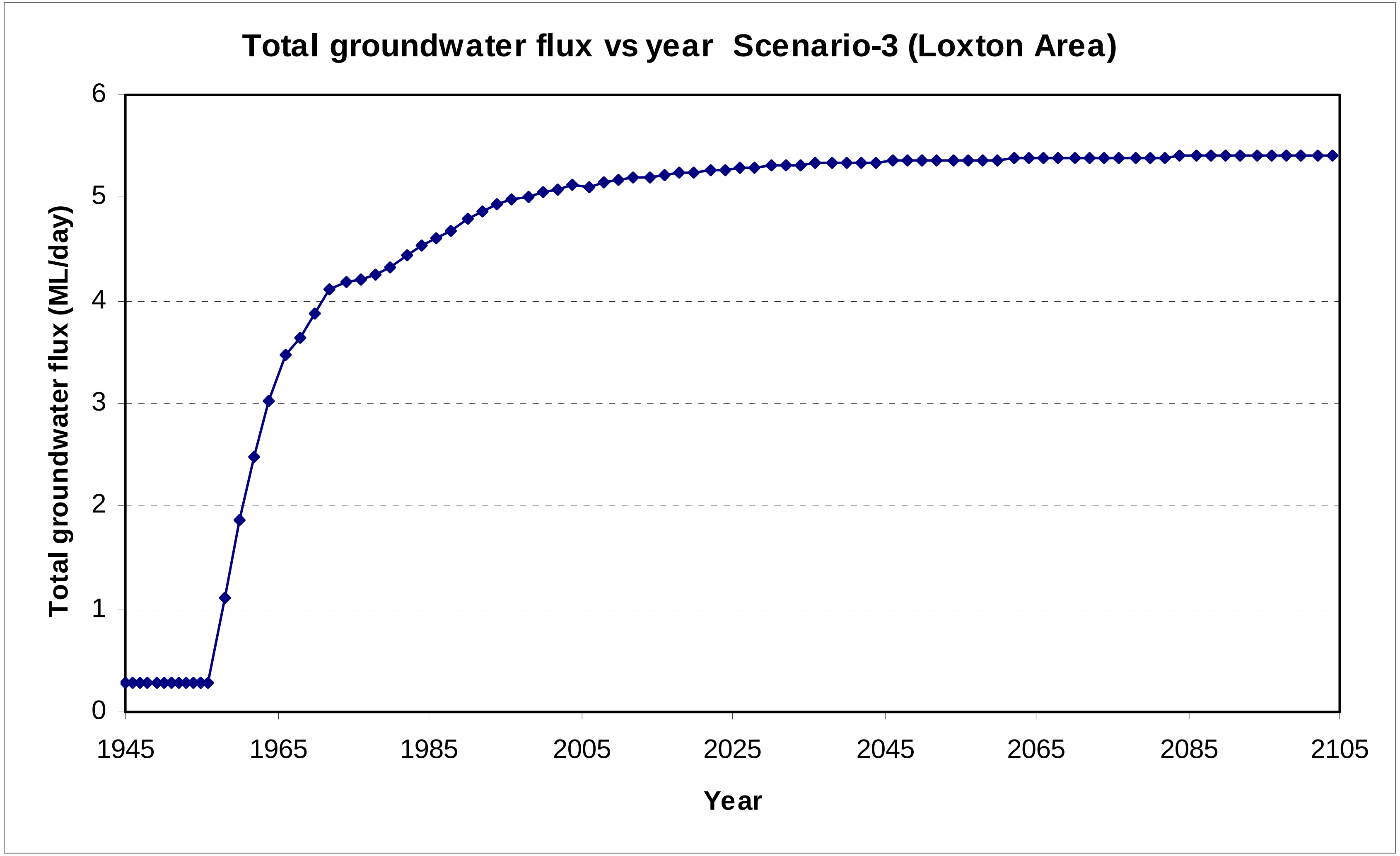


Appendix A-3-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-3 (Loxton Area)

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
0	1945	0.23	0.06	0.29
0	1946	0.23	0.06	0.29
0	1947	0.23	0.06	0.29
0	1948	0.23	0.06	0.29
0	1949	0.23	0.06	0.29
0	1950	0.23	0.06	0.29
0	1951	0.23	0.06	0.29
0	1952	0.23	0.06	0.29
0	1953	0.23	0.06	0.29
0	1954	0.23	0.06	0.29
0	1955	0.23	0.06	0.29
30	1955	0.23	0.06	0.29
365	1956	0.23	0.07	0.29
1095	1958	0.98	0.12	1.11
1825	1960	1.69	0.18	1.87
2555	1962	2.25	0.23	2.48
3285	1964	2.71	0.30	3.02
4015	1966	3.12	0.36	3.48
4745	1968	3.25	0.40	3.64
5475	1970	3.41	0.47	3.88
6205	1972	3.60	0.51	4.10
6935	1974	3.65	0.54	4.19
7665	1976	3.63	0.59	4.22
8395	1978	3.65	0.61	4.26
9125	1980	3.70	0.63	4.33
9855	1982	3.76	0.68	4.44
10585	1984	3.82	0.70	4.52
11315	1986	3.89	0.72	4.60
12045	1988	3.95	0.73	4.68
12775	1990	4.01	0.79	4.80
13505	1992	4.07	0.80	4.87
14235	1994	4.12	0.82	4.93
14965	1996	4.17	0.83	4.99
15695	1998	4.20	0.80	5.00
16425	2000	4.24	0.81	5.05
17155	2002	4.27	0.82	5.09
17885	2004	4.30	0.83	5.12
18615	2006	4.32	0.80	5.11
19345	2008	4.34	0.80	5.14
20075	2010	4.36	0.81	5.16
20805	2012	4.37	0.81	5.19
21535	2014	4.39	0.82	5.21
22265	2016	4.40	0.82	5.23

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
22995	2018	4.41	0.83	5.24
23725	2020	4.42	0.83	5.25
24455	2022	4.43	0.83	5.27
25185	2024	4.44	0.84	5.28
25915	2026	4.45	0.84	5.29
26645	2028	4.46	0.84	5.30
27375	2030	4.46	0.84	5.31
28105	2032	4.47	0.85	5.31
28835	2034	4.47	0.85	5.32
29565	2036	4.48	0.85	5.33
30295	2038	4.48	0.85	5.33
31025	2040	4.48	0.85	5.34
31755	2042	4.49	0.86	5.34
32485	2044	4.49	0.86	5.35
33215	2046	4.49	0.86	5.35
33945	2048	4.50	0.86	5.35
34675	2050	4.50	0.86	5.36
35405	2052	4.50	0.86	5.36
36135	2054	4.50	0.86	5.37
36865	2056	4.51	0.86	5.37
37595	2058	4.51	0.86	5.37
38325	2060	4.51	0.87	5.37
39055	2062	4.51	0.87	5.38
39785	2064	4.51	0.87	5.38
40515	2066	4.51	0.87	5.38
41245	2068	4.52	0.87	5.38
41975	2070	4.52	0.87	5.39
42705	2072	4.52	0.87	5.39
43435	2074	4.52	0.87	5.39
44165	2076	4.52	0.87	5.39
44895	2078	4.52	0.87	5.39
45625	2080	4.52	0.87	5.40
46355	2082	4.52	0.87	5.40
47085	2084	4.53	0.87	5.40
47815	2086	4.53	0.87	5.40
48545	2088	4.53	0.87	5.40
49275	2090	4.53	0.87	5.40
50005	2092	4.53	0.88	5.40
50735	2094	4.53	0.88	5.41
51465	2096	4.53	0.88	5.41
52195	2098	4.53	0.88	5.41
52925	2100	4.53	0.88	5.41
53655	2102	4.53	0.88	5.41
54385	2104	4.53	0.88	5.41

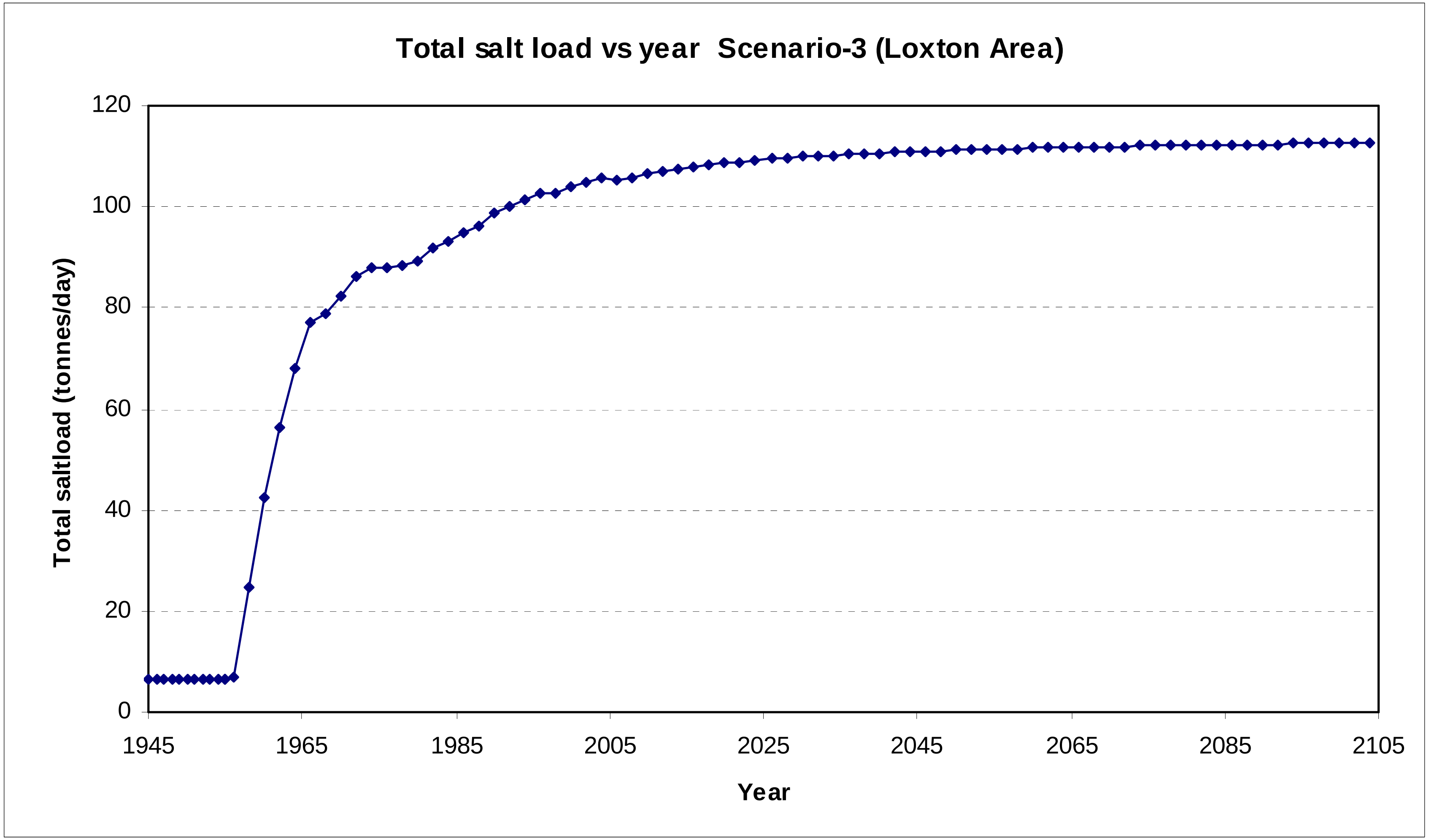
Appendix A-3-6a Predicted total groundwater flux (ML/day) in Scenario-3 (Loxton Area)



Appendix A-3-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-3 (Loxton Area)

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
0	1945	4.31	2.34	6.65
0	1946	4.31	2.34	6.65
0	1947	4.31	2.34	6.65
0	1948	4.31	2.34	6.65
0	1949	4.31	2.34	6.65
0	1950	4.31	2.34	6.65
0	1951	4.31	2.34	6.65
0	1952	4.31	2.34	6.65
0	1953	4.31	2.34	6.65
0	1954	4.31	2.34	6.65
0	1955	4.31	2.34	6.65
30	1955	4.31	2.34	6.65
365	1956	4.32	2.43	6.74
1095	1958	20.51	4.22	24.73
1825	1960	36.38	5.89	42.27
2555	1962	48.83	7.45	56.28
3285	1964	58.58	9.41	67.99
4015	1966	66.45	10.87	77.32
4745	1968	66.92	11.82	78.74
5475	1970	68.94	13.50	82.44
6205	1972	71.72	14.44	86.16
6935	1974	72.70	15.10	87.80
7665	1976	71.49	16.30	87.79
8395	1978	71.48	16.73	88.20
9125	1980	72.14	17.14	89.28
9855	1982	73.26	18.42	91.69
10585	1984	74.39	18.83	93.22
11315	1986	75.55	19.22	94.78
12045	1988	76.68	19.59	96.28
12775	1990	77.98	20.88	98.86
13505	1992	79.06	21.22	100.28
14235	1994	80.03	21.53	101.56
14965	1996	80.96	21.84	102.80
15695	1998	81.63	21.19	102.82
16425	2000	82.36	21.42	103.78
17155	2002	83.03	21.64	104.67
17885	2004	83.66	21.85	105.51
18615	2006	84.04	21.15	105.19
19345	2008	84.51	21.31	105.82
20075	2010	84.95	21.46	106.42
20805	2012	85.35	21.60	106.95
21535	2014	85.70	21.73	107.43
22265	2016	86.00	21.84	107.85
22995	2018	86.27	21.95	108.22
23725	2020	86.52	22.05	108.57
24455	2022	86.74	22.14	108.88
25185	2024	86.93	22.23	109.16
25915	2026	87.11	22.31	109.41
26645	2028	87.26	22.38	109.64
27375	2030	87.40	22.44	109.84
28105	2032	87.52	22.51	110.03
28835	2034	87.63	22.57	110.20
29565	2036	87.73	22.62	110.35
30295	2038	87.82	22.67	110.50
31025	2040	87.91	22.72	110.63
31755	2042	87.99	22.77	110.76
32485	2044	88.06	22.81	110.87
33215	2046	88.13	22.85	110.98
33945	2048	88.19	22.89	111.08
34675	2050	88.25	22.93	111.18
35405	2052	88.31	22.96	111.27
36135	2054	88.36	23.00	111.35
36865	2056	88.41	23.03	111.44
37595	2058	88.45	23.06	111.51
38325	2060	88.50	23.09	111.59
39055	2062	88.54	23.12	111.66
39785	2064	88.58	23.14	111.72
40515	2066	88.62	23.17	111.78
41245	2068	88.65	23.19	111.84
41975	2070	88.69	23.22	111.90
42705	2072	88.72	23.24	111.96
43435	2074	88.75	23.26	112.01
44165	2076	88.78	23.28	112.06
44895	2078	88.81	23.30	112.11
45625	2080	88.84	23.32	112.16
46355	2082	88.86	23.34	112.20
47085	2084	88.89	23.36	112.25
47815	2086	88.91	23.38	112.29
48545	2088	88.94	23.39	112.33
49275	2090	88.96	23.41	112.37
50005	2092	88.98	23.43	112.41
50735	2094	89.00	23.44	112.45
51465	2096	89.02	23.46	112.48
52195	2098	89.04	23.47	112.52
52925	2100	89.06	23.48	112.55
53655	2102	89.08	23.50	112.58
54385	2104	89.10	23.51	112.61

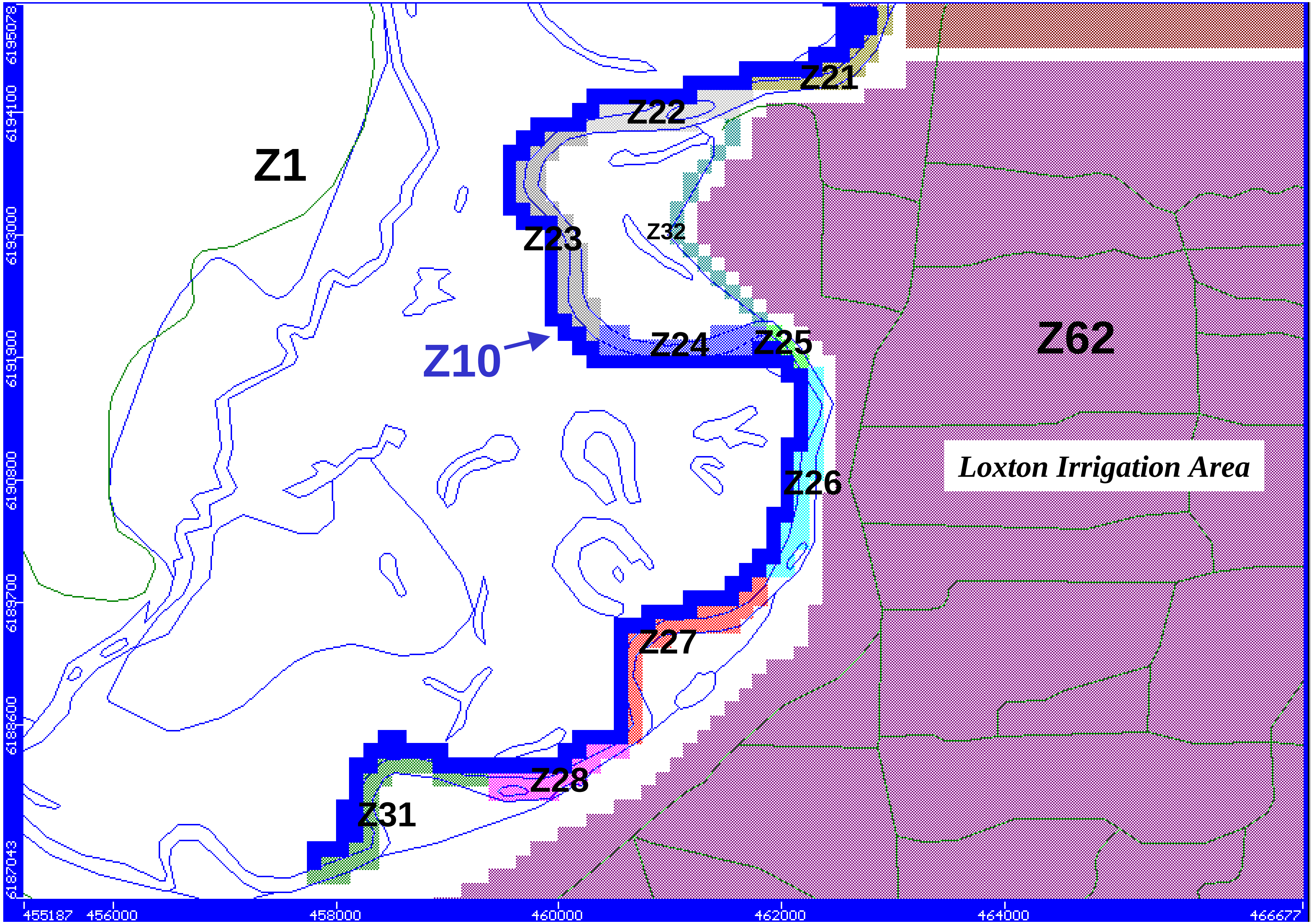
Appendix A-3-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-3 (Loxton Area)



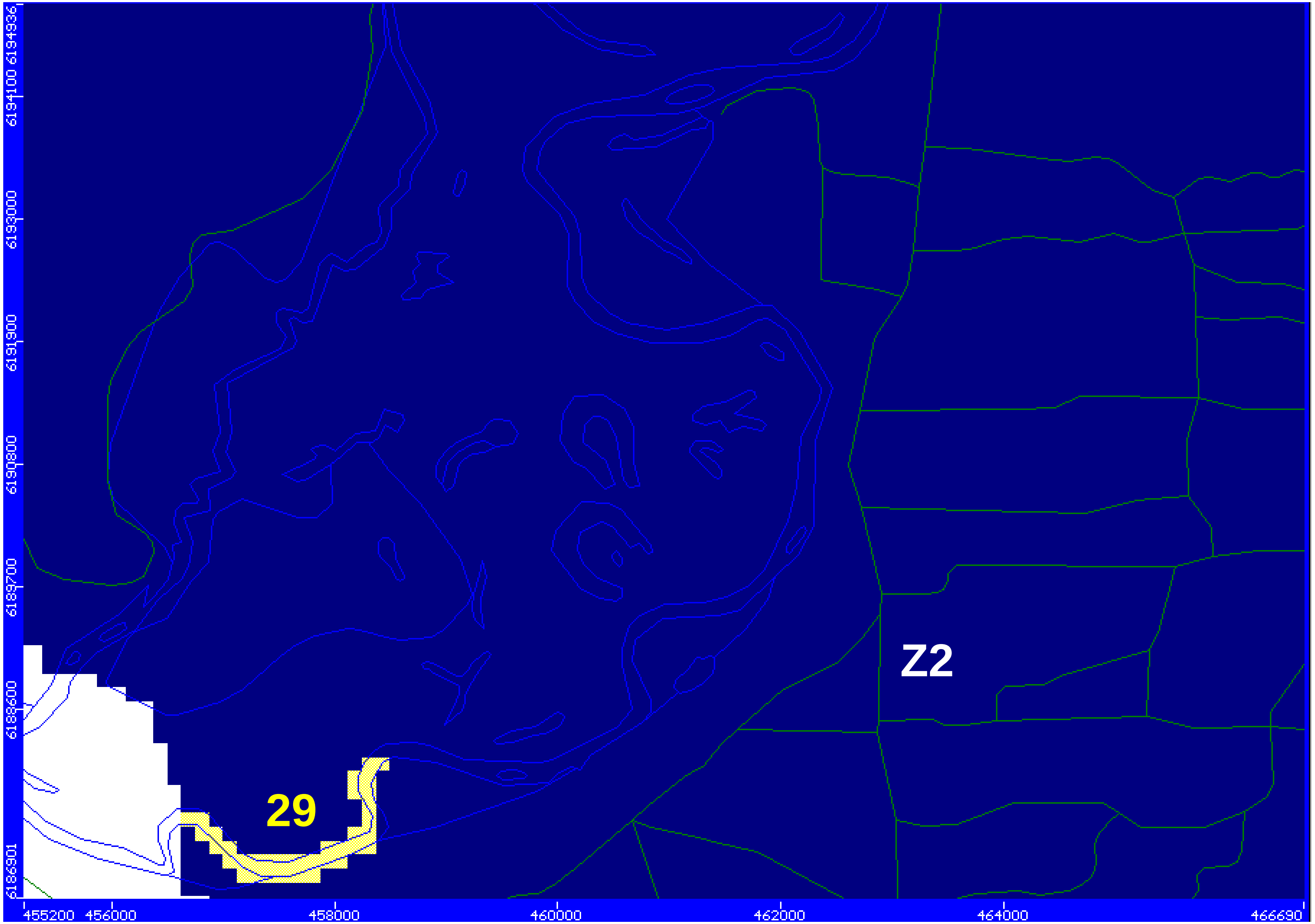
Appendix A-3-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-3 (Loxton Area)

A-4 Groundwater flux and salt load entering the River Murray Scenario-4 (Loxton Area)

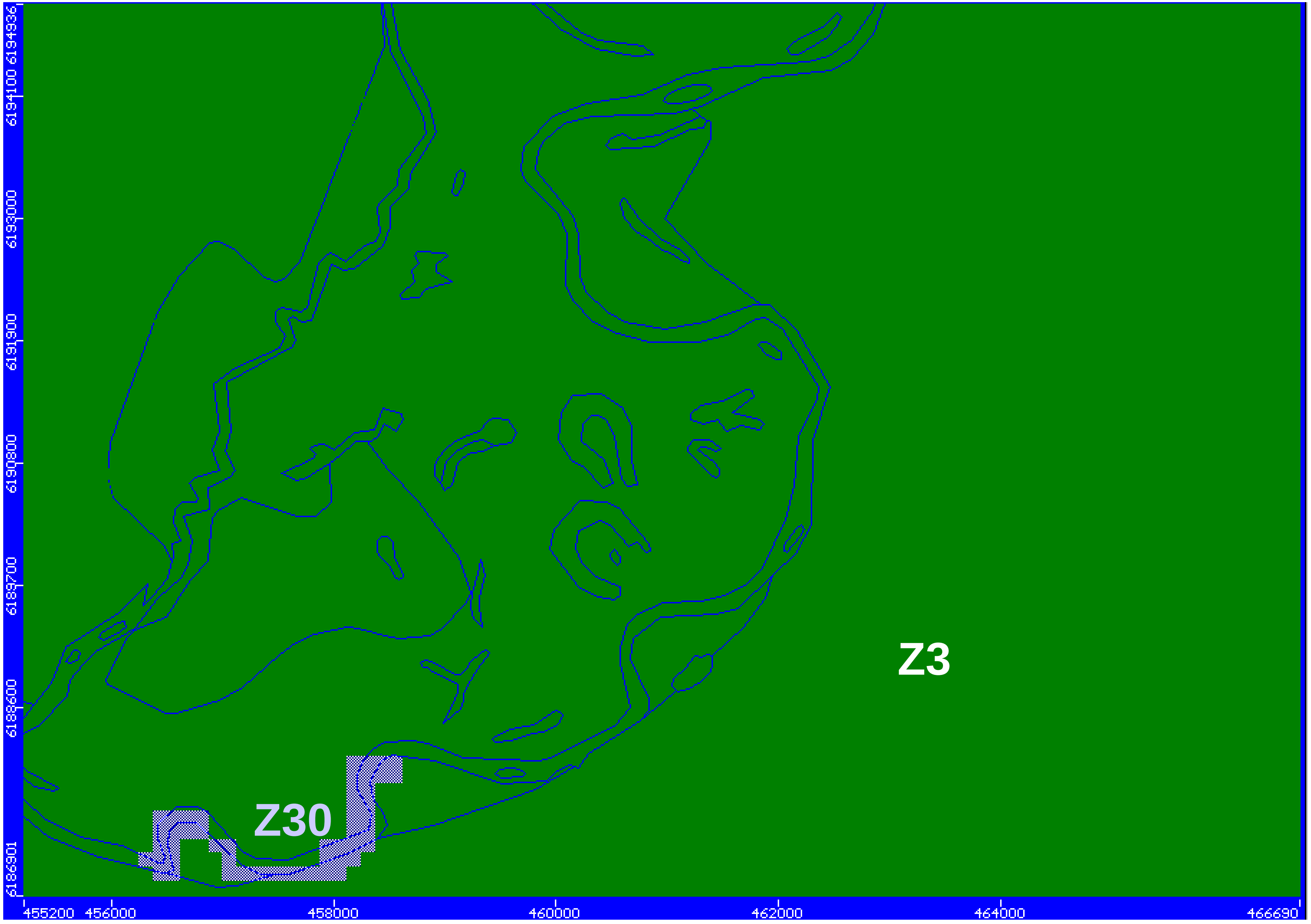
- Flow budget zones (Loxton Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix A-4-1a Flow budget zones in model Layer-1 (Loxton Area)



Appendix A-4-1b Flow budget zones in model Layer-2 (Loxton Area)



Appendix A-4-1c Flow budget zones in model Layer-3 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
30	1955	39.1	4.1	0.0	3.0	25.8	95.4	26.3	16.8	0.0	16.9	227
365	1956	39.1	4.1	0.0	3.1	26.1	95.9	26.3	16.8	0.0	16.9	228
1095	1958	200.1	106.7	0.0	96.1	228.4	292.2	27.1	16.9	0.0	17.1	985
1825	1960	366.5	210.9	0.0	187.2	386.3	459.2	29.7	17.3	14.0	17.5	1689
2555	1962	510.0	276.9	0.0	245.1	498.3	605.0	35.9	18.2	39.8	18.7	2248
3285	1964	624.4	317.4	1.1	284.6	581.9	758.0	47.5	19.8	59.2	20.4	2714
4015	1966	714.6	343.8	3.1	311.1	647.6	918.4	63.0	21.7	72.8	22.3	3118
4745	1968	720.9	325.9	2.6	296.9	648.3	1061.2	81.3	23.9	61.1	24.2	3246
5475	1970	735.1	318.0	2.3	294.2	664.7	1186.5	102.3	26.3	57.1	26.3	3413
6205	1972	755.5	317.9	2.4	296.7	686.5	1298.5	123.3	28.8	57.1	28.4	3595
6935	1974	766.6	314.3	2.4	294.5	679.8	1335.1	142.4	31.5	54.9	30.5	3652
7665	1976	751.0	298.3	1.7	281.4	656.5	1363.4	160.0	34.3	46.0	32.7	3625
8395	1978	745.3	290.3	1.3	275.0	651.9	1397.6	173.4	37.1	42.2	34.8	3649
9125	1980	746.6	287.5	1.2	273.4	654.4	1431.0	184.3	39.8	40.9	37.0	3696
9855	1982	751.9	287.5	1.3	275.7	660.6	1464.8	194.9	42.6	40.9	39.2	3759
10585	1984	760.0	288.6	1.4	277.4	667.6	1496.0	203.0	45.3	41.3	41.6	3822
11315	1986	769.3	290.1	1.6	279.5	675.0	1525.7	210.2	47.8	42.0	43.9	3885
12045	1988	778.7	291.8	1.8	281.7	682.3	1554.0	216.8	50.3	42.8	46.2	3946
12775	1990	788.6	293.9	2.2	285.6	690.1	1582.3	224.5	52.9	43.7	48.6	4012
13505	1992	798.2	295.8	2.4	287.8	697.0	1606.4	229.9	55.3	44.5	51.0	4068
14235	1994	774.8	280.7	1.5	273.6	672.9	1604.0	234.3	57.6	36.5	53.3	3989
14965	1996	760.6	271.9	1.1	265.7	661.1	1597.1	237.8	59.8	32.4	55.5	3943
15695	1998	753.3	267.5	0.9	260.6	654.3	1589.8	239.0	61.7	30.6	57.5	3915
16425	2000	749.8	265.4	0.8	258.8	651.0	1586.6	241.3	63.6	29.7	59.5	3907
17155	2002	749.0	264.5	0.8	258.1	649.5	1585.6	243.4	65.5	29.4	61.5	3907
17885	2004	750.5	264.3	0.8	258.0	648.9	1585.8	245.4	67.2	29.2	63.4	3914
18615	2006	752.6	264.1	0.7	256.5	648.2	1585.1	245.6	68.7	29.1	65.0	3916
19345	2008	754.7	264.2	0.7	256.6	648.4	1586.3	247.2	70.3	29.1	66.7	3924
20075	2010	757.2	264.5	0.8	256.9	648.8	1588.1	248.8	71.7	29.2	68.4	3934
20805	2012	759.7	264.9	0.8	257.3	649.5	1590.3	250.3	73.1	29.3	69.9	3945
21535	2014	762.0	265.2	0.8	257.7	650.2	1592.7	251.7	74.4	29.4	71.4	3955
22265	2016	764.0	265.5	0.8	258.0	651.0	1595.1	253.0	75.6	29.5	72.9	3965
22995	2018	765.8	265.8	0.9	258.4	651.9	1597.6	254.1	76.8	29.6	74.3	3975
23725	2020	764.9	265.7	0.8	258.4	652.6	1599.8	255.2	77.8	29.6	75.5	3980
24455	2022	763.0	265.6	0.8	258.4	653.1	1601.7	256.1	78.7	29.6	76.7	3984
25185	2024	761.6	265.5	0.8	258.5	653.5	1603.4	257.0	79.6	29.6	77.8	3987
25915	2026	760.6	265.5	0.8	258.6	653.9	1604.8	257.8	80.4	29.6	78.9	3991
26645	2028	760.0	265.6	0.8	258.7	654.2	1606.0	258.5	81.1	29.7	79.8	3994

Appendix A-4-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-4 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
27375	2030	759.7	265.6	0.8	258.8	654.5	1607.1	259.2	81.8	29.7	80.7	3998
28105	2032	759.6	265.7	0.8	258.9	654.8	1608.1	259.8	82.4	29.7	81.6	4001
28835	2034	759.6	265.7	0.9	259.0	655.0	1609.0	260.3	83.0	29.7	82.3	4005
29565	2036	759.8	265.8	0.9	259.1	655.3	1609.9	260.9	83.5	29.8	83.1	4008
30295	2038	760.0	265.9	0.9	259.2	655.5	1610.8	261.4	84.0	29.8	83.7	4011
31025	2040	760.4	266.0	0.9	259.3	655.8	1611.6	261.8	84.4	29.8	84.4	4014
31755	2042	760.7	266.1	0.9	259.4	656.1	1612.5	262.2	84.9	29.9	85.0	4018
32485	2044	761.1	266.1	0.9	259.6	656.3	1613.3	262.7	85.3	29.9	85.5	4021
33215	2046	761.5	266.2	0.9	259.7	656.6	1614.1	263.0	85.7	29.9	86.1	4024
33945	2048	762.0	266.3	0.9	259.8	656.9	1614.9	263.4	86.0	30.0	86.6	4027
34675	2050	762.4	266.4	0.9	259.9	657.2	1615.7	263.7	86.3	30.0	87.0	4030
35405	2052	762.8	266.5	0.9	260.0	657.5	1616.5	264.1	86.7	30.0	87.5	4032
36135	2054	763.3	266.6	0.9	260.1	657.7	1617.3	264.4	87.0	30.1	87.9	4035
36865	2056	763.7	266.7	0.9	260.2	658.0	1618.0	264.7	87.2	30.1	88.3	4038
37595	2058	764.1	266.8	0.9	260.3	658.3	1618.7	264.9	87.5	30.1	88.7	4040
38325	2060	764.6	266.9	0.9	260.4	658.5	1619.4	265.2	87.8	30.2	89.0	4043
39055	2062	765.0	266.9	0.9	260.5	658.8	1620.1	265.4	88.0	30.2	89.3	4045
39785	2064	765.4	267.0	0.9	260.6	659.0	1620.8	265.7	88.2	30.2	89.6	4048
40515	2066	765.8	267.1	1.0	260.7	659.2	1621.4	265.9	88.4	30.2	89.9	4050
41245	2068	766.1	267.2	1.0	260.8	659.5	1622.0	266.1	88.6	30.3	90.2	4052
41975	2070	766.5	267.3	1.0	260.9	659.7	1622.6	266.3	88.8	30.3	90.5	4054
42705	2072	766.9	267.3	1.0	261.0	659.9	1623.2	266.5	89.0	30.3	90.8	4056
43435	2074	767.2	267.4	1.0	261.1	660.1	1623.7	266.7	89.2	30.4	91.0	4058
44165	2076	767.6	267.5	1.0	261.2	660.3	1624.3	266.9	89.4	30.4	91.3	4060
44895	2078	767.9	267.5	1.0	261.2	660.5	1624.8	267.1	89.5	30.4	91.5	4061
45625	2080	768.2	267.6	1.0	261.3	660.7	1625.3	267.2	89.7	30.4	91.7	4063
46355	2082	768.5	267.7	1.0	261.4	660.8	1625.8	267.4	89.8	30.4	91.9	4065
47085	2084	768.8	267.7	1.0	261.5	661.0	1626.2	267.6	90.0	30.5	92.1	4066
47815	2086	769.1	267.8	1.0	261.5	661.2	1626.6	267.7	90.1	30.5	92.3	4068
48545	2088	769.3	267.8	1.0	261.6	661.3	1627.1	267.9	90.3	30.5	92.5	4069
49275	2090	769.6	267.9	1.0	261.6	661.5	1627.5	268.0	90.4	30.5	92.7	4071
50005	2092	769.9	267.9	1.0	261.7	661.6	1627.8	268.1	90.5	30.5	92.9	4072
50735	2094	770.1	268.0	1.0	261.8	661.7	1628.2	268.3	90.6	30.6	93.0	4073
51465	2096	770.3	268.0	1.0	261.8	661.9	1628.6	268.4	90.7	30.6	93.2	4075
52195	2098	770.5	268.1	1.0	261.9	662.0	1628.9	268.5	90.8	30.6	93.4	4076
52925	2100	770.8	268.1	1.0	261.9	662.1	1629.2	268.6	91.0	30.6	93.5	4077
53655	2102	771.0	268.1	1.0	262.0	662.2	1629.5	268.7	91.1	30.6	93.7	4078
54385	2104	771.2	268.2	1.0	262.0	662.4	1629.8	268.8	91.2	30.6	93.8	4079
TDS	mg/L	25807	29055	30760	39978	18716	7710	35935	29140	39117	24080	

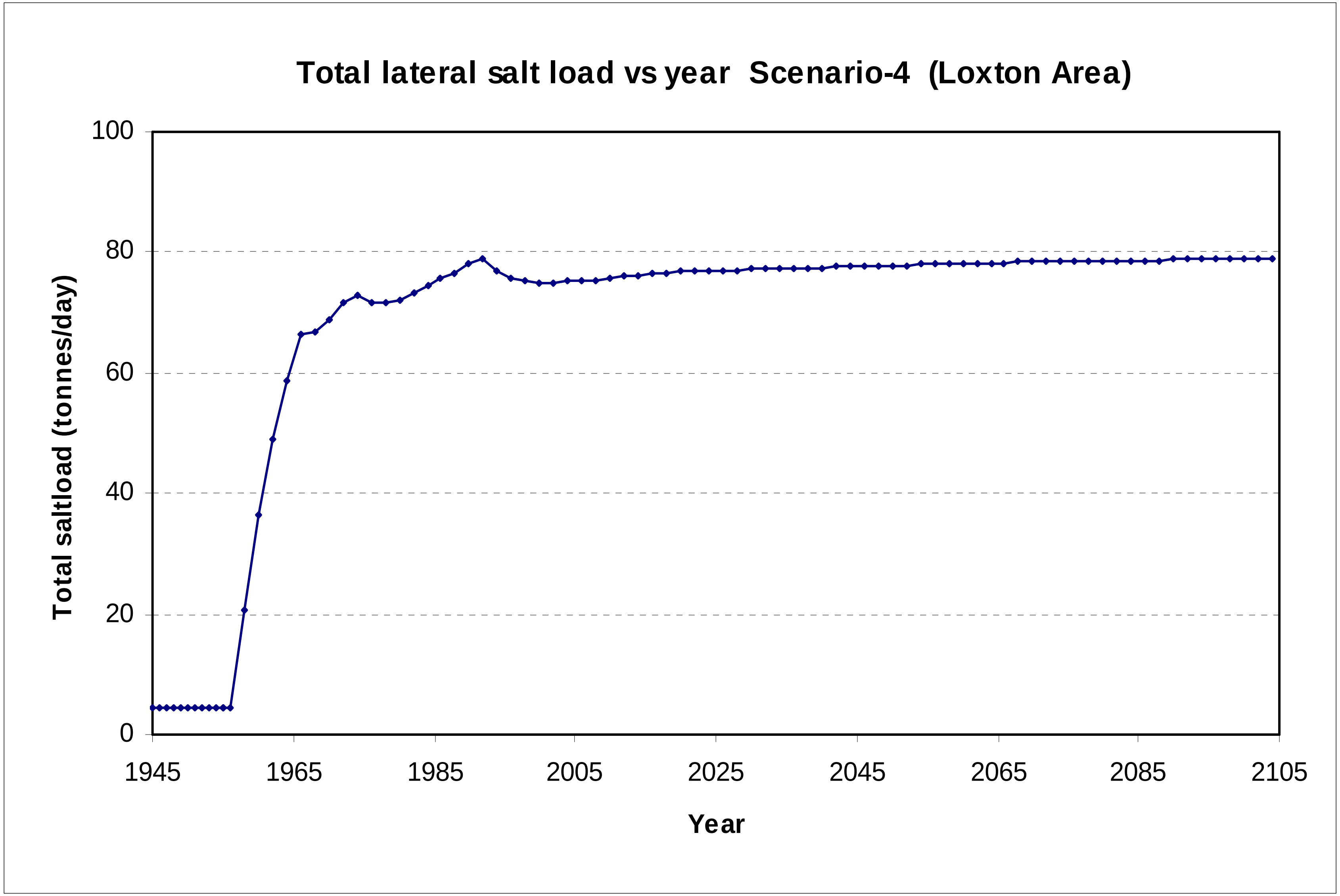
Appendix A-4-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-4 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1946	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1947	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1948	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1949	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1950	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1951	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1952	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1953	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1954	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
30	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
365	1956	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
1095	1958	5.2	3.1	0.0	3.8	4.3	2.3	1.0	0.5	0.0	0.4	21
1825	1960	9.5	6.1	0.0	7.5	7.2	3.5	1.1	0.5	0.5	0.4	36
2555	1962	13.2	8.0	0.0	9.8	9.3	4.7	1.3	0.5	1.6	0.5	49
3285	1964	16.1	9.2	0.0	11.4	10.9	5.8	1.7	0.6	2.3	0.5	59
4015	1966	18.4	10.0	0.1	12.4	12.1	7.1	2.3	0.6	2.8	0.5	66
4745	1968	18.6	9.5	0.1	11.9	12.1	8.2	2.9	0.7	2.4	0.6	67
5475	1970	19.0	9.2	0.1	11.8	12.4	9.1	3.7	0.8	2.2	0.6	69
6205	1972	19.5	9.2	0.1	11.9	12.8	10.0	4.4	0.8	2.2	0.7	72
6935	1974	19.8	9.1	0.1	11.8	12.7	10.3	5.1	0.9	2.1	0.7	73
7665	1976	19.4	8.7	0.1	11.3	12.3	10.5	5.7	1.0	1.8	0.8	71
8395	1978	19.2	8.4	0.0	11.0	12.2	10.8	6.2	1.1	1.6	0.8	71
9125	1980	19.3	8.4	0.0	10.9	12.2	11.0	6.6	1.2	1.6	0.9	72
9855	1982	19.4	8.4	0.0	11.0	12.4	11.3	7.0	1.2	1.6	0.9	73
10585	1984	19.6	8.4	0.0	11.1	12.5	11.5	7.3	1.3	1.6	1.0	74
11315	1986	19.9	8.4	0.0	11.2	12.6	11.8	7.6	1.4	1.6	1.1	76
12045	1988	20.1	8.5	0.1	11.3	12.8	12.0	7.8	1.5	1.7	1.1	77
12775	1990	20.4	8.5	0.1	11.4	12.9	12.2	8.1	1.5	1.7	1.2	78
13505	1992	20.6	8.6	0.1	11.5	13.0	12.4	8.3	1.6	1.7	1.2	79
14235	1994	20.0	8.2	0.0	10.9	12.6	12.4	8.4	1.7	1.4	1.3	77
14965	1996	19.6	7.9	0.0	10.6	12.4	12.3	8.5	1.7	1.3	1.3	76
15695	1998	19.4	7.8	0.0	10.4	12.2	12.3	8.6	1.8	1.2	1.4	75
16425	2000	19.4	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.2	1.4	75
17155	2002	19.3	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.1	1.5	75
17885	2004	19.4	7.7	0.0	10.3	12.1	12.2	8.8	2.0	1.1	1.5	75
18615	2006	19.4	7.7	0.0	10.3	12.1	12.2	8.8	2.0	1.1	1.6	75
19345	2008	19.5	7.7	0.0	10.3	12.1	12.2	8.9	2.0	1.1	1.6	75
20075	2010	19.5	7.7	0.0	10.3	12.1	12.2	8.9	2.1	1.1	1.6	76
20805	2012	19.6	7.7	0.0	10.3	12.2	12.3	9.0	2.1	1.1	1.7	76
21535	2014	19.7	7.7	0.0	10.3	12.2	12.3	9.0	2.2	1.1	1.7	76
22265	2016	19.7	7.7	0.0	10.3	12.2	12.3	9.1	2.2	1.2	1.8	76

Appendix A-4-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-4 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	19.8	7.7	0.0	10.3	12.2	12.3	9.1	2.2	1.2	1.8	77
23725	2020	19.7	7.7	0.0	10.3	12.2	12.3	9.2	2.3	1.2	1.8	77
24455	2022	19.7	7.7	0.0	10.3	12.2	12.3	9.2	2.3	1.2	1.8	77
25185	2024	19.7	7.7	0.0	10.3	12.2	12.4	9.2	2.3	1.2	1.9	77
25915	2026	19.6	7.7	0.0	10.3	12.2	12.4	9.3	2.3	1.2	1.9	77
26645	2028	19.6	7.7	0.0	10.3	12.2	12.4	9.3	2.4	1.2	1.9	77
27375	2030	19.6	7.7	0.0	10.3	12.2	12.4	9.3	2.4	1.2	1.9	77
28105	2032	19.6	7.7	0.0	10.3	12.3	12.4	9.3	2.4	1.2	2.0	77
28835	2034	19.6	7.7	0.0	10.4	12.3	12.4	9.4	2.4	1.2	2.0	77
29565	2036	19.6	7.7	0.0	10.4	12.3	12.4	9.4	2.4	1.2	2.0	77
30295	2038	19.6	7.7	0.0	10.4	12.3	12.4	9.4	2.4	1.2	2.0	77
31025	2040	19.6	7.7	0.0	10.4	12.3	12.4	9.4	2.5	1.2	2.0	78
31755	2042	19.6	7.7	0.0	10.4	12.3	12.4	9.4	2.5	1.2	2.0	78
32485	2044	19.6	7.7	0.0	10.4	12.3	12.4	9.4	2.5	1.2	2.1	78
33215	2046	19.7	7.7	0.0	10.4	12.3	12.4	9.5	2.5	1.2	2.1	78
33945	2048	19.7	7.7	0.0	10.4	12.3	12.5	9.5	2.5	1.2	2.1	78
34675	2050	19.7	7.7	0.0	10.4	12.3	12.5	9.5	2.5	1.2	2.1	78
35405	2052	19.7	7.7	0.0	10.4	12.3	12.5	9.5	2.5	1.2	2.1	78
36135	2054	19.7	7.7	0.0	10.4	12.3	12.5	9.5	2.5	1.2	2.1	78
36865	2056	19.7	7.7	0.0	10.4	12.3	12.5	9.5	2.5	1.2	2.1	78
37595	2058	19.7	7.8	0.0	10.4	12.3	12.5	9.5	2.5	1.2	2.1	78
38325	2060	19.7	7.8	0.0	10.4	12.3	12.5	9.5	2.6	1.2	2.1	78
39055	2062	19.7	7.8	0.0	10.4	12.3	12.5	9.5	2.6	1.2	2.2	78
39785	2064	19.8	7.8	0.0	10.4	12.3	12.5	9.5	2.6	1.2	2.2	78
40515	2066	19.8	7.8	0.0	10.4	12.3	12.5	9.6	2.6	1.2	2.2	78
41245	2068	19.8	7.8	0.0	10.4	12.3	12.5	9.6	2.6	1.2	2.2	78
41975	2070	19.8	7.8	0.0	10.4	12.3	12.5	9.6	2.6	1.2	2.2	78
42705	2072	19.8	7.8	0.0	10.4	12.4	12.5	9.6	2.6	1.2	2.2	78
43435	2074	19.8	7.8	0.0	10.4	12.4	12.5	9.6	2.6	1.2	2.2	78
44165	2076	19.8	7.8	0.0	10.4	12.4	12.5	9.6	2.6	1.2	2.2	79
44895	2078	19.8	7.8	0.0	10.4	12.4	12.5	9.6	2.6	1.2	2.2	79
45625	2080	19.8	7.8	0.0	10.4	12.4	12.5	9.6	2.6	1.2	2.2	79
46355	2082	19.8	7.8	0.0	10.4	12.4	12.5	9.6	2.6	1.2	2.2	79
47085	2084	19.8	7.8	0.0	10.5	12.4	12.5	9.6	2.6	1.2	2.2	79
47815	2086	19.8	7.8	0.0	10.5	12.4	12.5	9.6	2.6	1.2	2.2	79
48545	2088	19.9	7.8	0.0	10.5	12.4	12.5	9.6	2.6	1.2	2.2	79
49275	2090	19.9	7.8	0.0	10.5	12.4	12.5	9.6	2.6	1.2	2.2	79
50005	2092	19.9	7.8	0.0	10.5	12.4	12.6	9.6	2.6	1.2	2.2	79
50735	2094	19.9	7.8	0.0	10.5	12.4	12.6	9.6	2.6	1.2	2.2	79
51465	2096	19.9	7.8	0.0	10.5	12.4	12.6	9.6	2.6	1.2	2.2	79
52195	2098	19.9	7.8	0.0	10.5	12.4	12.6	9.6	2.6	1.2	2.2	79
52925	2100	19.9	7.8	0.0	10.5	12.4	12.6	9.7	2.7	1.2	2.3	79
53655	2102	19.9	7.8	0.0	10.5	12.4	12.6	9.7	2.7	1.2	2.3	79
54385	2104	19.9	7.8	0.0	10.5	12.4	12.6	9.7	2.7	1.2	2.3	79
TDS	mg/L	25807	29055	30760	39678	15718	7710	35936	29140	39117	24080	

Appendix A-4-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-4 (Loxton Area)



Appendix A-4-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-4 (Loxton Area)

Day	Year	Z2 to Z21 (m³/day)	Z2 to Z22 (m³/day)	Z2 to Z23 (m³/day)	Z2 to Z24 (m³/day)	Z2 to Z25 (m³/day)	Z2 to Z26 (m³/day)	Z2 to Z27 (m³/day)	Z2 to Z28 (m³/day)	Z2 to Z29 (m³/day)	Z3 to Z29 (m³/day)	Z2 to Z31 (m³/day)	Z3 to Z30 (m³/day)	Total Lateral (m³/day)
30	1955	6.7	0.9	0.0	0.7	1.1	11.0	10.4	21.2	6.8	3.8	0.0	40.5	63
365	1956	6.7	0.9	0.0	1.2	1.6	12.9	10.4	21.0	6.8	3.8	0.0	40.5	65
1095	1958	21.5	9.6	0.0	10.3	9.2	28.9	11.1	21.3	6.8	3.9	0.0	40.8	123
1825	1960	33.8	17.7	0.0	19.3	14.3	46.2	13.0	22.2	6.9	4.1	0.0	41.4	178
2555	1962	43.3	23.3	1.0	26.6	17.8	65.1	16.8	24.7	7.3	4.6	0.1	43.3	231
3285	1964	50.8	27.4	2.4	37.2	20.8	95.1	26.5	28.5	7.7	5.2	0.3	45.7	302
4015	1966	56.6	30.4	3.2	41.8	22.8	119.2	35.6	32.8	8.2	5.7	0.4	48.1	357
4745	1968	58.0	30.3	3.4	42.0	23.1	141.6	45.2	37.4	8.7	6.2	0.6	50.5	396
5475	1970	59.7	30.9	3.9	50.0	24.2	174.3	64.4	42.9	9.2	6.7	0.9	53.0	467
6205	1972	61.6	31.8	4.2	51.5	24.9	192.2	74.3	48.3	9.7	7.2	1.1	55.4	507
6935	1974	62.8	32.2	4.4	52.2	25.0	203.8	82.9	53.9	10.2	7.7	1.4	57.9	537
7665	1976	62.6	31.8	5.1	59.3	25.2	225.6	99.9	60.2	10.7	8.2	1.7	60.5	590
8395	1978	62.8	31.8	5.2	59.3	25.2	232.8	106.0	65.6	11.2	8.6	2.1	62.9	611
9125	1980	63.3	32.0	5.3	59.8	25.3	238.9	111.1	70.8	11.7	9.0	2.4	65.3	630
9855	1982	63.9	32.5	6.3	68.6	26.1	259.0	126.1	76.8	12.2	9.5	2.8	67.9	684
10585	1984	64.9	33.1	6.5	69.3	26.4	264.0	130.0	81.8	12.7	9.9	3.2	70.2	702
11315	1986	65.7	33.6	6.7	70.0	26.6	268.7	133.7	86.5	13.2	10.3	3.6	72.6	719
12045	1988	66.5	34.1	6.9	70.6	26.9	273.0	137.0	91.0	13.7	10.7	4.0	74.9	734
12775	1990	67.4	34.8	8.2	79.7	27.7	292.7	151.1	96.4	14.2	11.1	4.5	77.4	788
13505	1992	68.2	35.2	8.4	80.3	27.9	296.2	153.8	100.7	14.7	11.5	4.8	79.7	802
14235	1994	67.1	34.3	8.2	79.1	27.4	297.3	155.8	104.6	15.2	11.9	5.1	81.9	806
14965	1996	66.8	34.1	8.2	78.6	27.1	297.6	157.5	108.2	15.6	12.3	5.4	84.1	811
15695	1998	66.6	33.9	7.1	69.9	26.4	282.2	148.0	110.4	16.0	12.6	5.6	86.1	779
16425	2000	66.6	33.9	7.1	69.8	26.4	282.4	149.2	113.4	16.5	12.9	5.9	88.1	784
17155	2002	66.7	34.0	7.2	69.9	26.4	282.7	150.3	116.3	16.9	13.2	6.2	90.1	790
17885	2004	67.0	34.2	7.3	70.0	26.4	283.2	151.4	119.0	17.3	13.5	6.4	92.0	796
18615	2006	67.2	34.2	6.3	61.8	25.8	268.8	141.8	120.4	17.7	13.8	6.5	93.7	764
19345	2008	67.4	34.3	6.3	61.9	25.9	269.2	142.7	122.7	18.0	14.0	6.7	95.4	769
20075	2010	67.7	34.5	6.4	62.1	25.9	269.8	143.5	124.9	18.4	14.3	6.9	97.1	774
20805	2012	67.9	34.6	6.4	62.2	25.9	270.3	144.4	126.9	18.7	14.6	7.1	98.7	779
21535	2014	68.1	34.7	6.5	62.4	26.0	270.8	145.1	128.8	19.0	14.8	7.3	100.2	783
22265	2016	68.3	34.8	6.5	62.5	26.0	271.2	145.8	130.5	19.3	15.0	7.5	101.6	787
22995	2018	68.4	34.9	6.6	62.6	26.1	271.7	146.4	132.1	19.6	15.2	7.6	103.0	791
23725	2020	68.0	34.6	6.5	62.6	26.1	272.0	146.9	133.5	19.9	15.4	7.8	104.3	793
24455	2022	67.8	34.5	6.5	62.6	26.1	272.3	147.4	134.9	20.1	15.6	7.9	105.5	796
25185	2024	67.7	34.5	6.5	62.6	26.1	272.6	147.9	136.1	20.4	15.8	8.1	106.6	798
25915	2026	67.6	34.4	6.5	62.6	26.1	272.8	148.3	137.2	20.6	16.0	8.2	107.7	800
26645	2028	67.6	34.4	6.5	62.7	26.1	273.1	148.7	138.2	20.8	16.1	8.3	108.8	803
27375	2030	67.6	34.5	6.5	62.7	26.1	273.3	149.1	139.2	21.0	16.3	8.4	109.8	805
28105	2032	67.6	34.5	6.5	62.8	26.1	273.5	149.4	140.1	21.2	16.4	8.5	110.7	807
28835	2034	67.6	34.5	6.6	62.8	26.1	273.7	149.7	140.9	21.4	16.6	8.6	111.6	808

Appendix A-4-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-4 (Loxton Area)

Year	Z2 to Z21 (m^3/day)	Z2 to Z22 (m^3/day)	Z2 to Z23 (m^3/day)	Z2 to Z24 (m^3/day)	Z2 to Z25 (m^3/day)	Z2 to Z26 (m^3/day)	Z2 to Z27 (m^3/day)	Z2 to Z28 (m^3/day)	Z2 to Z29 (m^3/day)	Z3 to Z29 (m^3/day)	Z2 to Z31 (m^3/day)	Z3 to Z30 (m^3/day)	Total Lateral (m^3/day)
2030	67.6	34.5	6.5	62.7	26.1	273.3	149.1	139.2	21.0	16.3	8.4	109.8	805
2032	67.6	34.5	6.5	62.8	26.1	273.5	149.4	140.1	21.2	16.4	8.5	110.7	807
2034	67.6	34.5	6.6	62.8	26.1	273.7	149.7	140.9	21.4	16.6	8.6	111.6	808
2036	67.7	34.5	6.6	62.8	26.2	273.9	150.0	141.7	21.6	16.7	8.7	112.4	810
2038	67.7	34.5	6.6	62.9	26.2	274.1	150.3	142.4	21.7	16.8	8.7	113.2	812
2040	67.7	34.6	6.6	62.9	26.2	274.3	150.6	143.0	21.9	16.9	8.8	114.0	813
2042	67.8	34.6	6.6	63.0	26.2	274.4	150.8	143.7	22.0	17.0	8.9	114.7	815
2044	67.8	34.6	6.6	63.0	26.2	274.6	151.0	144.2	22.2	17.1	9.0	115.4	816
2046	67.8	34.6	6.7	63.0	26.2	274.8	151.3	144.8	22.3	17.2	9.0	116.1	818
2048	67.9	34.7	6.7	63.1	26.2	274.9	151.5	145.3	22.4	17.3	9.1	116.7	819
2050	67.9	34.7	6.7	63.1	26.2	275.1	151.7	145.8	22.5	17.4	9.1	117.3	820
2052	68.0	34.7	6.7	63.2	26.2	275.2	151.8	146.2	22.6	17.5	9.2	117.9	821
2054	68.0	34.8	6.7	63.2	26.3	275.4	152.0	146.6	22.8	17.6	9.3	118.4	823
2056	68.0	34.8	6.7	63.2	26.3	275.5	152.2	147.0	22.9	17.7	9.3	118.9	824
2058	68.1	34.8	6.7	63.3	26.3	275.6	152.3	147.4	23.0	17.8	9.3	119.4	825
2060	68.1	34.8	6.8	63.3	26.3	275.8	152.5	147.8	23.0	17.9	9.4	119.9	826
2062	68.1	34.8	6.8	63.3	26.3	275.9	152.6	148.1	23.1	17.9	9.4	120.4	827
2064	68.2	34.9	6.8	63.4	26.3	276.0	152.8	148.4	23.2	18.0	9.5	120.8	827
2066	68.2	34.9	6.8	63.4	26.3	276.1	152.9	148.8	23.3	18.1	9.5	121.2	828
2068	68.2	34.9	6.8	63.4	26.3	276.2	153.0	149.0	23.4	18.1	9.6	121.6	829
2070	68.3	34.9	6.8	63.4	26.3	276.3	153.2	149.3	23.5	18.2	9.6	122.0	830
2072	68.3	34.9	6.8	63.5	26.3	276.4	153.3	149.6	23.5	18.3	9.6	122.4	831
2074	68.3	35.0	6.8	63.5	26.4	276.5	153.4	149.9	23.6	18.3	9.7	122.8	831
2076	68.4	35.0	6.8	63.5	26.4	276.6	153.5	150.1	23.7	18.4	9.7	123.1	832
2078	68.4	35.0	6.8	63.5	26.4	276.7	153.6	150.3	23.7	18.4	9.7	123.5	833
2080	68.4	35.0	6.9	63.6	26.4	276.8	153.7	150.6	23.8	18.5	9.8	123.8	833
2082	68.4	35.0	6.9	63.6	26.4	276.9	153.8	150.8	23.9	18.5	9.8	124.1	834
2084	68.5	35.1	6.9	63.6	26.4	277.0	153.9	151.0	23.9	18.6	9.8	124.4	835
2086	68.5	35.1	6.9	63.6	26.4	277.0	154.0	151.2	24.0	18.6	9.8	124.7	835
2088	68.5	35.1	6.9	63.7	26.4	277.1	154.1	151.4	24.0	18.7	9.9	125.0	836
2090	68.5	35.1	6.9	63.7	26.4	277.2	154.1	151.6	24.1	18.7	9.9	125.3	836
2092	68.5	35.1	6.9	63.7	26.4	277.2	154.2	151.7	24.1	18.8	9.9	125.5	837
2094	68.6	35.1	6.9	63.7	26.4	277.3	154.3	151.9	24.2	18.8	9.9	125.8	837
2096	68.6	35.1	6.9	63.7	26.4	277.4	154.4	152.1	24.2	18.8	10.0	126.1	838
2098	68.6	35.1	6.9	63.7	26.4	277.4	154.4	152.2	24.3	18.9	10.0	126.3	838
2100	68.6	35.2	6.9	63.8	26.4	277.5	154.5	152.4	24.3	18.9	10.0	126.5	839
2102	68.6	35.2	6.9	63.8	26.4	277.6	154.6	152.5	24.4	19.0	10.0	126.8	839
2104	68.7	35.2	6.9	63.8	26.5	277.6	154.6	152.7	24.4	19.0	10.0	127.0	839
mg/L	32287	32287	32287	32287	32287	29405	8700	7550	3300	32287	32287	32287	

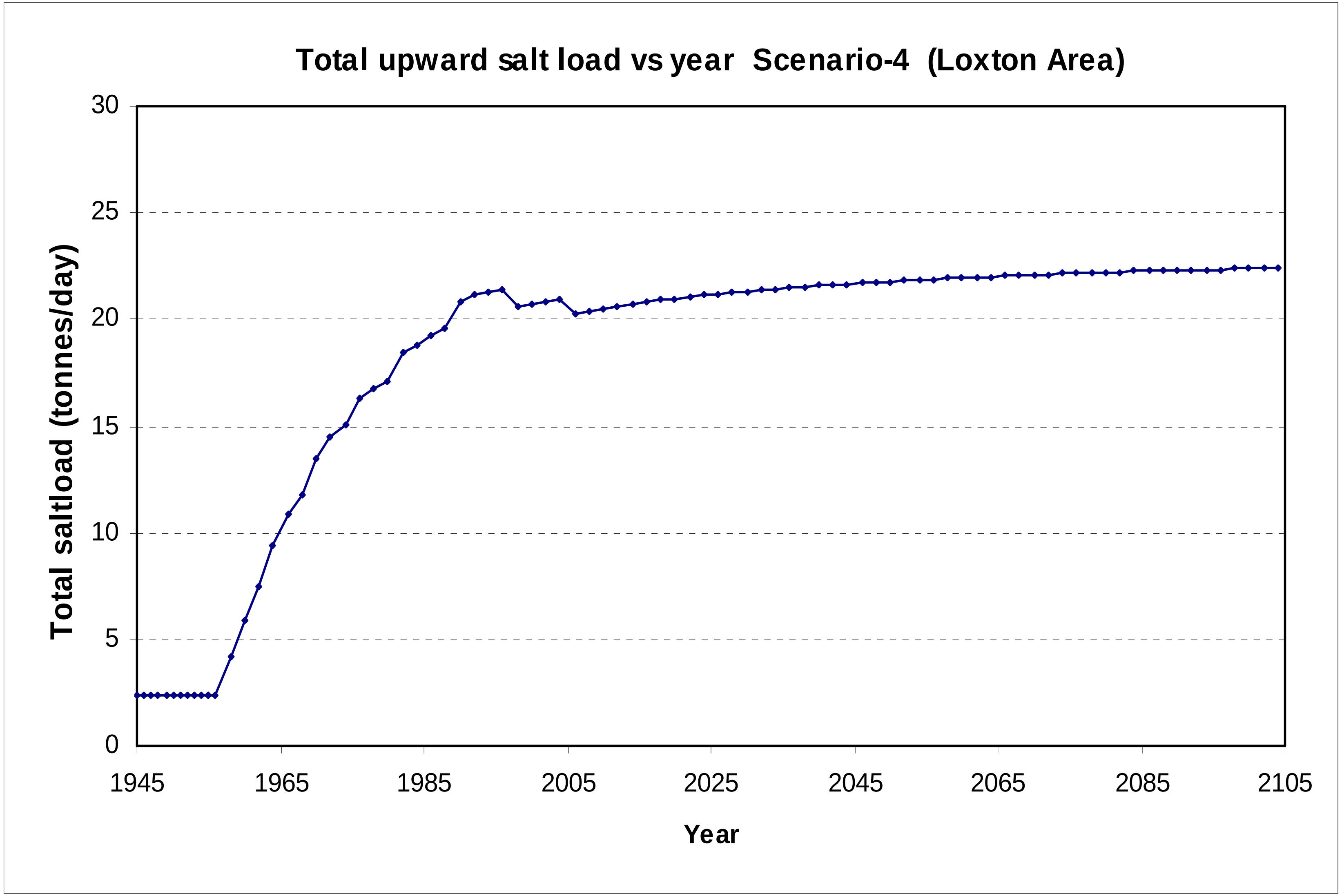
Appendix A-4-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-4 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z29 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1946	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1947	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1948	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1949	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1950	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1951	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1952	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1953	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1954	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
30	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
365	1956	0.2	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.0	0.1	0.0	1.3	2
1095	1958	0.7	0.3	0.0	0.3	0.3	0.8	0.1	0.2	0.0	0.1	0.0	1.3	4
1825	1960	1.1	0.6	0.0	0.6	0.5	1.4	0.1	0.2	0.0	0.1	0.0	1.3	6
2555	1962	1.4	0.8	0.0	0.9	0.6	1.9	0.2	0.2	0.0	0.1	0.0	1.4	7
3285	1964	1.6	0.9	0.1	1.2	0.7	2.8	0.3	0.2	0.0	0.2	0.0	1.5	9
4015	1966	1.8	1.0	0.1	1.3	0.7	3.5	0.3	0.2	0.0	0.2	0.0	1.6	11
4745	1968	1.9	1.0	0.1	1.4	0.7	4.2	0.4	0.3	0.0	0.2	0.0	1.6	12
5475	1970	1.9	1.0	0.1	1.6	0.8	5.1	0.6	0.3	0.0	0.2	0.0	1.7	14
6205	1972	2.0	1.0	0.1	1.7	0.8	5.7	0.7	0.4	0.0	0.2	0.0	1.8	14
6935	1974	2.0	1.0	0.1	1.7	0.8	6.0	0.8	0.4	0.0	0.2	0.0	1.9	15
7665	1976	2.0	1.0	0.2	1.9	0.8	6.6	1.0	0.5	0.0	0.3	0.1	2.0	16
8395	1978	2.0	1.0	0.2	1.9	0.8	6.8	1.0	0.5	0.0	0.3	0.1	2.0	17
9125	1980	2.0	1.0	0.2	1.9	0.8	7.0	1.1	0.5	0.0	0.3	0.1	2.1	17
9855	1982	2.1	1.0	0.2	2.2	0.8	7.6	1.2	0.6	0.0	0.3	0.1	2.2	18
10585	1984	2.1	1.1	0.2	2.2	0.9	7.8	1.3	0.6	0.0	0.3	0.1	2.3	19
11315	1986	2.1	1.1	0.2	2.3	0.9	7.9	1.3	0.7	0.0	0.3	0.1	2.3	19
12045	1988	2.1	1.1	0.2	2.3	0.9	8.0	1.3	0.7	0.0	0.3	0.1	2.4	20
12775	1990	2.2	1.1	0.3	2.6	0.9	8.6	1.5	0.7	0.0	0.4	0.1	2.5	21
13505	1992	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.0	0.4	0.2	2.6	21
14235	1994	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.1	0.4	0.2	2.6	21
14965	1996	2.2	1.1	0.3	2.5	0.9	8.8	1.5	0.8	0.1	0.4	0.2	2.7	21
15695	1998	2.2	1.1	0.2	2.3	0.9	8.3	1.4	0.8	0.1	0.4	0.2	2.8	21
16425	2000	2.1	1.1	0.2	2.3	0.9	8.3	1.4	0.9	0.1	0.4	0.2	2.8	21
17155	2002	2.2	1.1	0.2	2.3	0.9	8.3	1.5	0.9	0.1	0.4	0.2	2.9	21
17885	2004	2.2	1.1	0.2	2.3	0.9	8.3	1.5	0.9	0.1	0.4	0.2	3.0	21
18615	2006	2.2	1.1	0.2	2.0	0.8	7.9	1.4	0.9	0.1	0.4	0.2	3.0	20
19345	2008	2.2	1.1	0.2	2.0	0.8	7.9	1.4	0.9	0.1	0.5	0.2	3.1	20
20075	2010	2.2	1.1	0.2	2.0	0.8	7.9	1.4	0.9	0.1	0.5	0.2	3.1	20
20805	2012	2.2	1.1	0.2	2.0	0.8	7.9	1.4	1.0	0.1	0.5	0.2	3.2	21
21535	2014	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.0	0.1	0.5	0.2	3.2	21
22265	2016	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.0	0.1	0.5	0.2	3.3	21

Appendix A-4-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-4 (Loxton Area)

Day	Year	Z2 to Z21 (tonne/day)	Z2 to Z22 (tonne/day)	Z2 to Z23 (tonne/day)	Z2 to Z24 (tonne/day)	Z2 to Z25 (tonne/day)	Z2 to Z26 (tonne/day)	Z2 to Z27 (tonne/day)	Z2 to Z28 (tonne/day)	Z2 to Z29 (tonne/day)	Z3 to Z29 (tonne/day)	Z2 to Z31 (tonne/day)	Z3 to Z30 (tonne/day)	Total Lateral (tonne/day)
22995	2018	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.0	0.1	0.5	0.2	3.3	21
23725	2020	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.0	0.1	0.5	0.3	3.4	21
24455	2022	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.0	0.1	0.5	0.3	3.4	21
25185	2024	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.0	0.1	0.5	0.3	3.4	21
25915	2026	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.0	0.1	0.5	0.3	3.5	21
26645	2028	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.0	0.1	0.5	0.3	3.5	21
27375	2030	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.1	0.1	0.5	0.3	3.5	21
28105	2032	2.2	1.1	0.2	2.0	0.8	8.0	1.4	1.1	0.1	0.5	0.3	3.6	21
28835	2034	2.2	1.1	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.5	0.3	3.6	21
29565	2036	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.5	0.3	3.6	21
30295	2038	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.5	0.3	3.7	22
31025	2040	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.5	0.3	3.7	22
31755	2042	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.5	0.3	3.7	22
32485	2044	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.7	22
33215	2046	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.7	22
33945	2048	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.8	22
34675	2050	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.8	22
35405	2052	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.8	22
36135	2054	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.8	22
36865	2056	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.8	22
37595	2058	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
38325	2060	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
39055	2062	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
39785	2064	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
40515	2066	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
41245	2068	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
41975	2070	2.2	1.1	0.2	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
42705	2072	2.2	1.1	0.2	2.0	0.9	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
43435	2074	2.2	1.1	0.2	2.0	0.9	8.1	1.5	1.1	0.1	0.6	0.3	4.0	22
44165	2076	2.2	1.1	0.2	2.0	0.9	8.1	1.5	1.1	0.1	0.6	0.3	4.0	22
44895	2078	2.2	1.1	0.2	2.1	0.9	8.1	1.5	1.1	0.1	0.6	0.3	4.0	22
45625	2080	2.2	1.1	0.2	2.1	0.9	8.1	1.5	1.1	0.1	0.6	0.3	4.0	22
46355	2082	2.2	1.1	0.2	2.1	0.9	8.1	1.5	1.1	0.1	0.6	0.3	4.0	22
47085	2084	2.2	1.1	0.2	2.1	0.9	8.1	1.5	1.1	0.1	0.6	0.3	4.0	22
47815	2086	2.2	1.1	0.2	2.1	0.9	8.1	1.5	1.1	0.1	0.6	0.3	4.0	22
48545	2088	2.2	1.1	0.2	2.1	0.9	8.1	1.5	1.1	0.1	0.6	0.3	4.0	22
49275	2090	2.2	1.1	0.2	2.1	0.9	8.2	1.5	1.1	0.1	0.6	0.3	4.0	22
50005	2092	2.2	1.1	0.2	2.1	0.9	8.2	1.5	1.1	0.1	0.6	0.3	4.1	22
50735	2094	2.2	1.1	0.2	2.1	0.9	8.2	1.5	1.1	0.1	0.6	0.3	4.1	22
51465	2096	2.2	1.1	0.2	2.1	0.9	8.2	1.5	1.1	0.1	0.6	0.3	4.1	22
52195	2098	2.2	1.1	0.2	2.1	0.9	8.2	1.5	1.1	0.1	0.6	0.3	4.1	22
52925	2100	2.2	1.1	0.2	2.1	0.9	8.2	1.5	1.2	0.1	0.6	0.3	4.1	22
53655	2102	2.2	1.1	0.2	2.1	0.9	8.2	1.5	1.2	0.1	0.6	0.3	4.1	22
54385	2104	2.2	1.1	0.2	2.1	0.9	8.2	1.5	1.2	0.1	0.6	0.3	4.1	22
TDS	mg/L	32267	32267	32267	32267	32267	28405	9700	7550	3300	32267	32267	32267	

Appendix A-4-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-4 (Loxton Area)

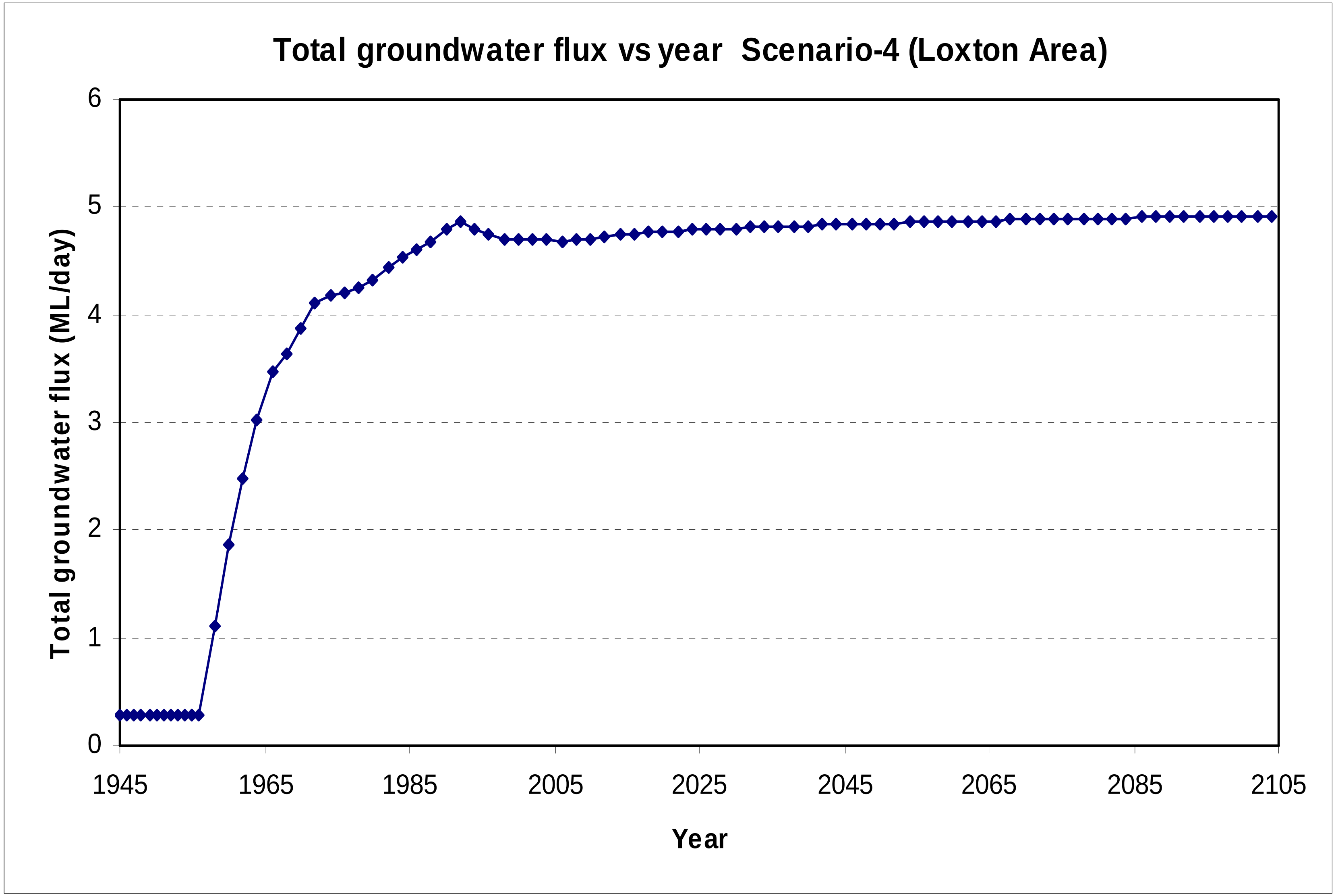


Appendix A-4-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-4 (Loxton Area)

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
0	1945	0.23	0.06	0.29
0	1946	0.23	0.06	0.29
0	1947	0.23	0.06	0.29
0	1948	0.23	0.06	0.29
0	1949	0.23	0.06	0.29
0	1950	0.23	0.06	0.29
0	1951	0.23	0.06	0.29
0	1952	0.23	0.06	0.29
0	1953	0.23	0.06	0.29
0	1954	0.23	0.06	0.29
0	1955	0.23	0.06	0.29
30	1955	0.23	0.06	0.29
365	1956	0.23	0.07	0.29
1095	1958	0.98	0.12	1.11
1825	1960	1.69	0.18	1.87
2555	1962	2.25	0.23	2.48
3285	1964	2.71	0.30	3.02
4015	1966	3.12	0.36	3.48
4745	1968	3.25	0.40	3.64
5475	1970	3.41	0.47	3.88
6205	1972	3.60	0.51	4.10
6935	1974	3.65	0.54	4.19
7665	1976	3.63	0.59	4.22
8395	1978	3.65	0.61	4.26
9125	1980	3.70	0.63	4.33
9855	1982	3.76	0.68	4.44
10585	1984	3.82	0.70	4.52
11315	1986	3.89	0.72	4.60
12045	1988	3.95	0.73	4.68
12775	1990	4.01	0.79	4.80
13505	1992	4.07	0.80	4.87
14235	1994	3.99	0.81	4.80
14965	1996	3.94	0.81	4.75
15695	1998	3.91	0.78	4.69
16425	2000	3.91	0.78	4.69
17155	2002	3.91	0.79	4.70
17885	2004	3.91	0.80	4.71
18615	2006	3.92	0.76	4.68
19345	2008	3.92	0.77	4.69
20075	2010	3.93	0.77	4.71
20805	2012	3.95	0.78	4.72
21535	2014	3.96	0.78	4.74
22265	2016	3.97	0.79	4.75

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
22995	2018	3.98	0.79	4.77
23725	2020	3.98	0.79	4.77
24455	2022	3.98	0.80	4.78
25185	2024	3.99	0.80	4.79
25915	2026	3.99	0.80	4.79
26645	2028	3.99	0.80	4.80
27375	2030	4.00	0.80	4.80
28105	2032	4.00	0.81	4.81
28835	2034	4.00	0.81	4.81
29565	2036	4.01	0.81	4.82
30295	2038	4.01	0.81	4.82
31025	2040	4.01	0.81	4.83
31755	2042	4.02	0.81	4.83
32485	2044	4.02	0.82	4.84
33215	2046	4.02	0.82	4.84
33945	2048	4.03	0.82	4.85
34675	2050	4.03	0.82	4.85
35405	2052	4.03	0.82	4.85
36135	2054	4.04	0.82	4.86
36865	2056	4.04	0.82	4.86
37595	2058	4.04	0.82	4.86
38325	2060	4.04	0.83	4.87
39055	2062	4.05	0.83	4.87
39785	2064	4.05	0.83	4.87
40515	2066	4.05	0.83	4.88
41245	2068	4.05	0.83	4.88
41975	2070	4.05	0.83	4.88
42705	2072	4.06	0.83	4.89
43435	2074	4.06	0.83	4.89
44165	2076	4.06	0.83	4.89
44895	2078	4.06	0.83	4.89
45625	2080	4.06	0.83	4.90
46355	2082	4.06	0.83	4.90
47085	2084	4.07	0.83	4.90
47815	2086	4.07	0.84	4.90
48545	2088	4.07	0.84	4.90
49275	2090	4.07	0.84	4.91
50005	2092	4.07	0.84	4.91
50735	2094	4.07	0.84	4.91
51465	2096	4.07	0.84	4.91
52195	2098	4.08	0.84	4.91
52925	2100	4.08	0.84	4.92
53655	2102	4.08	0.84	4.92
54385	2104	4.08	0.84	4.92

Appendix A-4-6a Predicted total groundwater flux (ML/day) in Scenario-4 (Loxton Area)

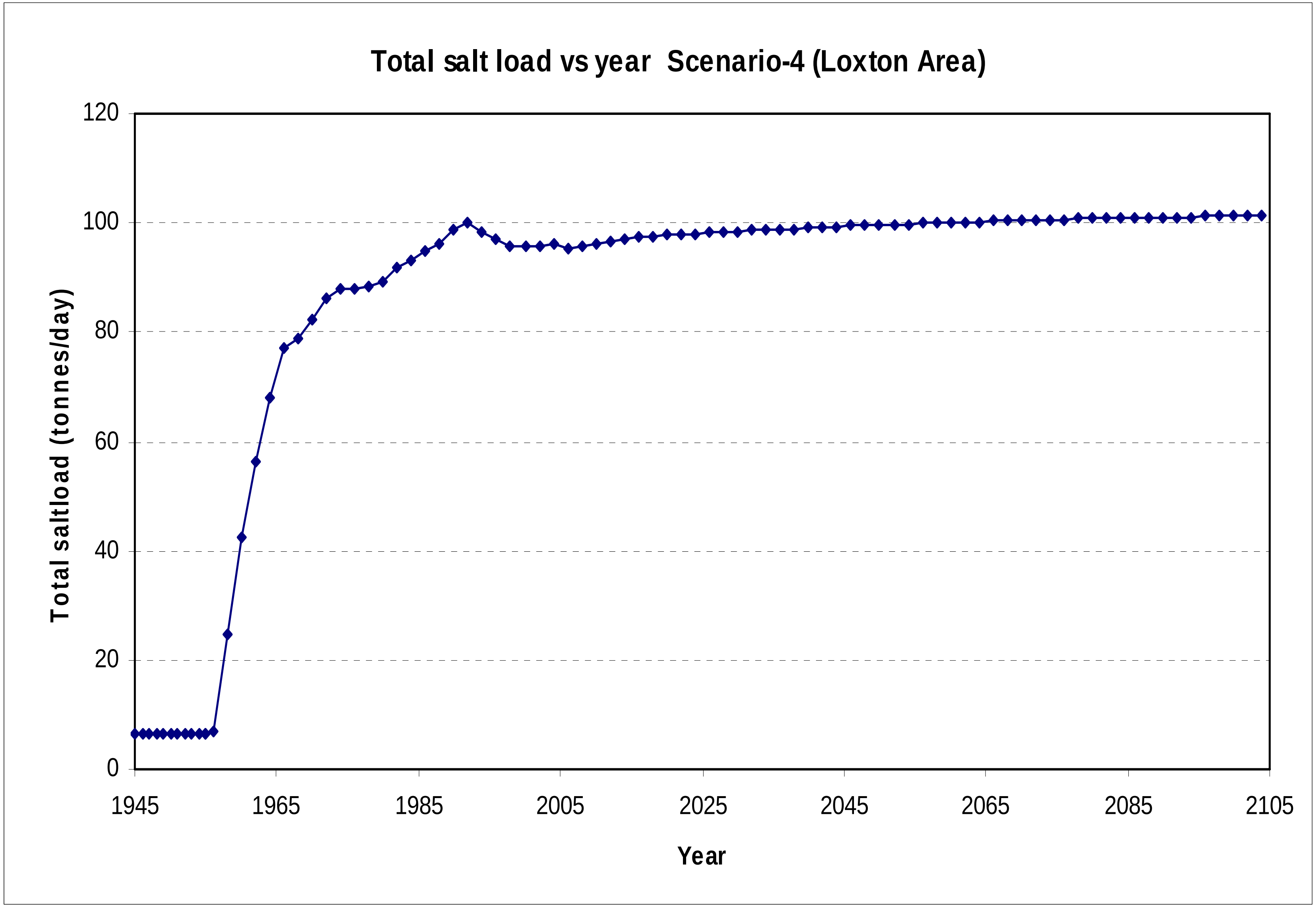


Appendix A-4-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-4 (Loxton Area)

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
0	1945	4.31	2.34	6.65
0	1946	4.31	2.34	6.65
0	1947	4.31	2.34	6.65
0	1948	4.31	2.34	6.65
0	1949	4.31	2.34	6.65
0	1950	4.31	2.34	6.65
0	1951	4.31	2.34	6.65
0	1952	4.31	2.34	6.65
0	1953	4.31	2.34	6.65
0	1954	4.31	2.34	6.65
0	1955	4.31	2.34	6.65
30	1955	4.31	2.34	6.65
365	1956	4.32	2.43	6.74
1095	1958	20.51	4.22	24.73
1825	1960	36.38	5.89	42.27
2555	1962	48.83	7.45	56.28
3285	1964	58.58	9.41	67.99
4015	1966	66.45	10.87	77.32
4745	1968	66.92	11.82	78.74
5475	1970	68.94	13.50	82.44
6205	1972	71.72	14.44	86.16
6935	1974	72.70	15.10	87.80
7665	1976	71.49	16.30	87.79
8395	1978	71.48	16.73	88.20
9125	1980	72.14	17.14	89.28
9855	1982	73.26	18.42	91.69
10585	1984	74.39	18.83	93.22
11315	1986	75.55	19.22	94.78
12045	1988	76.68	19.59	96.28
12775	1990	77.98	20.87	98.85
13505	1992	79.04	21.21	100.25
14235	1994	76.90	21.26	98.16
14965	1996	75.76	21.36	97.13
15695	1998	75.12	20.57	95.69
16425	2000	74.97	20.69	95.66
17155	2002	75.02	20.82	95.85
17885	2004	75.21	20.97	96.18
18615	2006	75.26	20.23	95.49
19345	2008	75.48	20.35	95.83
20075	2010	75.73	20.49	96.22
20805	2012	75.98	20.61	96.59
21535	2014	76.23	20.73	96.96
22265	2016	76.46	20.84	97.29

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
22995	2018	76.67	20.94	97.61
23725	2020	76.78	20.99	97.77
24455	2022	76.84	21.06	97.90
25185	2024	76.91	21.12	98.03
25915	2026	76.98	21.19	98.17
26645	2028	77.06	21.25	98.31
27375	2030	77.14	21.31	98.45
28105	2032	77.21	21.37	98.58
28835	2034	77.29	21.42	98.71
29565	2036	77.36	21.48	98.84
30295	2038	77.44	21.53	98.96
31025	2040	77.51	21.58	99.09
31755	2042	77.58	21.62	99.20
32485	2044	77.65	21.67	99.32
33215	2046	77.72	21.71	99.43
33945	2048	77.79	21.75	99.54
34675	2050	77.85	21.79	99.64
35405	2052	77.92	21.82	99.74
36135	2054	77.98	21.86	99.84
36865	2056	78.04	21.89	99.93
37595	2058	78.09	21.93	100.02
38325	2060	78.14	21.96	100.10
39055	2062	78.20	21.99	100.18
39785	2064	78.25	22.02	100.26
40515	2066	78.30	22.04	100.34
41245	2068	78.34	22.07	100.41
41975	2070	78.39	22.10	100.48
42705	2072	78.43	22.12	100.55
43435	2074	78.47	22.14	100.62
44165	2076	78.51	22.17	100.68
44895	2078	78.55	22.19	100.74
45625	2080	78.59	22.21	100.80
46355	2082	78.62	22.23	100.85
47085	2084	78.66	22.25	100.91
47815	2086	78.69	22.27	100.96
48545	2088	78.72	22.29	101.01
49275	2090	78.75	22.31	101.06
50005	2092	78.78	22.32	101.11
50735	2094	78.81	22.34	101.15
51465	2096	78.84	22.36	101.19
52195	2098	78.86	22.37	101.24
52925	2100	78.89	22.39	101.28
53655	2102	78.91	22.40	101.31
54385	2104	78.94	22.42	101.35

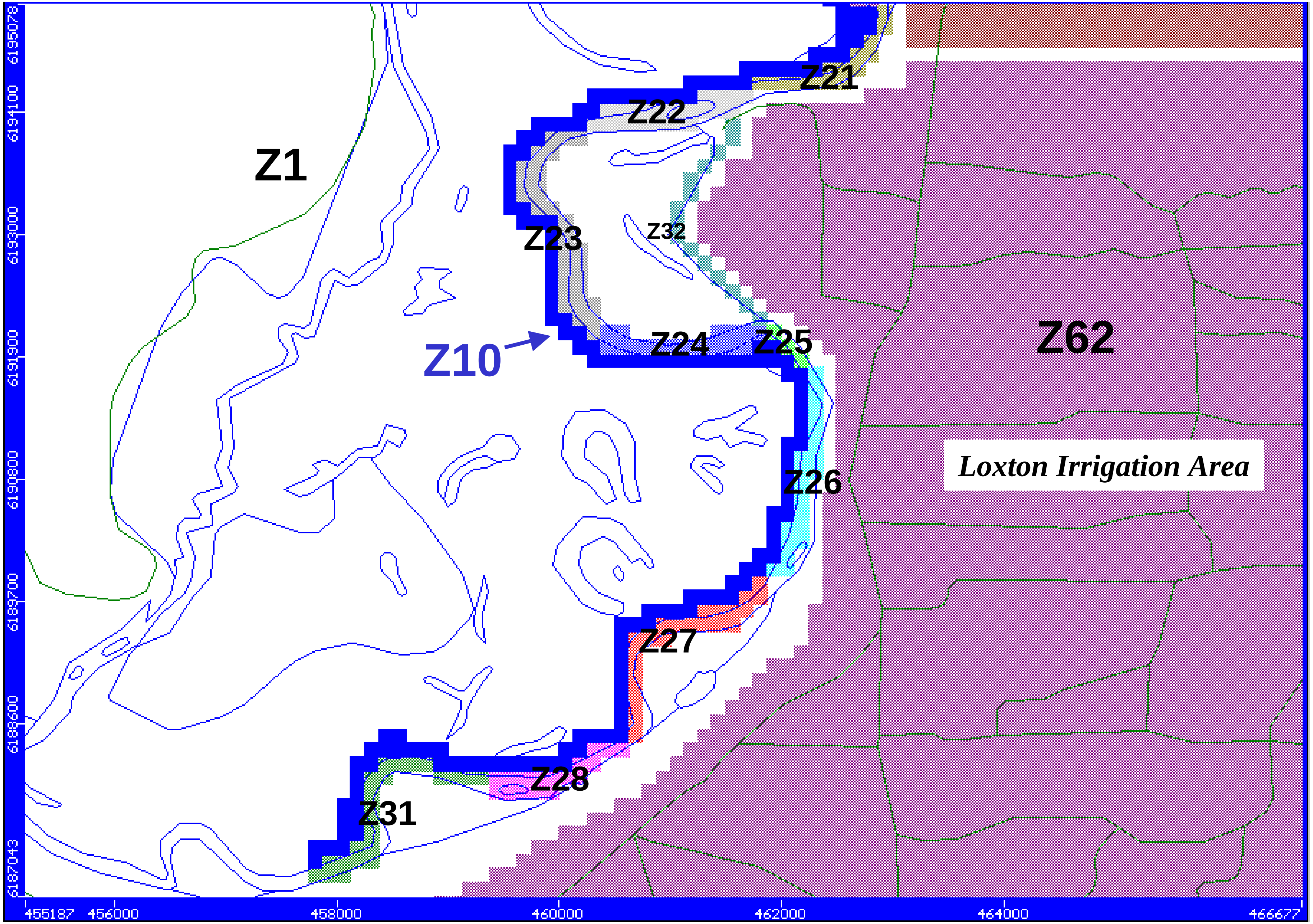
Appendix A-4-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-4 (Loxton Area)



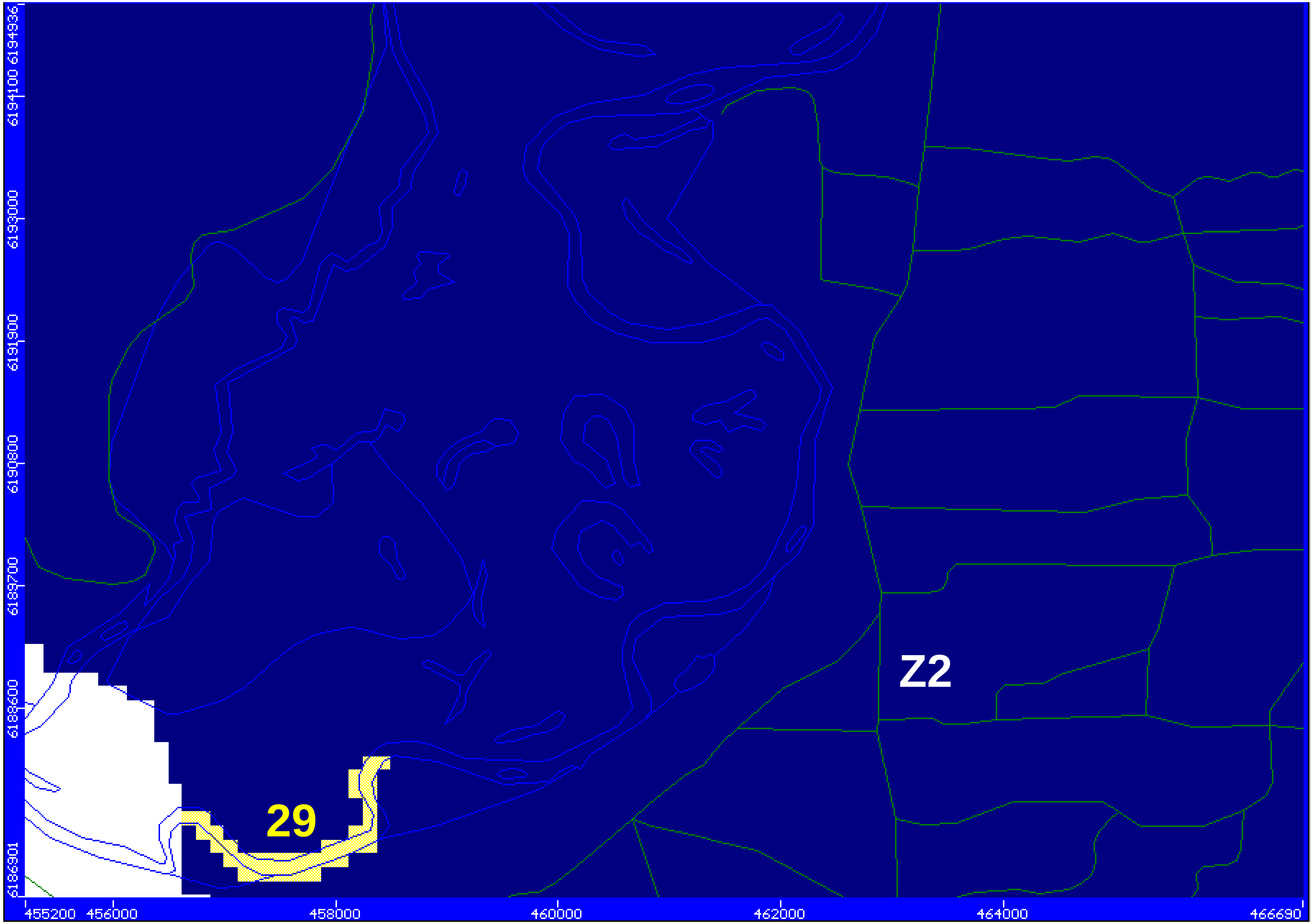
Appendix A-4-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-4 (Loxton Area)

A-5 Groundwater flux and salt load entering the River Murray Scenario-5 (Loxton Area)

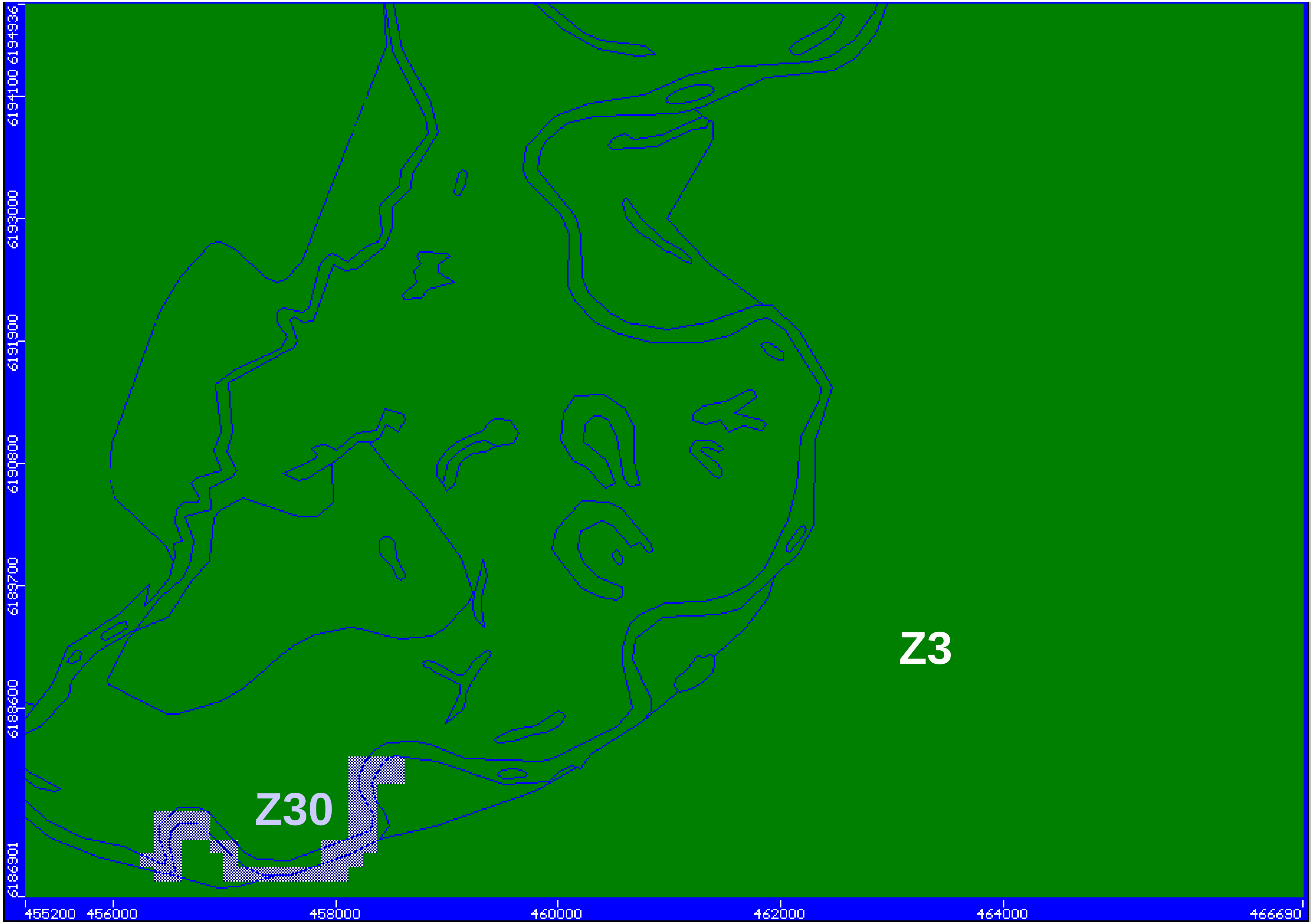
- Flow budget zones (Loxton Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix A-5-1a Flow budget zones in model Layer-1 (Loxton Area)



Appendix A-5-1b Flow budget zones in model Layer-2 (Loxton Area)



Appendix A-5-1c Flow budget zones in model Layer-3 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
30	1955	39.1	4.1	0.0	3.0	25.8	95.4	26.3	16.8	0.0	16.9	227
365	1956	39.1	4.1	0.0	3.1	26.1	95.9	26.3	16.8	0.0	16.9	228
1095	1958	200.1	106.7	0.0	96.1	228.4	292.2	27.1	16.9	0.0	17.1	985
1825	1960	366.5	210.9	0.0	187.2	386.3	459.2	29.7	17.3	14.0	17.5	1689
2555	1962	510.0	276.9	0.0	245.1	498.3	605.0	35.9	18.2	39.8	18.7	2248
3285	1964	624.4	317.4	1.1	284.6	581.9	758.0	47.5	19.8	59.2	20.4	2714
4015	1966	714.6	343.8	3.1	311.1	647.6	918.4	63.0	21.7	72.8	22.3	3118
4745	1968	720.9	325.9	2.6	296.9	648.3	1061.2	81.3	23.9	61.1	24.2	3246
5475	1970	735.1	318.0	2.3	294.2	664.7	1186.5	102.3	26.3	57.1	26.3	3413
6205	1972	755.5	317.9	2.4	296.7	686.5	1298.5	123.3	28.8	57.1	28.4	3595
6935	1974	766.6	314.3	2.4	294.5	679.8	1335.1	142.4	31.5	54.9	30.5	3652
7665	1976	751.0	298.3	1.7	281.4	656.5	1363.4	160.0	34.3	46.0	32.7	3625
8395	1978	745.3	290.3	1.3	275.0	651.9	1397.6	173.4	37.1	42.2	34.8	3649
9125	1980	746.6	287.5	1.2	273.4	654.4	1431.0	184.3	39.8	40.9	37.0	3696
9855	1982	751.9	287.5	1.3	275.7	660.6	1464.8	194.9	42.6	40.9	39.2	3759
10585	1984	760.0	288.6	1.4	277.4	667.6	1496.0	203.0	45.3	41.3	41.6	3822
11315	1986	769.3	290.1	1.6	279.5	675.0	1525.7	210.2	47.8	42.0	43.9	3885
12045	1988	778.7	291.8	1.8	281.7	682.3	1554.0	216.8	50.3	42.8	46.2	3946
12775	1990	788.6	293.9	2.2	285.6	690.1	1582.3	224.5	52.9	43.7	48.6	4012
13505	1992	798.2	295.8	2.4	287.8	697.0	1606.4	229.9	55.3	44.5	51.0	4068
14235	1994	774.8	280.7	1.5	273.6	672.9	1604.0	234.3	57.6	36.5	53.3	3989
14965	1996	760.6	271.9	1.1	265.7	661.1	1597.1	237.8	59.8	32.4	55.5	3943
15695	1998	753.3	267.5	0.9	260.6	654.3	1589.8	239.0	61.7	30.6	57.5	3915
16425	2000	749.8	265.4	0.8	258.8	651.0	1586.6	241.3	63.6	29.7	59.5	3907
17155	2002	749.0	264.5	0.8	258.1	649.5	1585.6	243.4	65.5	29.4	61.5	3907
17885	2004	720.0	248.2	0.2	242.0	610.2	1532.6	244.4	67.0	21.8	63.1	3749
18615	2006	698.9	237.1	0.0	230.4	588.4	1494.3	242.8	68.2	17.7	64.2	3642
19345	2008	683.8	231.0	0.0	224.6	574.5	1463.0	242.0	69.2	15.4	65.3	3569
20075	2010	673.2	227.4	0.0	220.9	564.3	1435.7	240.8	70.0	14.0	66.3	3513
20805	2012	665.1	225.0	0.0	218.4	556.3	1411.8	239.5	70.7	13.1	67.1	3467
21535	2014	658.4	223.2	0.0	216.4	549.7	1391.0	238.1	71.2	12.5	67.8	3428
22265	2016	652.7	221.8	0.0	214.8	544.1	1373.0	236.7	71.6	12.1	68.3	3395
22995	2018	647.6	220.7	0.0	213.4	539.4	1357.3	235.4	71.8	11.7	68.8	3366
23725	2020	640.7	219.3	0.0	212.0	535.2	1343.5	234.1	72.0	11.4	69.2	3337
24455	2022	633.5	218.0	0.0	210.7	531.4	1331.4	232.9	72.1	11.1	69.5	3311
25185	2024	627.3	217.0	0.0	209.6	528.1	1320.6	231.8	72.1	10.8	69.7	3287
25915	2026	622.0	216.1	0.0	208.7	525.1	1311.1	230.8	72.2	10.5	70.0	3266
26645	2028	617.5	215.4	0.0	207.9	522.4	1302.7	229.9	72.2	10.3	70.1	3248

Appendix A-5-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-5 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
27375	2030	613.7	214.7	0.0	207.2	520.0	1295.2	229.1	72.2	10.1	70.3	3232
28105	2032	610.4	214.1	0.0	206.5	517.9	1288.5	228.4	72.2	10.0	70.4	3218
28835	2034	607.5	213.6	0.0	206.0	516.0	1282.6	227.8	72.1	9.8	70.5	3206
29565	2036	605.0	213.1	0.0	205.5	514.4	1277.4	227.3	72.1	9.7	70.6	3195
30295	2038	602.9	212.8	0.0	205.0	512.9	1272.8	226.8	72.1	9.6	70.8	3186
31025	2040	601.0	212.4	0.0	204.7	511.6	1268.7	226.4	72.1	9.5	70.9	3177
31755	2042	599.4	212.1	0.0	204.3	510.5	1265.1	226.1	72.1	9.4	71.0	3170
32485	2044	598.0	211.8	0.0	204.0	509.5	1262.0	225.8	72.2	9.3	71.1	3164
33215	2046	596.7	211.6	0.0	203.8	508.6	1259.2	225.5	72.2	9.3	71.2	3158
33945	2048	595.7	211.4	0.0	203.6	507.8	1256.8	225.3	72.2	9.2	71.3	3153
34675	2050	594.7	211.2	0.0	203.4	507.2	1254.7	225.1	72.3	9.2	71.4	3149
35405	2052	593.9	211.1	0.0	203.2	506.6	1252.9	225.0	72.3	9.1	71.5	3146
36135	2054	593.1	210.9	0.0	203.1	506.1	1251.3	224.9	72.3	9.1	71.6	3142
36865	2056	592.5	210.8	0.0	202.9	505.6	1250.0	224.8	72.4	9.0	71.7	3140
37595	2058	592.0	210.7	0.0	202.8	505.2	1248.8	224.7	72.4	9.0	71.9	3138
38325	2060	591.5	210.6	0.0	202.7	504.9	1247.8	224.7	72.5	9.0	72.0	3136
39055	2062	591.0	210.6	0.0	202.7	504.6	1247.0	224.7	72.6	9.0	72.1	3134
39785	2064	590.7	210.5	0.0	202.6	504.4	1246.3	224.7	72.6	9.0	72.2	3133
40515	2066	590.4	210.5	0.0	202.5	504.2	1245.7	224.7	72.7	8.9	72.3	3132
41245	2068	590.1	210.4	0.0	202.5	504.0	1245.3	224.7	72.8	8.9	72.5	3131
41975	2070	589.9	210.4	0.0	202.5	503.9	1244.9	224.8	72.9	8.9	72.6	3131
42705	2072	589.7	210.3	0.0	202.4	503.8	1244.6	224.8	72.9	8.9	72.7	3130
43435	2074	589.5	210.3	0.0	202.4	503.7	1244.4	224.9	73.0	8.9	72.8	3130
44165	2076	589.4	210.3	0.0	202.4	503.6	1244.3	225.0	73.1	8.9	73.0	3130
44895	2078	589.3	210.3	0.0	202.4	503.5	1244.2	225.0	73.2	8.9	73.1	3130
45625	2080	589.2	210.3	0.0	202.4	503.5	1244.2	225.1	73.2	8.9	73.2	3130
46355	2082	589.1	210.3	0.0	202.4	503.5	1244.3	225.2	73.3	8.9	73.3	3130
47085	2084	589.1	210.3	0.0	202.4	503.5	1244.4	225.3	73.4	8.9	73.4	3131
47815	2086	589.0	210.3	0.0	202.4	503.5	1244.5	225.4	73.5	8.9	73.5	3131
48545	2088	589.0	210.3	0.0	202.4	503.5	1244.7	225.5	73.6	8.9	73.7	3132
49275	2090	589.0	210.3	0.0	202.4	503.6	1244.9	225.6	73.6	8.9	73.8	3132
50005	2092	589.0	210.3	0.0	202.4	503.6	1245.1	225.7	73.7	8.9	73.9	3133
50735	2094	589.0	210.3	0.0	202.5	503.7	1245.4	225.8	73.8	8.9	74.0	3133
51465	2096	589.1	210.3	0.0	202.5	503.7	1245.7	226.0	73.9	8.9	74.1	3134
52195	2098	589.1	210.4	0.0	202.5	503.8	1246.0	226.1	74.0	8.9	74.2	3135
52925	2100	589.2	210.4	0.0	202.5	503.8	1246.3	226.2	74.1	8.9	74.3	3136
53655	2102	589.2	210.4	0.0	202.6	503.9	1246.7	226.3	74.1	8.9	74.4	3137
54385	2104	589.3	210.4	0.0	202.6	504.0	1247.0	226.4	74.2	8.9	74.6	3137
TDS	*mg/L*	*25807*	*29055*	*30760*	*39978*	*18716*	*7710*	*35935*	*29140*	*39117*	*24080*	

Appendix A-5-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-5 (Loxton Area)

Day	Year	Z1 to Z21 (tonne/day)	Z1 to Z22 (tonne/day)	Z1 to Z23 (tonne/day)	Z1 to Z24 (tonne/day)	Z1 to Z25 (tonne/day)	Z1 to Z26 (tonne/day)	Z1 to Z27 (tonne/day)	Z1 to Z28 (tonne/day)	Seepage Z32 Drain (tonne/day)	Z1 to Z31 (tonne/day)	Total Lateral (tonne/day)
0	1945	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1946	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1947	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1948	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1949	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1950	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1951	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1952	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1953	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1954	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
30	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
365	1956	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
1095	1958	5.2	3.1	0.0	3.8	4.3	2.3	1.0	0.5	0.0	0.4	21
1825	1960	9.5	6.1	0.0	7.5	7.2	3.5	1.1	0.5	0.5	0.4	36
2555	1962	13.2	8.0	0.0	9.8	9.3	4.7	1.3	0.5	1.6	0.5	49
3285	1964	16.1	9.2	0.0	11.4	10.9	5.8	1.7	0.6	2.3	0.5	59
4015	1966	18.4	10.0	0.1	12.4	12.1	7.1	2.3	0.6	2.8	0.5	66
4745	1968	18.6	9.5	0.1	11.9	12.1	8.2	2.9	0.7	2.4	0.6	67
5475	1970	19.0	9.2	0.1	11.8	12.4	9.1	3.7	0.8	2.2	0.6	69
6205	1972	19.5	9.2	0.1	11.9	12.8	10.0	4.4	0.8	2.2	0.7	72
6935	1974	19.8	9.1	0.1	11.8	12.7	10.3	5.1	0.9	2.1	0.7	73
7665	1976	19.4	8.7	0.1	11.3	12.3	10.5	5.7	1.0	1.8	0.8	71
8395	1978	19.2	8.4	0.0	11.0	12.2	10.8	6.2	1.1	1.6	0.8	71
9125	1980	19.3	8.4	0.0	10.9	12.2	11.0	6.6	1.2	1.6	0.9	72
9855	1982	19.4	8.4	0.0	11.0	12.4	11.3	7.0	1.2	1.6	0.9	73
10585	1984	19.6	8.4	0.0	11.1	12.5	11.5	7.3	1.3	1.6	1.0	74
11315	1986	19.9	8.4	0.0	11.2	12.6	11.8	7.6	1.4	1.6	1.1	76
12045	1988	20.1	8.5	0.1	11.3	12.8	12.0	7.8	1.5	1.7	1.1	77
12775	1990	20.4	8.5	0.1	11.4	12.9	12.2	8.1	1.5	1.7	1.2	78
13505	1992	20.6	8.6	0.1	11.5	13.0	12.4	8.3	1.6	1.7	1.2	79
14235	1994	20.0	8.2	0.0	10.9	12.6	12.4	8.4	1.7	1.4	1.3	77
14965	1996	19.6	7.9	0.0	10.6	12.4	12.3	8.5	1.7	1.3	1.3	76
15695	1998	19.4	7.8	0.0	10.4	12.2	12.3	8.6	1.8	1.2	1.4	75
16425	2000	19.4	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.2	1.4	75
17155	2002	19.3	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.1	1.5	75
17885	2004	18.6	7.2	0.0	9.7	11.4	11.8	8.8	2.0	0.9	1.5	72
18615	2006	18.0	6.9	0.0	9.2	11.0	11.5	8.7	2.0	0.7	1.5	70
19345	2008	17.6	6.7	0.0	9.0	10.8	11.3	8.7	2.0	0.6	1.6	68
20075	2010	17.4	6.6	0.0	8.8	10.6	11.1	8.7	2.0	0.5	1.6	67
20805	2012	17.2	6.5	0.0	8.7	10.4	10.9	8.6	2.1	0.5	1.6	67
21535	2014	17.0	6.5	0.0	8.6	10.3	10.7	8.6	2.1	0.5	1.6	66
22265	2016	16.8	6.4	0.0	8.6	10.2	10.6	8.5	2.1	0.5	1.6	65

Appendix A-5-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-5 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	16.7	6.4	0.0	8.5	10.1	10.5	8.5	2.1	0.5	1.7	65
23725	2020	16.5	6.4	0.0	8.5	10.0	10.4	8.4	2.1	0.4	1.7	64
24455	2022	16.3	6.3	0.0	8.4	9.9	10.3	8.4	2.1	0.4	1.7	64
25185	2024	16.2	6.3	0.0	8.4	9.9	10.2	8.3	2.1	0.4	1.7	63
25915	2026	16.1	6.3	0.0	8.3	9.8	10.1	8.3	2.1	0.4	1.7	63
26645	2028	15.9	6.3	0.0	8.3	9.8	10.0	8.3	2.1	0.4	1.7	63
27375	2030	15.8	6.2	0.0	8.3	9.7	10.0	8.2	2.1	0.4	1.7	63
28105	2032	15.8	6.2	0.0	8.3	9.7	9.9	8.2	2.1	0.4	1.7	62
28835	2034	15.7	6.2	0.0	8.2	9.7	9.9	8.2	2.1	0.4	1.7	62
29565	2036	15.6	6.2	0.0	8.2	9.6	9.8	8.2	2.1	0.4	1.7	62
30295	2038	15.6	6.2	0.0	8.2	9.6	9.8	8.2	2.1	0.4	1.7	62
31025	2040	15.5	6.2	0.0	8.2	9.6	9.8	8.1	2.1	0.4	1.7	62
31755	2042	15.5	6.2	0.0	8.2	9.6	9.8	8.1	2.1	0.4	1.7	61
32485	2044	15.4	6.2	0.0	8.2	9.5	9.7	8.1	2.1	0.4	1.7	61
33215	2046	15.4	6.1	0.0	8.1	9.5	9.7	8.1	2.1	0.4	1.7	61
33945	2048	15.4	6.1	0.0	8.1	9.5	9.7	8.1	2.1	0.4	1.7	61
34675	2050	15.3	6.1	0.0	8.1	9.5	9.7	8.1	2.1	0.4	1.7	61
35405	2052	15.3	6.1	0.0	8.1	9.5	9.7	8.1	2.1	0.4	1.7	61
36135	2054	15.3	6.1	0.0	8.1	9.5	9.6	8.1	2.1	0.4	1.7	61
36865	2056	15.3	6.1	0.0	8.1	9.5	9.6	8.1	2.1	0.4	1.7	61
37595	2058	15.3	6.1	0.0	8.1	9.5	9.6	8.1	2.1	0.4	1.7	61
38325	2060	15.3	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.4	1.7	61
39055	2062	15.3	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.4	1.7	61
39785	2064	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.4	1.7	61
40515	2066	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.4	1.7	61
41245	2068	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.7	61
41975	2070	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.7	61
42705	2072	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
43435	2074	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
44165	2076	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
44895	2078	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
45625	2080	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
46355	2082	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
47085	2084	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
47815	2086	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
48545	2088	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
49275	2090	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
50005	2092	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.1	0.3	1.8	61
50735	2094	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.2	0.3	1.8	61
51465	2096	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.2	0.3	1.8	61
52195	2098	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.2	0.3	1.8	61
52925	2100	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.2	0.3	1.8	61
53655	2102	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.2	0.3	1.8	61
54385	2104	15.2	6.1	0.0	8.1	9.4	9.6	8.1	2.2	0.3	1.8	61
TDS	mg/L	25807	29055	30760	39678	18718	7710	35935	29140	39117	24080	

Appendix A-5-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-5 (Loxton Area)

Appendix A-5-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-5 (Loxton Area)

Day	Year	Z2 to Z21 (m³/day)	Z2 to Z22 (m³/day)	Z2 to Z23 (m³/day)	Z2 to Z24 (m³/day)	Z2 to Z25 (m³/day)	Z2 to Z26 (m³/day)	Z2 to Z27 (m³/day)	Z2 to Z28 (m³/day)	Z2 to Z29 (m³/day)	Z3 to Z29 (m³/day)	Z2 to Z31 (m³/day)	Z3 to Z30 (m³/day)	Total Lateral (m³/day)
30	1955	6.7	0.9	0.0	0.7	1.1	11.0	10.4	21.2	6.8	3.8	0.0	40.5	63
365	1956	6.7	0.9	0.0	1.2	1.6	12.9	10.4	21.0	6.8	3.8	0.0	40.5	65
1095	1958	21.5	9.6	0.0	10.3	9.2	28.9	11.1	21.3	6.8	3.9	0.0	40.8	123
1825	1960	33.8	17.7	0.0	19.3	14.3	46.2	13.0	22.2	6.9	4.1	0.0	41.4	178
2555	1962	43.3	23.3	1.0	26.6	17.8	65.1	16.8	24.7	7.3	4.6	0.1	43.3	231
3285	1964	50.8	27.4	2.4	37.2	20.8	95.1	26.5	28.5	7.7	5.2	0.3	45.7	302
4015	1966	56.6	30.4	3.2	41.8	22.8	119.2	35.6	32.8	8.2	5.7	0.4	48.1	357
4745	1968	58.0	30.3	3.4	42.0	23.1	141.6	45.2	37.4	8.7	6.2	0.6	50.5	396
5475	1970	59.7	30.9	3.9	50.0	24.2	174.3	64.4	42.9	9.2	6.7	0.9	53.0	467
6205	1972	61.6	31.8	4.2	51.5	24.9	192.2	74.3	48.3	9.7	7.2	1.1	55.4	507
6935	1974	62.8	32.2	4.4	52.2	25.0	203.8	82.9	53.9	10.2	7.7	1.4	57.9	537
7665	1976	62.6	31.8	5.1	59.3	25.2	225.6	99.9	60.2	10.7	8.2	1.7	60.5	590
8395	1978	62.8	31.8	5.2	59.3	25.2	232.8	106.0	65.6	11.2	8.6	2.1	62.9	611
9125	1980	63.3	32.0	5.3	59.8	25.3	238.9	111.1	70.8	11.7	9.0	2.4	65.3	630
9855	1982	63.9	32.5	6.3	68.6	26.1	259.0	126.1	76.8	12.2	9.5	2.8	67.9	684
10585	1984	64.9	33.1	6.5	69.3	26.4	264.0	130.0	81.8	12.7	9.9	3.2	70.2	702
11315	1986	65.7	33.6	6.7	70.0	26.6	268.7	133.7	86.5	13.2	10.3	3.6	72.6	719
12045	1988	66.5	34.1	6.9	70.6	26.9	273.0	137.0	91.0	13.7	10.7	4.0	74.9	734
12775	1990	67.4	34.8	8.2	79.7	27.7	292.7	151.1	96.4	14.2	11.1	4.5	77.4	788
13505	1992	68.2	35.2	8.4	80.3	27.9	296.2	153.8	100.7	14.7	11.5	4.8	79.7	802
14235	1994	67.1	34.3	8.2	79.1	27.4	297.3	155.8	104.6	15.2	11.9	5.1	81.9	806
14965	1996	66.8	34.1	8.2	78.6	27.1	297.6	157.5	108.2	15.6	12.3	5.4	84.1	811
15695	1998	66.6	33.9	7.1	69.9	26.4	282.2	148.0	110.4	16.0	12.6	5.6	86.1	779
16425	2000	66.6	33.9	7.1	69.8	26.4	282.4	149.2	113.4	16.5	12.9	5.9	88.1	784
17155	2002	66.7	34.0	7.2	69.9	26.4	282.7	150.3	116.3	16.9	13.2	6.2	90.1	790
17885	2004	65.2	32.8	6.9	68.0	25.4	279.1	150.4	118.4	17.2	13.4	6.3	91.4	783
18615	2006	64.1	31.9	5.6	58.5	24.3	260.7	139.5	118.9	17.4	13.5	6.2	92.3	741
19345	2008	63.2	31.4	5.4	57.7	23.9	257.3	139.0	120.1	17.6	13.6	6.3	93.2	735
20075	2010	62.7	31.1	5.3	57.1	23.6	254.2	138.3	121.0	17.8	13.7	6.4	94.1	731
20805	2012	62.2	30.8	5.3	56.7	23.4	251.3	137.6	121.6	17.9	13.7	6.4	94.8	727
21535	2014	61.8	30.6	5.2	56.3	23.2	248.8	136.9	122.0	18.1	13.8	6.5	95.4	723
22265	2016	61.4	30.4	5.1	56.0	23.1	246.5	136.2	122.2	18.2	13.9	6.5	96.0	719
22995	2018	61.1	30.2	5.1	55.7	22.9	244.6	135.6	122.3	18.3	13.9	6.5	96.5	716
23725	2020	60.3	29.7	5.0	55.3	22.8	242.7	134.9	122.2	18.4	14.0	6.6	96.9	712
24455	2022	59.7	29.4	4.9	55.0	22.6	241.1	134.3	122.1	18.5	14.0	6.6	97.3	708
25185	2024	59.2	29.2	4.9	54.8	22.5	239.7	133.8	122.0	18.5	14.1	6.6	97.7	705
25915	2026	58.8	29.0	4.8	54.6	22.4	238.4	133.3	121.8	18.6	14.1	6.6	98.0	702
26645	2028	58.5	28.8	4.8	54.4	22.3	237.3	132.9	121.7	18.7	14.2	6.6	98.4	700

Appendix A-5-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-5 (Loxton Area)

Day	Year	Z2 to Z21 (m³/day)	Z2 to Z22 (m³/day)	Z2 to Z23 (m³/day)	Z2 to Z24 (m³/day)	Z2 to Z25 (m³/day)	Z2 to Z26 (m³/day)	Z2 to Z27 (m³/day)	Z2 to Z28 (m³/day)	Z2 to Z29 (m³/day)	Z3 to Z29 (m³/day)	Z2 to Z31 (m³/day)	Z3 to Z30 (m³/day)	Total Lateral (m³/day)
27375	2030	58.2	28.7	4.7	54.2	22.3	236.4	132.5	121.6	18.7	14.2	6.6	98.7	698
28105	2032	58.0	28.6	4.7	54.1	22.2	235.5	132.1	121.4	18.8	14.3	6.6	99.0	696
28835	2034	57.8	28.5	4.7	54.0	22.1	234.8	131.9	121.3	18.8	14.3	6.6	99.2	695
29565	2036	57.6	28.4	4.7	53.9	22.1	234.1	131.6	121.2	18.9	14.4	6.6	99.5	693
30295	2038	57.5	28.3	4.7	53.8	22.0	233.5	131.4	121.1	18.9	14.4	6.7	99.8	692
31025	2040	57.3	28.3	4.6	53.7	22.0	233.0	131.2	121.1	19.0	14.4	6.7	100.0	691
31755	2042	57.2	28.2	4.6	53.6	22.0	232.5	131.1	121.0	19.0	14.5	6.7	100.2	690
32485	2044	57.1	28.2	4.6	53.6	21.9	232.1	130.9	121.0	19.0	14.5	6.7	100.5	690
33215	2046	57.0	28.1	4.6	53.5	21.9	231.8	130.8	121.0	19.1	14.6	6.7	100.7	689
33945	2048	56.9	28.1	4.6	53.5	21.9	231.5	130.7	121.0	19.1	14.6	6.7	100.9	689
34675	2050	56.9	28.1	4.6	53.4	21.9	231.2	130.7	121.0	19.2	14.6	6.7	101.2	688
35405	2052	56.8	28.0	4.6	53.4	21.8	231.0	130.6	121.1	19.2	14.7	6.7	101.4	688
36135	2054	56.8	28.0	4.6	53.4	21.8	230.8	130.6	121.1	19.3	14.7	6.8	101.6	688
36865	2056	56.7	28.0	4.6	53.3	21.8	230.7	130.5	121.2	19.3	14.7	6.8	101.8	688
37595	2058	56.7	28.0	4.6	53.3	21.8	230.5	130.5	121.2	19.3	14.8	6.8	102.0	688
38325	2060	56.7	28.0	4.6	53.3	21.8	230.4	130.5	121.3	19.4	14.8	6.8	102.3	688
39055	2062	56.6	28.0	4.6	53.3	21.8	230.3	130.5	121.4	19.4	14.8	6.8	102.5	688
39785	2064	56.6	27.9	4.6	53.3	21.8	230.3	130.5	121.5	19.4	14.9	6.8	102.7	688
40515	2066	56.6	27.9	4.6	53.3	21.8	230.2	130.6	121.6	19.5	14.9	6.9	102.9	688
41245	2068	56.6	27.9	4.6	53.3	21.8	230.2	130.6	121.7	19.5	14.9	6.9	103.1	688
41975	2070	56.5	27.9	4.6	53.3	21.8	230.1	130.6	121.8	19.6	15.0	6.9	103.2	688
42705	2072	56.5	27.9	4.6	53.3	21.8	230.1	130.7	121.9	19.6	15.0	6.9	103.4	688
43435	2074	56.5	27.9	4.6	53.3	21.8	230.1	130.7	122.0	19.6	15.0	6.9	103.6	688
44165	2076	56.5	27.9	4.6	53.3	21.8	230.1	130.7	122.1	19.7	15.1	6.9	103.8	689
44895	2078	56.5	27.9	4.6	53.3	21.8	230.2	130.8	122.2	19.7	15.1	7.0	104.0	689
45625	2080	56.5	27.9	4.6	53.3	21.8	230.2	130.8	122.3	19.7	15.1	7.0	104.2	689
46355	2082	56.5	27.9	4.6	53.3	21.8	230.2	130.9	122.5	19.8	15.2	7.0	104.4	690
47085	2084	56.5	27.9	4.6	53.3	21.8	230.2	131.0	122.6	19.8	15.2	7.0	104.5	690
47815	2086	56.5	27.9	4.6	53.3	21.8	230.3	131.0	122.7	19.8	15.2	7.0	104.7	690
48545	2088	56.5	27.9	4.6	53.3	21.8	230.3	131.1	122.8	19.9	15.2	7.0	104.9	690
49275	2090	56.5	27.9	4.6	53.3	21.8	230.4	131.1	123.0	19.9	15.3	7.1	105.0	691
50005	2092	56.5	27.9	4.6	53.3	21.8	230.4	131.2	123.1	19.9	15.3	7.1	105.2	691
50735	2094	56.5	27.9	4.6	53.3	21.8	230.5	131.3	123.2	20.0	15.3	7.1	105.4	691
51465	2096	56.5	27.9	4.6	53.3	21.8	230.6	131.3	123.3	20.0	15.3	7.1	105.5	692
52195	2098	56.5	28.0	4.6	53.4	21.8	230.6	131.4	123.4	20.0	15.4	7.1	105.7	692
52925	2100	56.5	28.0	4.6	53.4	21.8	230.7	131.5	123.6	20.0	15.4	7.1	105.8	693
53655	2102	56.5	28.0	4.6	53.4	21.8	230.8	131.5	123.7	20.1	15.4	7.2	106.0	693
54385	2104	56.5	28.0	4.6	53.4	21.8	230.8	131.6	123.8	20.1	15.4	7.2	106.1	693
TDS	mg/L	32287	32287	32287	32287	32287	29405	8700	7550	3300	32287	32287	32287	

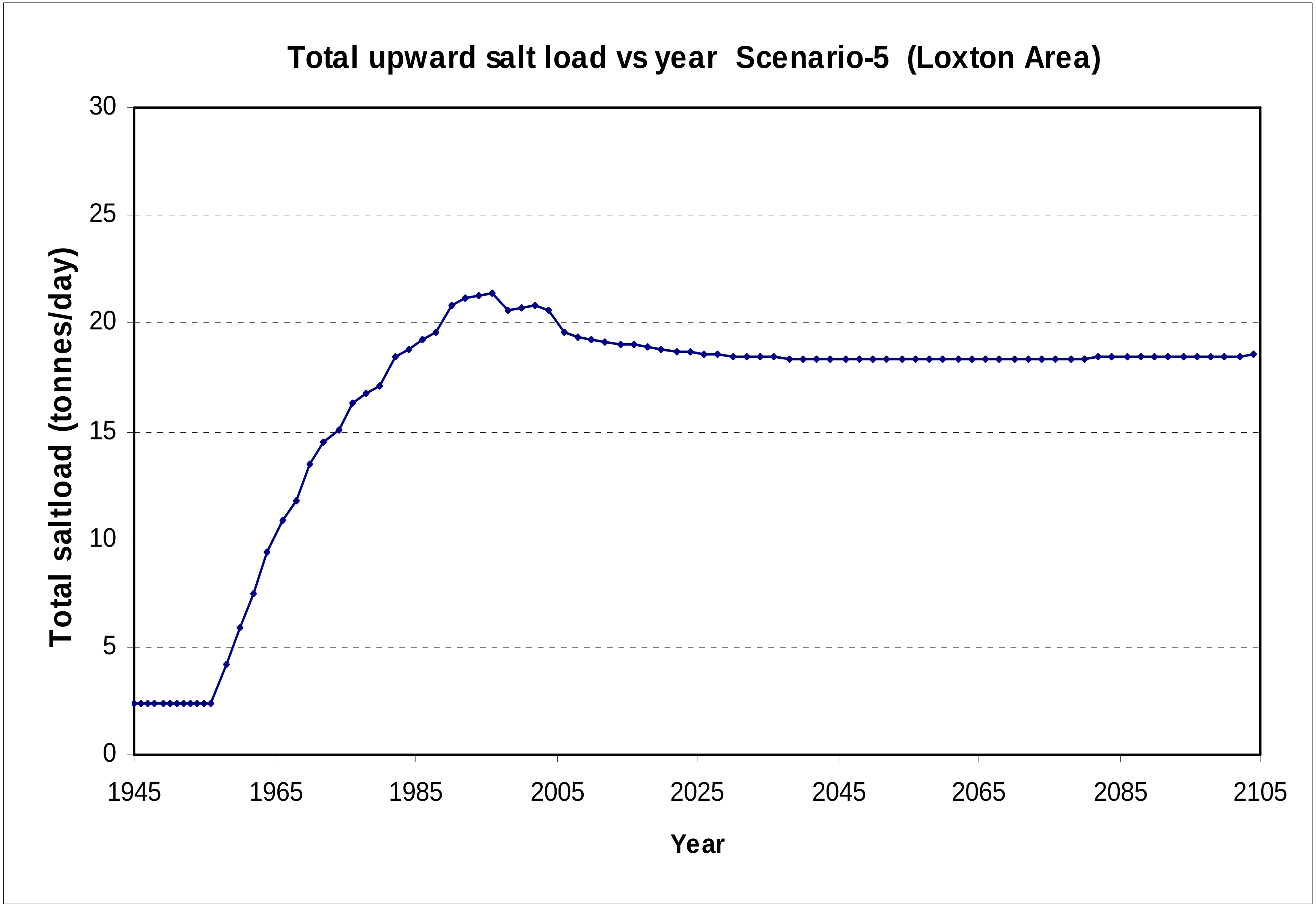
Appendix A-5-4b Predicted upward groundwater flux (m³/day) from flow budget zones in Scenario-5 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z29 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1946	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1947	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1948	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1949	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1950	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1951	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1952	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1953	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1954	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
30	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
365	1956	0.2	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.0	0.1	0.0	1.3	2
1095	1958	0.7	0.3	0.0	0.3	0.3	0.8	0.1	0.2	0.0	0.1	0.0	1.3	4
1825	1960	1.1	0.6	0.0	0.6	0.5	1.4	0.1	0.2	0.0	0.1	0.0	1.3	6
2555	1962	1.4	0.8	0.0	0.9	0.6	1.9	0.2	0.2	0.0	0.1	0.0	1.4	7
3285	1964	1.6	0.9	0.1	1.2	0.7	2.8	0.3	0.2	0.0	0.2	0.0	1.5	9
4015	1966	1.8	1.0	0.1	1.3	0.7	3.5	0.3	0.2	0.0	0.2	0.0	1.6	11
4745	1968	1.9	1.0	0.1	1.4	0.7	4.2	0.4	0.3	0.0	0.2	0.0	1.6	12
5475	1970	1.9	1.0	0.1	1.6	0.8	5.1	0.6	0.3	0.0	0.2	0.0	1.7	14
6205	1972	2.0	1.0	0.1	1.7	0.8	5.7	0.7	0.4	0.0	0.2	0.0	1.8	14
6935	1974	2.0	1.0	0.1	1.7	0.8	6.0	0.8	0.4	0.0	0.2	0.0	1.9	15
7665	1976	2.0	1.0	0.2	1.9	0.8	6.6	1.0	0.5	0.0	0.3	0.1	2.0	16
8395	1978	2.0	1.0	0.2	1.9	0.8	6.8	1.0	0.5	0.0	0.3	0.1	2.0	17
9125	1980	2.0	1.0	0.2	1.9	0.8	7.0	1.1	0.5	0.0	0.3	0.1	2.1	17
9855	1982	2.1	1.0	0.2	2.2	0.8	7.6	1.2	0.6	0.0	0.3	0.1	2.2	18
10585	1984	2.1	1.1	0.2	2.2	0.9	7.8	1.3	0.6	0.0	0.3	0.1	2.3	19
11315	1986	2.1	1.1	0.2	2.3	0.9	7.9	1.3	0.7	0.0	0.3	0.1	2.3	19
12045	1988	2.1	1.1	0.2	2.3	0.9	8.0	1.3	0.7	0.0	0.3	0.1	2.4	20
12775	1990	2.2	1.1	0.3	2.6	0.9	8.6	1.5	0.7	0.0	0.4	0.1	2.5	21
13505	1992	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.0	0.4	0.2	2.6	21
14235	1994	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.1	0.4	0.2	2.6	21
14965	1996	2.2	1.1	0.3	2.5	0.9	8.8	1.5	0.8	0.1	0.4	0.2	2.7	21
15695	1998	2.2	1.1	0.2	2.3	0.9	8.3	1.4	0.8	0.1	0.4	0.2	2.8	21
16425	2000	2.1	1.1	0.2	2.3	0.9	8.3	1.4	0.9	0.1	0.4	0.2	2.8	21
17155	2002	2.2	1.1	0.2	2.3	0.9	8.3	1.5	0.9	0.1	0.4	0.2	2.9	21
17885	2004	2.1	1.1	0.2	2.2	0.8	8.2	1.5	0.9	0.1	0.4	0.2	3.0	21
18615	2006	2.1	1.0	0.2	1.9	0.8	7.7	1.4	0.9	0.1	0.4	0.2	3.0	20
19345	2008	2.0	1.0	0.2	1.9	0.8	7.6	1.3	0.9	0.1	0.4	0.2	3.0	19
20075	2010	2.0	1.0	0.2	1.8	0.8	7.5	1.3	0.9	0.1	0.4	0.2	3.0	19
20805	2012	2.0	1.0	0.2	1.8	0.8	7.4	1.3	0.9	0.1	0.4	0.2	3.1	19
21535	2014	2.0	1.0	0.2	1.8	0.7	7.3	1.3	0.9	0.1	0.4	0.2	3.1	19
22265	2016	2.0	1.0	0.2	1.8	0.7	7.2	1.3	0.9	0.1	0.4	0.2	3.1	19

Appendix A-5-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-5 (Loxton Area)

Day	Year	Z2 to Z21 (tonne/day)	Z2 to Z22 (tonne/day)	Z2 to Z23 (tonne/day)	Z2 to Z24 (tonne/day)	Z2 to Z25 (tonne/day)	Z2 to Z26 (tonne/day)	Z2 to Z27 (tonne/day)	Z2 to Z28 (tonne/day)	Z2 to Z29 (tonne/day)	Z3 to Z29 (tonne/day)	Z2 to Z31 (tonne/day)	Z3 to Z30 (tonne/day)	Total Lateral (tonne/day)
22995	2018	2.0	1.0	0.2	1.8	0.7	7.2	1.3	0.9	0.1	0.4	0.2	3.1	19
23725	2020	1.9	1.0	0.2	1.8	0.7	7.1	1.3	0.9	0.1	0.5	0.2	3.1	19
24455	2022	1.9	0.9	0.2	1.8	0.7	7.1	1.3	0.9	0.1	0.5	0.2	3.1	19
25185	2024	1.9	0.9	0.2	1.8	0.7	7.0	1.3	0.9	0.1	0.5	0.2	3.2	19
25915	2026	1.9	0.9	0.2	1.8	0.7	7.0	1.3	0.9	0.1	0.5	0.2	3.2	19
26645	2028	1.9	0.9	0.2	1.8	0.7	7.0	1.3	0.9	0.1	0.5	0.2	3.2	19
27375	2030	1.9	0.9	0.2	1.7	0.7	7.0	1.3	0.9	0.1	0.5	0.2	3.2	18
28105	2032	1.9	0.9	0.2	1.7	0.7	6.9	1.3	0.9	0.1	0.5	0.2	3.2	18
28835	2034	1.9	0.9	0.2	1.7	0.7	6.9	1.3	0.9	0.1	0.5	0.2	3.2	18
29565	2036	1.9	0.9	0.2	1.7	0.7	6.9	1.3	0.9	0.1	0.5	0.2	3.2	18
30295	2038	1.9	0.9	0.2	1.7	0.7	6.9	1.3	0.9	0.1	0.5	0.2	3.2	18
31025	2040	1.8	0.9	0.1	1.7	0.7	6.9	1.3	0.9	0.1	0.5	0.2	3.2	18
31755	2042	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.2	18
32485	2044	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.2	18
33215	2046	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.2	18
33945	2048	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
34675	2050	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
35405	2052	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
36135	2054	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
36865	2056	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
37595	2058	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
38325	2060	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
39055	2062	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
39785	2064	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
40515	2066	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
41245	2068	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
41975	2070	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
42705	2072	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
43435	2074	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
44165	2076	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.3	18
44895	2078	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
45625	2080	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
46355	2082	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
47085	2084	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
47815	2086	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
48545	2088	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
49275	2090	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
50005	2092	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
50735	2094	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
51465	2096	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
52195	2098	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
52925	2100	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	18
53655	2102	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	19
54385	2104	1.8	0.9	0.1	1.7	0.7	6.8	1.3	0.9	0.1	0.5	0.2	3.4	19
TDS	mg/L	32267	32267	32267	32267	32267	28405	9700	7550	3300	32267	32267	32267	

Appendix A-5-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-5 (Loxton Area)

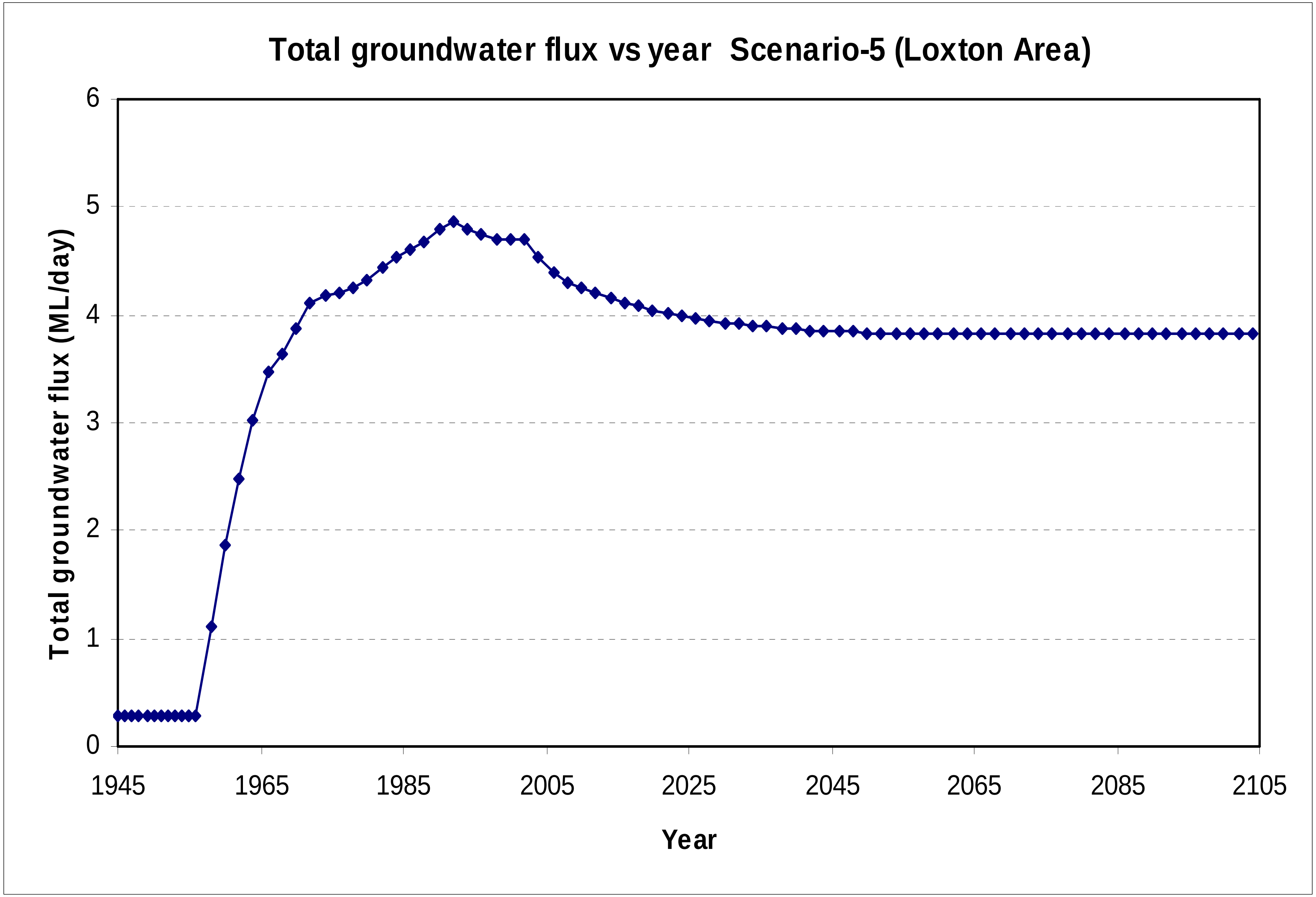


Appendix A-5-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-5 (Loxton Area)

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
0	1945	0.23	0.06	0.29
0	1946	0.23	0.06	0.29
0	1947	0.23	0.06	0.29
0	1948	0.23	0.06	0.29
0	1949	0.23	0.06	0.29
0	1950	0.23	0.06	0.29
0	1951	0.23	0.06	0.29
0	1952	0.23	0.06	0.29
0	1953	0.23	0.06	0.29
0	1954	0.23	0.06	0.29
0	1955	0.23	0.06	0.29
30	1955	0.23	0.06	0.29
365	1956	0.23	0.07	0.29
1095	1958	0.98	0.12	1.11
1825	1960	1.69	0.18	1.87
2555	1962	2.25	0.23	2.48
3285	1964	2.71	0.30	3.02
4015	1966	3.12	0.36	3.48
4745	1968	3.25	0.40	3.64
5475	1970	3.41	0.47	3.88
6205	1972	3.60	0.51	4.10
6935	1974	3.65	0.54	4.19
7665	1976	3.63	0.59	4.22
8395	1978	3.65	0.61	4.26
9125	1980	3.70	0.63	4.33
9855	1982	3.76	0.68	4.44
10585	1984	3.82	0.70	4.52
11315	1986	3.89	0.72	4.60
12045	1988	3.95	0.73	4.68
12775	1990	4.01	0.79	4.80
13505	1992	4.07	0.80	4.87
14235	1994	3.99	0.81	4.80
14965	1996	3.94	0.81	4.75
15695	1998	3.91	0.78	4.69
16425	2000	3.91	0.78	4.69
17155	2002	3.91	0.79	4.70
17885	2004	3.75	0.78	4.53
18615	2006	3.64	0.74	4.38
19345	2008	3.57	0.74	4.30
20075	2010	3.51	0.73	4.24
20805	2012	3.47	0.73	4.19
21535	2014	3.43	0.72	4.15
22265	2016	3.40	0.72	4.11

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
22995	2018	3.37	0.72	4.08
23725	2020	3.34	0.71	4.05
24455	2022	3.31	0.71	4.02
25185	2024	3.29	0.71	3.99
25915	2026	3.27	0.70	3.97
26645	2028	3.25	0.70	3.95
27375	2030	3.23	0.70	3.93
28105	2032	3.22	0.70	3.91
28835	2034	3.21	0.69	3.90
29565	2036	3.20	0.69	3.89
30295	2038	3.19	0.69	3.88
31025	2040	3.18	0.69	3.87
31755	2042	3.17	0.69	3.86
32485	2044	3.16	0.69	3.85
33215	2046	3.16	0.69	3.85
33945	2048	3.15	0.69	3.84
34675	2050	3.15	0.69	3.84
35405	2052	3.15	0.69	3.83
36135	2054	3.14	0.69	3.83
36865	2056	3.14	0.69	3.83
37595	2058	3.14	0.69	3.83
38325	2060	3.14	0.69	3.82
39055	2062	3.13	0.69	3.82
39785	2064	3.13	0.69	3.82
40515	2066	3.13	0.69	3.82
41245	2068	3.13	0.69	3.82
41975	2070	3.13	0.69	3.82
42705	2072	3.13	0.69	3.82
43435	2074	3.13	0.69	3.82
44165	2076	3.13	0.69	3.82
44895	2078	3.13	0.69	3.82
45625	2080	3.13	0.69	3.82
46355	2082	3.13	0.69	3.82
47085	2084	3.13	0.69	3.82
47815	2086	3.13	0.69	3.82
48545	2088	3.13	0.69	3.82
49275	2090	3.13	0.69	3.82
50005	2092	3.13	0.69	3.82
50735	2094	3.13	0.69	3.82
51465	2096	3.13	0.69	3.83
52195	2098	3.13	0.69	3.83
52925	2100	3.14	0.69	3.83
53655	2102	3.14	0.69	3.83
54385	2104	3.14	0.69	3.83

Appendix A-5-6a Predicted total groundwater flux (ML/day) in Scenario-5 (Loxton Area)

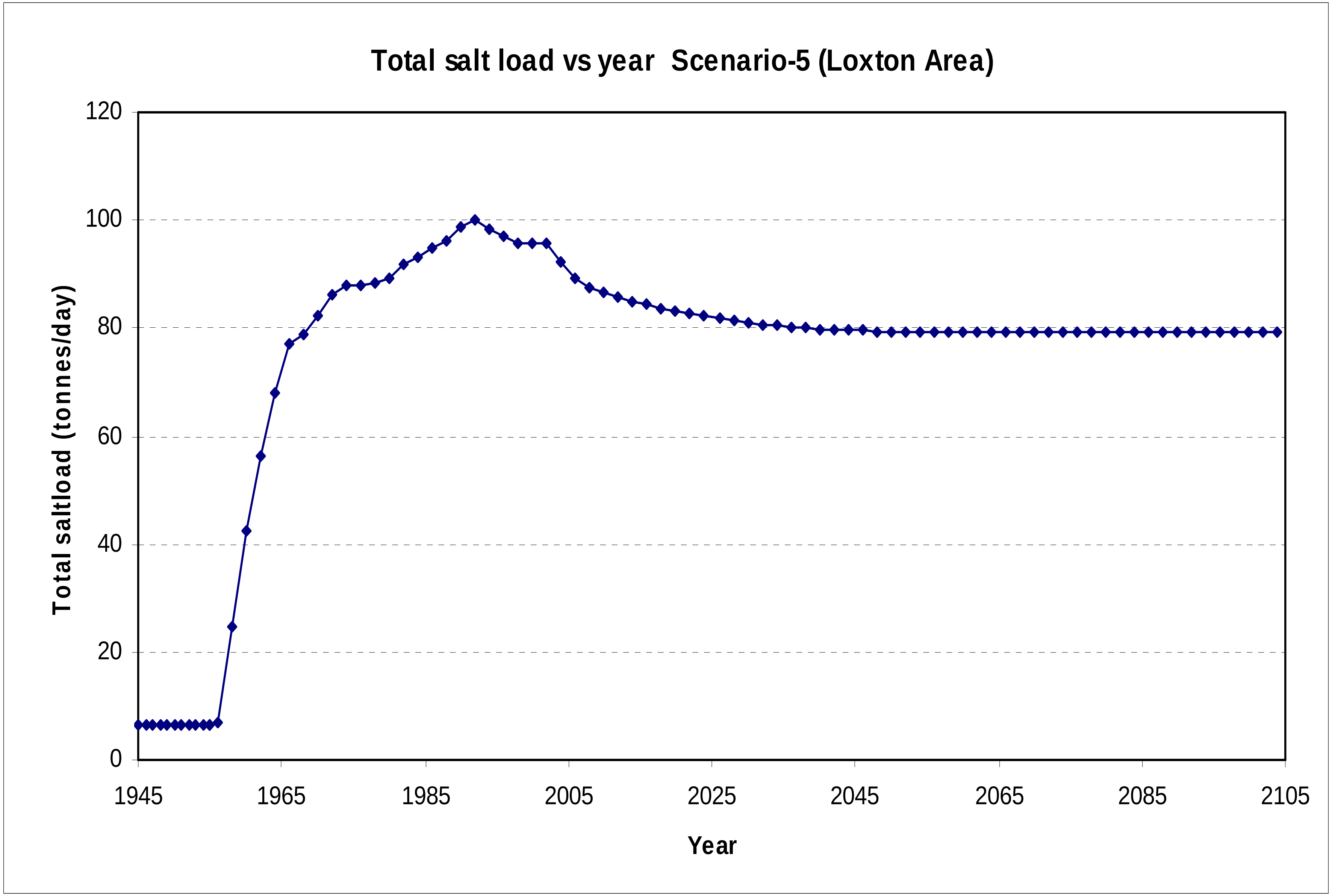


Appendix A-5-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-5 (Loxton Area)

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
0	1945	4.31	2.34	6.65
0	1946	4.31	2.34	6.65
0	1947	4.31	2.34	6.65
0	1948	4.31	2.34	6.65
0	1949	4.31	2.34	6.65
0	1950	4.31	2.34	6.65
0	1951	4.31	2.34	6.65
0	1952	4.31	2.34	6.65
0	1953	4.31	2.34	6.65
0	1954	4.31	2.34	6.65
0	1955	4.31	2.34	6.65
30	1955	4.31	2.34	6.65
365	1956	4.32	2.43	6.74
1095	1958	20.51	4.22	24.73
1825	1960	36.38	5.89	42.27
2555	1962	48.83	7.45	56.28
3285	1964	58.58	9.41	67.99
4015	1966	66.45	10.87	77.32
4745	1968	66.92	11.82	78.74
5475	1970	68.94	13.50	82.44
6205	1972	71.72	14.44	86.16
6935	1974	72.70	15.10	87.80
7665	1976	71.49	16.30	87.79
8395	1978	71.48	16.73	88.20
9125	1980	72.14	17.14	89.28
9855	1982	73.26	18.42	91.69
10585	1984	74.39	18.83	93.22
11315	1986	75.55	19.22	94.78
12045	1988	76.68	19.59	96.28
12775	1990	77.98	20.87	98.85
13505	1992	79.04	21.21	100.25
14235	1994	76.90	21.26	98.16
14965	1996	75.76	21.36	97.13
15695	1998	75.12	20.57	95.69
16425	2000	74.97	20.69	95.66
17155	2002	75.02	20.82	95.85
17885	2004	71.81	20.60	92.42
18615	2006	69.62	19.54	89.16
19345	2008	68.25	19.39	87.64
20075	2010	67.28	19.27	86.55
20805	2012	66.52	19.17	85.69
21535	2014	65.89	19.07	84.96
22265	2016	65.35	18.99	84.34

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
22995	2018	64.88	18.91	83.80
23725	2020	64.38	18.80	83.18
24455	2022	63.90	18.72	82.61
25185	2024	63.47	18.65	82.12
25915	2026	63.11	18.59	81.69
26645	2028	62.78	18.54	81.32
27375	2030	62.50	18.50	81.00
28105	2032	62.25	18.46	80.71
28835	2034	62.04	18.43	80.46
29565	2036	61.85	18.40	80.25
30295	2038	61.68	18.38	80.06
31025	2040	61.54	18.36	79.90
31755	2042	61.41	18.35	79.76
32485	2044	61.30	18.33	79.64
33215	2046	61.21	18.33	79.53
33945	2048	61.12	18.32	79.44
34675	2050	61.05	18.32	79.37
35405	2052	60.99	18.31	79.31
36135	2054	60.94	18.31	79.25
36865	2056	60.90	18.31	79.21
37595	2058	60.86	18.32	79.18
38325	2060	60.83	18.32	79.15
39055	2062	60.81	18.32	79.13
39785	2064	60.79	18.33	79.12
40515	2066	60.77	18.33	79.11
41245	2068	60.76	18.34	79.10
41975	2070	60.75	18.35	79.10
42705	2072	60.75	18.36	79.11
43435	2074	60.75	18.37	79.11
44165	2076	60.75	18.37	79.12
44895	2078	60.75	18.38	79.14
45625	2080	60.76	18.39	79.15
46355	2082	60.76	18.40	79.17
47085	2084	60.77	18.41	79.19
47815	2086	60.78	18.42	79.20
48545	2088	60.79	18.43	79.23
49275	2090	60.80	18.44	79.25
50005	2092	60.82	18.46	79.27
50735	2094	60.83	18.47	79.30
51465	2096	60.85	18.48	79.32
52195	2098	60.86	18.49	79.35
52925	2100	60.88	18.50	79.38
53655	2102	60.89	18.51	79.40
54385	2104	60.91	18.52	79.43

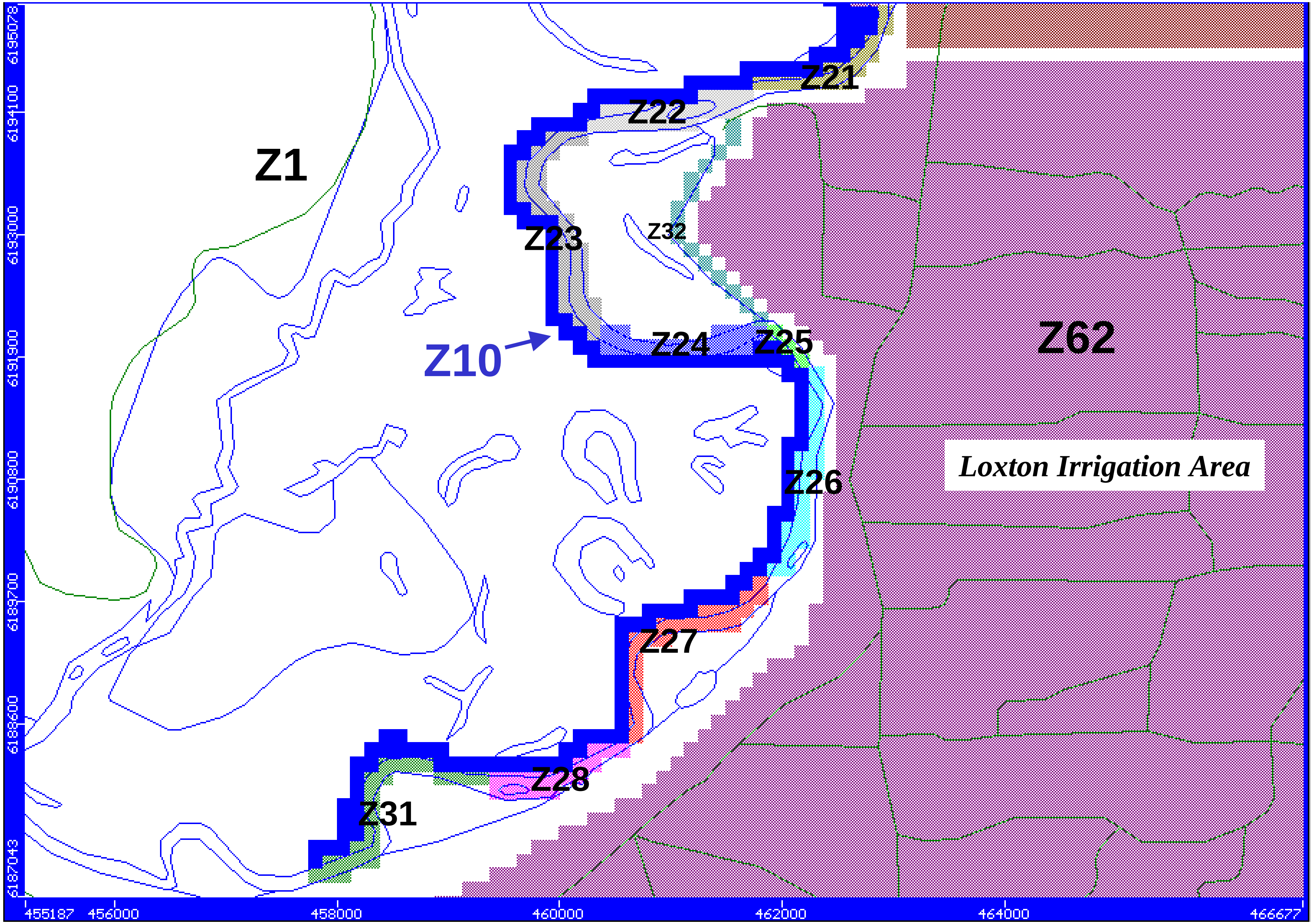
Appendix A-5-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-5 (Loxton Area)



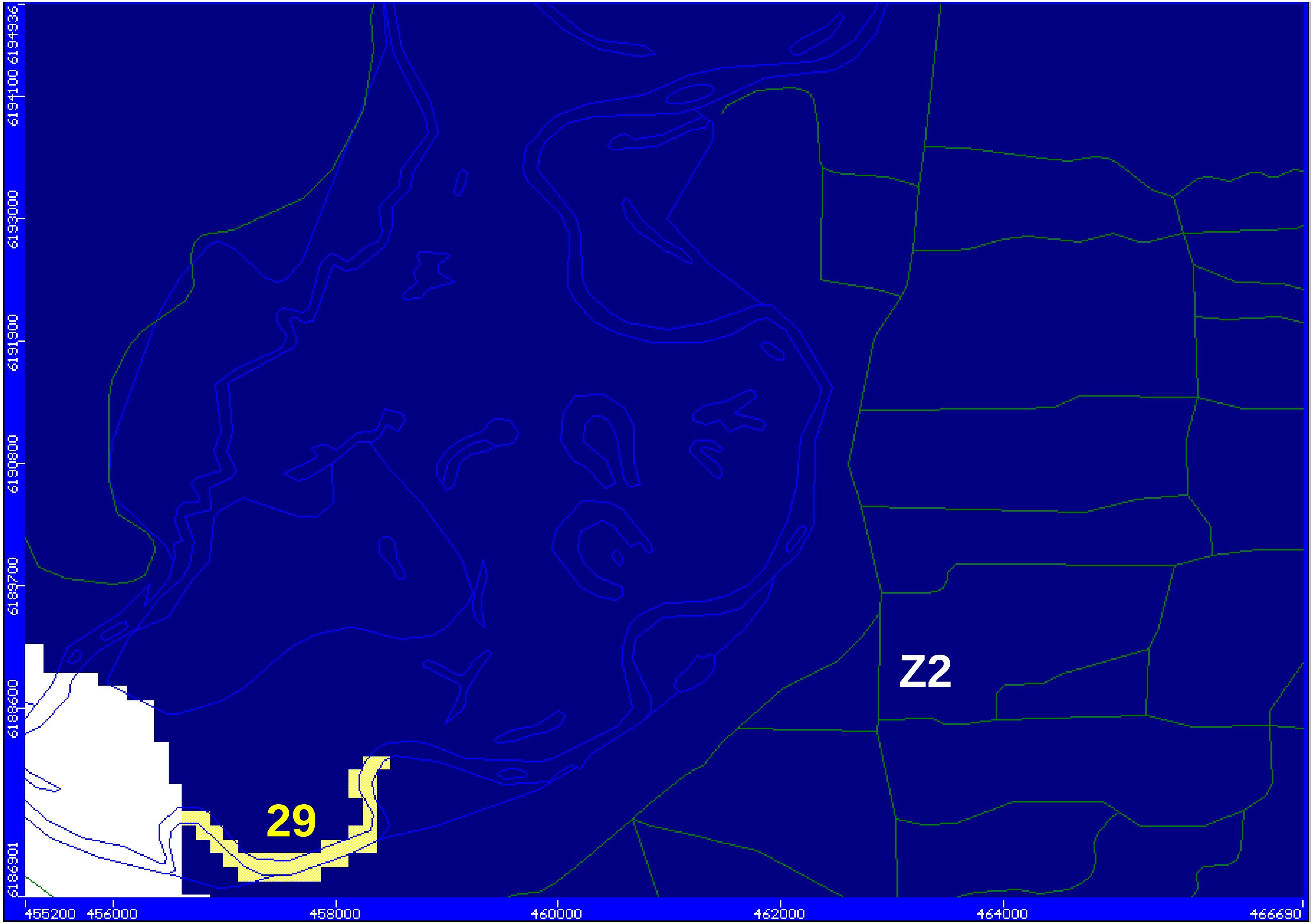
Appendix A-5-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-5 (Loxton Area)

A-6 Groundwater flux and salt load entering the River Murray Scenario-6 (Loxton Area)

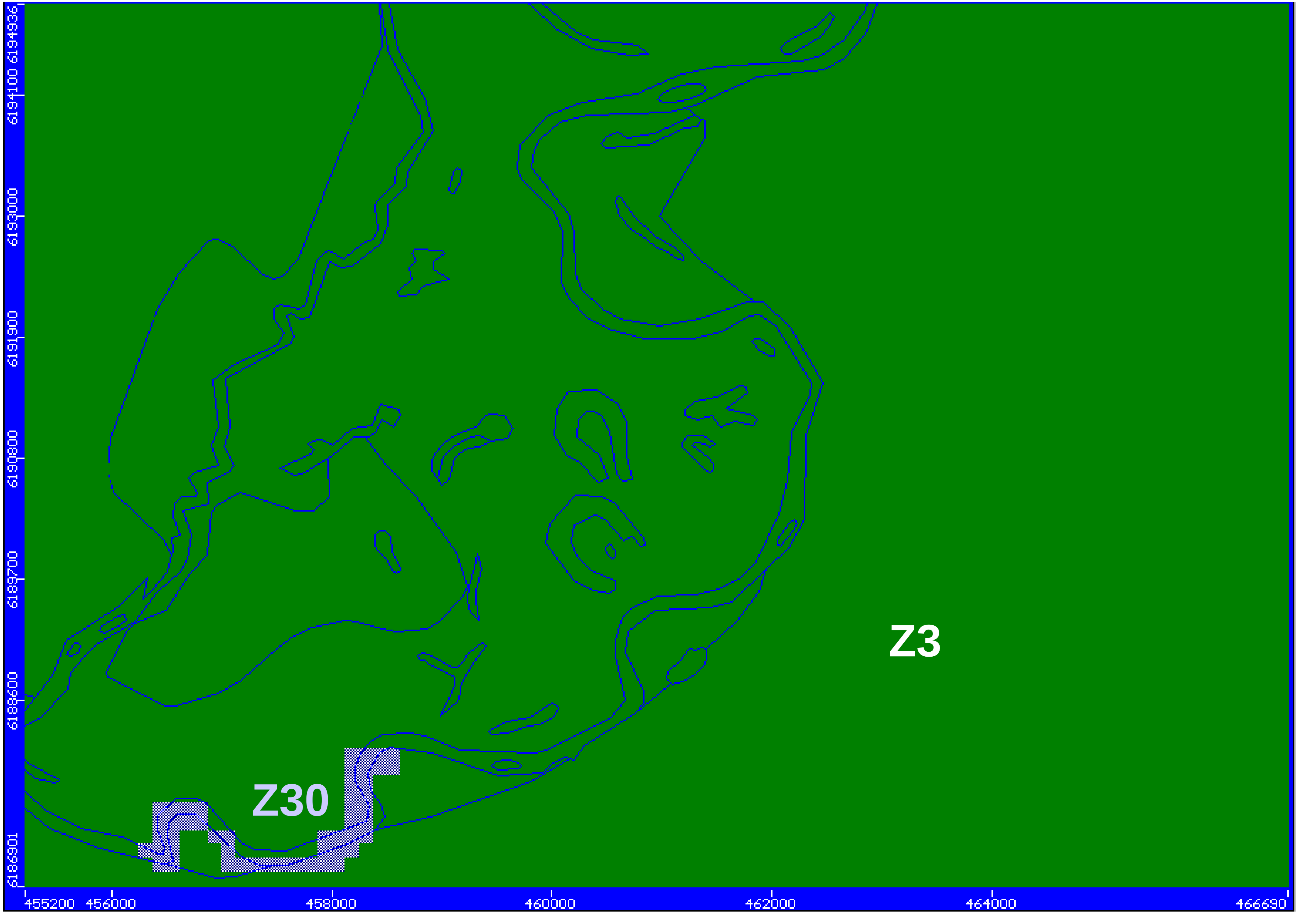
- Flow budget zones (Loxton Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix A-6-1a Flow budget zones in model Layer-1 (Loxton Area)



Appendix A-6-1b Flow budget zones in model Layer-2 (Loxton Area)



Appendix A-6-1c Flow budget zones in model Layer-3 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
30	1955	39.1	4.1	0.0	3.0	25.8	95.4	26.3	16.8	0.0	16.9	227
365	1956	39.1	4.1	0.0	3.1	26.1	95.9	26.3	16.8	0.0	16.9	228
1095	1958	200.1	106.7	0.0	96.1	228.4	292.2	27.1	16.9	0.0	17.1	985
1825	1960	366.5	210.9	0.0	187.2	386.3	459.2	29.7	17.3	14.0	17.5	1689
2555	1962	510.0	276.9	0.0	245.1	498.3	605.0	35.9	18.2	39.8	18.7	2248
3285	1964	624.4	317.4	1.1	284.6	581.9	758.0	47.5	19.8	59.2	20.4	2714
4015	1966	714.6	343.8	3.1	311.1	647.6	918.4	63.0	21.7	72.8	22.3	3118
4745	1968	720.9	325.9	2.6	296.9	648.3	1061.2	81.3	23.9	61.1	24.2	3246
5475	1970	735.1	318.0	2.3	294.2	664.7	1186.5	102.3	26.3	57.1	26.3	3413
6205	1972	755.5	317.9	2.4	296.7	686.5	1298.5	123.3	28.8	57.1	28.4	3595
6935	1974	766.6	314.3	2.4	294.5	679.8	1335.1	142.4	31.5	54.9	30.5	3652
7665	1976	751.0	298.3	1.7	281.4	656.5	1363.4	160.0	34.3	46.0	32.7	3625
8395	1978	745.3	290.3	1.3	275.0	651.9	1397.6	173.4	37.1	42.2	34.8	3649
9125	1980	746.6	287.5	1.2	273.4	654.4	1431.0	184.3	39.8	40.9	37.0	3696
9855	1982	751.9	287.5	1.3	275.7	660.6	1464.8	194.9	42.6	40.9	39.2	3759
10585	1984	760.0	288.6	1.4	277.4	667.6	1496.0	203.0	45.3	41.3	41.6	3822
11315	1986	769.3	290.1	1.6	279.5	675.0	1525.7	210.2	47.8	42.0	43.9	3885
12045	1988	778.7	291.8	1.8	281.7	682.3	1554.0	216.8	50.3	42.8	46.2	3946
12775	1990	788.6	293.9	2.2	285.6	690.1	1582.3	224.5	52.9	43.7	48.6	4012
13505	1992	798.2	295.8	2.4	287.8	697.0	1606.4	229.9	55.3	44.5	51.0	4068
14235	1994	774.8	280.7	1.5	273.6	672.9	1604.0	234.3	57.6	36.5	53.3	3989
14965	1996	760.6	271.9	1.1	265.7	661.1	1597.1	237.8	59.8	32.4	55.5	3943
15695	1998	753.3	267.5	0.9	260.6	654.3	1589.8	239.0	61.7	30.6	57.5	3915
16425	2000	749.8	265.4	0.8	258.8	651.0	1586.6	241.3	63.6	29.7	59.5	3907
17155	2002	749.0	264.5	0.8	258.1	649.5	1585.6	243.4	65.5	29.4	61.5	3907
17885	2004	720.5	248.3	0.3	242.1	610.3	1532.7	244.5	67.0	21.8	63.1	3750
18615	2006	700.2	237.3	0.0	230.7	588.6	1494.8	243.0	68.2	17.7	64.3	3645
19345	2008	686.1	231.4	0.0	225.0	575.0	1464.6	242.7	69.4	15.5	65.6	3575
20075	2010	676.7	228.1	0.0	221.8	565.4	1440.1	242.4	70.5	14.2	66.8	3526
20805	2012	670.2	226.0	0.0	219.6	558.5	1421.6	242.1	71.5	13.4	68.0	3491
21535	2014	665.0	224.6	0.0	218.1	553.5	1408.5	241.9	72.4	12.9	69.1	3466
22265	2016	667.1	224.5	0.0	217.7	550.2	1400.3	242.2	73.3	12.7	70.1	3458
22995	2018	672.6	224.6	0.0	217.7	548.3	1396.0	242.7	74.1	12.6	71.1	3460
23725	2020	679.0	224.8	0.0	217.7	547.5	1394.8	243.4	74.9	12.6	72.1	3467
24455	2022	685.6	225.2	0.0	218.1	547.7	1396.3	244.3	75.7	12.7	73.1	3479
25185	2024	696.2	226.1	0.0	218.9	548.9	1400.2	245.3	76.4	12.9	73.9	3499
25915	2026	707.2	227.1	0.0	219.8	550.9	1405.8	246.4	77.1	13.2	74.8	3522
26645	2028	717.1	228.1	0.0	220.8	553.5	1412.6	247.5	77.8	13.4	75.6	3546

Appendix A-6-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-6 (Loxton Area)

Day	Year	Z1 to Z21 (m³/day)	Z1 to Z22 (m³/day)	Z1 to Z23 (m³/day)	Z1 to Z24 (m³/day)	Z1 to Z25 (m³/day)	Z1 to Z26 (m³/day)	Z1 to Z27 (m³/day)	Z1 to Z28 (m³/day)	Seepage Z32 Drain (m³/day)	Z1 to Z31 (m³/day)	Total Lateral (m³/day)
27375	2030	729.4	229.3	0.0	222.0	556.4	1420.1	248.6	78.4	13.8	76.3	3574
28105	2032	740.6	230.6	0.0	223.2	559.6	1428.1	249.6	79.0	14.1	77.1	3602
28835	2034	752.4	231.8	0.0	224.4	562.9	1436.3	250.7	79.5	14.5	77.8	3630
29565	2036	763.0	233.1	0.0	225.6	566.3	1444.7	251.7	80.0	14.9	78.5	3658
30295	2038	772.4	234.3	0.0	226.8	569.8	1453.1	252.6	80.6	15.3	79.1	3684
31025	2040	780.8	235.4	0.0	227.9	573.2	1461.4	253.5	81.0	15.7	79.7	3709
31755	2042	788.5	236.5	0.0	229.0	576.4	1469.4	254.3	81.5	16.1	80.3	3732
32485	2044	795.3	237.5	0.0	230.0	579.5	1476.9	255.1	81.9	16.4	80.9	3754
33215	2046	801.3	238.4	0.0	230.9	582.3	1483.9	255.9	82.4	16.7	81.4	3773
33945	2048	806.6	239.2	0.1	231.8	585.0	1490.4	256.5	82.8	17.0	82.0	3791
34675	2050	811.3	239.9	0.1	232.5	587.3	1496.4	257.2	83.2	17.3	82.5	3808
35405	2052	815.4	240.6	0.1	233.2	589.5	1501.8	257.8	83.5	17.5	82.9	3822
36135	2054	819.1	241.2	0.2	233.8	591.4	1506.7	258.4	83.9	17.7	83.4	3836
36865	2056	822.3	241.7	0.2	234.4	593.1	1511.1	258.9	84.2	17.9	83.9	3848
37595	2058	825.1	242.2	0.2	234.9	594.7	1515.0	259.4	84.5	18.0	84.3	3858
38325	2060	827.6	242.6	0.3	235.3	596.1	1518.5	259.9	84.8	18.2	84.7	3868
39055	2062	829.9	243.0	0.3	235.7	597.3	1521.7	260.3	85.1	18.3	85.1	3877
39785	2064	831.9	243.3	0.3	236.1	598.4	1524.5	260.7	85.4	18.4	85.5	3885
40515	2066	833.7	243.6	0.3	236.4	599.4	1527.1	261.1	85.7	18.6	85.9	3892
41245	2068	835.4	243.9	0.3	236.7	600.3	1529.4	261.5	86.0	18.7	86.2	3898
41975	2070	836.9	244.2	0.3	237.0	601.1	1531.6	261.8	86.2	18.7	86.6	3904
42705	2072	838.2	244.4	0.3	237.3	601.9	1533.5	262.2	86.5	18.8	86.9	3910
43435	2074	839.5	244.6	0.4	237.5	602.6	1535.2	262.5	86.7	18.9	87.2	3915
44165	2076	840.6	244.8	0.4	237.7	603.2	1536.8	262.7	86.9	19.0	87.5	3920
44895	2078	841.6	245.0	0.4	237.9	603.8	1538.3	263.0	87.1	19.0	87.8	3924
45625	2080	842.6	245.1	0.4	238.1	604.3	1539.6	263.3	87.3	19.1	88.1	3928
46355	2082	843.5	245.3	0.4	238.2	604.8	1540.9	263.5	87.5	19.1	88.4	3932
47085	2084	844.3	245.4	0.4	238.4	605.2	1542.1	263.8	87.7	19.2	88.6	3935
47815	2086	845.1	245.6	0.4	238.5	605.6	1543.2	264.0	87.9	19.2	88.9	3938
48545	2088	845.8	245.7	0.4	238.7	606.0	1544.2	264.2	88.1	19.3	89.1	3941
49275	2090	846.5	245.8	0.4	238.8	606.4	1545.1	264.4	88.2	19.3	89.3	3944
50005	2092	847.1	245.9	0.4	238.9	606.7	1546.0	264.6	88.4	19.4	89.6	3947
50735	2094	847.7	246.0	0.4	239.0	607.1	1546.9	264.8	88.6	19.4	89.8	3950
51465	2096	848.2	246.1	0.4	239.1	607.4	1547.6	265.0	88.7	19.4	90.0	3952
52195	2098	848.8	246.2	0.4	239.2	607.6	1548.4	265.1	88.9	19.5	90.2	3954
52925	2100	849.2	246.3	0.5	239.3	607.9	1549.1	265.3	89.0	19.5	90.4	3956
53655	2102	849.7	246.4	0.5	239.4	608.2	1549.8	265.5	89.1	19.5	90.6	3959
54385	2104	850.2	246.4	0.5	239.5	608.4	1550.4	265.6	89.3	19.5	90.8	3961
TDS	*mg/L*	*25807*	*29055*	*30760*	*39978*	*18716*	*7710*	*35935*	*29140*	*39117*	*24080*	

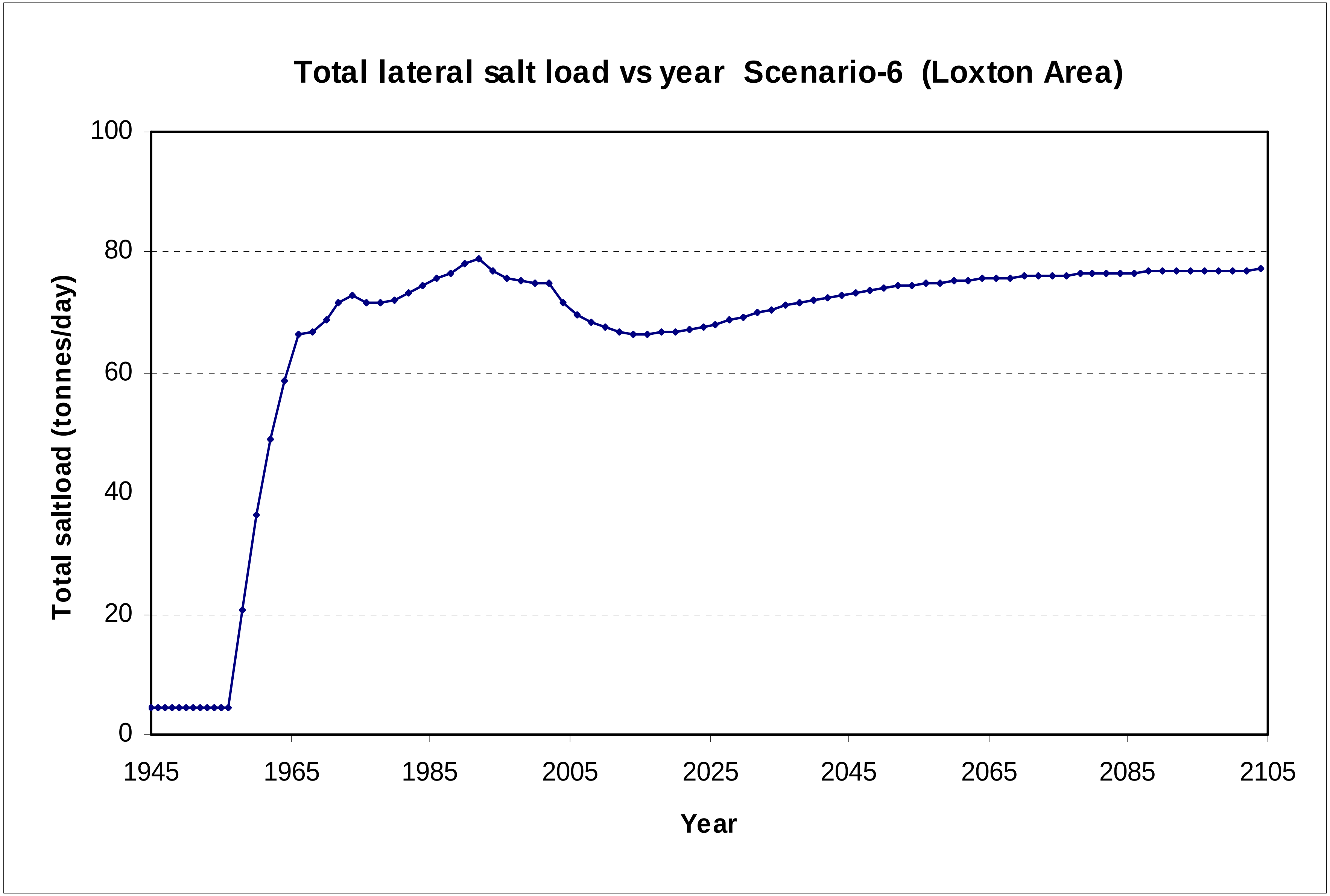
Appendix A-6-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-6 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1946	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1947	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1948	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1949	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1950	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1951	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1952	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1953	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1954	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
30	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
365	1956	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
1095	1958	5.2	3.1	0.0	3.8	4.3	2.3	1.0	0.5	0.0	0.4	21
1825	1960	9.5	6.1	0.0	7.5	7.2	3.5	1.1	0.5	0.5	0.4	36
2555	1962	13.2	8.0	0.0	9.8	9.3	4.7	1.3	0.5	1.6	0.5	49
3285	1964	16.1	9.2	0.0	11.4	10.9	5.8	1.7	0.6	2.3	0.5	59
4015	1966	18.4	10.0	0.1	12.4	12.1	7.1	2.3	0.6	2.8	0.5	66
4745	1968	18.6	9.5	0.1	11.9	12.1	8.2	2.9	0.7	2.4	0.6	67
5475	1970	19.0	9.2	0.1	11.8	12.4	9.1	3.7	0.8	2.2	0.6	69
6205	1972	19.5	9.2	0.1	11.9	12.8	10.0	4.4	0.8	2.2	0.7	72
6935	1974	19.8	9.1	0.1	11.8	12.7	10.3	5.1	0.9	2.1	0.7	73
7665	1976	19.4	8.7	0.1	11.3	12.3	10.5	5.7	1.0	1.8	0.8	71
8395	1978	19.2	8.4	0.0	11.0	12.2	10.8	6.2	1.1	1.6	0.8	71
9125	1980	19.3	8.4	0.0	10.9	12.2	11.0	6.6	1.2	1.6	0.9	72
9855	1982	19.4	8.4	0.0	11.0	12.4	11.3	7.0	1.2	1.6	0.9	73
10585	1984	19.6	8.4	0.0	11.1	12.5	11.5	7.3	1.3	1.6	1.0	74
11315	1986	19.9	8.4	0.0	11.2	12.6	11.8	7.6	1.4	1.6	1.1	76
12045	1988	20.1	8.5	0.1	11.3	12.8	12.0	7.8	1.5	1.7	1.1	77
12775	1990	20.4	8.5	0.1	11.4	12.9	12.2	8.1	1.5	1.7	1.2	78
13505	1992	20.6	8.6	0.1	11.5	13.0	12.4	8.3	1.6	1.7	1.2	79
14235	1994	20.0	8.2	0.0	10.9	12.6	12.4	8.4	1.7	1.4	1.3	77
14965	1996	19.6	7.9	0.0	10.6	12.4	12.3	8.5	1.7	1.3	1.3	76
15695	1998	19.4	7.8	0.0	10.4	12.2	12.3	8.6	1.8	1.2	1.4	75
16425	2000	19.4	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.2	1.4	75
17155	2002	19.3	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.1	1.5	75
17885	2004	18.6	7.2	0.0	9.7	11.4	11.8	8.8	2.0	0.9	1.5	72
18615	2006	18.1	6.9	0.0	9.2	11.0	11.5	8.7	2.0	0.7	1.5	70
19345	2008	17.7	6.7	0.0	9.0	10.8	11.3	8.7	2.0	0.6	1.6	68
20075	2010	17.5	6.6	0.0	8.9	10.6	11.1	8.7	2.1	0.6	1.6	68
20805	2012	17.3	6.6	0.0	8.8	10.5	11.0	8.7	2.1	0.5	1.6	67
21535	2014	17.2	6.5	0.0	8.7	10.4	10.9	8.7	2.1	0.5	1.7	67
22265	2016	17.2	6.5	0.0	8.7	10.3	10.8	8.7	2.1	0.5	1.7	67

Appendix A-6-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-6 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	17.4	6.5	0.0	8.7	10.3	10.8	8.7	2.2	0.5	1.7	67
23725	2020	17.5	6.5	0.0	8.7	10.2	10.8	8.7	2.2	0.5	1.7	67
24455	2022	17.7	6.5	0.0	8.7	10.3	10.8	8.8	2.2	0.5	1.8	67
25185	2024	18.0	6.6	0.0	8.7	10.3	10.8	8.8	2.2	0.5	1.8	68
25915	2026	18.2	6.6	0.0	8.8	10.3	10.8	8.9	2.2	0.5	1.8	68
26645	2028	18.5	6.6	0.0	8.8	10.4	10.9	8.9	2.3	0.5	1.8	69
27375	2030	18.8	6.7	0.0	8.9	10.4	10.9	8.9	2.3	0.5	1.8	69
28105	2032	19.1	6.7	0.0	8.9	10.5	11.0	9.0	2.3	0.6	1.9	70
28835	2034	19.4	6.7	0.0	9.0	10.5	11.1	9.0	2.3	0.6	1.9	70
29565	2036	19.7	6.8	0.0	9.0	10.6	11.1	9.0	2.3	0.6	1.9	71
30295	2038	19.9	6.8	0.0	9.1	10.7	11.2	9.1	2.3	0.6	1.9	72
31025	2040	20.2	6.8	0.0	9.1	10.7	11.3	9.1	2.4	0.6	1.9	72
31755	2042	20.3	6.9	0.0	9.2	10.8	11.3	9.1	2.4	0.6	1.9	73
32485	2044	20.5	6.9	0.0	9.2	10.8	11.4	9.2	2.4	0.6	1.9	73
33215	2046	20.7	6.9	0.0	9.2	10.9	11.4	9.2	2.4	0.7	2.0	73
33945	2048	20.8	6.9	0.0	9.3	10.9	11.5	9.2	2.4	0.7	2.0	74
34675	2050	20.9	7.0	0.0	9.3	11.0	11.5	9.2	2.4	0.7	2.0	74
35405	2052	21.0	7.0	0.0	9.3	11.0	11.6	9.3	2.4	0.7	2.0	74
36135	2054	21.1	7.0	0.0	9.3	11.1	11.6	9.3	2.4	0.7	2.0	75
36865	2056	21.2	7.0	0.0	9.4	11.1	11.7	9.3	2.5	0.7	2.0	75
37595	2058	21.3	7.0	0.0	9.4	11.1	11.7	9.3	2.5	0.7	2.0	75
38325	2060	21.4	7.0	0.0	9.4	11.2	11.7	9.3	2.5	0.7	2.0	75
39055	2062	21.4	7.1	0.0	9.4	11.2	11.7	9.4	2.5	0.7	2.0	75
39785	2064	21.5	7.1	0.0	9.4	11.2	11.8	9.4	2.5	0.7	2.1	76
40515	2066	21.5	7.1	0.0	9.5	11.2	11.8	9.4	2.5	0.7	2.1	76
41245	2068	21.6	7.1	0.0	9.5	11.2	11.8	9.4	2.5	0.7	2.1	76
41975	2070	21.6	7.1	0.0	9.5	11.3	11.8	9.4	2.5	0.7	2.1	76
42705	2072	21.6	7.1	0.0	9.5	11.3	11.8	9.4	2.5	0.7	2.1	76
43435	2074	21.7	7.1	0.0	9.5	11.3	11.8	9.4	2.5	0.7	2.1	76
44165	2076	21.7	7.1	0.0	9.5	11.3	11.8	9.4	2.5	0.7	2.1	76
44895	2078	21.7	7.1	0.0	9.5	11.3	11.9	9.5	2.5	0.7	2.1	76
45625	2080	21.7	7.1	0.0	9.5	11.3	11.9	9.5	2.5	0.7	2.1	76
46355	2082	21.8	7.1	0.0	9.5	11.3	11.9	9.5	2.6	0.7	2.1	77
47085	2084	21.8	7.1	0.0	9.5	11.3	11.9	9.5	2.6	0.8	2.1	77
47815	2086	21.8	7.1	0.0	9.5	11.3	11.9	9.5	2.6	0.8	2.1	77
48545	2088	21.8	7.1	0.0	9.5	11.3	11.9	9.5	2.6	0.8	2.1	77
49275	2090	21.8	7.1	0.0	9.5	11.3	11.9	9.5	2.6	0.8	2.2	77
50005	2092	21.9	7.1	0.0	9.6	11.4	11.9	9.5	2.6	0.8	2.2	77
50735	2094	21.9	7.1	0.0	9.6	11.4	11.9	9.5	2.6	0.8	2.2	77
51465	2096	21.9	7.2	0.0	9.6	11.4	11.9	9.5	2.6	0.8	2.2	77
52195	2098	21.9	7.2	0.0	9.6	11.4	11.9	9.5	2.6	0.8	2.2	77
52925	2100	21.9	7.2	0.0	9.6	11.4	11.9	9.5	2.6	0.8	2.2	77
53655	2102	21.9	7.2	0.0	9.6	11.4	11.9	9.5	2.6	0.8	2.2	77
54385	2104	21.9	7.2	0.0	9.6	11.4	12.0	9.5	2.6	0.8	2.2	77
TDS	mg/L	25807	29055	30780	39678	15718	7710	35935	29140	39117	24080	

Appendix A-6-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-6 (Loxton Area)



Appendix A-6-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-6 (Loxton Area)

Day	Year	Z2 to Z21 (m^3/day)	Z2 to Z22 (m^3/day)	Z2 to Z23 (m^3/day)	Z2 to Z24 (m^3/day)	Z2 to Z25 (m^3/day)	Z2 to Z26 (m^3/day)	Z2 to Z27 (m^3/day)	Z2 to Z28 (m^3/day)	Z2 to Z29 (m^3/day)	Z3 to Z29 (m^3/day)	Z2 to Z31 (m^3/day)	Z3 to Z30 (m^3/day)	Total Lateral (m^3/day)
30	1955	6.7	0.9	0.0	0.7	1.1	11.0	10.4	21.2	6.8	3.8	0.0	40.5	63
365	1956	6.7	0.9	0.0	1.2	1.6	12.9	10.4	21.0	6.8	3.8	0.0	40.5	65
1095	1958	21.5	9.6	0.0	10.3	9.2	28.9	11.1	21.3	6.8	3.9	0.0	40.8	123
1825	1960	33.8	17.7	0.0	19.3	14.3	46.2	13.0	22.2	6.9	4.1	0.0	41.4	178
2555	1962	43.3	23.3	1.0	26.6	17.8	65.1	16.8	24.7	7.3	4.6	0.1	43.3	231
3285	1964	50.8	27.4	2.4	37.2	20.8	95.1	26.5	28.5	7.7	5.2	0.3	45.7	302
4015	1966	56.6	30.4	3.2	41.8	22.8	119.2	35.6	32.8	8.2	5.7	0.4	48.1	357
4745	1968	58.0	30.3	3.4	42.0	23.1	141.6	45.2	37.4	8.7	6.2	0.6	50.5	396
5475	1970	59.7	30.9	3.9	50.0	24.2	174.3	64.4	42.9	9.2	6.7	0.9	53.0	467
6205	1972	61.6	31.8	4.2	51.5	24.9	192.2	74.3	48.3	9.7	7.2	1.1	55.4	507
6935	1974	62.8	32.2	4.4	52.2	25.0	203.8	82.9	53.9	10.2	7.7	1.4	57.9	537
7665	1976	62.6	31.8	5.1	59.3	25.2	225.6	99.9	60.2	10.7	8.2	1.7	60.5	590
8395	1978	62.8	31.8	5.2	59.3	25.2	232.8	106.0	65.6	11.2	8.6	2.1	62.9	611
9125	1980	63.3	32.0	5.3	59.8	25.3	238.9	111.1	70.8	11.7	9.0	2.4	65.3	630
9855	1982	63.9	32.5	6.3	68.6	26.1	259.0	126.1	76.8	12.2	9.5	2.8	67.9	684
10585	1984	64.9	33.1	6.5	69.3	26.4	264.0	130.0	81.8	12.7	9.9	3.2	70.2	702
11315	1986	65.7	33.6	6.7	70.0	26.6	268.7	133.7	86.5	13.2	10.3	3.6	72.6	719
12045	1988	66.5	34.1	6.9	70.6	26.9	273.0	137.0	91.0	13.7	10.7	4.0	74.9	734
12775	1990	67.4	34.8	8.2	79.7	27.7	292.7	151.1	96.4	14.2	11.1	4.5	77.4	788
13505	1992	68.2	35.2	8.4	80.3	27.9	296.2	153.8	100.7	14.7	11.5	4.8	79.7	802
14235	1994	67.1	34.3	8.2	79.1	27.4	297.3	155.8	104.6	15.2	11.9	5.1	81.9	806
14965	1996	66.8	34.1	8.2	78.6	27.1	297.6	157.5	108.2	15.6	12.3	5.4	84.1	811
15695	1998	66.6	33.9	7.1	69.9	26.4	282.2	148.0	110.4	16.0	12.6	5.6	86.1	779
16425	2000	66.6	33.9	7.1	69.8	26.4	282.4	149.2	113.4	16.5	12.9	5.9	88.1	784
17155	2002	66.7	34.0	7.2	69.9	26.4	282.7	150.3	116.3	16.9	13.2	6.2	90.1	790
17885	2004	65.4	32.9	6.9	68.1	25.4	279.2	150.5	118.4	17.2	13.4	6.3	91.5	784
18615	2006	64.3	32.1	5.7	58.6	24.3	261.0	139.7	119.1	17.4	13.5	6.3	92.4	742
19345	2008	63.6	31.6	5.5	57.9	24.0	258.1	139.6	120.6	17.7	13.7	6.4	93.6	739
20075	2010	63.2	31.5	5.5	57.6	23.7	255.7	139.6	122.1	17.9	13.8	6.6	94.7	737
20805	2012	62.9	31.3	5.5	57.3	23.6	254.0	139.6	123.4	18.1	14.0	6.7	95.8	736
21535	2014	62.6	31.2	5.4	57.1	23.5	252.8	139.7	124.7	18.4	14.1	6.8	96.9	736
22265	2016	63.6	31.9	5.6	57.3	23.4	252.5	140.0	125.9	18.6	14.3	7.0	97.9	740
22995	2018	64.2	32.3	5.7	57.5	23.4	252.5	140.5	127.1	18.8	14.5	7.1	98.9	744
23725	2020	64.7	32.5	5.8	57.7	23.5	252.8	141.0	128.3	19.0	14.6	7.2	99.9	747
24455	2022	65.3	32.8	5.8	57.9	23.5	253.4	141.5	129.4	19.2	14.8	7.3	100.8	751
25185	2024	66.3	33.3	6.0	58.2	23.6	254.3	142.2	130.5	19.4	14.9	7.5	101.8	756
25915	2026	67.2	33.8	6.1	58.6	23.7	255.3	142.9	131.6	19.5	15.1	7.6	102.7	761
26645	2028	67.9	34.1	6.2	58.9	23.8	256.3	143.5	132.6	19.7	15.2	7.7	103.5	766

Appendix A-6-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-6 (Loxton Area)

Day	Year	Z2 to Z21 (m³/day)	Z2 to Z22 (m³/day)	Z2 to Z23 (m³/day)	Z2 to Z24 (m³/day)	Z2 to Z25 (m³/day)	Z2 to Z26 (m³/day)	Z2 to Z27 (m³/day)	Z2 to Z28 (m³/day)	Z2 to Z29 (m³/day)	Z3 to Z29 (m³/day)	Z2 to Z31 (m³/day)	Z3 to Z30 (m³/day)	Total Lateral (m³/day)
27375	2030	68.9	34.5	6.4	59.2	23.9	257.5	144.1	133.6	19.9	15.4	7.8	104.4	771
28105	2032	69.7	34.9	6.5	59.5	24.1	258.6	144.8	134.5	20.1	15.5	7.9	105.2	776
28835	2034	70.5	35.3	6.6	59.9	24.2	259.7	145.4	135.4	20.2	15.6	8.0	106.0	781
29565	2036	71.3	35.6	6.7	60.2	24.3	260.9	145.9	136.2	20.4	15.8	8.1	106.8	785
30295	2038	71.9	35.9	6.8	60.5	24.4	261.9	146.5	137.1	20.5	15.9	8.2	107.5	790
31025	2040	72.5	36.2	6.9	60.8	24.6	263.0	147.0	137.8	20.7	16.0	8.3	108.3	794
31755	2042	73.0	36.5	7.0	61.0	24.7	264.0	147.4	138.6	20.8	16.1	8.3	109.0	797
32485	2044	73.5	36.7	7.1	61.3	24.8	264.9	147.9	139.3	20.9	16.2	8.4	109.7	801
33215	2046	73.9	36.9	7.1	61.5	24.9	265.8	148.3	139.9	21.1	16.4	8.5	110.4	804
33945	2048	74.2	37.0	7.2	61.7	25.0	266.6	148.7	140.6	21.2	16.5	8.6	111.0	807
34675	2050	74.5	37.2	7.3	61.9	25.0	267.3	149.1	141.2	21.3	16.6	8.6	111.6	810
35405	2052	74.8	37.3	7.3	62.0	25.1	268.0	149.4	141.7	21.5	16.7	8.7	112.3	812
36135	2054	75.0	37.4	7.4	62.2	25.2	268.6	149.8	142.3	21.6	16.8	8.8	112.8	815
36865	2056	75.2	37.5	7.4	62.3	25.2	269.1	150.1	142.8	21.7	16.9	8.8	113.4	817
37595	2058	75.4	37.6	7.4	62.4	25.3	269.6	150.3	143.3	21.8	16.9	8.9	114.0	819
38325	2060	75.6	37.7	7.5	62.5	25.3	270.0	150.6	143.8	21.9	17.0	8.9	114.5	821
39055	2062	75.7	37.8	7.5	62.6	25.4	270.4	150.9	144.2	22.0	17.1	9.0	115.0	823
39785	2064	75.9	37.9	7.5	62.7	25.4	270.8	151.1	144.6	22.1	17.2	9.0	115.5	824
40515	2066	76.0	37.9	7.6	62.8	25.4	271.1	151.3	145.0	22.2	17.3	9.1	116.0	826
41245	2068	76.1	38.0	7.6	62.9	25.5	271.5	151.5	145.4	22.3	17.4	9.1	116.5	827
41975	2070	76.2	38.0	7.6	62.9	25.5	271.7	151.7	145.8	22.4	17.4	9.2	117.0	828
42705	2072	76.3	38.1	7.6	63.0	25.5	272.0	151.9	146.2	22.5	17.5	9.2	117.4	830
43435	2074	76.4	38.1	7.7	63.1	25.5	272.2	152.1	146.5	22.6	17.6	9.3	117.8	831
44165	2076	76.5	38.2	7.7	63.1	25.5	272.4	152.2	146.8	22.6	17.6	9.3	118.2	832
44895	2078	76.5	38.2	7.7	63.2	25.6	272.6	152.4	147.2	22.7	17.7	9.3	118.7	833
45625	2080	76.6	38.2	7.7	63.2	25.6	272.8	152.5	147.5	22.8	17.8	9.4	119.0	834
46355	2082	76.7	38.3	7.7	63.2	25.6	273.0	152.7	147.8	22.9	17.8	9.4	119.4	835
47085	2084	76.7	38.3	7.7	63.3	25.6	273.2	152.8	148.0	22.9	17.9	9.5	119.8	836
47815	2086	76.8	38.3	7.8	63.3	25.6	273.3	152.9	148.3	23.0	17.9	9.5	120.1	837
48545	2088	76.8	38.4	7.8	63.4	25.6	273.5	153.1	148.6	23.1	18.0	9.5	120.5	838
49275	2090	76.9	38.4	7.8	63.4	25.7	273.6	153.2	148.8	23.1	18.1	9.6	120.8	838
50005	2092	76.9	38.4	7.8	63.4	25.7	273.7	153.3	149.1	23.2	18.1	9.6	121.1	839
50735	2094	77.0	38.4	7.8	63.5	25.7	273.9	153.4	149.3	23.3	18.2	9.6	121.5	840
51465	2096	77.0	38.5	7.8	63.5	25.7	274.0	153.5	149.5	23.3	18.2	9.6	121.8	841
52195	2098	77.0	38.5	7.8	63.5	25.7	274.1	153.6	149.7	23.4	18.3	9.7	122.1	841
52925	2100	77.1	38.5	7.8	63.6	25.7	274.2	153.7	149.9	23.4	18.3	9.7	122.3	842
53655	2102	77.1	38.5	7.9	63.6	25.7	274.3	153.8	150.1	23.5	18.4	9.7	122.6	843
54385	2104	77.1	38.5	7.9	63.6	25.7	274.4	153.9	150.3	23.5	18.4	9.7	122.9	843
TDS	mg/L	32267	32267	32267	32267	32267	29405	9700	7550	3300	32267	32267	32267	

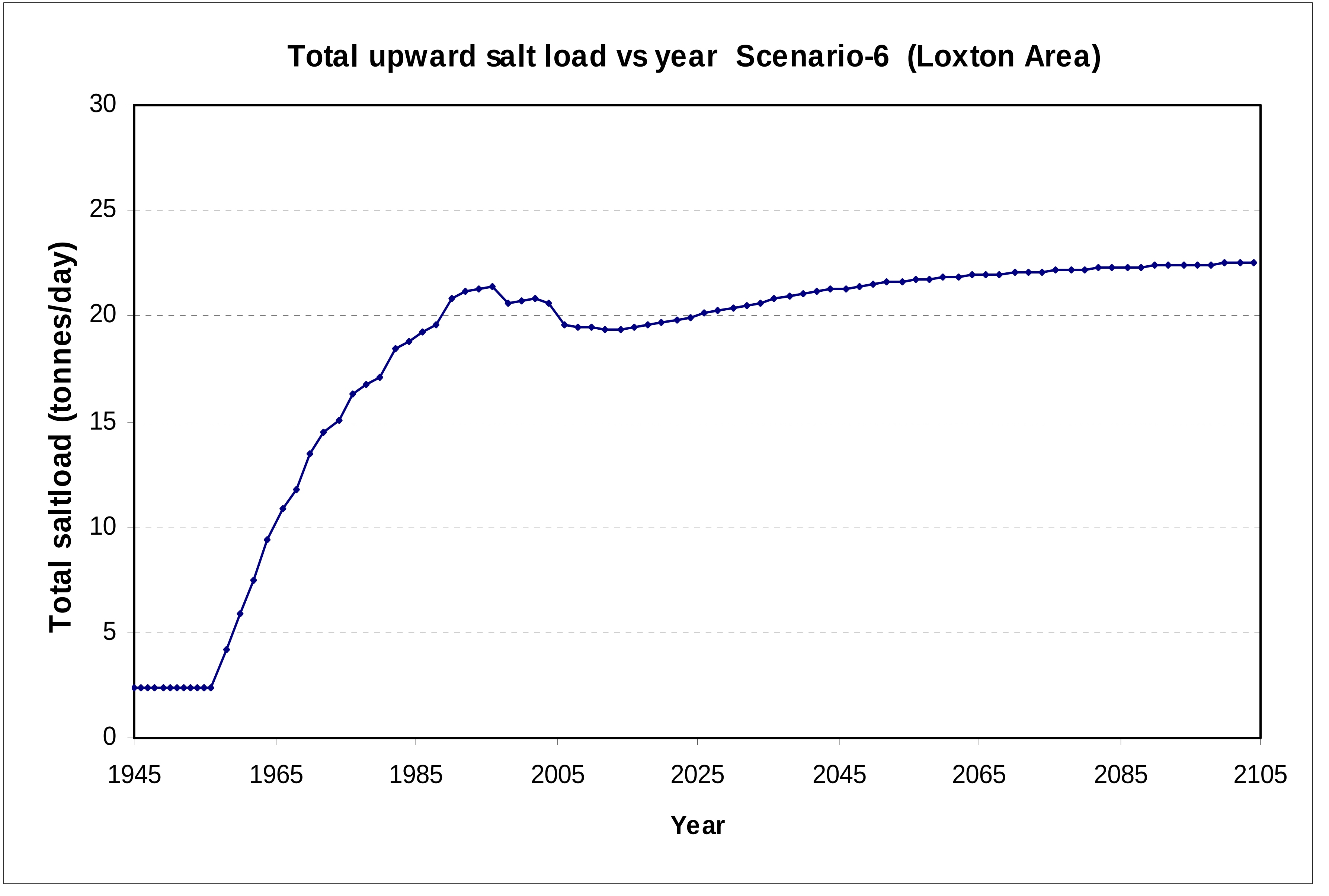
Appendix A-6-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-6 (Loxton Area)

Day	Year	Z2 to Z21 (tonne s/day)	Z2 to Z22 (tonne s/day)	Z2 to Z23 (tonne s/day)	Z2 to Z24 (tonne s/day)	Z2 to Z25 (tonne s/day)	Z2 to Z26 (tonne s/day)	Z2 to Z27 (tonne s/day)	Z2 to Z28 (tonne s/day)	Z2 to Z29 (tonne s/day)	Z3 to Z29 (tonne s/day)	Z2 to Z31 (tonne s/day)	Z3 to Z30 (tonne s/day)	Total Lateral (tonne s/day)
0	1945	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1946	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1947	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1948	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1949	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1950	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1951	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1952	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1953	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1954	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
30	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
365	1956	0.2	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.0	0.1	0.0	1.3	2
1095	1958	0.7	0.3	0.0	0.3	0.3	0.8	0.1	0.2	0.0	0.1	0.0	1.3	4
1825	1960	1.1	0.6	0.0	0.6	0.5	1.4	0.1	0.2	0.0	0.1	0.0	1.3	6
2555	1962	1.4	0.8	0.0	0.9	0.6	1.9	0.2	0.2	0.0	0.1	0.0	1.4	7
3285	1964	1.6	0.9	0.1	1.2	0.7	2.8	0.3	0.2	0.0	0.2	0.0	1.5	9
4015	1966	1.8	1.0	0.1	1.3	0.7	3.5	0.3	0.2	0.0	0.2	0.0	1.6	11
4745	1968	1.9	1.0	0.1	1.4	0.7	4.2	0.4	0.3	0.0	0.2	0.0	1.6	12
5475	1970	1.9	1.0	0.1	1.6	0.8	5.1	0.6	0.3	0.0	0.2	0.0	1.7	14
6205	1972	2.0	1.0	0.1	1.7	0.8	5.7	0.7	0.4	0.0	0.2	0.0	1.8	14
6935	1974	2.0	1.0	0.1	1.7	0.8	6.0	0.8	0.4	0.0	0.2	0.0	1.9	15
7665	1976	2.0	1.0	0.2	1.9	0.8	6.6	1.0	0.5	0.0	0.3	0.1	2.0	16
8395	1978	2.0	1.0	0.2	1.9	0.8	6.8	1.0	0.5	0.0	0.3	0.1	2.0	17
9125	1980	2.0	1.0	0.2	1.9	0.8	7.0	1.1	0.5	0.0	0.3	0.1	2.1	17
9855	1982	2.1	1.0	0.2	2.2	0.8	7.6	1.2	0.6	0.0	0.3	0.1	2.2	18
10585	1984	2.1	1.1	0.2	2.2	0.9	7.8	1.3	0.6	0.0	0.3	0.1	2.3	19
11315	1986	2.1	1.1	0.2	2.3	0.9	7.9	1.3	0.7	0.0	0.3	0.1	2.3	19
12045	1988	2.1	1.1	0.2	2.3	0.9	8.0	1.3	0.7	0.0	0.3	0.1	2.4	20
12775	1990	2.2	1.1	0.3	2.6	0.9	8.6	1.5	0.7	0.0	0.4	0.1	2.5	21
13505	1992	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.0	0.4	0.2	2.6	21
14235	1994	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.1	0.4	0.2	2.6	21
14965	1996	2.2	1.1	0.3	2.5	0.9	8.8	1.5	0.8	0.1	0.4	0.2	2.7	21
15695	1998	2.2	1.1	0.2	2.3	0.9	8.3	1.4	0.8	0.1	0.4	0.2	2.8	21
16425	2000	2.1	1.1	0.2	2.3	0.9	8.3	1.4	0.9	0.1	0.4	0.2	2.8	21
17155	2002	2.2	1.1	0.2	2.3	0.9	8.3	1.5	0.9	0.1	0.4	0.2	2.9	21
17885	2004	2.1	1.1	0.2	2.2	0.8	8.2	1.5	0.9	0.1	0.4	0.2	3.0	21
18615	2006	2.1	1.0	0.2	1.9	0.8	7.7	1.4	0.9	0.1	0.4	0.2	3.0	20
19345	2008	2.1	1.0	0.2	1.9	0.8	7.6	1.4	0.9	0.1	0.4	0.2	3.0	19
20075	2010	2.0	1.0	0.2	1.9	0.8	7.5	1.4	0.9	0.1	0.4	0.2	3.1	19
20805	2012	2.0	1.0	0.2	1.8	0.8	7.5	1.4	0.9	0.1	0.5	0.2	3.1	19
21535	2014	2.0	1.0	0.2	1.8	0.8	7.4	1.4	0.9	0.1	0.5	0.2	3.1	19
22265	2016	2.1	1.0	0.2	1.9	0.8	7.4	1.4	1.0	0.1	0.5	0.2	3.2	20

Appendix A-6-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-6 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z25 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	2.1	1.0	0.2	1.9	0.8	7.4	1.4	1.0	0.1	0.5	0.2	3.2	20
23725	2020	2.1	1.0	0.2	1.9	0.8	7.4	1.4	1.0	0.1	0.5	0.2	3.2	20
24455	2022	2.1	1.1	0.2	1.9	0.8	7.5	1.4	1.0	0.1	0.5	0.2	3.3	20
25185	2024	2.1	1.1	0.2	1.9	0.8	7.5	1.4	1.0	0.1	0.5	0.2	3.3	20
25915	2026	2.2	1.1	0.2	1.9	0.8	7.5	1.4	1.0	0.1	0.5	0.2	3.3	20
26645	2028	2.2	1.1	0.2	1.9	0.8	7.5	1.4	1.0	0.1	0.5	0.2	3.3	20
27375	2030	2.2	1.1	0.2	1.9	0.8	7.6	1.4	1.0	0.1	0.5	0.3	3.4	20
28105	2032	2.2	1.1	0.2	1.9	0.8	7.6	1.4	1.0	0.1	0.5	0.3	3.4	21
28835	2034	2.3	1.1	0.2	1.9	0.8	7.6	1.4	1.0	0.1	0.5	0.3	3.4	21
29565	2036	2.3	1.1	0.2	1.9	0.8	7.7	1.4	1.0	0.1	0.5	0.3	3.4	21
30295	2038	2.3	1.2	0.2	2.0	0.8	7.7	1.4	1.0	0.1	0.5	0.3	3.5	21
31025	2040	2.3	1.2	0.2	2.0	0.8	7.7	1.4	1.0	0.1	0.5	0.3	3.5	21
31755	2042	2.4	1.2	0.2	2.0	0.8	7.8	1.4	1.0	0.1	0.5	0.3	3.5	21
32485	2044	2.4	1.2	0.2	2.0	0.8	7.8	1.4	1.1	0.1	0.5	0.3	3.5	21
33215	2046	2.4	1.2	0.2	2.0	0.8	7.8	1.4	1.1	0.1	0.5	0.3	3.6	21
33945	2048	2.4	1.2	0.2	2.0	0.8	7.8	1.4	1.1	0.1	0.5	0.3	3.6	21
34675	2050	2.4	1.2	0.2	2.0	0.8	7.9	1.4	1.1	0.1	0.5	0.3	3.6	21
35405	2052	2.4	1.2	0.2	2.0	0.8	7.9	1.4	1.1	0.1	0.5	0.3	3.6	22
36135	2054	2.4	1.2	0.2	2.0	0.8	7.9	1.5	1.1	0.1	0.5	0.3	3.6	22
36865	2056	2.4	1.2	0.2	2.0	0.8	7.9	1.5	1.1	0.1	0.5	0.3	3.7	22
37595	2058	2.4	1.2	0.2	2.0	0.8	7.9	1.5	1.1	0.1	0.5	0.3	3.7	22
38325	2060	2.4	1.2	0.2	2.0	0.8	7.9	1.5	1.1	0.1	0.5	0.3	3.7	22
39055	2062	2.4	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.7	22
39785	2064	2.4	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.7	22
40515	2066	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.7	22
41245	2068	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.8	22
41975	2070	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.8	22
42705	2072	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.8	22
43435	2074	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.8	22
44165	2076	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.8	22
44895	2078	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.8	22
45625	2080	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.8	22
46355	2082	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.9	22
47085	2084	2.5	1.2	0.2	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.9	22
47815	2086	2.5	1.2	0.3	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.9	22
48545	2088	2.5	1.2	0.3	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.9	22
49275	2090	2.5	1.2	0.3	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.9	22
50005	2092	2.5	1.2	0.3	2.0	0.8	8.0	1.5	1.1	0.1	0.6	0.3	3.9	22
50735	2094	2.5	1.2	0.3	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
51465	2096	2.5	1.2	0.3	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
52195	2098	2.5	1.2	0.3	2.0	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
52925	2100	2.5	1.2	0.3	2.1	0.8	8.1	1.5	1.1	0.1	0.6	0.3	3.9	22
53655	2102	2.5	1.2	0.3	2.1	0.8	8.1	1.5	1.1	0.1	0.6	0.3	4.0	22
54385	2104	2.5	1.2	0.3	2.1	0.8	8.1	1.5	1.1	0.1	0.6	0.3	4.0	23
TDS	mg/L	32267	32267	32267	32267	32267	29405	9700	7550	3300	32267	32267	32267	

Appendix A-6-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-6 (Loxton Area)

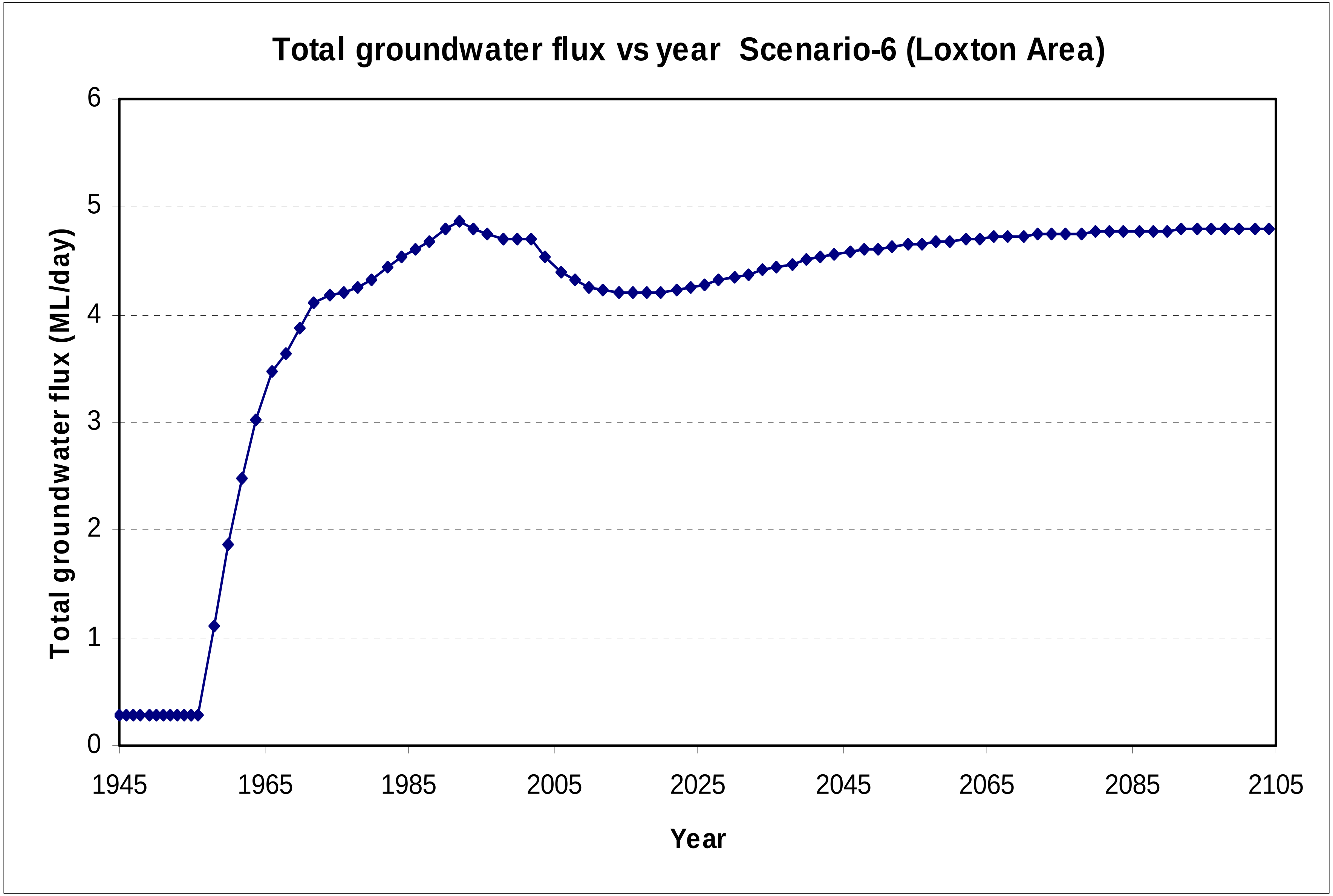


Appendix A-6-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-6 (Loxton Area)

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
0	1945	0.23	0.06	0.29
0	1946	0.23	0.06	0.29
0	1947	0.23	0.06	0.29
0	1948	0.23	0.06	0.29
0	1949	0.23	0.06	0.29
0	1950	0.23	0.06	0.29
0	1951	0.23	0.06	0.29
0	1952	0.23	0.06	0.29
0	1953	0.23	0.06	0.29
0	1954	0.23	0.06	0.29
0	1955	0.23	0.06	0.29
30	1955	0.23	0.06	0.29
365	1956	0.23	0.07	0.29
1095	1958	0.98	0.12	1.11
1825	1960	1.69	0.18	1.87
2555	1962	2.25	0.23	2.48
3285	1964	2.71	0.30	3.02
4015	1966	3.12	0.36	3.48
4745	1968	3.25	0.40	3.64
5475	1970	3.41	0.47	3.88
6205	1972	3.60	0.51	4.10
6935	1974	3.65	0.54	4.19
7665	1976	3.63	0.59	4.22
8395	1978	3.65	0.61	4.26
9125	1980	3.70	0.63	4.33
9855	1982	3.76	0.68	4.44
10585	1984	3.82	0.70	4.52
11315	1986	3.89	0.72	4.60
12045	1988	3.95	0.73	4.68
12775	1990	4.01	0.79	4.80
13505	1992	4.07	0.80	4.87
14235	1994	3.99	0.81	4.80
14965	1996	3.94	0.81	4.75
15695	1998	3.91	0.78	4.69
16425	2000	3.91	0.78	4.69
17155	2002	3.91	0.79	4.70
17885	2004	3.75	0.78	4.53
18615	2006	3.64	0.74	4.39
19345	2008	3.58	0.74	4.31
20075	2010	3.53	0.74	4.26
20805	2012	3.49	0.74	4.23
21535	2014	3.47	0.74	4.20
22265	2016	3.46	0.74	4.20

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
22995	2018	3.46	0.74	4.20
23725	2020	3.47	0.75	4.21
24455	2022	3.48	0.75	4.23
25185	2024	3.50	0.76	4.26
25915	2026	3.52	0.76	4.28
26645	2028	3.55	0.77	4.31
27375	2030	3.57	0.77	4.35
28105	2032	3.60	0.78	4.38
28835	2034	3.63	0.78	4.41
29565	2036	3.66	0.79	4.44
30295	2038	3.68	0.79	4.47
31025	2040	3.71	0.79	4.50
31755	2042	3.73	0.80	4.53
32485	2044	3.75	0.80	4.55
33215	2046	3.77	0.80	4.58
33945	2048	3.79	0.81	4.60
34675	2050	3.81	0.81	4.62
35405	2052	3.82	0.81	4.63
36135	2054	3.84	0.81	4.65
36865	2056	3.85	0.82	4.66
37595	2058	3.86	0.82	4.68
38325	2060	3.87	0.82	4.69
39055	2062	3.88	0.82	4.70
39785	2064	3.88	0.82	4.71
40515	2066	3.89	0.83	4.72
41245	2068	3.90	0.83	4.73
41975	2070	3.90	0.83	4.73
42705	2072	3.91	0.83	4.74
43435	2074	3.91	0.83	4.75
44165	2076	3.92	0.83	4.75
44895	2078	3.92	0.83	4.76
45625	2080	3.93	0.83	4.76
46355	2082	3.93	0.84	4.77
47085	2084	3.94	0.84	4.77
47815	2086	3.94	0.84	4.78
48545	2088	3.94	0.84	4.78
49275	2090	3.94	0.84	4.78
50005	2092	3.95	0.84	4.79
50735	2094	3.95	0.84	4.79
51465	2096	3.95	0.84	4.79
52195	2098	3.95	0.84	4.80
52925	2100	3.96	0.84	4.80
53655	2102	3.96	0.84	4.80
54385	2104	3.96	0.84	4.80

Appendix A-6-6a Predicted total groundwater flux (ML/day) in Scenario-6 (Loxton Area)

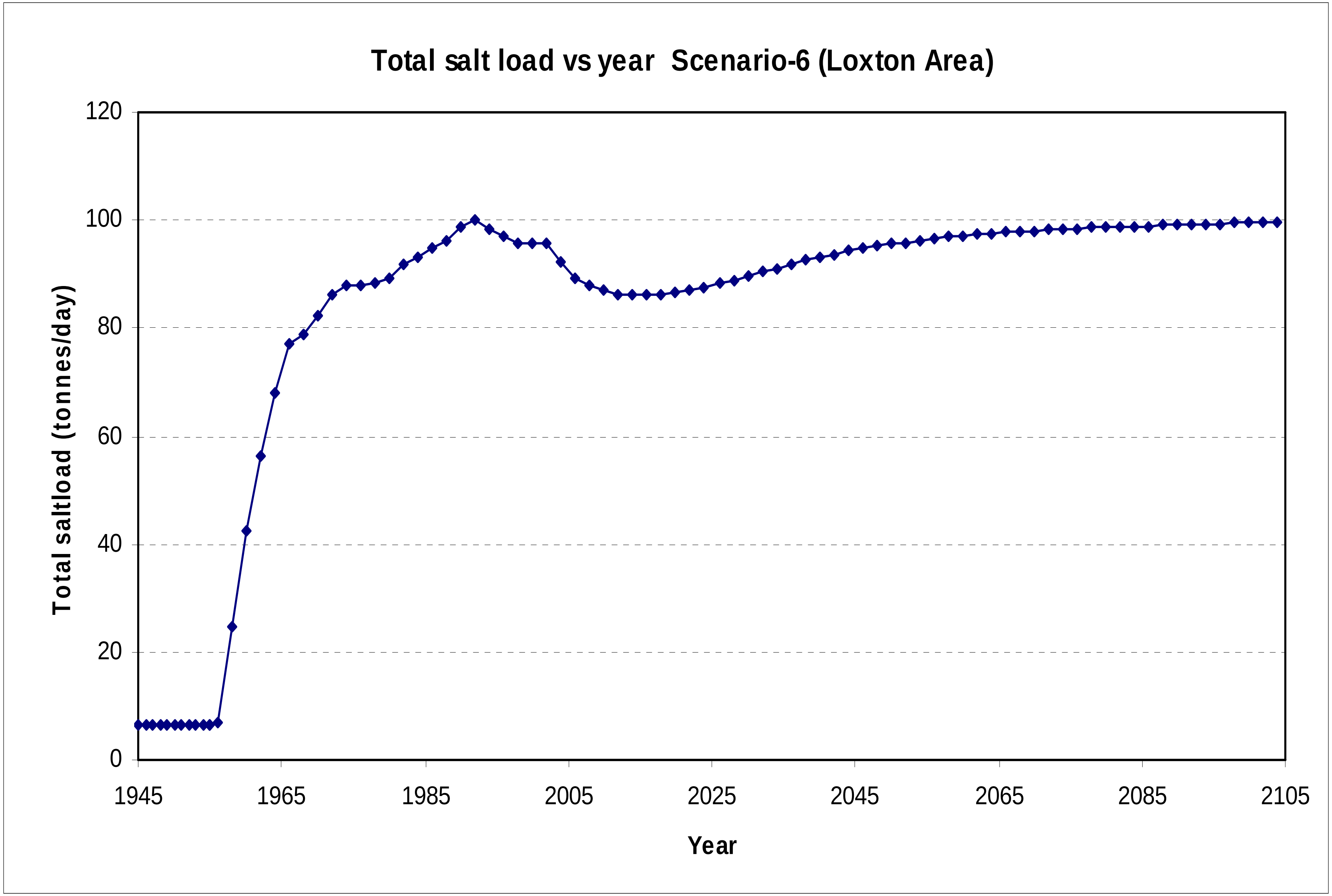


Appendix A-6-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-6 (Loxton Area)

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
0	1945	4.31	2.34	6.65
0	1946	4.31	2.34	6.65
0	1947	4.31	2.34	6.65
0	1948	4.31	2.34	6.65
0	1949	4.31	2.34	6.65
0	1950	4.31	2.34	6.65
0	1951	4.31	2.34	6.65
0	1952	4.31	2.34	6.65
0	1953	4.31	2.34	6.65
0	1954	4.31	2.34	6.65
0	1955	4.31	2.34	6.65
30	1955	4.31	2.34	6.65
365	1956	4.32	2.43	6.74
1095	1958	20.51	4.22	24.73
1825	1960	36.38	5.89	42.27
2555	1962	48.83	7.45	56.28
3285	1964	58.58	9.41	67.99
4015	1966	66.45	10.87	77.32
4745	1968	66.92	11.82	78.74
5475	1970	68.94	13.50	82.44
6205	1972	71.72	14.44	86.16
6935	1974	72.70	15.10	87.80
7665	1976	71.49	16.30	87.79
8395	1978	71.48	16.73	88.20
9125	1980	72.14	17.14	89.28
9855	1982	73.26	18.42	91.69
10585	1984	74.39	18.83	93.22
11315	1986	75.55	19.22	94.78
12045	1988	76.68	19.59	96.28
12775	1990	77.98	20.87	98.85
13505	1992	79.04	21.21	100.25
14235	1994	76.90	21.26	98.16
14965	1996	75.76	21.36	97.13
15695	1998	75.12	20.57	95.69
16425	2000	74.97	20.69	95.66
17155	2002	75.02	20.83	95.85
17885	2004	71.84	20.62	92.46
18615	2006	69.69	19.57	89.26
19345	2008	68.41	19.47	87.88
20075	2010	67.57	19.42	86.99
20805	2012	67.00	19.40	86.39
21535	2014	66.60	19.40	85.99
22265	2016	66.56	19.51	86.07

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
22995	2018	66.70	19.61	86.31
23725	2020	66.92	19.70	86.62
24455	2022	67.21	19.81	87.02
25185	2024	67.68	19.96	87.64
25915	2026	68.20	20.10	88.31
26645	2028	68.72	20.24	88.95
27375	2030	69.32	20.38	89.70
28105	2032	69.90	20.52	90.42
28835	2034	70.50	20.66	91.16
29565	2036	71.07	20.79	91.86
30295	2038	71.60	20.91	92.51
31025	2040	72.10	21.03	93.13
31755	2042	72.57	21.14	93.71
32485	2044	73.00	21.24	94.24
33215	2046	73.39	21.33	94.72
33945	2048	73.74	21.42	95.16
34675	2050	74.06	21.50	95.56
35405	2052	74.35	21.57	95.93
36135	2054	74.61	21.64	96.26
36865	2056	74.85	21.71	96.55
37595	2058	75.06	21.77	96.83
38325	2060	75.25	21.82	97.07
39055	2062	75.42	21.87	97.30
39785	2064	75.58	21.92	97.50
40515	2066	75.72	21.97	97.69
41245	2068	75.85	22.01	97.87
41975	2070	75.97	22.05	98.03
42705	2072	76.08	22.09	98.18
43435	2074	76.19	22.13	98.31
44165	2076	76.28	22.16	98.44
44895	2078	76.37	22.20	98.56
45625	2080	76.45	22.23	98.68
46355	2082	76.53	22.26	98.78
47085	2084	76.60	22.29	98.88
47815	2086	76.66	22.31	98.98
48545	2088	76.73	22.34	99.07
49275	2090	76.79	22.36	99.15
50005	2092	76.84	22.39	99.23
50735	2094	76.90	22.41	99.31
51465	2096	76.95	22.43	99.38
52195	2098	77.00	22.46	99.45
52925	2100	77.04	22.48	99.52
53655	2102	77.08	22.50	99.58
54385	2104	77.13	22.52	99.64

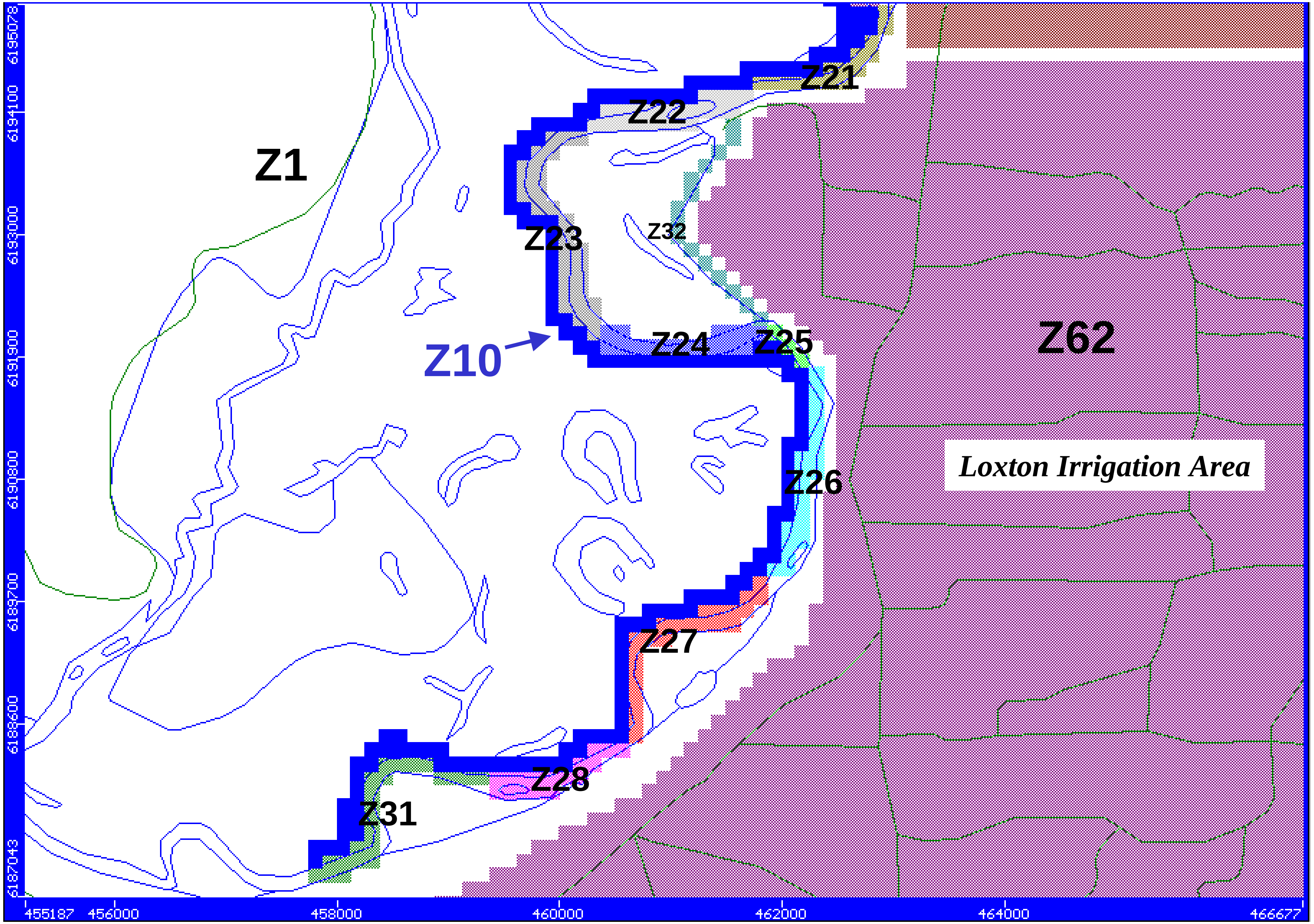
Appendix A-6-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-6 (Loxton Area)



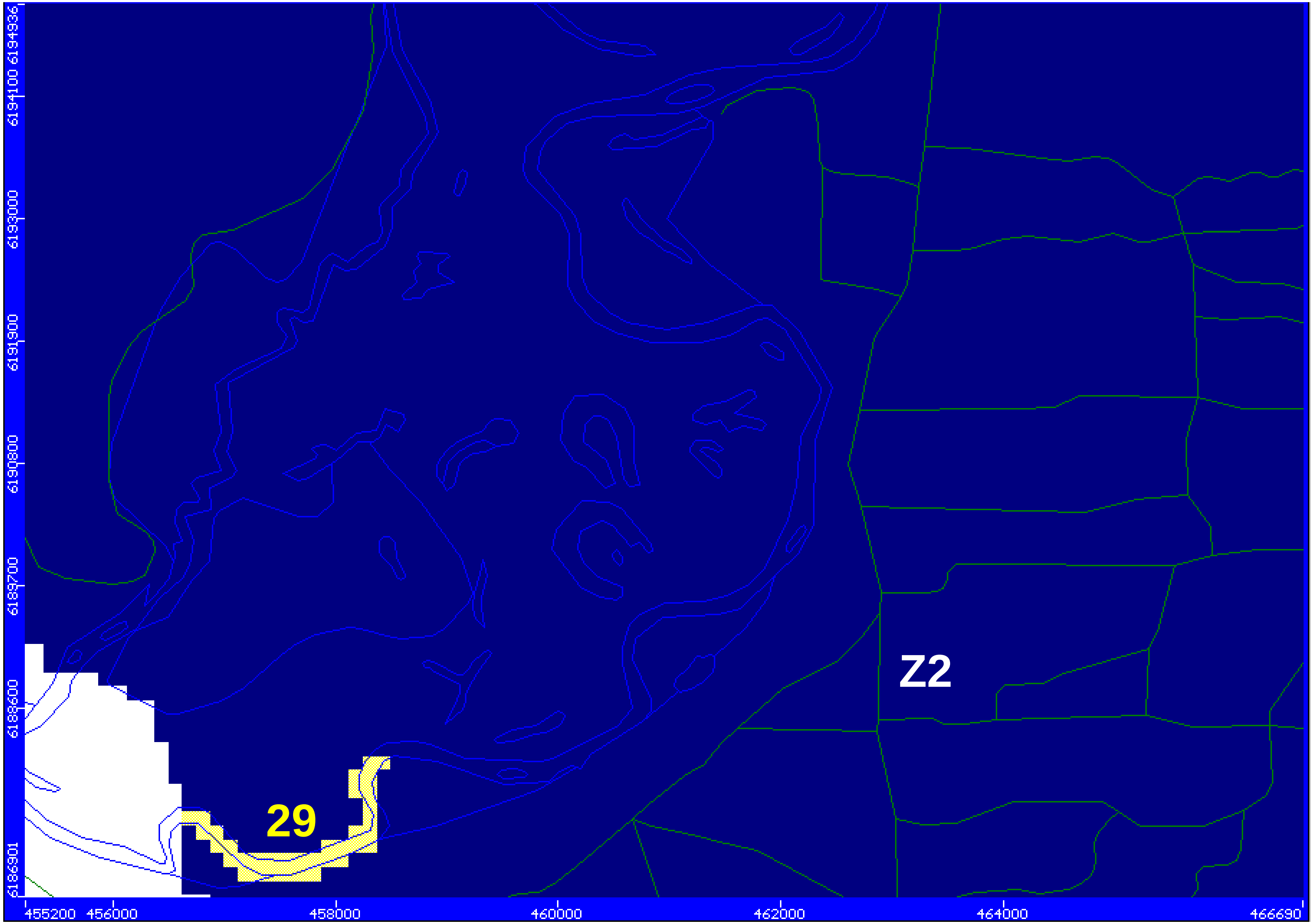
Appendix A-6-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-6 (Loxton Area)

A-7 Groundwater flux and salt load entering the River Murray Scenario-7 (Loxton Area)

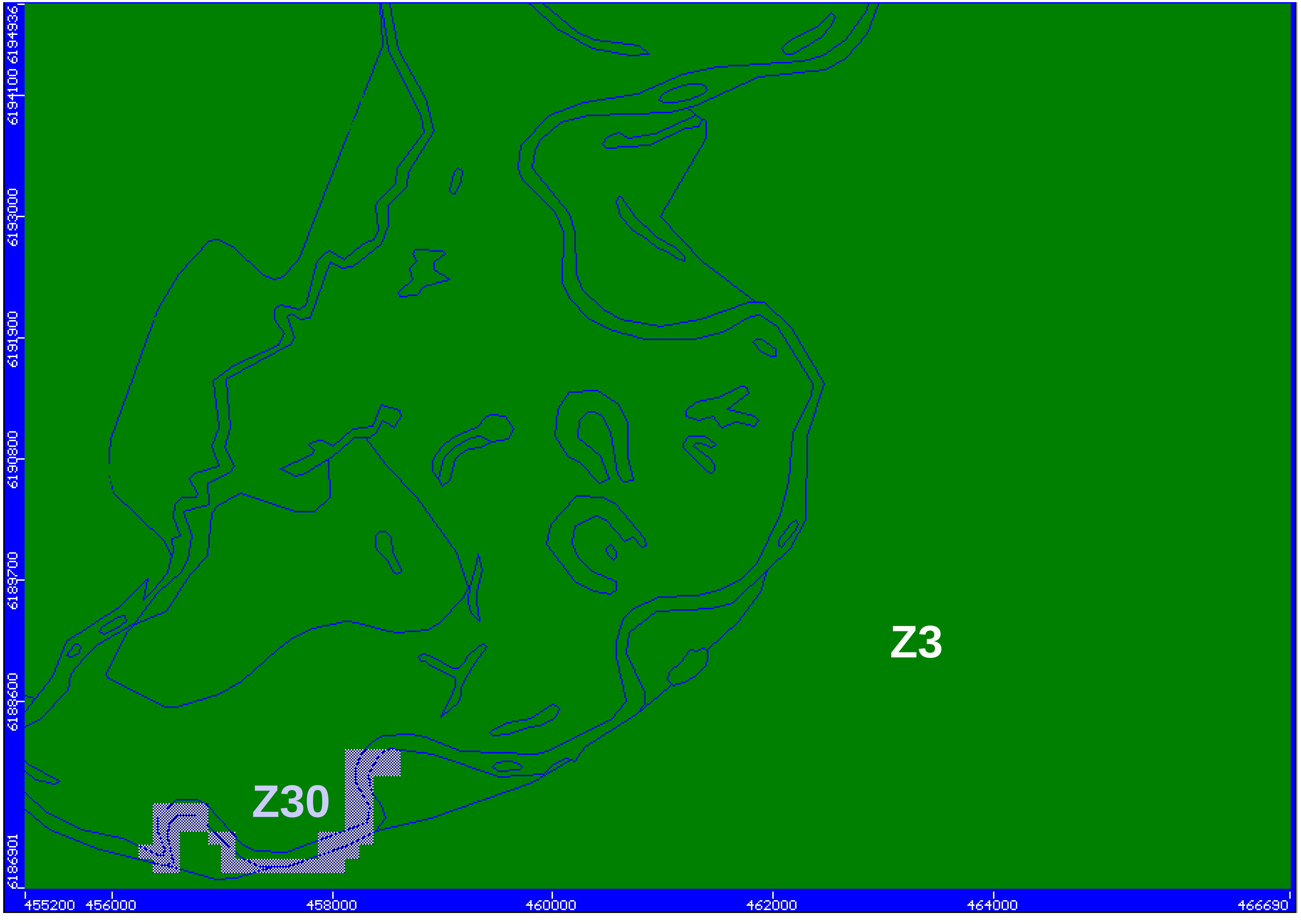
- Flow budget zones (Loxton Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix A-7-1a Flow budget zones in model Layer-1 (Loxton Area)



Appendix A-7-1b Flow budget zones in model Layer-2 (Loxton Area)



Appendix A-7-1c Flow budget zones in model Layer-3 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
30	1955	39.1	4.1	0.0	3.0	25.8	95.4	26.3	16.8	0.0	16.9	227
365	1956	39.1	4.1	0.0	3.1	26.1	95.9	26.3	16.8	0.0	16.9	228
1095	1958	200.1	106.7	0.0	96.1	228.4	292.2	27.1	16.9	0.0	17.1	985
1825	1960	366.5	210.9	0.0	187.2	386.3	459.2	29.7	17.3	14.0	17.5	1689
2555	1962	510.0	276.9	0.0	245.1	498.3	605.0	35.9	18.2	39.8	18.7	2248
3285	1964	624.4	317.4	1.1	284.6	581.9	758.0	47.5	19.8	59.2	20.4	2714
4015	1966	714.6	343.8	3.1	311.1	647.6	918.4	63.0	21.7	72.8	22.3	3118
4745	1968	720.9	325.9	2.6	296.9	648.3	1061.2	81.3	23.9	61.1	24.2	3246
5475	1970	735.1	318.0	2.3	294.2	664.7	1186.5	102.3	26.3	57.1	26.3	3413
6205	1972	755.5	317.9	2.4	296.7	686.5	1298.5	123.3	28.8	57.1	28.4	3595
6935	1974	766.6	314.3	2.4	294.5	679.8	1335.1	142.4	31.5	54.9	30.5	3652
7665	1976	751.0	298.3	1.7	281.4	656.5	1363.4	160.0	34.3	46.0	32.7	3625
8395	1978	745.3	290.3	1.3	275.0	651.9	1397.6	173.4	37.1	42.2	34.8	3649
9125	1980	746.6	287.5	1.2	273.4	654.4	1431.0	184.3	39.8	40.9	37.0	3696
9855	1982	751.9	287.5	1.3	275.7	660.6	1464.8	194.9	42.6	40.9	39.2	3759
10585	1984	760.0	288.6	1.4	277.4	667.6	1496.0	203.0	45.3	41.3	41.6	3822
11315	1986	769.3	290.1	1.6	279.5	675.0	1525.7	210.2	47.8	42.0	43.9	3885
12045	1988	778.7	291.8	1.8	281.7	682.3	1554.0	216.8	50.3	42.8	46.2	3946
12775	1990	788.6	293.9	2.2	285.6	690.1	1582.3	224.5	52.9	43.7	48.6	4012
13505	1992	798.2	295.8	2.4	287.8	697.0	1606.4	229.9	55.3	44.5	51.0	4068
14235	1994	774.8	280.7	1.5	273.6	672.9	1604.0	234.3	57.6	36.5	53.3	3989
14965	1996	760.6	271.9	1.1	265.7	661.1	1597.1	237.8	59.8	32.4	55.5	3943
15695	1998	753.3	267.5	0.9	260.6	654.3	1589.8	239.0	61.7	30.6	57.5	3915
16425	2000	749.8	265.4	0.8	258.8	651.0	1586.6	241.3	63.6	29.7	59.5	3907
17155	2002	749.0	264.5	0.8	258.1	649.5	1585.6	243.4	65.5	29.4	61.5	3907
17885	2004	720.0	248.2	0.2	242.0	610.2	1532.6	244.4	67.0	21.8	63.1	3749
18615	2006	431.2	13.7	0.0	0.0	347.6	952.7	7.1	6.9	0.0	4.2	1763
19345	2008	367.5	5.9	0.0	0.0	302.9	821.1	4.5	5.5	0.0	3.9	1511
20075	2010	336.7	3.4	0.0	0.0	278.6	751.2	3.5	5.0	0.0	3.9	1382
20805	2012	317.3	2.8	0.0	0.0	262.5	703.5	2.7	4.8	0.0	3.8	1297
21535	2014	303.5	2.5	0.0	0.0	250.7	667.4	2.1	4.6	0.0	3.8	1235
22265	2016	292.8	2.3	0.0	0.0	241.7	638.5	1.9	4.5	0.0	3.8	1185
22995	2018	284.3	2.1	0.0	0.0	234.5	614.7	1.8	4.4	0.0	3.8	1146
23725	2020	275.1	1.9	0.0	0.0	228.4	594.6	1.8	4.3	0.0	3.8	1110
24455	2022	266.1	1.8	0.0	0.0	223.2	577.4	1.7	4.2	0.0	3.9	1078
25185	2024	258.4	1.7	0.0	0.0	218.7	562.5	1.7	4.2	0.0	3.9	1051
25915	2026	251.9	1.6	0.0	0.0	214.8	549.5	1.6	4.1	0.0	3.9	1027
26645	2028	246.4	1.5	0.0	0.0	211.4	538.1	1.6	4.0	0.0	3.9	1007

Appendix A-7-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-7 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
27375	2030	241.7	1.5	0.0	0.0	208.4	528.1	1.5	4.0	0.0	3.9	989
28105	2032	237.7	1.4	0.0	0.0	205.7	519.2	1.5	3.9	0.0	3.9	973
28835	2034	234.3	1.4	0.0	0.0	203.4	511.4	1.5	3.9	0.0	3.9	960
29565	2036	231.4	1.3	0.0	0.0	201.3	504.4	1.5	3.8	0.0	3.9	948
30295	2038	228.8	1.3	0.0	0.0	199.5	498.3	1.4	3.8	0.0	3.9	937
31025	2040	226.6	1.3	0.0	0.0	197.8	492.9	1.4	3.8	0.0	3.9	928
31755	2042	224.6	1.2	0.0	0.0	196.4	488.1	1.4	3.8	0.0	3.9	919
32485	2044	222.9	1.2	0.0	0.0	195.1	483.8	1.4	3.7	0.0	3.9	912
33215	2046	221.3	1.2	0.0	0.0	194.0	480.1	1.4	3.7	0.0	3.9	906
33945	2048	220.0	1.2	0.0	0.0	193.0	476.7	1.4	3.7	0.0	3.9	900
34675	2050	218.8	1.1	0.0	0.0	192.1	473.8	1.3	3.7	0.0	3.9	895
35405	2052	217.8	1.1	0.0	0.0	191.4	471.2	1.3	3.7	0.0	3.9	890
36135	2054	216.8	1.1	0.0	0.0	190.7	468.9	1.3	3.7	0.0	3.9	886
36865	2056	216.0	1.1	0.0	0.0	190.1	466.9	1.3	3.7	0.0	3.9	883
37595	2058	215.3	1.1	0.0	0.0	189.5	465.1	1.3	3.6	0.0	3.9	880
38325	2060	214.6	1.1	0.0	0.0	189.0	463.5	1.3	3.6	0.0	3.9	877
39055	2062	214.1	1.1	0.0	0.0	188.6	462.1	1.3	3.6	0.0	4.0	875
39785	2064	213.6	1.1	0.0	0.0	188.3	460.9	1.3	3.6	0.0	4.0	873
40515	2066	213.1	1.1	0.0	0.0	187.9	459.9	1.3	3.6	0.0	4.0	871
41245	2068	212.7	1.0	0.0	0.0	187.7	459.0	1.3	3.6	0.0	4.0	869
41975	2070	212.4	1.0	0.0	0.0	187.4	458.2	1.3	3.6	0.0	4.0	868
42705	2072	212.0	1.0	0.0	0.0	187.2	457.5	1.3	3.6	0.0	4.0	867
43435	2074	211.8	1.0	0.0	0.0	187.0	457.0	1.3	3.6	0.0	4.0	866
44165	2076	211.5	1.0	0.0	0.0	186.8	456.5	1.3	3.7	0.0	4.0	865
44895	2078	211.3	1.0	0.0	0.0	186.7	456.1	1.3	3.7	0.0	4.0	864
45625	2080	211.1	1.0	0.0	0.0	186.6	455.8	1.3	3.7	0.0	4.0	863
46355	2082	211.0	1.0	0.0	0.0	186.5	455.5	1.3	3.7	0.0	4.0	863
47085	2084	210.9	1.0	0.0	0.0	186.4	455.3	1.3	3.7	0.0	4.0	863
47815	2086	210.7	1.0	0.0	0.0	186.4	455.2	1.3	3.7	0.0	4.0	862
48545	2088	210.6	1.0	0.0	0.0	186.3	455.1	1.3	3.7	0.0	4.0	862
49275	2090	210.6	1.0	0.0	0.0	186.3	455.0	1.3	3.7	0.0	4.1	862
50005	2092	210.5	1.0	0.0	0.0	186.2	455.0	1.3	3.7	0.0	4.1	862
50735	2094	210.4	1.0	0.0	0.0	186.2	455.0	1.3	3.7	0.0	4.1	862
51465	2096	210.4	1.0	0.0	0.0	186.2	455.1	1.3	3.7	0.0	4.1	862
52195	2098	210.4	1.0	0.0	0.0	186.2	455.2	1.3	3.7	0.0	4.1	862
52925	2100	210.4	1.0	0.0	0.0	186.2	455.3	1.3	3.7	0.0	4.1	862
53655	2102	210.4	1.0	0.0	0.0	186.3	455.4	1.3	3.7	0.0	4.1	862
54385	2104	210.4	1.0	0.0	0.0	186.3	455.6	1.3	3.8	0.0	4.1	862
TDS	*mg/L*	*25807*	*29055*	*30760*	*39978*	*18716*	*7710*	*35935*	*29140*	*39117*	*24080*	

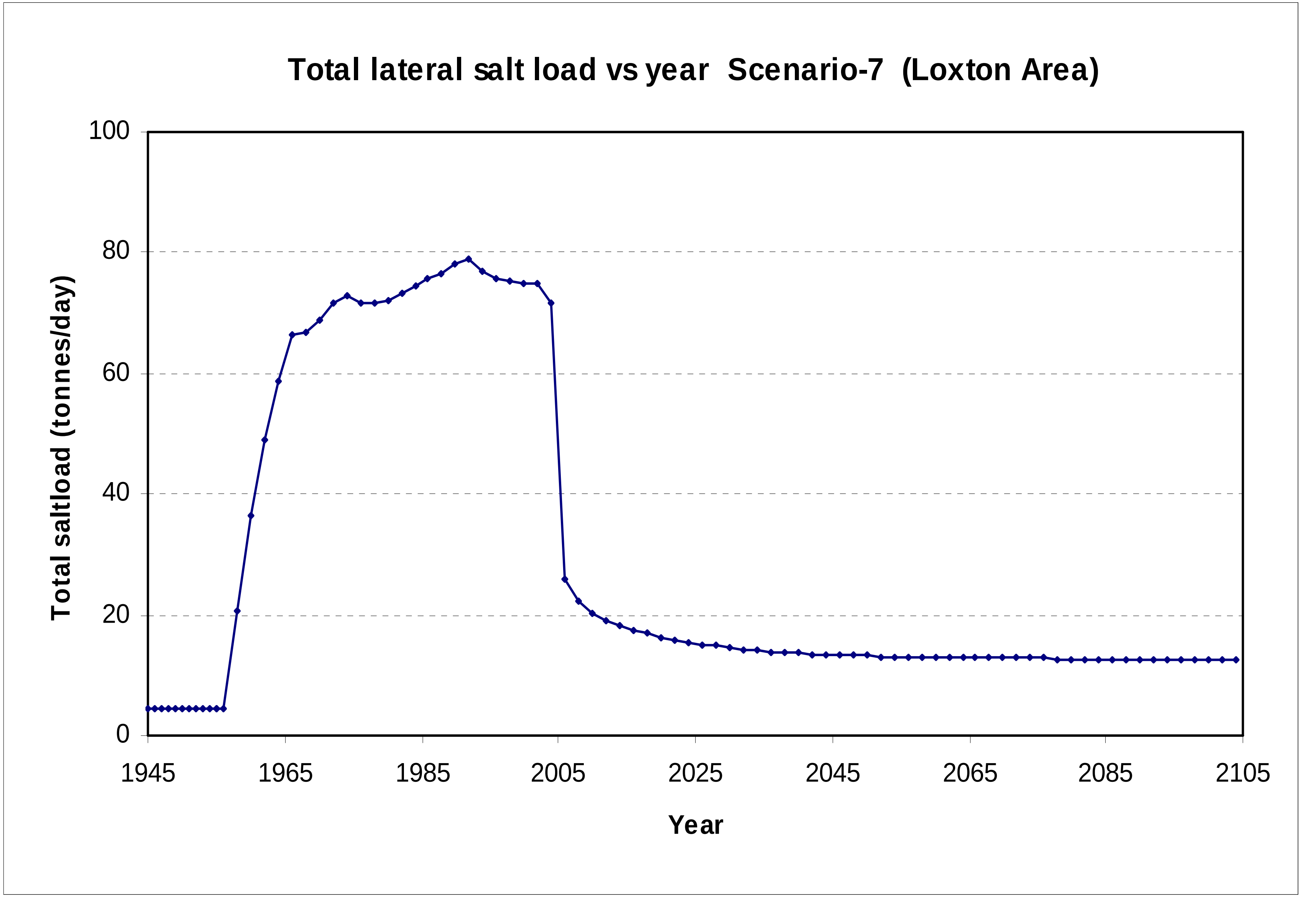
Appendix A-7-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-7 (Loxton Area)

Day	Year	Z1 to Z21 (tonne/day)	Z1 to Z22 (tonne/day)	Z1 to Z23 (tonne/day)	Z1 to Z24 (tonne/day)	Z1 to Z25 (tonne/day)	Z1 to Z26 (tonne/day)	Z1 to Z27 (tonne/day)	Z1 to Z28 (tonne/day)	Seepage Z32 Drain (tonne/day)	Z1 to Z31 (tonne/day)	Total Lateral (tonne/day)
0	1945	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1946	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1947	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1948	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1949	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1950	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1951	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1952	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1953	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1954	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
30	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
365	1956	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
1095	1958	5.2	3.1	0.0	3.8	4.3	2.3	1.0	0.5	0.0	0.4	21
1825	1960	9.5	6.1	0.0	7.5	7.2	3.5	1.1	0.5	0.5	0.4	38
2555	1962	13.2	8.0	0.0	9.8	9.3	4.7	1.3	0.5	1.6	0.5	49
3285	1964	16.1	9.2	0.0	11.4	10.9	5.8	1.7	0.6	2.3	0.5	59
4015	1966	18.4	10.0	0.1	12.4	12.1	7.1	2.3	0.6	2.8	0.5	66
4745	1968	18.6	9.5	0.1	11.9	12.1	8.2	2.9	0.7	2.4	0.6	67
5475	1970	19.0	9.2	0.1	11.8	12.4	9.1	3.7	0.8	2.2	0.6	69
6205	1972	19.5	9.2	0.1	11.9	12.8	10.0	4.4	0.8	2.2	0.7	72
6935	1974	19.8	9.1	0.1	11.8	12.7	10.3	5.1	0.9	2.1	0.7	73
7665	1976	19.4	8.7	0.1	11.3	12.3	10.5	5.7	1.0	1.8	0.8	71
8395	1978	19.2	8.4	0.0	11.0	12.2	10.8	6.2	1.1	1.6	0.8	71
9125	1980	19.3	8.4	0.0	10.9	12.2	11.0	6.6	1.2	1.6	0.9	72
9855	1982	19.4	8.4	0.0	11.0	12.4	11.3	7.0	1.2	1.6	0.9	73
10585	1984	19.6	8.4	0.0	11.1	12.5	11.5	7.3	1.3	1.6	1.0	74
11315	1986	19.9	8.4	0.0	11.2	12.6	11.8	7.6	1.4	1.6	1.1	76
12045	1988	20.1	8.5	0.1	11.3	12.8	12.0	7.8	1.5	1.7	1.1	77
12775	1990	20.4	8.5	0.1	11.4	12.9	12.2	8.1	1.5	1.7	1.2	78
13505	1992	20.6	8.6	0.1	11.5	13.0	12.4	8.3	1.6	1.7	1.2	79
14235	1994	20.0	8.2	0.0	10.9	12.6	12.4	8.4	1.7	1.4	1.3	77
14965	1996	19.6	7.9	0.0	10.6	12.4	12.3	8.5	1.7	1.3	1.3	76
15695	1998	19.4	7.8	0.0	10.4	12.2	12.3	8.6	1.8	1.2	1.4	75
16425	2000	19.4	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.2	1.4	75
17155	2002	19.3	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.1	1.5	75
17885	2004	18.6	7.2	0.0	9.7	11.4	11.8	8.8	2.0	0.9	1.5	72
18615	2006	11.1	0.4	0.0	0.0	6.5	7.3	0.3	0.2	0.0	0.1	26
19345	2008	9.5	0.2	0.0	0.0	5.7	6.3	0.2	0.2	0.0	0.1	22
20075	2010	8.7	0.1	0.0	0.0	5.2	5.8	0.1	0.1	0.0	0.1	20
20805	2012	8.2	0.1	0.0	0.0	4.9	5.4	0.1	0.1	0.0	0.1	19
21535	2014	7.8	0.1	0.0	0.0	4.7	5.1	0.1	0.1	0.0	0.1	18
22265	2016	7.6	0.1	0.0	0.0	4.5	4.9	0.1	0.1	0.0	0.1	17

Appendix A-7-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-7 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	7.3	0.1	0.0	0.0	4.4	4.7	0.1	0.1	0.0	0.1	17
23725	2020	7.1	0.1	0.0	0.0	4.3	4.6	0.1	0.1	0.0	0.1	16
24455	2022	6.9	0.1	0.0	0.0	4.2	4.5	0.1	0.1	0.0	0.1	16
25185	2024	6.7	0.0	0.0	0.0	4.1	4.3	0.1	0.1	0.0	0.1	15
25915	2026	6.5	0.0	0.0	0.0	4.0	4.2	0.1	0.1	0.0	0.1	15
26645	2028	6.4	0.0	0.0	0.0	4.0	4.1	0.1	0.1	0.0	0.1	15
27375	2030	6.2	0.0	0.0	0.0	3.9	4.1	0.1	0.1	0.0	0.1	15
28105	2032	6.1	0.0	0.0	0.0	3.9	4.0	0.1	0.1	0.0	0.1	14
28835	2034	6.0	0.0	0.0	0.0	3.8	3.9	0.1	0.1	0.0	0.1	14
29565	2036	6.0	0.0	0.0	0.0	3.8	3.9	0.1	0.1	0.0	0.1	14
30295	2038	5.9	0.0	0.0	0.0	3.7	3.8	0.1	0.1	0.0	0.1	14
31025	2040	5.8	0.0	0.0	0.0	3.7	3.8	0.1	0.1	0.0	0.1	14
31755	2042	5.8	0.0	0.0	0.0	3.7	3.8	0.1	0.1	0.0	0.1	14
32485	2044	5.8	0.0	0.0	0.0	3.7	3.7	0.0	0.1	0.0	0.1	13
33215	2046	5.7	0.0	0.0	0.0	3.6	3.7	0.0	0.1	0.0	0.1	13
33945	2048	5.7	0.0	0.0	0.0	3.6	3.7	0.0	0.1	0.0	0.1	13
34675	2050	5.6	0.0	0.0	0.0	3.6	3.7	0.0	0.1	0.0	0.1	13
35405	2052	5.6	0.0	0.0	0.0	3.6	3.6	0.0	0.1	0.0	0.1	13
36135	2054	5.6	0.0	0.0	0.0	3.6	3.6	0.0	0.1	0.0	0.1	13
36865	2056	5.6	0.0	0.0	0.0	3.6	3.6	0.0	0.1	0.0	0.1	13
37595	2058	5.6	0.0	0.0	0.0	3.5	3.6	0.0	0.1	0.0	0.1	13
38325	2060	5.5	0.0	0.0	0.0	3.5	3.6	0.0	0.1	0.0	0.1	13
39055	2062	5.5	0.0	0.0	0.0	3.5	3.6	0.0	0.1	0.0	0.1	13
39785	2064	5.5	0.0	0.0	0.0	3.5	3.6	0.0	0.1	0.0	0.1	13
40515	2066	5.5	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
41245	2068	5.5	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
41975	2070	5.5	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
42705	2072	5.5	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
43435	2074	5.5	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
44165	2076	5.5	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
44895	2078	5.5	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
45625	2080	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
46355	2082	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
47085	2084	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
47815	2086	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
48545	2088	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
49275	2090	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
50005	2092	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
50735	2094	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
51465	2096	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
52195	2098	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
52925	2100	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
53655	2102	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
54385	2104	5.4	0.0	0.0	0.0	3.5	3.5	0.0	0.1	0.0	0.1	13
TDS	mg/L	25807	29055	30760	39678	15718	7710	35935	29140	39117	24080	

Appendix A-7-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-7 (Loxton Area)



Appendix A-7-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-7 (Loxton Area)

Day	Year	Z2 to Z21 (m^3/day)	Z2 to Z22 (m^3/day)	Z2 to Z23 (m^3/day)	Z2 to Z24 (m^3/day)	Z2 to Z25 (m^3/day)	Z2 to Z26 (m^3/day)	Z2 to Z27 (m^3/day)	Z2 to Z28 (m^3/day)	Z2 to Z29 (m^3/day)	Z3 to Z29 (m^3/day)	Z2 to Z31 (m^3/day)	Z3 to Z30 (m^3/day)	Total Lateral (m^3/day)
30	1955	6.7	0.9	0.0	0.7	1.1	11.0	10.4	21.2	6.8	3.8	0.0	40.5	63
365	1956	6.7	0.9	0.0	1.2	1.6	12.9	10.4	21.0	6.8	3.8	0.0	40.5	65
1095	1958	21.5	9.6	0.0	10.3	9.2	28.9	11.1	21.3	6.8	3.9	0.0	40.8	123
1825	1960	33.8	17.7	0.0	19.3	14.3	46.2	13.0	22.2	6.9	4.1	0.0	41.4	178
2555	1962	43.3	23.3	1.0	26.6	17.8	65.1	16.8	24.7	7.3	4.6	0.1	43.3	231
3285	1964	50.8	27.4	2.4	37.2	20.8	95.1	26.5	28.5	7.7	5.2	0.3	45.7	302
4015	1966	56.6	30.4	3.2	41.8	22.8	119.2	35.6	32.8	8.2	5.7	0.4	48.1	357
4745	1968	58.0	30.3	3.4	42.0	23.1	141.6	45.2	37.4	8.7	6.2	0.6	50.5	396
5475	1970	59.7	30.9	3.9	50.0	24.2	174.3	64.4	42.9	9.2	6.7	0.9	53.0	467
6205	1972	61.6	31.8	4.2	51.5	24.9	192.2	74.3	48.3	9.7	7.2	1.1	55.4	507
6935	1974	62.8	32.2	4.4	52.2	25.0	203.8	82.9	53.9	10.2	7.7	1.4	57.9	537
7665	1976	62.6	31.8	5.1	59.3	25.2	225.6	99.9	60.2	10.7	8.2	1.7	60.5	590
8395	1978	62.8	31.8	5.2	59.3	25.2	232.8	106.0	65.6	11.2	8.6	2.1	62.9	611
9125	1980	63.3	32.0	5.3	59.8	25.3	238.9	111.1	70.8	11.7	9.0	2.4	65.3	630
9855	1982	63.9	32.5	6.3	68.6	26.1	259.0	126.1	76.8	12.2	9.5	2.8	67.9	684
10585	1984	64.9	33.1	6.5	69.3	26.4	264.0	130.0	81.8	12.7	9.9	3.2	70.2	702
11315	1986	65.7	33.6	6.7	70.0	26.6	268.7	133.7	86.5	13.2	10.3	3.6	72.6	719
12045	1988	66.5	34.1	6.9	70.6	26.9	273.0	137.0	91.0	13.7	10.7	4.0	74.9	734
12775	1990	67.4	34.8	8.2	79.7	27.7	292.7	151.1	96.4	14.2	11.1	4.5	77.4	788
13505	1992	68.2	35.2	8.4	80.3	27.9	296.2	153.8	100.7	14.7	11.5	4.8	79.7	802
14235	1994	67.1	34.3	8.2	79.1	27.4	297.3	155.8	104.6	15.2	11.9	5.1	81.9	806
14965	1996	66.8	34.1	8.2	78.6	27.1	297.6	157.5	108.2	15.6	12.3	5.4	84.1	811
15695	1998	66.6	33.9	7.1	69.9	26.4	282.2	148.0	110.4	16.0	12.6	5.6	86.1	779
16425	2000	66.6	33.9	7.1	69.8	26.4	282.4	149.2	113.4	16.5	12.9	5.9	88.1	784
17155	2002	66.7	34.0	7.2	69.9	26.4	282.7	150.3	116.3	16.9	13.2	6.2	90.1	790
17885	2004	65.2	32.8	6.9	68.0	25.4	279.1	150.4	118.4	17.2	13.4	6.3	91.4	783
18615	2006	54.8	16.7	1.4	35.8	19.9	200.0	44.6	40.8	15.8	13.2	0.0	87.7	443
19345	2008	51.6	14.0	1.1	32.1	18.7	181.7	38.1	31.1	15.6	13.2	0.0	87.6	397
20075	2010	49.9	13.0	1.0	30.4	18.0	171.3	34.9	28.2	15.6	13.2	0.0	87.8	375
20805	2012	48.7	12.5	0.9	29.4	17.5	164.1	32.9	26.7	15.6	13.2	0.0	88.0	361
21535	2014	47.8	12.1	0.9	28.6	17.1	158.4	31.3	25.7	15.7	13.3	0.0	88.2	351
22265	2016	47.0	11.8	0.9	28.0	16.8	153.9	30.0	24.9	15.7	13.3	0.0	88.5	342
22995	2018	46.4	11.6	0.8	27.6	16.6	150.1	28.9	24.2	15.8	13.3	0.0	88.7	335
23725	2020	45.4	11.2	0.8	27.1	16.3	146.7	28.2	23.6	15.8	13.3	0.0	88.9	328
24455	2022	44.6	10.9	0.8	26.6	16.2	143.8	27.6	23.1	15.8	13.4	0.0	89.1	323
25185	2024	44.0	10.7	0.7	26.3	16.0	141.3	27.0	22.6	15.9	13.4	0.0	89.3	318
25915	2026	43.4	10.6	0.7	26.0	15.9	139.1	26.5	22.1	15.9	13.4	0.0	89.5	314
26645	2028	43.0	10.4	0.7	25.8	15.7	137.2	26.1	21.7	15.9	13.4	0.0	89.7	310

Appendix A-7-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-7 (Loxton Area)

Day	Year	Z2 to Z21 (m³/day)	Z2 to Z22 (m³/day)	Z2 to Z23 (m³/day)	Z2 to Z24 (m³/day)	Z2 to Z25 (m³/day)	Z2 to Z26 (m³/day)	Z2 to Z27 (m³/day)	Z2 to Z28 (m³/day)	Z2 to Z29 (m³/day)	Z3 to Z29 (m³/day)	Z2 to Z31 (m³/day)	Z3 to Z30 (m³/day)	Total Lateral (m³/day)
27375	2030	42.6	10.3	0.7	25.5	15.6	135.5	25.7	21.4	15.9	13.5	0.0	89.9	307
28105	2032	42.3	10.2	0.7	25.3	15.5	134.0	25.4	21.0	16.0	13.5	0.0	90.0	304
28835	2034	42.0	10.2	0.7	25.2	15.4	132.7	25.1	20.8	16.0	13.5	0.0	90.2	301
29565	2036	41.8	10.1	0.7	25.0	15.4	131.5	24.8	20.5	16.0	13.5	0.0	90.4	299
30295	2038	41.6	10.0	0.6	24.9	15.3	130.5	24.6	20.3	16.0	13.6	0.0	90.5	297
31025	2040	41.4	10.0	0.6	24.8	15.2	129.6	24.4	20.1	16.1	13.6	0.0	90.7	296
31755	2042	41.2	9.9	0.6	24.7	15.2	128.7	24.2	19.9	16.1	13.6	0.0	90.9	294
32485	2044	41.1	9.9	0.6	24.6	15.1	128.0	24.1	19.7	16.1	13.6	0.0	91.0	293
33215	2046	40.9	9.8	0.6	24.5	15.1	127.4	23.9	19.6	16.2	13.7	0.0	91.2	292
33945	2048	40.8	9.8	0.6	24.5	15.1	126.8	23.8	19.5	16.2	13.7	0.0	91.3	291
34675	2050	40.7	9.8	0.6	24.4	15.0	126.3	23.7	19.4	16.2	13.7	0.0	91.5	290
35405	2052	40.6	9.8	0.6	24.3	15.0	125.9	23.6	19.4	16.2	13.7	0.0	91.7	289
36135	2054	40.6	9.7	0.6	24.3	15.0	125.5	23.6	19.3	16.3	13.8	0.0	91.8	289
36865	2056	40.5	9.7	0.6	24.3	15.0	125.1	23.5	19.3	16.3	13.8	0.0	92.0	288
37595	2058	40.4	9.7	0.6	24.2	14.9	124.8	23.5	19.2	16.3	13.8	0.0	92.1	288
38325	2060	40.4	9.7	0.6	24.2	14.9	124.6	23.4	19.2	16.3	13.8	0.0	92.3	287
39055	2062	40.3	9.7	0.6	24.2	14.9	124.4	23.4	19.2	16.4	13.9	0.0	92.4	287
39785	2064	40.3	9.7	0.6	24.1	14.9	124.2	23.4	19.2	16.4	13.9	0.0	92.6	287
40515	2066	40.2	9.6	0.6	24.1	14.9	124.0	23.3	19.2	16.4	13.9	0.0	92.8	286
41245	2068	40.2	9.6	0.6	24.1	14.9	123.9	23.3	19.2	16.5	14.0	0.0	92.9	286
41975	2070	40.2	9.6	0.6	24.1	14.9	123.7	23.3	19.2	16.5	14.0	0.0	93.1	286
42705	2072	40.1	9.6	0.6	24.1	14.9	123.6	23.3	19.2	16.5	14.0	0.0	93.2	286
43435	2074	40.1	9.6	0.6	24.1	14.9	123.5	23.3	19.3	16.5	14.0	0.0	93.4	286
44165	2076	40.1	9.6	0.6	24.1	14.9	123.5	23.3	19.3	16.6	14.1	0.0	93.5	286
44895	2078	40.1	9.6	0.6	24.1	14.8	123.4	23.3	19.3	16.6	14.1	0.0	93.6	286
45625	2080	40.1	9.6	0.6	24.1	14.8	123.4	23.3	19.4	16.6	14.1	0.0	93.8	286
46355	2082	40.1	9.6	0.6	24.0	14.8	123.4	23.3	19.4	16.6	14.1	0.0	93.9	286
47085	2084	40.1	9.6	0.6	24.0	14.8	123.3	23.4	19.5	16.7	14.2	0.0	94.1	286
47815	2086	40.0	9.6	0.6	24.0	14.8	123.3	23.4	19.5	16.7	14.2	0.0	94.2	286
48545	2088	40.0	9.6	0.6	24.0	14.8	123.3	23.4	19.6	16.7	14.2	0.0	94.3	286
49275	2090	40.0	9.6	0.6	24.1	14.8	123.4	23.4	19.6	16.7	14.2	0.0	94.5	286
50005	2092	40.0	9.6	0.6	24.1	14.8	123.4	23.4	19.7	16.8	14.2	0.0	94.6	287
50735	2094	40.0	9.6	0.6	24.1	14.8	123.4	23.5	19.7	16.8	14.3	0.0	94.7	287
51465	2096	40.0	9.6	0.6	24.1	14.8	123.4	23.5	19.8	16.8	14.3	0.0	94.9	287
52195	2098	40.0	9.6	0.6	24.1	14.8	123.5	23.5	19.9	16.8	14.3	0.0	95.0	287
52925	2100	40.0	9.6	0.6	24.1	14.8	123.5	23.6	19.9	16.9	14.3	0.0	95.1	287
53655	2102	40.0	9.6	0.6	24.1	14.8	123.5	23.6	20.0	16.9	14.4	0.0	95.2	287
54385	2104	40.0	9.6	0.6	24.1	14.8	123.6	23.6	20.0	16.9	14.4	0.0	95.4	288
TDS	mg/L	32287	32287	32287	32287	32287	29405	9700	7550	3300	32287	32287	32287	

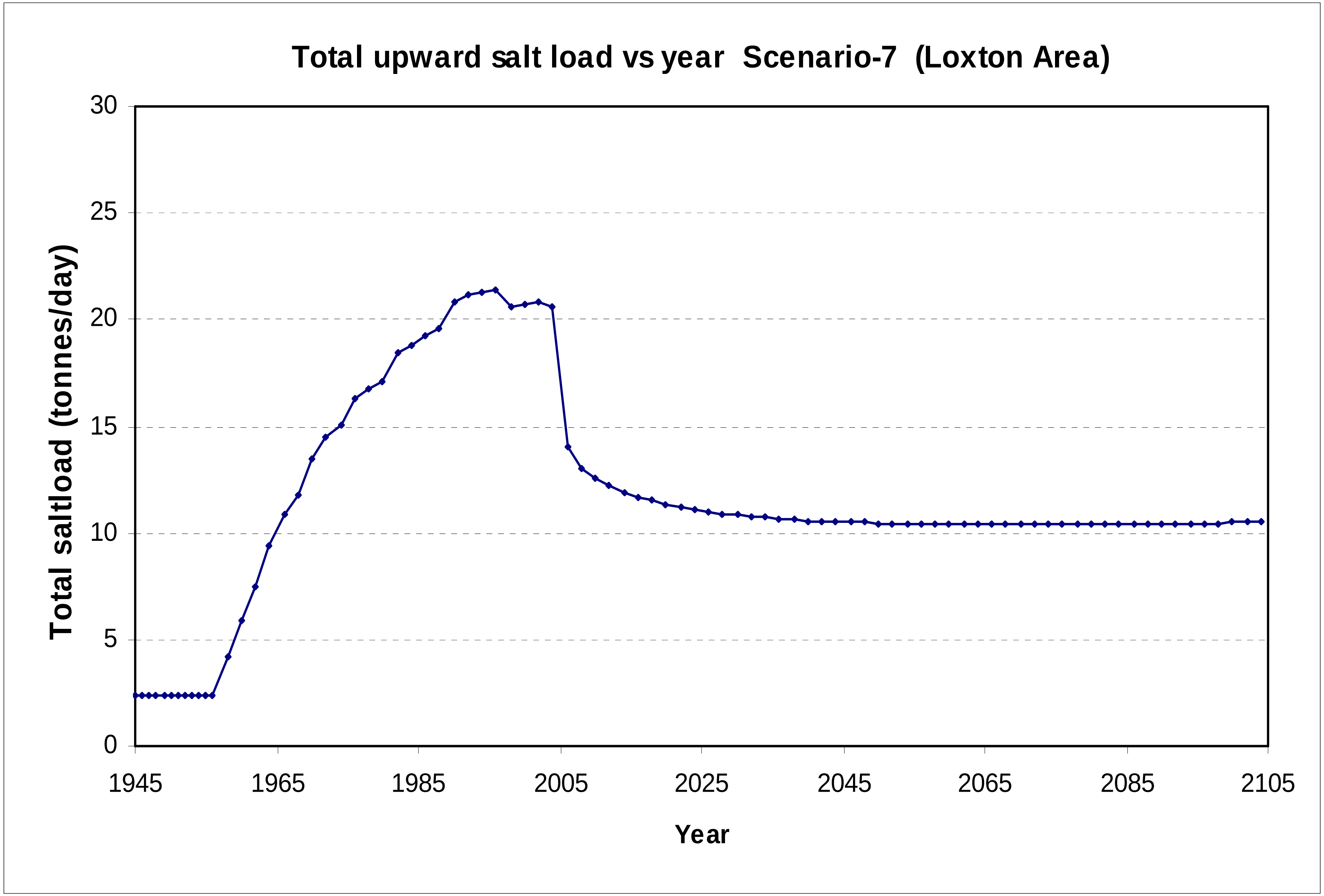
Appendix A-7-4b Predicted upward groundwater flux (m³/day) from flow budget zones in Scenario-7 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z29 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1946	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1947	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1948	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1949	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1950	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1951	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1952	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1953	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1954	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
30	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
365	1956	0.2	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.0	0.1	0.0	1.3	2
1095	1958	0.7	0.3	0.0	0.3	0.3	0.8	0.1	0.2	0.0	0.1	0.0	1.3	4
1825	1960	1.1	0.6	0.0	0.6	0.5	1.4	0.1	0.2	0.0	0.1	0.0	1.3	6
2555	1962	1.4	0.8	0.0	0.9	0.6	1.9	0.2	0.2	0.0	0.1	0.0	1.4	7
3285	1964	1.6	0.9	0.1	1.2	0.7	2.8	0.3	0.2	0.0	0.2	0.0	1.5	9
4015	1966	1.8	1.0	0.1	1.3	0.7	3.5	0.3	0.2	0.0	0.2	0.0	1.6	11
4745	1968	1.9	1.0	0.1	1.4	0.7	4.2	0.4	0.3	0.0	0.2	0.0	1.6	12
5475	1970	1.9	1.0	0.1	1.6	0.8	5.1	0.6	0.3	0.0	0.2	0.0	1.7	14
6205	1972	2.0	1.0	0.1	1.7	0.8	5.7	0.7	0.4	0.0	0.2	0.0	1.8	14
6935	1974	2.0	1.0	0.1	1.7	0.8	6.0	0.8	0.4	0.0	0.2	0.0	1.9	15
7665	1976	2.0	1.0	0.2	1.9	0.8	6.6	1.0	0.5	0.0	0.3	0.1	2.0	16
8395	1978	2.0	1.0	0.2	1.9	0.8	6.8	1.0	0.5	0.0	0.3	0.1	2.0	17
9125	1980	2.0	1.0	0.2	1.9	0.8	7.0	1.1	0.5	0.0	0.3	0.1	2.1	17
9855	1982	2.1	1.0	0.2	2.2	0.8	7.6	1.2	0.6	0.0	0.3	0.1	2.2	18
10585	1984	2.1	1.1	0.2	2.2	0.9	7.8	1.3	0.6	0.0	0.3	0.1	2.3	19
11315	1986	2.1	1.1	0.2	2.3	0.9	7.9	1.3	0.7	0.0	0.3	0.1	2.3	19
12045	1988	2.1	1.1	0.2	2.3	0.9	8.0	1.3	0.7	0.0	0.3	0.1	2.4	20
12775	1990	2.2	1.1	0.3	2.6	0.9	8.6	1.5	0.7	0.0	0.4	0.1	2.5	21
13505	1992	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.0	0.4	0.2	2.6	21
14235	1994	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.1	0.4	0.2	2.6	21
14965	1996	2.2	1.1	0.3	2.5	0.9	8.8	1.5	0.8	0.1	0.4	0.2	2.7	21
15695	1998	2.2	1.1	0.2	2.3	0.9	8.3	1.4	0.8	0.1	0.4	0.2	2.8	21
16425	2000	2.1	1.1	0.2	2.3	0.9	8.3	1.4	0.9	0.1	0.4	0.2	2.8	21
17155	2002	2.2	1.1	0.2	2.3	0.9	8.3	1.5	0.9	0.1	0.4	0.2	2.9	21
17885	2004	2.1	1.1	0.2	2.2	0.8	8.2	1.5	0.9	0.1	0.4	0.2	3.0	21
18615	2006	1.8	0.5	0.0	1.2	0.6	5.9	0.4	0.3	0.1	0.4	0.0	2.8	14
19345	2008	1.7	0.5	0.0	1.0	0.6	5.3	0.4	0.2	0.1	0.4	0.0	2.8	13
20075	2010	1.6	0.4	0.0	1.0	0.6	5.0	0.3	0.2	0.1	0.4	0.0	2.8	13
20805	2012	1.6	0.4	0.0	0.9	0.6	4.8	0.3	0.2	0.1	0.4	0.0	2.8	12
21535	2014	1.5	0.4	0.0	0.9	0.6	4.7	0.3	0.2	0.1	0.4	0.0	2.8	12
22265	2016	1.5	0.4	0.0	0.9	0.5	4.5	0.3	0.2	0.1	0.4	0.0	2.9	12

Appendix A-7-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-7 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z29 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	1.5	0.4	0.0	0.9	0.5	4.4	0.3	0.2	0.1	0.4	0.0	2.9	12
23725	2020	1.5	0.4	0.0	0.9	0.5	4.3	0.3	0.2	0.1	0.4	0.0	2.9	11
24455	2022	1.4	0.4	0.0	0.9	0.5	4.2	0.3	0.2	0.1	0.4	0.0	2.9	11
25185	2024	1.4	0.3	0.0	0.8	0.5	4.2	0.3	0.2	0.1	0.4	0.0	2.9	11
25915	2026	1.4	0.3	0.0	0.8	0.5	4.1	0.3	0.2	0.1	0.4	0.0	2.9	11
26645	2028	1.4	0.3	0.0	0.8	0.5	4.0	0.3	0.2	0.1	0.4	0.0	2.9	11
27375	2030	1.4	0.3	0.0	0.8	0.5	4.0	0.2	0.2	0.1	0.4	0.0	2.9	11
28105	2032	1.4	0.3	0.0	0.8	0.5	3.9	0.2	0.2	0.1	0.4	0.0	2.9	11
28835	2034	1.4	0.3	0.0	0.8	0.5	3.9	0.2	0.2	0.1	0.4	0.0	2.9	11
29565	2036	1.3	0.3	0.0	0.8	0.5	3.9	0.2	0.2	0.1	0.4	0.0	2.9	11
30295	2038	1.3	0.3	0.0	0.8	0.5	3.8	0.2	0.2	0.1	0.4	0.0	2.9	11
31025	2040	1.3	0.3	0.0	0.8	0.5	3.8	0.2	0.2	0.1	0.4	0.0	2.9	11
31755	2042	1.3	0.3	0.0	0.8	0.5	3.8	0.2	0.2	0.1	0.4	0.0	2.9	11
32485	2044	1.3	0.3	0.0	0.8	0.5	3.8	0.2	0.1	0.1	0.4	0.0	2.9	11
33215	2046	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	2.9	10
33945	2048	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	2.9	10
34675	2050	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	3.0	10
35405	2052	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	3.0	10
36135	2054	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	3.0	10
36865	2056	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	3.0	10
37595	2058	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	3.0	10
38325	2060	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	3.0	10
39055	2062	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	3.0	10
39785	2064	1.3	0.3	0.0	0.8	0.5	3.7	0.2	0.1	0.1	0.4	0.0	3.0	10
40515	2066	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.4	0.0	3.0	10
41245	2068	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
41975	2070	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
42705	2072	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
43435	2074	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
44165	2076	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
44895	2078	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
45625	2080	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
46355	2082	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
47085	2084	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
47815	2086	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
48545	2088	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
49275	2090	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.0	10
50005	2092	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.1	10
50735	2094	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.1	10
51465	2096	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.1	10
52195	2098	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.1	0.1	0.5	0.0	3.1	10
52925	2100	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.2	0.1	0.5	0.0	3.1	10
53655	2102	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.2	0.1	0.5	0.0	3.1	10
54385	2104	1.3	0.3	0.0	0.8	0.5	3.6	0.2	0.2	0.1	0.5	0.0	3.1	10
TDS	mg/L	32267	32267	32267	32267	32267	29405	9700	7550	3300	32267	32267	32267	

Appendix A-7-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-7 (Loxton Area)

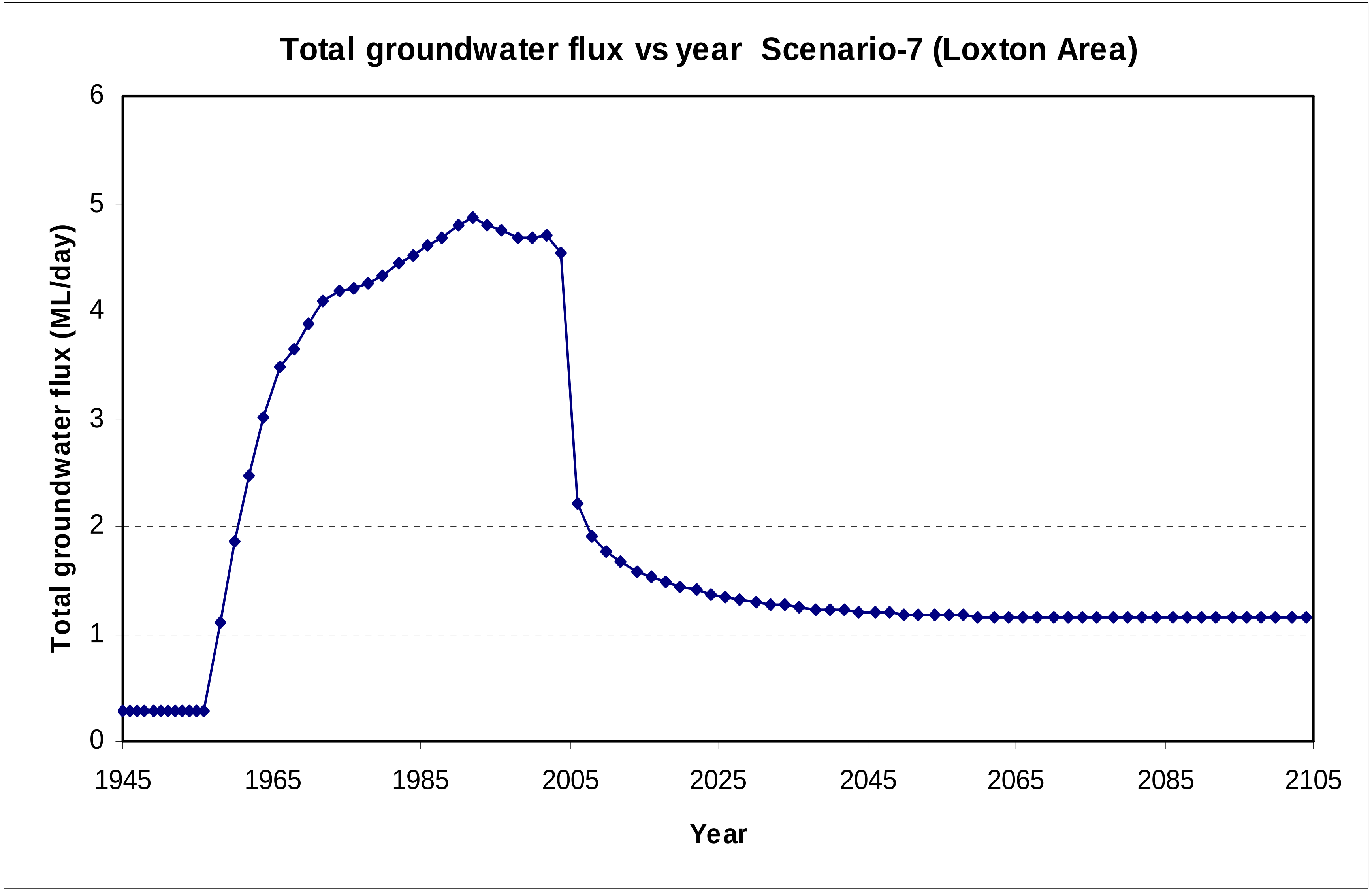


Appendix A-7-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-7 (Loxton Area)

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
0	1945	0.23	0.06	0.29
0	1946	0.23	0.06	0.29
0	1947	0.23	0.06	0.29
0	1948	0.23	0.06	0.29
0	1949	0.23	0.06	0.29
0	1950	0.23	0.06	0.29
0	1951	0.23	0.06	0.29
0	1952	0.23	0.06	0.29
0	1953	0.23	0.06	0.29
0	1954	0.23	0.06	0.29
0	1955	0.23	0.06	0.29
30	1955	0.23	0.06	0.29
365	1956	0.23	0.07	0.29
1095	1958	0.98	0.12	1.11
1825	1960	1.69	0.18	1.87
2555	1962	2.25	0.23	2.48
3285	1964	2.71	0.30	3.02
4015	1966	3.12	0.36	3.48
4745	1968	3.25	0.40	3.64
5475	1970	3.41	0.47	3.88
6205	1972	3.60	0.51	4.10
6935	1974	3.65	0.54	4.19
7665	1976	3.63	0.59	4.22
8395	1978	3.65	0.61	4.26
9125	1980	3.70	0.63	4.33
9855	1982	3.76	0.68	4.44
10585	1984	3.82	0.70	4.52
11315	1986	3.89	0.72	4.60
12045	1988	3.95	0.73	4.68
12775	1990	4.01	0.79	4.80
13505	1992	4.07	0.80	4.87
14235	1994	3.99	0.81	4.80
14965	1996	3.94	0.81	4.75
15695	1998	3.91	0.78	4.69
16425	2000	3.91	0.78	4.69
17155	2002	3.91	0.79	4.70
17885	2004	3.75	0.78	4.53
18615	2006	1.76	0.44	2.21
19345	2008	1.51	0.40	1.91
20075	2010	1.38	0.38	1.76
20805	2012	1.30	0.36	1.66
21535	2014	1.23	0.35	1.59
22265	2016	1.19	0.34	1.53

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
22995	2018	1.15	0.34	1.48
23725	2020	1.11	0.33	1.44
24455	2022	1.08	0.32	1.40
25185	2024	1.05	0.32	1.37
25915	2026	1.03	0.31	1.34
26645	2028	1.01	0.31	1.32
27375	2030	0.99	0.31	1.30
28105	2032	0.97	0.30	1.28
28835	2034	0.96	0.30	1.26
29565	2036	0.95	0.30	1.25
30295	2038	0.94	0.30	1.23
31025	2040	0.93	0.30	1.22
31755	2042	0.92	0.29	1.21
32485	2044	0.91	0.29	1.20
33215	2046	0.91	0.29	1.20
33945	2048	0.90	0.29	1.19
34675	2050	0.89	0.29	1.18
35405	2052	0.89	0.29	1.18
36135	2054	0.89	0.29	1.17
36865	2056	0.88	0.29	1.17
37595	2058	0.88	0.29	1.17
38325	2060	0.88	0.29	1.16
39055	2062	0.87	0.29	1.16
39785	2064	0.87	0.29	1.16
40515	2066	0.87	0.29	1.16
41245	2068	0.87	0.29	1.16
41975	2070	0.87	0.29	1.15
42705	2072	0.87	0.29	1.15
43435	2074	0.87	0.29	1.15
44165	2076	0.86	0.29	1.15
44895	2078	0.86	0.29	1.15
45625	2080	0.86	0.29	1.15
46355	2082	0.86	0.29	1.15
47085	2084	0.86	0.29	1.15
47815	2086	0.86	0.29	1.15
48545	2088	0.86	0.29	1.15
49275	2090	0.86	0.29	1.15
50005	2092	0.86	0.29	1.15
50735	2094	0.86	0.29	1.15
51465	2096	0.86	0.29	1.15
52195	2098	0.86	0.29	1.15
52925	2100	0.86	0.29	1.15
53655	2102	0.86	0.29	1.15
54385	2104	0.86	0.29	1.15

Appendix A-7-6a Predicted total groundwater flux (ML/day) in Scenario-7 (Loxton Area)

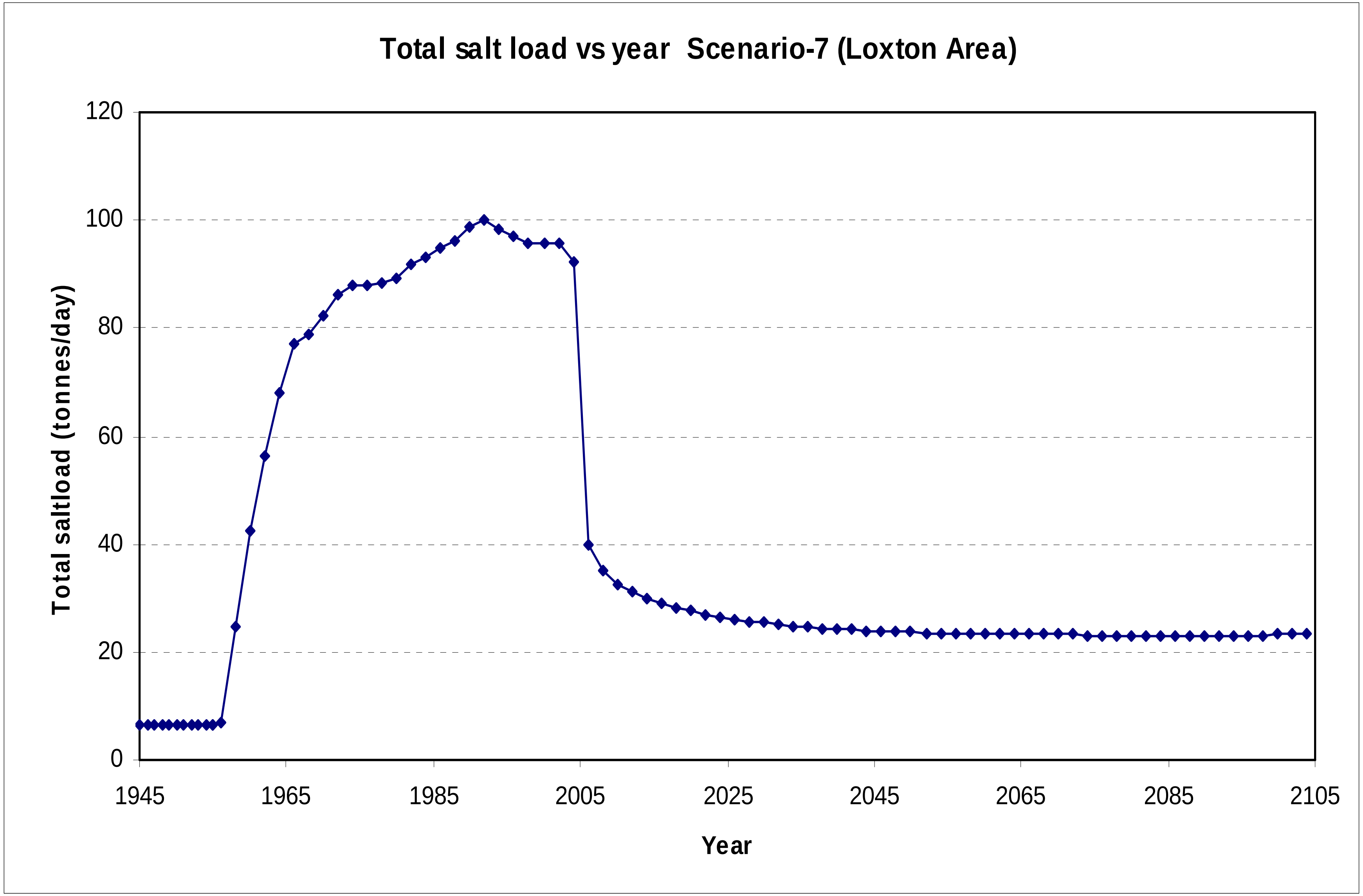


Appendix A-7-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-7 (Loxton Area)

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
0	1945	4.31	2.34	6.65
0	1946	4.31	2.34	6.65
0	1947	4.31	2.34	6.65
0	1948	4.31	2.34	6.65
0	1949	4.31	2.34	6.65
0	1950	4.31	2.34	6.65
0	1951	4.31	2.34	6.65
0	1952	4.31	2.34	6.65
0	1953	4.31	2.34	6.65
0	1954	4.31	2.34	6.65
0	1955	4.31	2.34	6.65
30	1955	4.31	2.34	6.65
365	1956	4.32	2.43	6.74
1095	1958	20.51	4.22	24.73
1825	1960	36.38	5.89	42.27
2555	1962	48.83	7.45	56.28
3285	1964	58.58	9.41	67.99
4015	1966	66.45	10.87	77.32
4745	1968	66.92	11.82	78.74
5475	1970	68.94	13.50	82.44
6205	1972	71.72	14.44	86.16
6935	1974	72.70	15.10	87.80
7665	1976	71.49	16.30	87.79
8395	1978	71.48	16.73	88.20
9125	1980	72.14	17.14	89.28
9855	1982	73.26	18.42	91.69
10585	1984	74.39	18.83	93.22
11315	1986	75.55	19.22	94.78
12045	1988	76.68	19.59	96.28
12775	1990	77.98	20.87	98.85
13505	1992	79.04	21.21	100.25
14235	1994	76.90	21.26	98.16
14965	1996	75.76	21.36	97.13
15695	1998	75.12	20.57	95.69
16425	2000	74.97	20.69	95.66
17155	2002	75.02	20.82	95.85
17885	2004	71.81	20.60	92.42
18615	2006	25.93	14.08	40.01
19345	2008	22.07	13.04	35.12
20075	2010	20.16	12.52	32.68
20805	2012	18.94	12.18	31.11
21535	2014	18.04	11.92	29.96
22265	2016	17.36	11.71	29.07

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
22995	2018	16.81	11.54	28.35
23725	2020	16.30	11.37	27.67
24455	2022	15.83	11.23	27.05
25185	2024	15.42	11.11	26.53
25915	2026	15.08	11.00	26.08
26645	2028	14.78	10.92	25.69
27375	2030	14.52	10.84	25.36
28105	2032	14.29	10.77	25.06
28835	2034	14.09	10.72	24.81
29565	2036	13.92	10.67	24.59
30295	2038	13.77	10.62	24.39
31025	2040	13.64	10.58	24.22
31755	2042	13.52	10.55	24.07
32485	2044	13.42	10.52	23.94
33215	2046	13.33	10.50	23.83
33945	2048	13.25	10.48	23.73
34675	2050	13.18	10.46	23.64
35405	2052	13.12	10.45	23.56
36135	2054	13.06	10.43	23.49
36865	2056	13.01	10.42	23.44
37595	2058	12.97	10.42	23.38
38325	2060	12.93	10.41	23.34
39055	2062	12.90	10.41	23.30
39785	2064	12.87	10.40	23.27
40515	2066	12.84	10.40	23.24
41245	2068	12.82	10.40	23.22
41975	2070	12.80	10.40	23.20
42705	2072	12.78	10.40	23.18
43435	2074	12.77	10.40	23.17
44165	2076	12.76	10.41	23.16
44895	2078	12.74	10.41	23.15
45625	2080	12.74	10.41	23.15
46355	2082	12.73	10.42	23.15
47085	2084	12.72	10.42	23.15
47815	2086	12.72	10.43	23.15
48545	2088	12.71	10.43	23.15
49275	2090	12.71	10.44	23.15
50005	2092	12.71	10.45	23.15
50735	2094	12.71	10.45	23.16
51465	2096	12.71	10.46	23.17
52195	2098	12.71	10.47	23.17
52925	2100	12.71	10.47	23.18
53655	2102	12.71	10.48	23.19
54385	2104	12.71	10.49	23.20

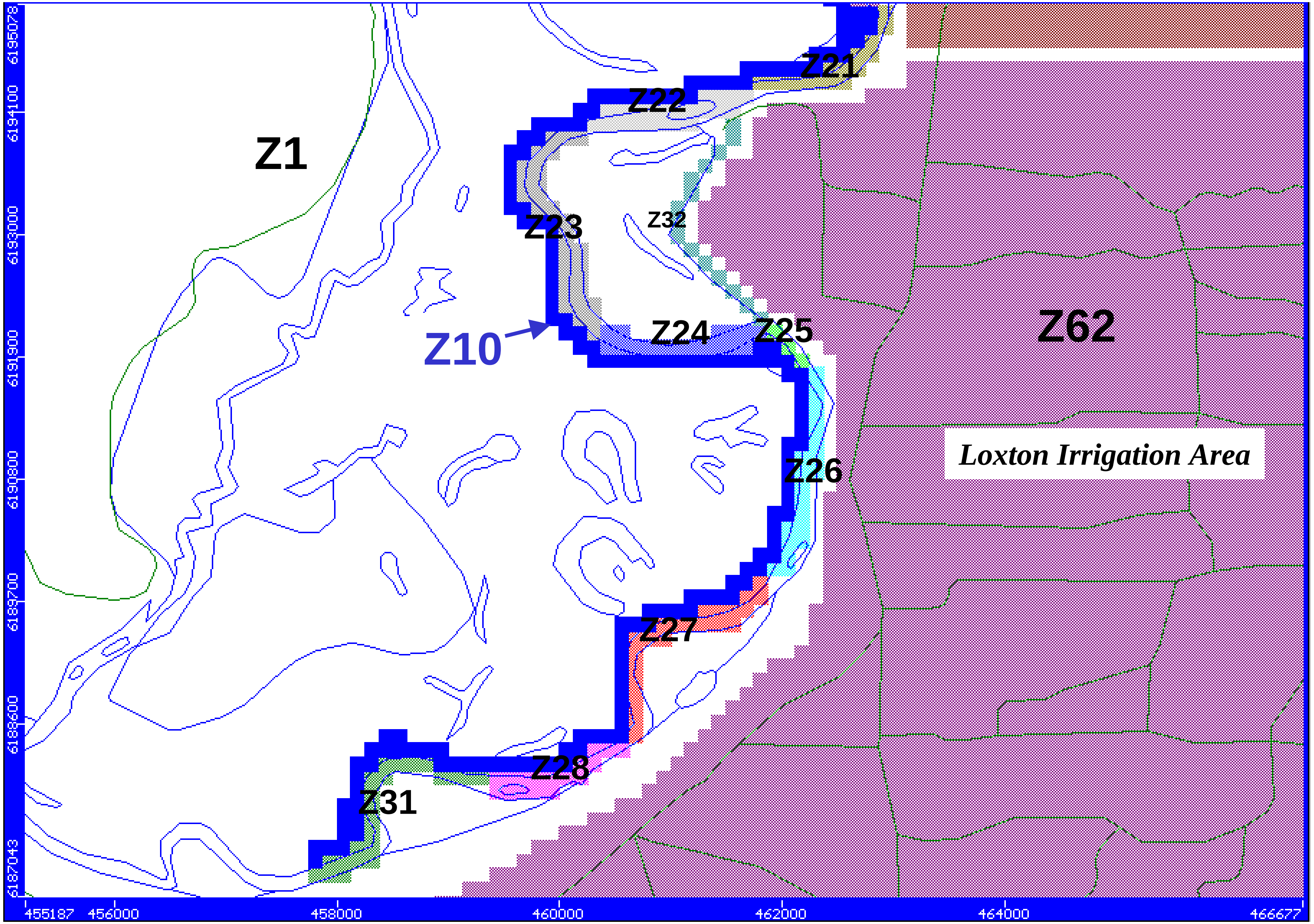
Appendix A-7-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-7 (Loxton Area)



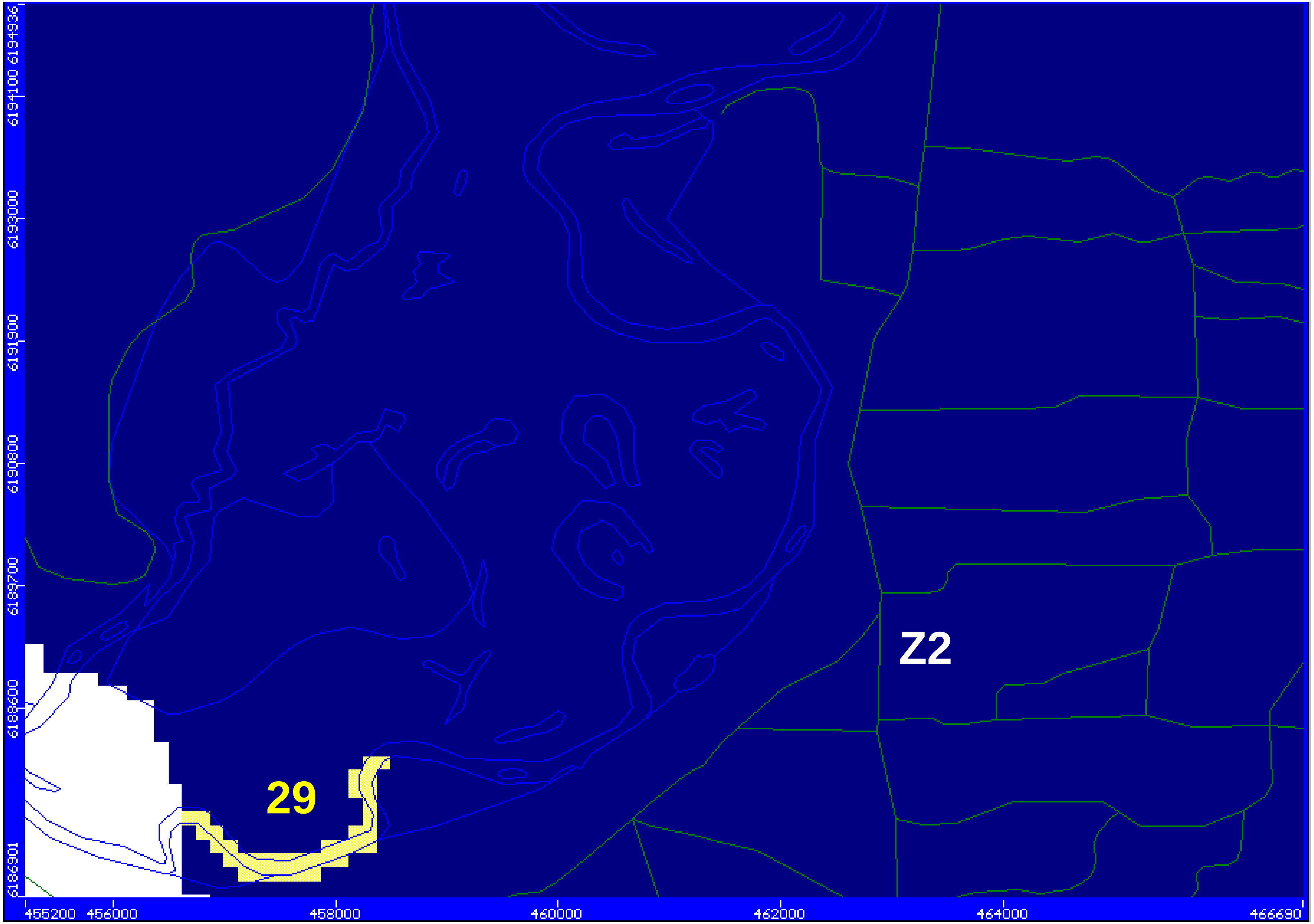
Appendix A-7-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-7 (Loxton Area)

A-8 Groundwater flux and salt load entering the River Murray Scenario-8 (Loxton Area)

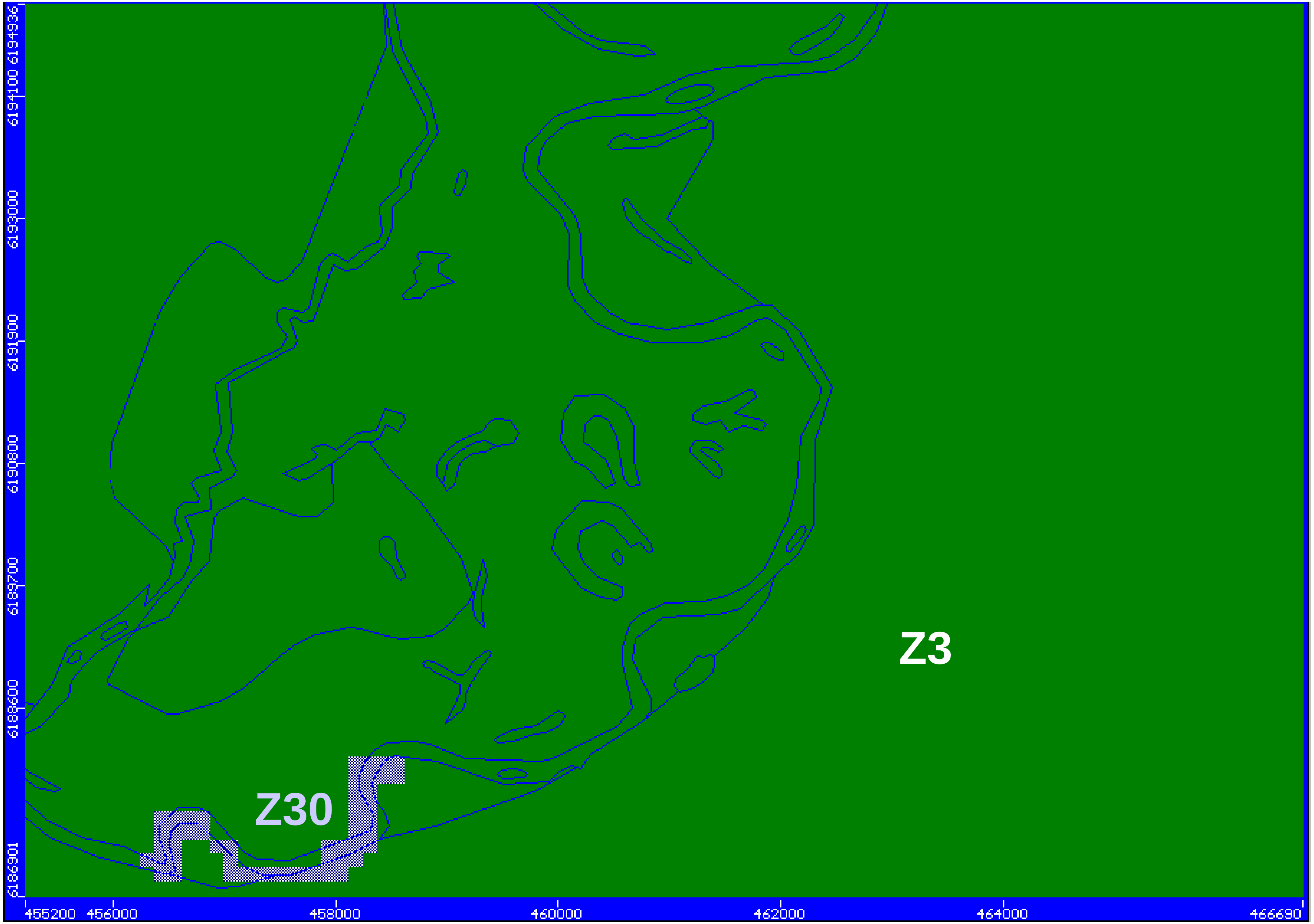
- Flow budget zones (Loxton Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).
- Borehole locations and pumping rates .



Appendix A-8-1a Flow budget zones in model Layer-1 (Loxton Area)



Appendix A-8-1b Flow budget zones in model Layer-2 (Loxton Area)



Appendix A-8-1c Flow budget zones in model Layer-3 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
30	1955	39.1	4.1	0.0	3.0	25.8	95.4	26.3	16.8	0.0	16.9	227
365	1956	39.1	4.1	0.0	3.1	26.1	95.9	26.3	16.8	0.0	16.9	228
1095	1958	200.1	106.7	0.0	96.1	228.4	292.2	27.1	16.9	0.0	17.1	985
1825	1960	366.5	210.9	0.0	187.2	386.3	459.2	29.7	17.3	14.0	17.5	1689
2555	1962	510.0	276.9	0.0	245.1	498.3	605.0	35.9	18.2	39.8	18.7	2248
3285	1964	624.4	317.4	1.1	284.6	581.9	758.0	47.5	19.8	59.2	20.4	2714
4015	1966	714.6	343.8	3.1	311.1	647.6	918.4	63.0	21.7	72.8	22.3	3118
4745	1968	720.9	325.9	2.6	296.9	648.3	1061.2	81.3	23.9	61.1	24.2	3246
5475	1970	735.1	318.0	2.3	294.2	664.7	1186.5	102.3	26.3	57.1	26.3	3413
6205	1972	755.5	317.9	2.4	296.7	686.5	1298.5	123.3	28.8	57.1	28.4	3595
6935	1974	766.6	314.3	2.4	294.5	679.8	1335.1	142.4	31.5	54.9	30.5	3652
7665	1976	751.0	298.3	1.7	281.4	656.5	1363.4	160.0	34.3	46.0	32.7	3625
8395	1978	745.3	290.3	1.3	275.0	651.9	1397.6	173.4	37.1	42.2	34.8	3649
9125	1980	746.6	287.5	1.2	273.4	654.4	1431.0	184.3	39.8	40.9	37.0	3696
9855	1982	751.9	287.5	1.3	275.7	660.6	1464.8	194.9	42.6	40.9	39.2	3759
10585	1984	760.0	288.6	1.4	277.4	667.6	1496.0	203.0	45.3	41.3	41.6	3822
11315	1986	769.3	290.1	1.6	279.5	675.0	1525.7	210.2	47.8	42.0	43.9	3885
12045	1988	778.7	291.8	1.8	281.7	682.3	1554.0	216.8	50.3	42.8	46.2	3946
12775	1990	788.6	293.9	2.2	285.6	690.1	1582.3	224.5	52.9	43.7	48.6	4012
13505	1992	798.2	295.8	2.4	287.8	697.0	1606.4	229.9	55.3	44.5	51.0	4068
14235	1994	774.8	280.7	1.5	273.6	672.9	1604.0	234.3	57.6	36.5	53.3	3989
14965	1996	760.6	271.9	1.1	265.7	661.1	1597.1	237.8	59.8	32.4	55.5	3943
15695	1998	753.3	267.5	0.9	260.6	654.3	1589.8	239.0	61.7	30.6	57.5	3915
16425	2000	749.8	265.4	0.8	258.8	651.0	1586.6	241.3	63.6	29.7	59.5	3907
17155	2002	749.0	264.5	0.8	258.1	649.5	1585.6	243.4	65.5	29.4	61.5	3907
17885	2004	720.5	248.3	0.3	242.1	610.3	1532.7	244.5	67.0	21.8	63.1	3750
18615	2006	30.35	2.03	0.00	0.00	0.00	13.65	5.88	4.04	0.00	4.54	60
19345	2008	21.85	1.43	0.00	0.00	0.00	9.16	4.62	3.25	0.00	4.50	45
20075	2010	19.21	1.15	0.00	0.00	0.00	8.17	4.01	3.07	0.00	4.52	40
20805	2012	17.67	1.00	0.00	0.00	0.00	7.67	3.63	3.00	0.00	4.55	38
21535	2014	16.64	0.90	0.00	0.00	0.00	7.36	3.39	2.98	0.00	4.60	36
22265	2016	16.82	0.88	0.00	0.00	0.00	7.19	3.24	2.98	0.00	4.64	36
22995	2018	17.12	0.86	0.00	0.00	0.00	7.08	3.15	2.99	0.00	4.69	36
23725	2020	17.47	0.85	0.00	0.00	0.00	7.03	3.11	3.01	0.00	4.73	36
24455	2022	17.80	0.85	0.00	0.00	0.00	7.01	3.10	3.04	0.00	4.78	37
25185	2024	18.64	0.87	0.00	0.00	0.00	7.03	3.11	3.07	0.00	4.82	38
25915	2026	19.35	0.89	0.00	0.00	0.00	7.08	3.15	3.10	0.00	4.87	38
26645	2028	19.93	0.91	0.00	0.00	0.00	7.14	3.20	3.13	0.00	4.91	39

Appendix A-8-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-8 (Loxton Area)

Day	Year	Z1 to Z21 (m^3/day)	Z1 to Z22 (m^3/day)	Z1 to Z23 (m^3/day)	Z1 to Z24 (m^3/day)	Z1 to Z25 (m^3/day)	Z1 to Z26 (m^3/day)	Z1 to Z27 (m^3/day)	Z1 to Z28 (m^3/day)	Seepage Z32 Drain (m^3/day)	Z1 to Z31 (m^3/day)	Total Lateral (m^3/day)
27375	2030	20.88	0.93	0.00	0.00	0.00	7.22	3.26	3.16	0.00	4.95	40
28105	2032	21.63	0.96	0.00	0.00	0.00	7.31	3.32	3.20	0.00	4.99	41
28835	2034	22.48	0.98	0.00	0.00	0.00	7.40	3.39	3.23	0.00	5.04	43
29565	2036	23.19	1.01	0.00	0.00	0.00	7.52	3.46	3.27	0.00	5.08	44
30295	2038	23.79	1.04	0.00	0.00	0.00	7.63	3.53	3.30	0.00	5.12	44
31025	2040	24.36	1.06	0.00	0.00	0.00	7.75	3.60	3.34	0.00	5.16	45
31755	2042	24.86	1.08	0.00	0.00	0.00	7.86	3.66	3.37	0.00	5.19	46
32485	2044	25.31	1.10	0.00	0.00	0.00	7.96	3.72	3.40	0.00	5.23	47
33215	2046	25.71	1.12	0.00	0.00	0.00	8.05	3.78	3.43	0.00	5.27	47
33945	2048	26.06	1.14	0.00	0.00	0.00	8.14	3.84	3.46	0.00	5.31	48
34675	2050	26.37	1.15	0.00	0.00	0.00	8.22	3.89	3.49	0.00	5.34	48
35405	2052	26.65	1.17	0.00	0.00	0.00	8.30	3.94	3.52	0.00	5.38	49
36135	2054	26.78	1.17	0.00	0.00	0.00	8.33	3.96	3.53	0.00	5.39	49
36865	2056	26.89	1.18	0.00	0.00	0.00	8.36	3.06	3.10	0.00	5.41	48
37595	2058	27.11	1.19	0.00	0.00	0.00	8.42	3.01	3.00	0.00	5.44	48
38325	2060	27.31	1.20	0.00	0.00	0.00	8.48	3.03	3.01	0.00	5.47	49
39055	2062	27.49	1.21	0.00	0.00	0.00	8.53	3.06	3.02	0.00	5.50	49
39785	2064	27.65	1.22	0.00	0.00	0.00	8.58	3.09	3.04	0.00	5.53	49
40515	2066	27.79	1.23	0.00	0.00	0.00	8.62	3.13	3.06	0.00	5.56	49
41245	2068	27.93	1.23	0.00	0.00	0.00	8.66	3.15	3.08	0.00	5.59	50
41975	2070	28.05	1.24	0.00	0.00	0.00	8.70	3.18	3.09	0.00	5.62	50
42705	2072	28.16	1.24	0.00	0.00	0.00	8.73	3.21	3.11	0.00	5.64	50
43435	2074	28.26	1.25	0.00	0.00	0.00	8.77	3.24	3.13	0.00	5.67	50
44165	2076	28.36	1.25	0.00	0.00	0.00	8.80	3.26	3.15	0.00	5.69	51
44895	2078	28.45	1.26	0.00	0.00	0.00	8.82	3.28	3.16	0.00	5.72	51
45625	2080	28.53	1.26	0.00	0.00	0.00	8.85	3.31	3.18	0.00	5.74	51
46355	2082	28.61	1.27	0.00	0.00	0.00	8.87	3.33	3.19	0.00	5.76	51
47085	2084	28.68	1.27	0.00	0.00	0.00	8.89	3.35	3.21	0.00	5.78	51
47815	2086	28.74	1.27	0.00	0.00	0.00	8.91	3.37	3.22	0.00	5.81	51
48545	2088	28.80	1.28	0.00	0.00	0.00	8.93	3.39	3.23	0.00	5.83	51
49275	2090	28.86	1.28	0.00	0.00	0.00	8.95	3.40	3.25	0.00	5.85	52
50005	2092	28.92	1.28	0.00	0.00	0.00	8.97	3.42	3.26	0.00	5.87	52
50735	2094	28.97	1.28	0.00	0.00	0.00	8.99	3.44	3.27	0.00	5.88	52
51465	2096	29.02	1.29	0.00	0.00	0.00	9.00	3.45	3.28	0.00	5.90	52
52195	2098	29.06	1.29	0.00	0.00	0.00	9.02	3.47	3.29	0.00	5.92	52
52925	2100	29.11	1.29	0.00	0.00	0.00	9.03	3.48	3.30	0.00	5.94	52
53655	2102	29.15	1.29	0.00	0.00	0.00	9.05	3.50	3.31	0.00	5.95	52
54385	2104	29.19	1.30	0.00	0.00	0.00	9.06	3.51	3.32	0.00	5.97	52
TDS	*mg/L*	*25807*	*29055*	*30760*	*39978*	*18716*	*7710*	*35935*	*29140*	*39117*	*24080*	

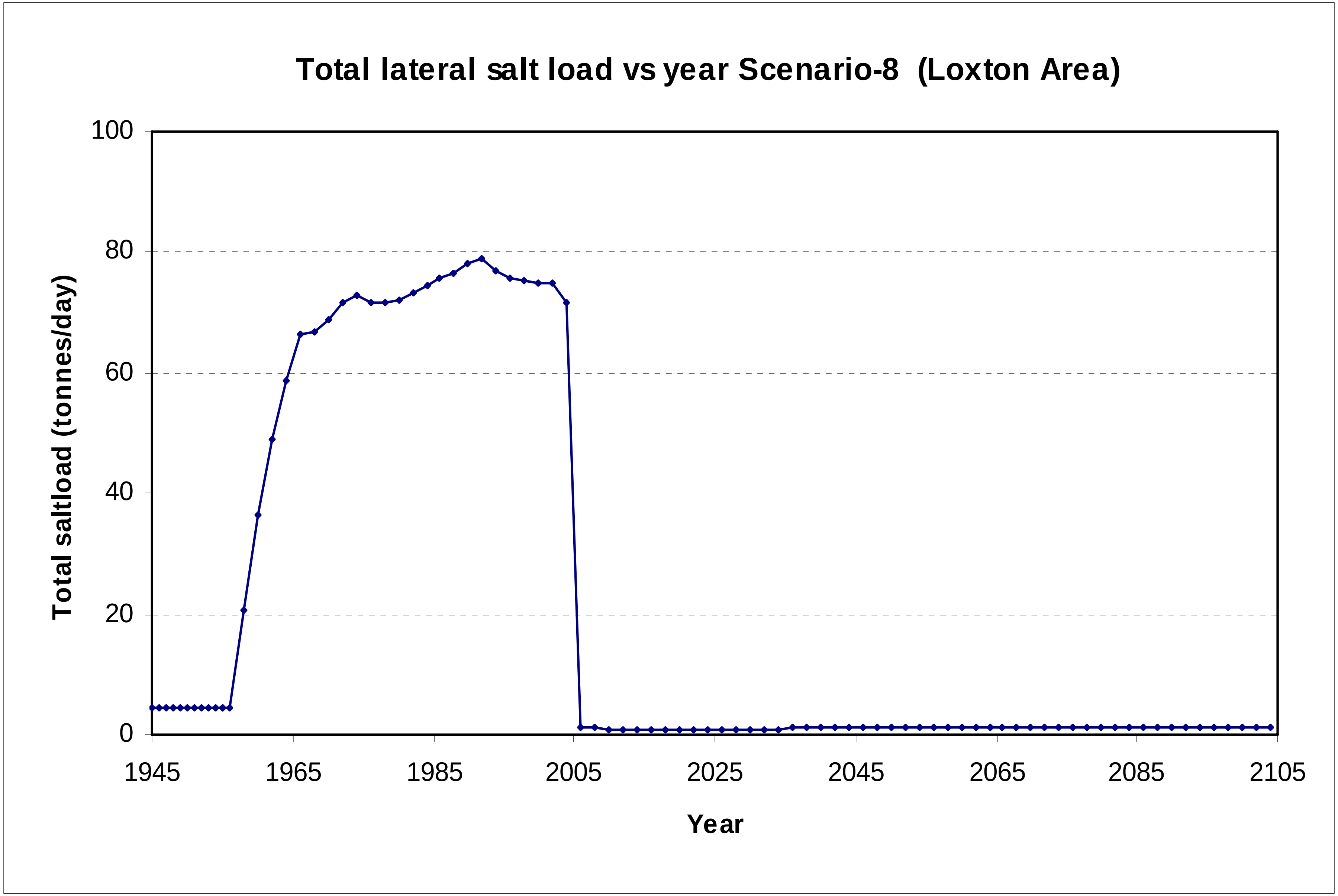
Appendix A-8-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-8 (Loxton Area)

Day	Year	Z1 to Z21 (tonne/day)	Z1 to Z22 (tonne/day)	Z1 to Z23 (tonne/day)	Z1 to Z24 (tonne/day)	Z1 to Z25 (tonne/day)	Z1 to Z26 (tonne/day)	Z1 to Z27 (tonne/day)	Z1 to Z28 (tonne/day)	Seepage Z32 Drain (tonne/day)	Z1 to Z31 (tonne/day)	Total Lateral (tonne/day)
0	1945	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1946	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1947	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1948	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1949	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1950	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1951	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1952	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1953	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1954	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
0	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
30	1955	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
365	1956	1.0	0.1	0.0	0.1	0.5	0.7	0.9	0.5	0.0	0.4	4
1095	1958	5.2	3.1	0.0	3.8	4.3	2.3	1.0	0.5	0.0	0.4	21
1825	1960	9.5	6.1	0.0	7.5	7.2	3.5	1.1	0.5	0.5	0.4	36
2555	1962	13.2	8.0	0.0	9.8	9.3	4.7	1.3	0.5	1.6	0.5	49
3285	1964	16.1	9.2	0.0	11.4	10.9	5.8	1.7	0.6	2.3	0.5	59
4015	1966	18.4	10.0	0.1	12.4	12.1	7.1	2.3	0.6	2.8	0.5	66
4745	1968	18.6	9.5	0.1	11.9	12.1	8.2	2.9	0.7	2.4	0.6	67
5475	1970	19.0	9.2	0.1	11.8	12.4	9.1	3.7	0.8	2.2	0.6	69
6205	1972	19.5	9.2	0.1	11.9	12.8	10.0	4.4	0.8	2.2	0.7	72
6935	1974	19.8	9.1	0.1	11.8	12.7	10.3	5.1	0.9	2.1	0.7	73
7665	1976	19.4	8.7	0.1	11.3	12.3	10.5	5.7	1.0	1.8	0.8	71
8395	1978	19.2	8.4	0.0	11.0	12.2	10.8	6.2	1.1	1.6	0.8	71
9125	1980	19.3	8.4	0.0	10.9	12.2	11.0	6.6	1.2	1.6	0.9	72
9855	1982	19.4	8.4	0.0	11.0	12.4	11.3	7.0	1.2	1.6	0.9	73
10585	1984	19.6	8.4	0.0	11.1	12.5	11.5	7.3	1.3	1.6	1.0	74
11315	1986	19.9	8.4	0.0	11.2	12.6	11.8	7.6	1.4	1.6	1.1	76
12045	1988	20.1	8.5	0.1	11.3	12.8	12.0	7.8	1.5	1.7	1.1	77
12775	1990	20.4	8.5	0.1	11.4	12.9	12.2	8.1	1.5	1.7	1.2	78
13505	1992	20.6	8.6	0.1	11.5	13.0	12.4	8.3	1.6	1.7	1.2	79
14235	1994	20.0	8.2	0.0	10.9	12.6	12.4	8.4	1.7	1.4	1.3	77
14965	1996	19.6	7.9	0.0	10.6	12.4	12.3	8.5	1.7	1.3	1.3	76
15695	1998	19.4	7.8	0.0	10.4	12.2	12.3	8.6	1.8	1.2	1.4	75
16425	2000	19.4	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.2	1.4	75
17155	2002	19.3	7.7	0.0	10.3	12.2	12.2	8.7	1.9	1.1	1.5	75
17885	2004	18.6	7.2	0.0	9.7	11.4	11.8	8.8	2.0	0.9	1.5	72
18615	2006	0.8	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.1	1
19345	2008	0.6	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.1	1
20075	2010	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
20805	2012	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
21535	2014	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
22265	2016	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1

Appendix A-8-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-8 (Loxton Area)

Day	Year	Z1 to Z21 (tonnes/day)	Z1 to Z22 (tonnes/day)	Z1 to Z23 (tonnes/day)	Z1 to Z24 (tonnes/day)	Z1 to Z25 (tonnes/day)	Z1 to Z26 (tonnes/day)	Z1 to Z27 (tonnes/day)	Z1 to Z28 (tonnes/day)	Seepage Z32 Drain (tonnes/day)	Z1 to Z31 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
23725	2020	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
24455	2022	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
25185	2024	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
25915	2026	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
26645	2028	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
27375	2030	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
28105	2032	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
28835	2034	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
29565	2036	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
30295	2038	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
31025	2040	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
31755	2042	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
32485	2044	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
33215	2046	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
33945	2048	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
34675	2050	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
35405	2052	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
36135	2054	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
36865	2056	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
37595	2058	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
38325	2060	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
39055	2062	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
39785	2064	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
40515	2066	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
41245	2068	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
41975	2070	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
42705	2072	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
43435	2074	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
44165	2076	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
44895	2078	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
45625	2080	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
46355	2082	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
47085	2084	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
47815	2086	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
48545	2088	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
49275	2090	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
50005	2092	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
50735	2094	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
51465	2096	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
52195	2098	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
52925	2100	0.8	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
53655	2102	0.8	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
54385	2104	0.8	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	1
TDS	mg/L	25807	29055	30780	39978	15718	7710	35935	29140	39117	24080	

Appendix A-8-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-8 (Loxton Area)



Appendix A-8-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-8 (Loxton Area)

Day	Year	Z2 to Z21 (m^3/day)	Z2 to Z22 (m^3/day)	Z2 to Z23 (m^3/day)	Z2 to Z24 (m^3/day)	Z2 to Z25 (m^3/day)	Z2 to Z26 (m^3/day)	Z2 to Z27 (m^3/day)	Z2 to Z28 (m^3/day)	Z2 to Z29 (m^3/day)	Z3 to Z29 (m^3/day)	Z2 to Z31 (m^3/day)	Z3 to Z30 (m^3/day)	Total Lateral (m^3/day)
30	1955	6.7	0.9	0.0	0.7	1.1	11.0	10.4	21.2	6.8	3.8	0.0	40.5	63
365	1956	6.7	0.9	0.0	1.2	1.6	12.9	10.4	21.0	6.8	3.8	0.0	40.5	65
1095	1958	21.5	9.6	0.0	10.3	9.2	28.9	11.1	21.3	6.8	3.9	0.0	40.8	123
1825	1960	33.8	17.7	0.0	19.3	14.3	46.2	13.0	22.2	6.9	4.1	0.0	41.4	178
2555	1962	43.3	23.3	1.0	26.6	17.8	65.1	16.8	24.7	7.3	4.6	0.1	43.3	231
3285	1964	50.8	27.4	2.4	37.2	20.8	95.1	26.5	28.5	7.7	5.2	0.3	45.7	302
4015	1966	56.6	30.4	3.2	41.8	22.8	119.2	35.6	32.8	8.2	5.7	0.4	48.1	357
4745	1968	58.0	30.3	3.4	42.0	23.1	141.6	45.2	37.4	8.7	6.2	0.6	50.5	396
5475	1970	59.7	30.9	3.9	50.0	24.2	174.3	64.4	42.9	9.2	6.7	0.9	53.0	467
6205	1972	61.6	31.8	4.2	51.5	24.9	192.2	74.3	48.3	9.7	7.2	1.1	55.4	507
6935	1974	62.8	32.2	4.4	52.2	25.0	203.8	82.9	53.9	10.2	7.7	1.4	57.9	537
7665	1976	62.6	31.8	5.1	59.3	25.2	225.6	99.9	60.2	10.7	8.2	1.7	60.5	590
8395	1978	62.8	31.8	5.2	59.3	25.2	232.8	106.0	65.6	11.2	8.6	2.1	62.9	611
9125	1980	63.3	32.0	5.3	59.8	25.3	238.9	111.1	70.8	11.7	9.0	2.4	65.3	630
9855	1982	63.9	32.5	6.3	68.6	26.1	259.0	126.1	76.8	12.2	9.5	2.8	67.9	684
10585	1984	64.9	33.1	6.5	69.3	26.4	264.0	130.0	81.8	12.7	9.9	3.2	70.2	702
11315	1986	65.7	33.6	6.7	70.0	26.6	268.7	133.7	86.5	13.2	10.3	3.6	72.6	719
12045	1988	66.5	34.1	6.9	70.6	26.9	273.0	137.0	91.0	13.7	10.7	4.0	74.9	734
12775	1990	67.4	34.8	8.2	79.7	27.7	292.7	151.1	96.4	14.2	11.1	4.5	77.4	788
13505	1992	68.2	35.2	8.4	80.3	27.9	296.2	153.8	100.7	14.7	11.5	4.8	79.7	802
14235	1994	67.1	34.3	8.2	79.1	27.4	297.3	155.8	104.6	15.2	11.9	5.1	81.9	806
14965	1996	66.8	34.1	8.2	78.6	27.1	297.6	157.5	108.2	15.6	12.3	5.4	84.1	811
15695	1998	66.6	33.9	7.1	69.9	26.4	282.2	148.0	110.4	16.0	12.6	5.6	86.1	779
16425	2000	66.6	33.9	7.1	69.8	26.4	282.4	149.2	113.4	16.5	12.9	5.9	88.1	784
17155	2002	66.7	34.0	7.2	69.9	26.4	282.7	150.3	116.3	16.9	13.2	6.2	90.1	790
17885	2004	65.4	32.9	6.9	68.1	25.4	279.2	150.5	118.4	17.2	13.4	6.3	91.5	784
18615	2006	38.37	14.89	1.22	24.45	11.71	99.73	45.12	30.49	16.06	13.20	0.21	88.22	295
19345	2008	36.59	13.76	1.12	23.17	11.02	93.95	42.55	26.66	16.13	13.29	0.20	88.77	278
20075	2010	35.68	13.25	1.07	22.52	10.66	91.60	41.30	25.66	16.26	13.40	0.20	89.45	272
20805	2012	35.05	12.92	1.03	22.13	10.44	90.17	40.57	25.31	16.39	13.51	0.21	90.16	268
21535	2014	34.59	12.69	1.01	21.87	10.29	89.27	40.12	25.24	16.53	13.63	0.22	90.88	265
22265	2016	35.18	13.11	1.05	21.96	10.26	88.96	39.96	25.34	16.68	13.76	0.24	91.64	266
22995	2018	35.48	13.33	1.07	21.99	10.23	88.81	39.91	25.52	16.82	13.88	0.26	92.39	267
23725	2020	35.74	13.43	1.08	22.06	10.23	88.85	39.97	25.77	16.97	14.01	0.28	93.12	268
24455	2022	36.04	13.61	1.10	22.17	10.24	89.01	40.12	26.06	17.11	14.14	0.31	93.85	270
25185	2024	36.75	14.04	1.14	22.40	10.29	89.38	40.36	26.39	17.25	14.26	0.34	94.59	273
25915	2026	37.27	14.35	1.17	22.59	10.35	89.78	40.62	26.73	17.39	14.39	0.37	95.32	275
26645	2028	37.67	14.58	1.20	22.77	10.40	90.20	40.91	27.08	17.53	14.52	0.41	96.03	277

Appendix A-8-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-8 (Loxton Area)

Day	Year	Z2 to Z21 (m^3/day)	Z2 to Z22 (m^3/day)	Z2 to Z23 (m^3/day)	Z2 to Z24 (m^3/day)	Z2 to Z25 (m^3/day)	Z2 to Z26 (m^3/day)	Z2 to Z27 (m^3/day)	Z2 to Z28 (m^3/day)	Z2 to Z29 (m^3/day)	Z3 to Z29 (m^3/day)	Z2 to Z31 (m^3/day)	Z3 to Z30 (m^3/day)	Total Lateral (m^3/day)
27375	2030	38.27	14.91	1.24	22.99	10.47	90.72	41.23	27.44	17.67	14.64	0.44	96.74	280
28105	2032	38.75	15.18	1.27	23.20	10.53	91.22	41.55	27.80	17.80	14.76	0.50	97.44	283
28835	2034	39.29	15.48	1.30	23.42	10.61	91.75	41.88	28.16	17.94	14.89	0.56	98.13	285
29565	2036	39.73	15.74	1.33	23.62	10.67	92.25	42.19	28.51	18.07	15.00	0.63	98.81	288
30295	2038	40.10	15.96	1.36	23.80	10.74	92.72	42.49	28.85	18.20	15.12	0.69	99.47	290
31025	2040	40.47	16.18	1.38	23.97	10.80	93.17	42.78	29.20	18.32	15.23	0.76	100.12	292
31755	2042	40.79	16.37	1.40	24.13	10.86	93.60	43.06	29.53	18.44	15.34	0.82	100.76	294
32485	2044	41.06	16.53	1.42	24.27	10.91	93.99	43.32	29.85	18.56	15.45	0.89	101.38	296
33215	2046	41.30	16.67	1.44	24.40	10.96	94.35	43.56	30.17	18.68	15.55	0.94	101.98	298
33945	2048	41.50	16.80	1.46	24.52	11.00	94.68	43.79	30.48	18.79	15.65	1.00	102.57	300
34675	2050	41.68	16.90	1.47	24.62	11.04	94.98	44.00	30.77	18.90	15.75	1.06	103.15	301
35405	2052	41.85	17.00	1.48	24.72	11.08	95.26	44.20	31.06	19.01	15.84	1.11	103.71	303
36135	2054	41.92	17.06	1.49	24.77	11.09	95.39	44.30	31.19	19.06	15.89	1.13	103.98	303
36865	2056	41.98	17.09	1.49	24.81	11.11	95.51	43.36	27.92	19.11	15.93	1.15	104.24	299
37595	2058	42.11	17.17	1.51	24.89	11.14	95.74	43.39	27.62	19.22	16.02	1.19	104.76	300
38325	2060	42.23	17.24	1.52	24.96	11.17	95.96	43.52	27.75	19.31	16.11	1.24	105.27	301
39055	2062	42.33	17.30	1.53	25.03	11.19	96.15	43.66	27.94	19.41	16.19	1.28	105.77	302
39785	2064	42.43	17.36	1.53	25.09	11.21	96.34	43.80	28.15	19.50	16.27	1.32	106.25	303
40515	2066	42.52	17.42	1.54	25.15	11.23	96.51	43.93	28.35	19.59	16.35	1.37	106.71	304
41245	2068	42.60	17.47	1.55	25.20	11.25	96.66	44.06	28.55	19.68	16.42	1.41	107.17	305
41975	2070	42.67	17.51	1.56	25.25	11.27	96.81	44.19	28.74	19.76	16.50	1.44	107.61	306
42705	2072	42.74	17.56	1.56	25.29	11.29	96.94	44.31	28.93	19.84	16.57	1.48	108.03	307
43435	2074	42.80	17.60	1.57	25.34	11.30	97.07	44.43	29.11	19.92	16.64	1.52	108.45	307
44165	2076	42.86	17.63	1.57	25.38	11.32	97.19	44.54	29.28	20.00	16.71	1.55	108.85	308
44895	2078	42.91	17.67	1.58	25.41	11.33	97.30	44.64	29.45	20.07	16.77	1.59	109.24	309
45625	2080	42.96	17.70	1.59	25.45	11.34	97.40	44.74	29.61	20.14	16.83	1.62	109.62	309
46355	2082	43.00	17.73	1.59	25.48	11.35	97.50	44.84	29.77	20.21	16.89	1.65	109.99	310
47085	2084	43.05	17.76	1.60	25.51	11.36	97.59	44.93	29.92	20.28	16.95	1.68	110.34	311
47815	2086	43.09	17.79	1.60	25.54	11.37	97.67	45.02	30.07	20.35	17.01	1.71	110.69	311
48545	2088	43.13	17.81	1.60	25.57	11.38	97.76	45.10	30.21	20.41	17.07	1.74	111.03	312
49275	2090	43.16	17.84	1.61	25.60	11.39	97.83	45.18	30.34	20.47	17.12	1.76	111.35	312
50005	2092	43.20	17.86	1.61	25.62	11.40	97.91	45.26	30.47	20.53	17.18	1.79	111.67	313
50735	2094	43.23	17.88	1.62	25.65	11.41	97.98	45.33	30.60	20.59	17.23	1.82	111.98	313
51465	2096	43.26	17.90	1.62	25.67	11.41	98.05	45.40	30.72	20.65	17.28	1.84	112.28	314
52195	2098	43.29	17.92	1.62	25.69	11.42	98.11	45.47	30.84	20.70	17.32	1.86	112.57	314
52925	2100	43.32	17.94	1.63	25.71	11.43	98.17	45.54	30.95	20.76	17.37	1.89	112.85	315
53655	2102	43.34	17.96	1.63	25.73	11.43	98.23	45.60	31.06	20.81	17.42	1.91	113.12	315
54385	2104	43.37	17.98	1.63	25.75	11.44	98.29	45.66	31.17	20.86	17.46	1.93	113.39	316
TDS	mg/L	32287	32287	32287	32287	32287	29405	9700	7550	3300	32287	32287	32287	

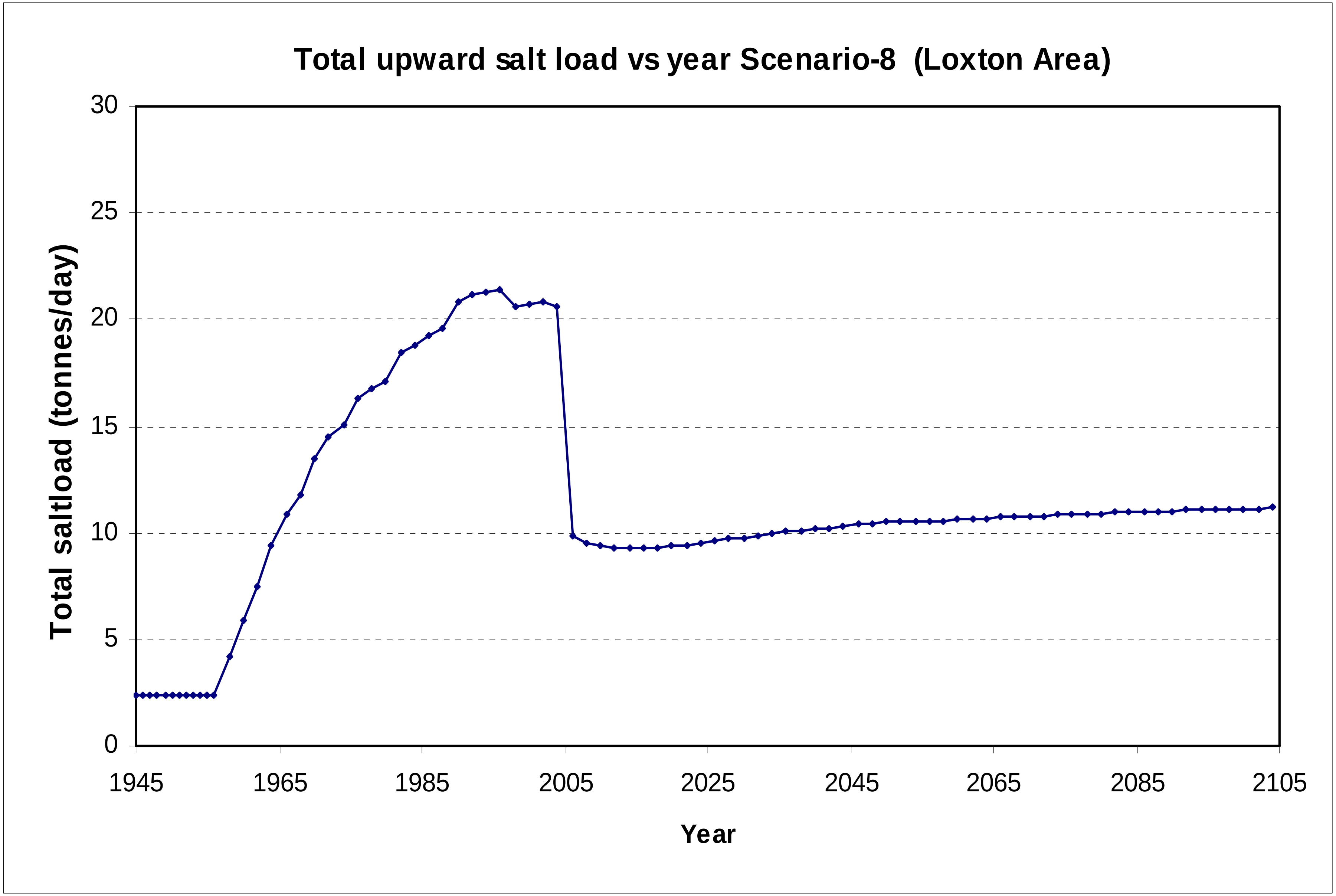
Appendix A-8-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-8 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z29 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1946	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1947	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1948	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1949	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1950	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1951	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1952	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1953	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1954	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
0	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
30	1955	0.2	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.1	0.0	1.3	2
365	1956	0.2	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.0	0.1	0.0	1.3	2
1095	1958	0.7	0.3	0.0	0.3	0.3	0.8	0.1	0.2	0.0	0.1	0.0	1.3	4
1825	1960	1.1	0.6	0.0	0.6	0.5	1.4	0.1	0.2	0.0	0.1	0.0	1.3	6
2555	1962	1.4	0.8	0.0	0.9	0.6	1.9	0.2	0.2	0.0	0.1	0.0	1.4	7
3285	1964	1.6	0.9	0.1	1.2	0.7	2.8	0.3	0.2	0.0	0.2	0.0	1.5	9
4015	1966	1.8	1.0	0.1	1.3	0.7	3.5	0.3	0.2	0.0	0.2	0.0	1.6	11
4745	1968	1.9	1.0	0.1	1.4	0.7	4.2	0.4	0.3	0.0	0.2	0.0	1.6	12
5475	1970	1.9	1.0	0.1	1.6	0.8	5.1	0.6	0.3	0.0	0.2	0.0	1.7	14
6205	1972	2.0	1.0	0.1	1.7	0.8	5.7	0.7	0.4	0.0	0.2	0.0	1.8	14
6935	1974	2.0	1.0	0.1	1.7	0.8	6.0	0.8	0.4	0.0	0.2	0.0	1.9	15
7665	1976	2.0	1.0	0.2	1.9	0.8	6.6	1.0	0.5	0.0	0.3	0.1	2.0	16
8395	1978	2.0	1.0	0.2	1.9	0.8	6.8	1.0	0.5	0.0	0.3	0.1	2.0	17
9125	1980	2.0	1.0	0.2	1.9	0.8	7.0	1.1	0.5	0.0	0.3	0.1	2.1	17
9855	1982	2.1	1.0	0.2	2.2	0.8	7.6	1.2	0.6	0.0	0.3	0.1	2.2	18
10585	1984	2.1	1.1	0.2	2.2	0.9	7.8	1.3	0.6	0.0	0.3	0.1	2.3	19
11315	1986	2.1	1.1	0.2	2.3	0.9	7.9	1.3	0.7	0.0	0.3	0.1	2.3	19
12045	1988	2.1	1.1	0.2	2.3	0.9	8.0	1.3	0.7	0.0	0.3	0.1	2.4	20
12775	1990	2.2	1.1	0.3	2.6	0.9	8.6	1.5	0.7	0.0	0.4	0.1	2.5	21
13505	1992	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.0	0.4	0.2	2.6	21
14235	1994	2.2	1.1	0.3	2.6	0.9	8.7	1.5	0.8	0.1	0.4	0.2	2.6	21
14965	1996	2.2	1.1	0.3	2.5	0.9	8.8	1.5	0.8	0.1	0.4	0.2	2.7	21
15695	1998	2.2	1.1	0.2	2.3	0.9	8.3	1.4	0.8	0.1	0.4	0.2	2.8	21
16425	2000	2.1	1.1	0.2	2.3	0.9	8.3	1.4	0.9	0.1	0.4	0.2	2.8	21
17155	2002	2.2	1.1	0.2	2.3	0.9	8.3	1.5	0.9	0.1	0.4	0.2	2.9	21
17885	2004	2.1	1.1	0.2	2.2	0.8	8.2	1.5	0.9	0.1	0.4	0.2	3.0	21
18615	2006	1.2	0.5	0.0	0.8	0.4	2.9	0.4	0.2	0.1	0.4	0.0	2.8	10
19345	2008	1.2	0.4	0.0	0.7	0.4	2.8	0.4	0.2	0.1	0.4	0.0	2.9	9
20075	2010	1.2	0.4	0.0	0.7	0.3	2.7	0.4	0.2	0.1	0.4	0.0	2.9	9
20805	2012	1.1	0.4	0.0	0.7	0.3	2.7	0.4	0.2	0.1	0.4	0.0	2.9	9
21535	2014	1.1	0.4	0.0	0.7	0.3	2.6	0.4	0.2	0.1	0.4	0.0	2.9	9
22265	2016	1.1	0.4	0.0	0.7	0.3	2.6	0.4	0.2	0.1	0.4	0.0	3.0	9

Appendix A-8-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-8 (Loxton Area)

Day	Year	Z2 to Z21 (tonnes/day)	Z2 to Z22 (tonnes/day)	Z2 to Z23 (tonnes/day)	Z2 to Z24 (tonnes/day)	Z2 to Z25 (tonnes/day)	Z2 to Z26 (tonnes/day)	Z2 to Z27 (tonnes/day)	Z2 to Z28 (tonnes/day)	Z2 to Z29 (tonnes/day)	Z3 to Z29 (tonnes/day)	Z2 to Z31 (tonnes/day)	Z3 to Z30 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	1.1	0.4	0.0	0.7	0.3	2.6	0.4	0.2	0.1	0.4	0.0	3.0	9
23725	2020	1.2	0.4	0.0	0.7	0.3	2.6	0.4	0.2	0.1	0.5	0.0	3.0	9
24455	2022	1.2	0.4	0.0	0.7	0.3	2.6	0.4	0.2	0.1	0.5	0.0	3.0	9
25185	2024	1.2	0.5	0.0	0.7	0.3	2.6	0.4	0.2	0.1	0.5	0.0	3.1	10
25915	2026	1.2	0.5	0.0	0.7	0.3	2.6	0.4	0.2	0.1	0.5	0.0	3.1	10
26645	2028	1.2	0.5	0.0	0.7	0.3	2.7	0.4	0.2	0.1	0.5	0.0	3.1	10
27375	2030	1.2	0.5	0.0	0.7	0.3	2.7	0.4	0.2	0.1	0.5	0.0	3.1	10
28105	2032	1.3	0.5	0.0	0.7	0.3	2.7	0.4	0.2	0.1	0.5	0.0	3.1	10
28835	2034	1.3	0.5	0.0	0.8	0.3	2.7	0.4	0.2	0.1	0.5	0.0	3.2	10
29565	2036	1.3	0.5	0.0	0.8	0.3	2.7	0.4	0.2	0.1	0.5	0.0	3.2	10
30295	2038	1.3	0.5	0.0	0.8	0.3	2.7	0.4	0.2	0.1	0.5	0.0	3.2	10
31025	2040	1.3	0.5	0.0	0.8	0.3	2.7	0.4	0.2	0.1	0.5	0.0	3.2	10
31755	2042	1.3	0.5	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.3	10
32485	2044	1.3	0.5	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.3	10
33215	2046	1.3	0.5	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.3	10
33945	2048	1.3	0.5	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.3	10
34675	2050	1.3	0.5	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.3	10
35405	2052	1.4	0.5	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.3	11
36135	2054	1.4	0.5	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.4	11
36865	2056	1.4	0.6	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.4	11
37595	2058	1.4	0.6	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.4	11
38325	2060	1.4	0.6	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.4	11
39055	2062	1.4	0.6	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.4	11
39785	2064	1.4	0.6	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.4	11
40515	2066	1.4	0.6	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.4	11
41245	2068	1.4	0.6	0.0	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.5	11
41975	2070	1.4	0.6	0.1	0.8	0.4	2.8	0.4	0.2	0.1	0.5	0.0	3.5	11
42705	2072	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.5	0.0	3.5	11
43435	2074	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.5	0.0	3.5	11
44165	2076	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.5	0.1	3.5	11
44895	2078	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.5	0.1	3.5	11
45625	2080	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.5	0.1	3.5	11
46355	2082	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.5	0.1	3.5	11
47085	2084	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.5	0.1	3.6	11
47815	2086	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.5	0.1	3.6	11
48545	2088	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.6	0.1	3.6	11
49275	2090	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.6	0.1	3.6	11
50005	2092	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.6	0.1	3.6	11
50735	2094	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.6	0.1	3.6	11
51465	2096	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.6	0.1	3.6	11
52195	2098	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.6	0.1	3.6	11
52925	2100	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.6	0.1	3.6	11
53655	2102	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.6	0.1	3.7	11
54385	2104	1.4	0.6	0.1	0.8	0.4	2.9	0.4	0.2	0.1	0.6	0.1	3.7	11
TDS	mg/L	32267	32267	32267	32267	32267	29405	9700	7550	3300	32267	32267	32267	

Appendix A-8-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-8 (Loxton Area)

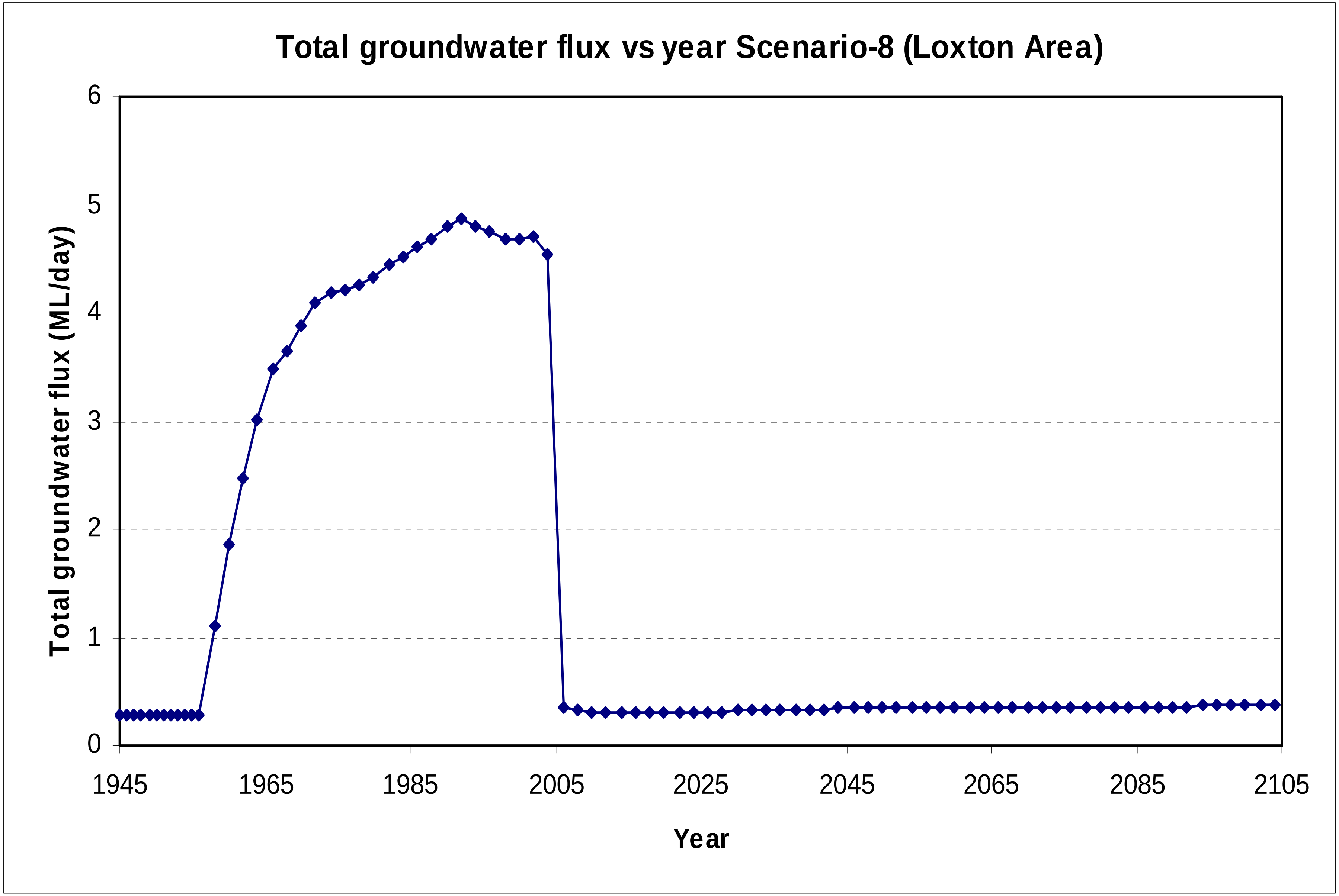


Appendix A-8-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-8 (Loxton Area)

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
0	1945	0.23	0.06	0.29
0	1946	0.23	0.06	0.29
0	1947	0.23	0.06	0.29
0	1948	0.23	0.06	0.29
0	1949	0.23	0.06	0.29
0	1950	0.23	0.06	0.29
0	1951	0.23	0.06	0.29
0	1952	0.23	0.06	0.29
0	1953	0.23	0.06	0.29
0	1954	0.23	0.06	0.29
0	1955	0.23	0.06	0.29
30	1955	0.23	0.06	0.29
365	1956	0.23	0.07	0.29
1095	1958	0.98	0.12	1.11
1825	1960	1.69	0.18	1.87
2555	1962	2.25	0.23	2.48
3285	1964	2.71	0.30	3.02
4015	1966	3.12	0.36	3.48
4745	1968	3.25	0.40	3.64
5475	1970	3.41	0.47	3.88
6205	1972	3.60	0.51	4.10
6935	1974	3.65	0.54	4.19
7665	1976	3.63	0.59	4.22
8395	1978	3.65	0.61	4.26
9125	1980	3.70	0.63	4.33
9855	1982	3.76	0.68	4.44
10585	1984	3.82	0.70	4.52
11315	1986	3.89	0.72	4.60
12045	1988	3.95	0.73	4.68
12775	1990	4.01	0.79	4.80
13505	1992	4.07	0.80	4.87
14235	1994	3.99	0.81	4.80
14965	1996	3.94	0.81	4.75
15695	1998	3.91	0.78	4.69
16425	2000	3.91	0.78	4.69
17155	2002	3.91	0.79	4.70
17885	2004	3.75	0.78	4.53
18615	2006	0.06	0.30	0.36
19345	2008	0.04	0.28	0.32
20075	2010	0.04	0.27	0.31
20805	2012	0.04	0.27	0.31
21535	2014	0.04	0.27	0.30
22265	2016	0.04	0.27	0.30

Day	Year	Lateral flux (ML/day)	Upward leackage (ML/day)	Total flux (ML/day)
22995	2018	0.04	0.27	0.30
23725	2020	0.04	0.27	0.30
24455	2022	0.04	0.27	0.31
25185	2024	0.04	0.27	0.31
25915	2026	0.04	0.28	0.31
26645	2028	0.04	0.28	0.32
27375	2030	0.04	0.28	0.32
28105	2032	0.04	0.28	0.32
28835	2034	0.04	0.29	0.33
29565	2036	0.04	0.29	0.33
30295	2038	0.04	0.29	0.33
31025	2040	0.05	0.29	0.34
31755	2042	0.05	0.29	0.34
32485	2044	0.05	0.30	0.34
33215	2046	0.05	0.30	0.35
33945	2048	0.05	0.30	0.35
34675	2050	0.05	0.30	0.35
35405	2052	0.05	0.30	0.35
36135	2054	0.05	0.30	0.35
36865	2056	0.05	0.30	0.35
37595	2058	0.05	0.30	0.35
38325	2060	0.05	0.30	0.35
39055	2062	0.05	0.30	0.35
39785	2064	0.05	0.30	0.35
40515	2066	0.05	0.30	0.35
41245	2068	0.05	0.30	0.35
41975	2070	0.05	0.31	0.36
42705	2072	0.05	0.31	0.36
43435	2074	0.05	0.31	0.36
44165	2076	0.05	0.31	0.36
44895	2078	0.05	0.31	0.36
45625	2080	0.05	0.31	0.36
46355	2082	0.05	0.31	0.36
47085	2084	0.05	0.31	0.36
47815	2086	0.05	0.31	0.36
48545	2088	0.05	0.31	0.36
49275	2090	0.05	0.31	0.36
50005	2092	0.05	0.31	0.36
50735	2094	0.05	0.31	0.37
51465	2096	0.05	0.31	0.37
52195	2098	0.05	0.31	0.37
52925	2100	0.05	0.31	0.37
53655	2102	0.05	0.32	0.37
54385	2104	0.05	0.32	0.37

Appendix A-8-6a Predicted total groundwater flux (ML/day) in Scenario-8 (Loxton Area)

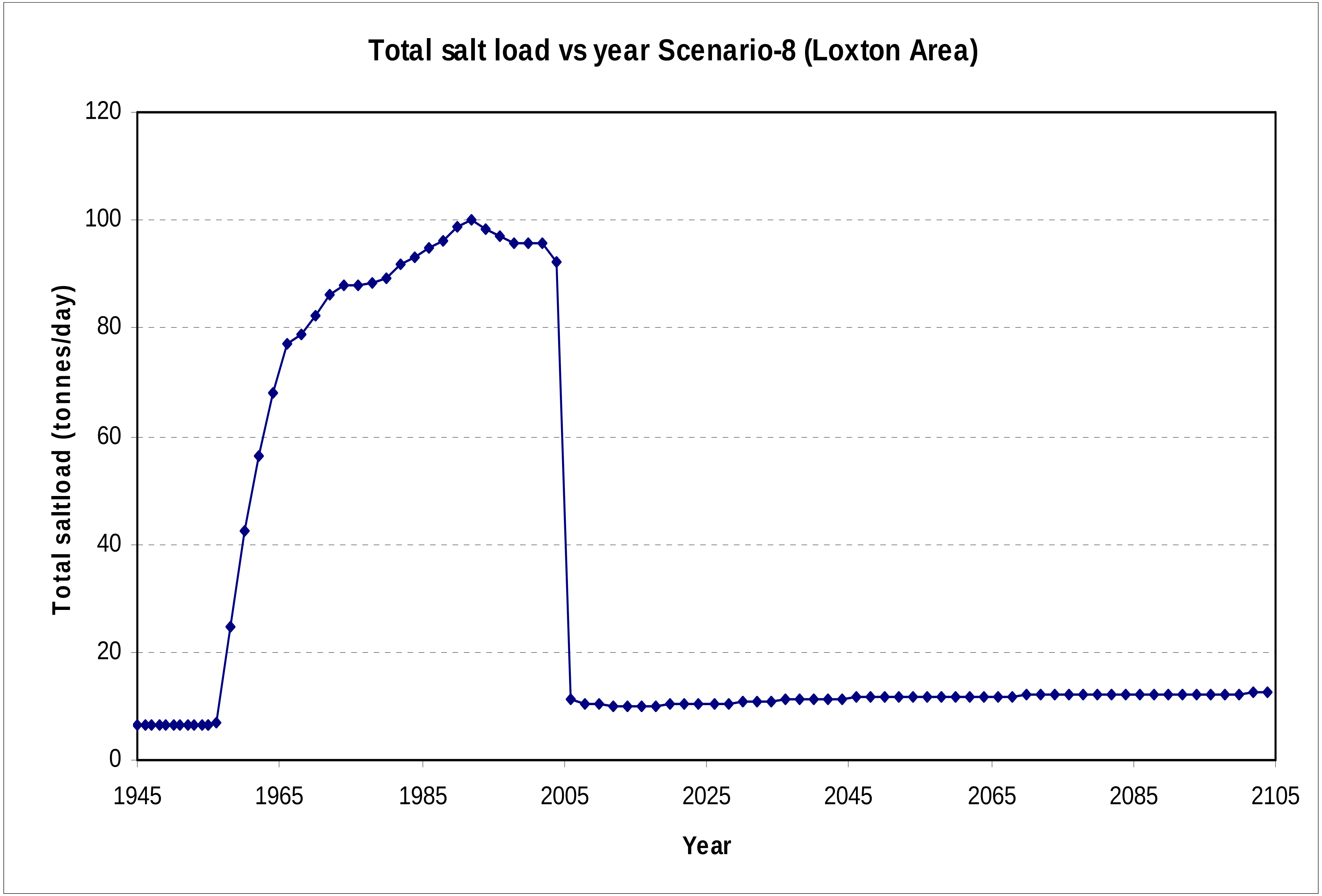


Appendix A-8-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-8 (Loxton Area)

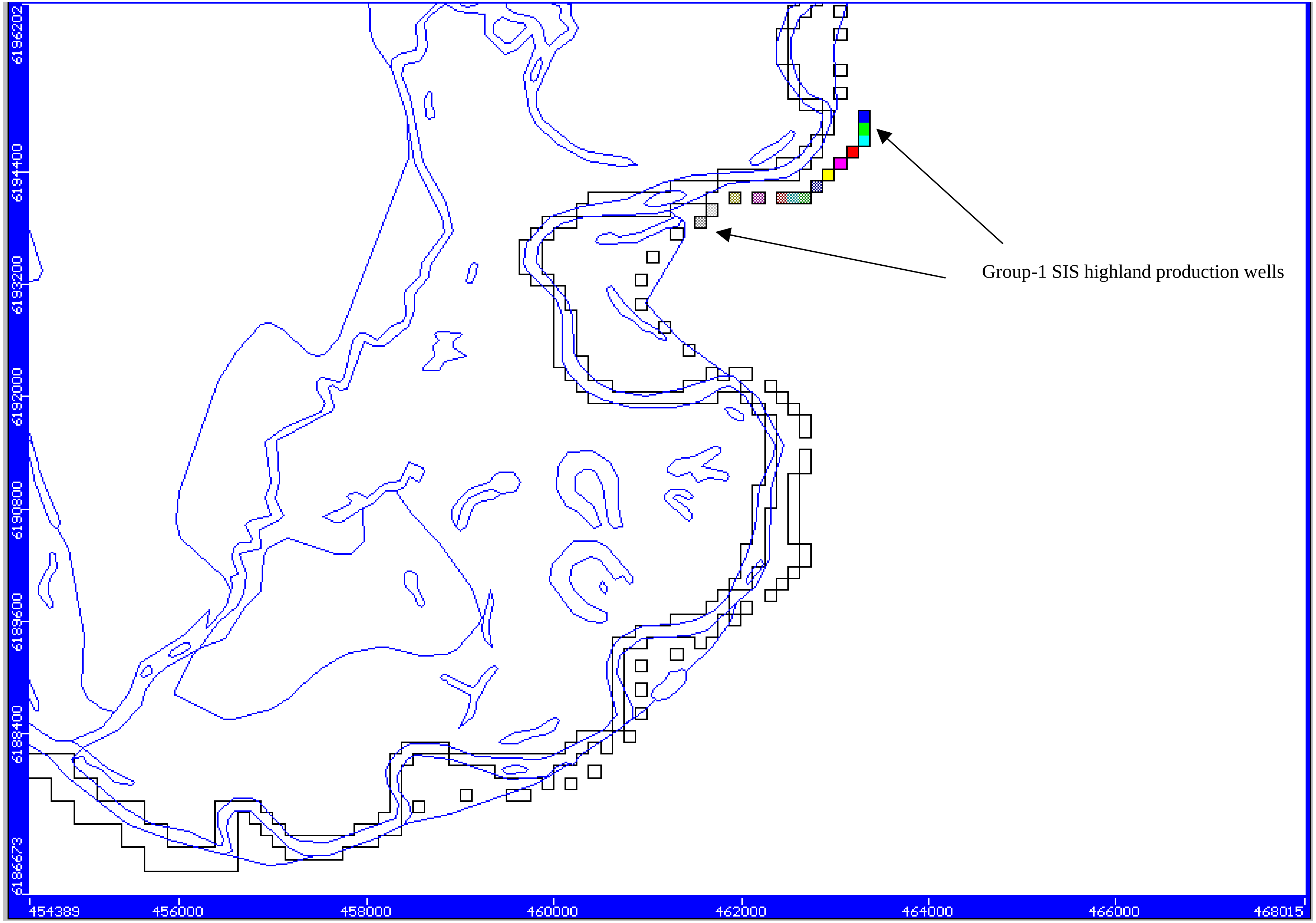
Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
0	1945	4.31	2.34	6.65
0	1946	4.31	2.34	6.65
0	1947	4.31	2.34	6.65
0	1948	4.31	2.34	6.65
0	1949	4.31	2.34	6.65
0	1950	4.31	2.34	6.65
0	1951	4.31	2.34	6.65
0	1952	4.31	2.34	6.65
0	1953	4.31	2.34	6.65
0	1954	4.31	2.34	6.65
0	1955	4.31	2.34	6.65
30	1955	4.31	2.34	6.65
365	1956	4.32	2.43	6.74
1095	1958	20.51	4.22	24.73
1825	1960	36.38	5.89	42.27
2555	1962	48.83	7.45	56.28
3285	1964	58.58	9.41	67.99
4015	1966	66.45	10.87	77.32
4745	1968	66.92	11.82	78.74
5475	1970	68.94	13.50	82.44
6205	1972	71.72	14.44	86.16
6935	1974	72.70	15.10	87.80
7665	1976	71.49	16.30	87.79
8395	1978	71.48	16.73	88.20
9125	1980	72.14	17.14	89.28
9855	1982	73.26	18.42	91.69
10585	1984	74.39	18.83	93.22
11315	1986	75.55	19.22	94.78
12045	1988	76.68	19.59	96.28
12775	1990	77.98	20.87	98.85
13505	1992	79.04	21.21	100.25
14235	1994	76.90	21.26	98.16
14965	1996	75.76	21.36	97.13
15695	1998	75.12	20.57	95.69
16425	2000	74.97	20.69	95.66
17155	2002	75.02	20.83	95.85
17885	2004	71.84	20.62	92.46
18615	2006	1.39	9.86	11.24
19345	2008	1.05	9.49	10.54
20075	2010	0.93	9.35	10.28
20805	2012	0.87	9.27	10.15
21535	2014	0.83	9.23	10.07
22265	2016	0.83	9.29	10.12

Day	Year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Transient Total Saltload (tonnes/day)
22995	2018	0.83	9.33	10.17
23725	2020	0.84	9.38	10.22
24455	2022	0.85	9.44	10.29
25185	2024	0.88	9.53	10.41
25915	2026	0.90	9.61	10.51
26645	2028	0.92	9.69	10.61
27375	2030	0.95	9.78	10.73
28105	2032	0.98	9.86	10.83
28835	2034	1.00	9.95	10.95
29565	2036	1.03	10.03	11.06
30295	2038	1.05	10.10	11.15
31025	2040	1.07	10.18	11.25
31755	2042	1.09	10.25	11.33
32485	2044	1.11	10.31	11.41
33215	2046	1.12	10.37	11.49
33945	2048	1.13	10.42	11.56
34675	2050	1.15	10.47	11.62
35405	2052	1.16	10.52	11.68
36135	2054	1.16	10.55	11.71
36865	2056	1.12	10.53	11.65
37595	2058	1.13	10.57	11.69
38325	2060	1.13	10.61	11.74
39055	2062	1.14	10.64	11.79
39785	2064	1.15	10.68	11.83
40515	2066	1.15	10.71	11.87
41245	2068	1.16	10.75	11.91
41975	2070	1.17	10.78	11.95
42705	2072	1.17	10.81	11.98
43435	2074	1.18	10.84	12.01
44165	2076	1.18	10.86	12.05
44895	2078	1.19	10.89	12.08
45625	2080	1.19	10.92	12.11
46355	2082	1.19	10.94	12.13
47085	2084	1.20	10.96	12.16
47815	2086	1.20	10.99	12.19
48545	2088	1.21	11.01	12.21
49275	2090	1.21	11.03	12.24
50005	2092	1.21	11.05	12.26
50735	2094	1.21	11.07	12.28
51465	2096	1.22	11.09	12.30
52195	2098	1.22	11.10	12.32
52925	2100	1.22	11.12	12.34
53655	2102	1.23	11.14	12.36
54385	2104	1.23	11.15	12.38

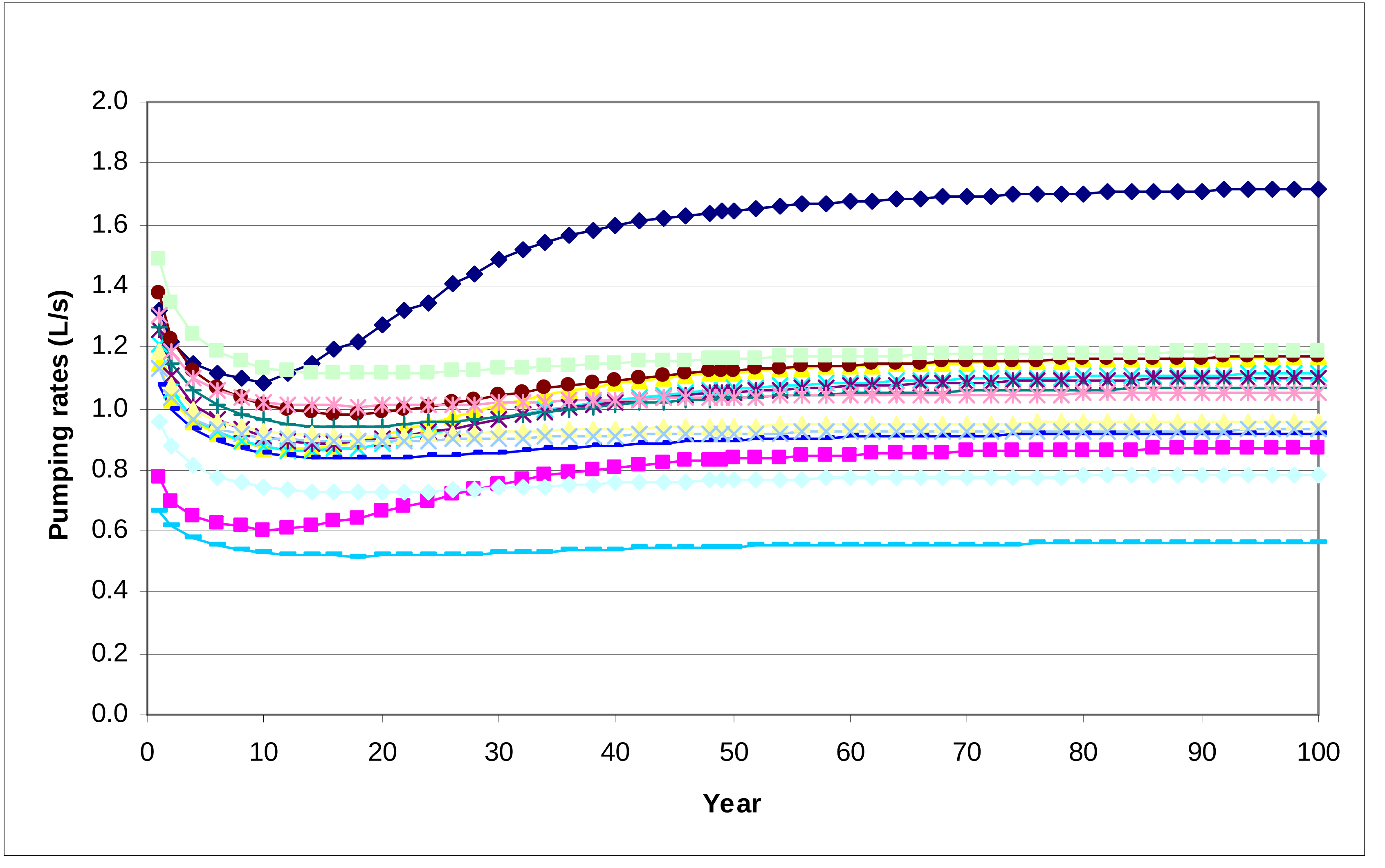
Appendix A-8-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-8 (Loxton Area)



Appendix A-8-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-8 (Loxton Area)



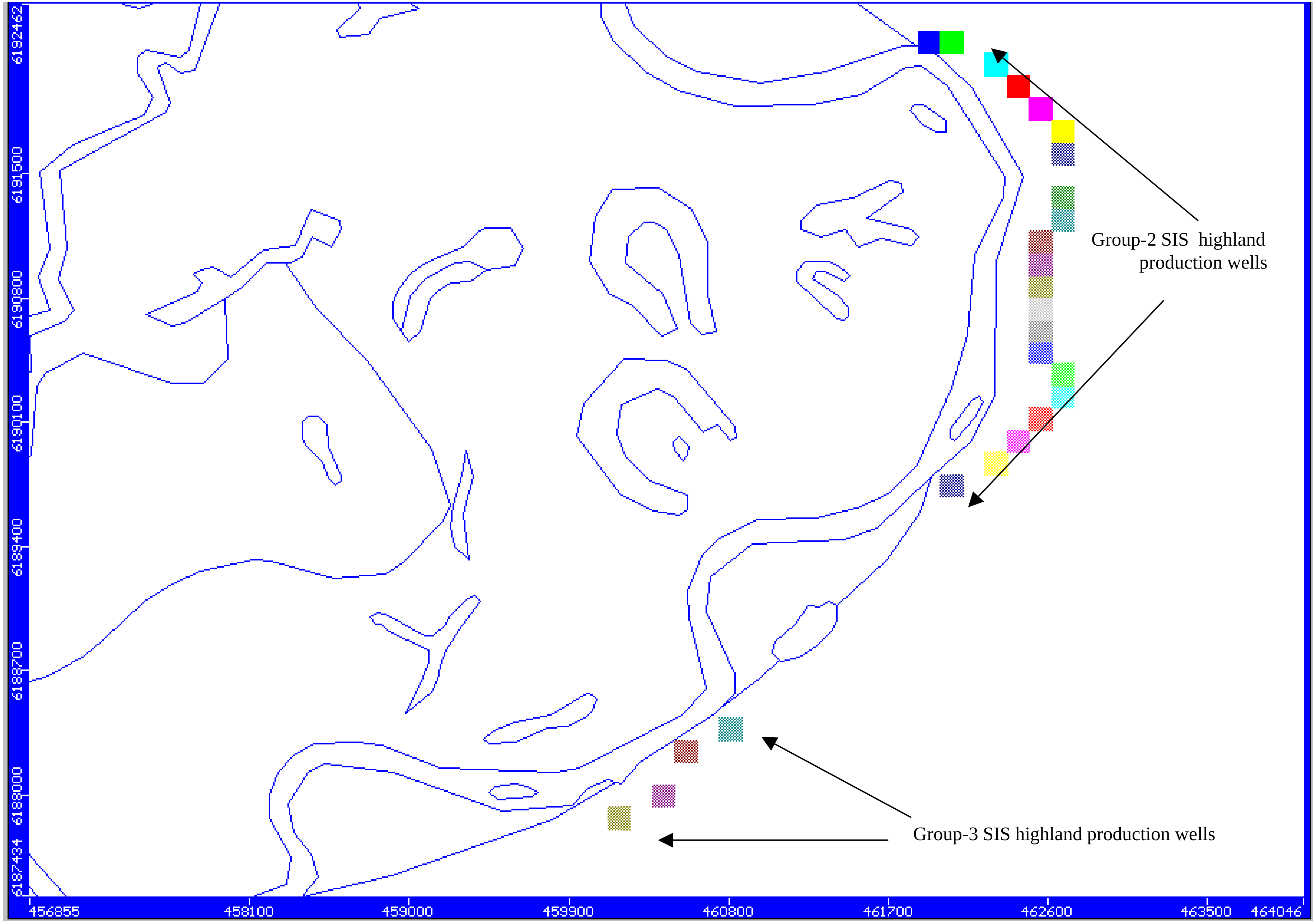
Appendix A-8-8a Potential locations of Group-1 highland SIS production wells Scenario-8 (Loxton Area)



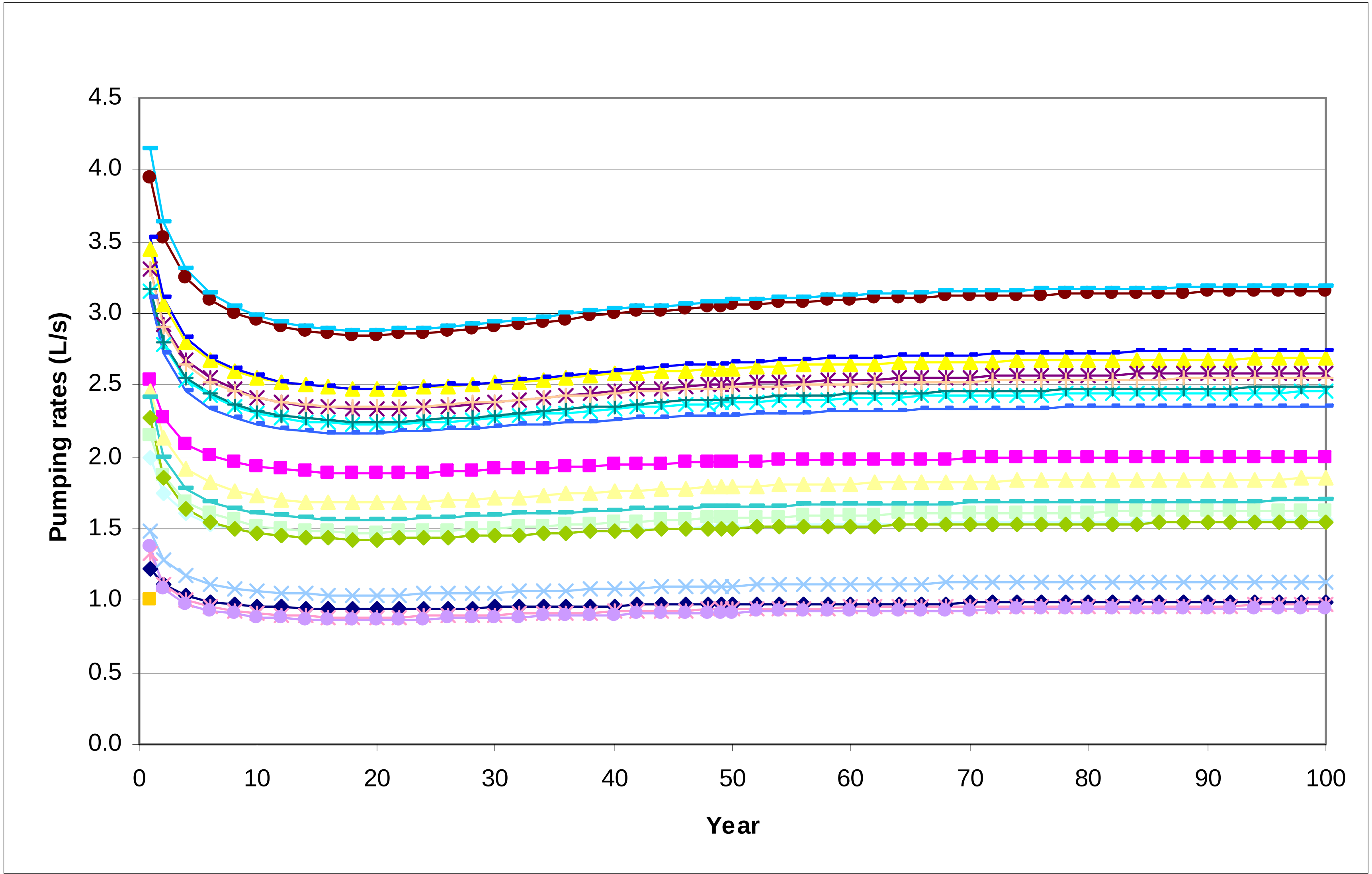
Appendix A-8-8b Graph of predicted range of pumping rates from Group-1 highland SIS production wells Scenario-8 (Loxton Area)

Time (day)	Time (year)	Ext (L/s) HLB0	Ext (L/s) HLB1	Ext (L/s) HLB2	Ext (L/s) HLB3	Ext (L/s) HLB4	Ext (L/s) HLB5	Ext (L/s) HLB6	Ext (L/s) HLB7	Ext (L/s) HLB8	Ext (L/s) HLB9	Ext (L/s) HLB10	Ext (L/s) HLB11	Ext (L/s) HLB12	Ext (L/s) HLB13	Total (L/s)
365	1	1.92	0.77	1.14	1.21	1.28	1.37	1.27	1.07	0.67	0.95	1.49	1.18	1.19	1.30	74.73
730	2	1.21	0.89	1.09	1.08	1.10	1.23	1.15	1.00	0.61	0.87	1.35	1.07	1.09	1.19	74.90
1460	4	1.15	0.85	0.95	0.97	1.01	1.12	1.08	0.99	0.57	0.81	1.24	1.00	0.97	1.10	71.93
2190	6	1.12	0.89	0.92	0.92	0.98	1.07	1.01	0.99	0.55	0.79	1.18	0.98	0.99	1.08	72.99
2920	8	1.10	0.81	0.99	0.90	0.99	1.03	0.93	0.97	0.54	0.76	1.15	0.94	0.92	1.04	72.83
3650	10	1.03	0.80	0.97	0.97	0.91	1.01	0.96	0.95	0.59	0.74	1.19	0.92	0.90	1.02	72.47
4380	12	1.11	0.81	0.97	0.96	0.99	0.99	0.95	0.94	0.52	0.79	1.12	0.92	0.90	1.02	72.34
5110	14	1.15	0.82	0.97	0.96	0.99	0.99	0.94	0.94	0.52	0.79	1.12	0.91	0.90	1.01	72.34
5840	16	1.19	0.89	0.99	0.97	0.99	0.99	0.94	0.94	0.52	0.79	1.11	0.91	0.89	1.01	72.39
6570	18	1.22	0.84	0.99	0.97	0.99	0.99	0.94	0.99	0.52	0.79	1.11	0.91	0.89	1.01	72.44
7300	20	1.28	0.86	0.91	0.89	0.90	0.99	0.94	0.94	0.52	0.79	1.11	0.91	0.89	1.01	72.59
8030	22	1.92	0.83	0.99	0.90	0.91	1.00	0.95	0.94	0.52	0.79	1.11	0.91	0.90	1.01	72.70
8760	24	1.95	0.70	0.95	0.91	0.92	1.01	0.95	0.94	0.52	0.79	1.12	0.91	0.90	1.01	72.82
9490	26	1.41	0.72	0.97	0.99	0.94	1.02	0.96	0.95	0.52	0.79	1.12	0.92	0.90	1.01	72.99
10220	28	1.44	0.79	0.99	0.95	0.95	1.03	0.97	0.95	0.59	0.74	1.12	0.92	0.90	1.01	71.73
10950	30	1.49	0.75	1.01	0.96	0.98	1.04	0.93	0.96	0.59	0.74	1.19	0.92	0.90	1.02	71.29
11680	32	1.52	0.77	1.03	0.93	0.99	1.05	0.93	0.96	0.59	0.74	1.19	0.92	0.90	1.02	71.42
12410	34	1.54	0.79	1.04	0.99	0.99	1.06	0.99	0.97	0.59	0.75	1.14	0.93	0.91	1.02	71.54
13140	36	1.56	0.79	1.06	1.01	1.00	1.07	1.00	0.97	0.54	0.75	1.14	0.93	0.91	1.02	71.65
13870	38	1.53	0.80	1.07	1.02	1.01	1.03	1.01	0.98	0.54	0.75	1.14	0.93	0.91	1.03	71.75
14600	40	1.60	0.81	1.03	1.09	1.02	1.09	1.01	0.98	0.54	0.76	1.15	0.93	0.91	1.03	71.84
15330	42	1.61	0.82	1.09	1.04	1.03	1.10	1.02	0.98	0.54	0.76	1.15	0.94	0.91	1.03	71.92
16060	44	1.62	0.82	1.10	1.05	1.04	1.11	1.02	0.98	0.54	0.76	1.16	0.94	0.92	1.03	71.99
16790	46	1.69	0.89	1.11	1.05	1.04	1.11	1.09	0.98	0.55	0.76	1.16	0.94	0.92	1.03	74.05
17520	48	1.64	0.89	1.11	1.06	1.05	1.12	1.09	0.98	0.55	0.76	1.16	0.94	0.92	1.04	74.70
17885	49	1.64	0.89	1.12	1.06	1.05	1.12	1.09	0.90	0.55	0.77	1.16	0.94	0.92	1.04	74.73
18250	50	1.65	0.89	1.12	1.06	1.05	1.12	1.04	0.90	0.55	0.77	1.16	0.94	0.92	1.04	74.75
18980	52	1.65	0.84	1.12	1.07	1.06	1.19	1.04	0.90	0.55	0.77	1.16	0.94	0.92	1.04	74.79
19710	54	1.66	0.84	1.19	1.07	1.06	1.19	1.04	0.90	0.55	0.77	1.17	0.95	0.92	1.04	74.23
20440	56	1.67	0.84	1.19	1.03	1.07	1.14	1.04	0.90	0.55	0.77	1.17	0.95	0.92	1.04	74.27
21170	58	1.67	0.85	1.19	1.03	1.07	1.14	1.05	0.90	0.55	0.77	1.17	0.95	0.92	1.04	74.30
21900	60	1.63	0.85	1.14	1.03	1.07	1.14	1.05	0.91	0.55	0.77	1.17	0.95	0.92	1.04	74.12
22630	62	1.63	0.85	1.14	1.09	1.03	1.14	1.05	0.91	0.55	0.77	1.17	0.95	0.92	1.04	74.33
23360	64	1.63	0.85	1.14	1.09	1.03	1.15	1.05	0.91	0.55	0.77	1.17	0.95	0.92	1.04	74.37
24090	66	1.69	0.85	1.15	1.09	1.03	1.15	1.05	0.91	0.56	0.77	1.17	0.95	0.92	1.04	74.39
24820	68	1.69	0.86	1.15	1.09	1.03	1.15	1.06	0.91	0.56	0.73	1.13	0.95	0.93	1.04	74.47
25550	70	1.69	0.86	1.15	1.10	1.03	1.15	1.06	0.91	0.56	0.73	1.13	0.95	0.93	1.05	74.43
26280	72	1.69	0.86	1.15	1.10	1.03	1.15	1.06	0.91	0.56	0.73	1.13	0.95	0.93	1.05	74.45
27010	74	1.70	0.86	1.15	1.10	1.03	1.16	1.06	0.91	0.56	0.73	1.13	0.95	0.93	1.05	74.46
27740	76	1.70	0.86	1.16	1.10	1.03	1.16	1.06	0.91	0.56	0.73	1.13	0.95	0.93	1.05	74.48
28470	78	1.70	0.86	1.16	1.10	1.03	1.16	1.06	0.91	0.56	0.73	1.13	0.95	0.93	1.05	74.49
29200	80	1.70	0.86	1.16	1.10	1.03	1.16	1.06	0.92	0.56	0.73	1.13	0.95	0.93	1.05	74.50
29930	82	1.71	0.86	1.16	1.11	1.03	1.16	1.06	0.92	0.56	0.73	1.13	0.95	0.93	1.05	74.52
30660	84	1.71	0.87	1.16	1.11	1.03	1.16	1.06	0.92	0.56	0.73	1.13	0.95	0.93	1.05	74.53
31390	86	1.71	0.87	1.16	1.11	1.03	1.16	1.06	0.92	0.56	0.73	1.13	0.95	0.93	1.05	74.54
32120	88	1.71	0.87	1.16	1.11	1.10	1.16	1.07	0.92	0.56	0.73	1.13	0.95	0.93	1.05	74.55
32850	90	1.71	0.87	1.16	1.11	1.10	1.17	1.07	0.92	0.56	0.73	1.13	0.96	0.93	1.05	74.55
33580	92	1.71	0.87	1.17	1.11	1.10	1.17	1.07	0.92	0.56	0.73	1.13	0.96	0.93	1.05	74.56
34310	94	1.71	0.87	1.17	1.11	1.10	1.17	1.07	0.92	0.56	0.73	1.13	0.96	0.93	1.05	74.57
35040	96	1.72	0.87	1.17	1.11	1.10	1.17	1.07	0.92	0.56	0.73	1.13	0.96	0.93	1.05	74.58
35770	98	1.72	0.87	1.17	1.11	1.10	1.17	1.07	0.92	0.56	0.73	1.13	0.96	0.93	1.05	74.59
36500	100	1.72	0.87	1.17	1.11	1.10	1.17	1.07	0.92	0.56	0.73	1.13	0.96	0.93	1.05	74.59
54385	149	1.79	0.88	1.13	1.12	1.11	1.13	1.03	0.92	0.56	0.79	1.19	0.96	0.93	1.05	74.89

Appendix A-8-8c Predicted range of pumping rates from Group-1 highland SIS production wells Scenario-8 (Loxton Area)



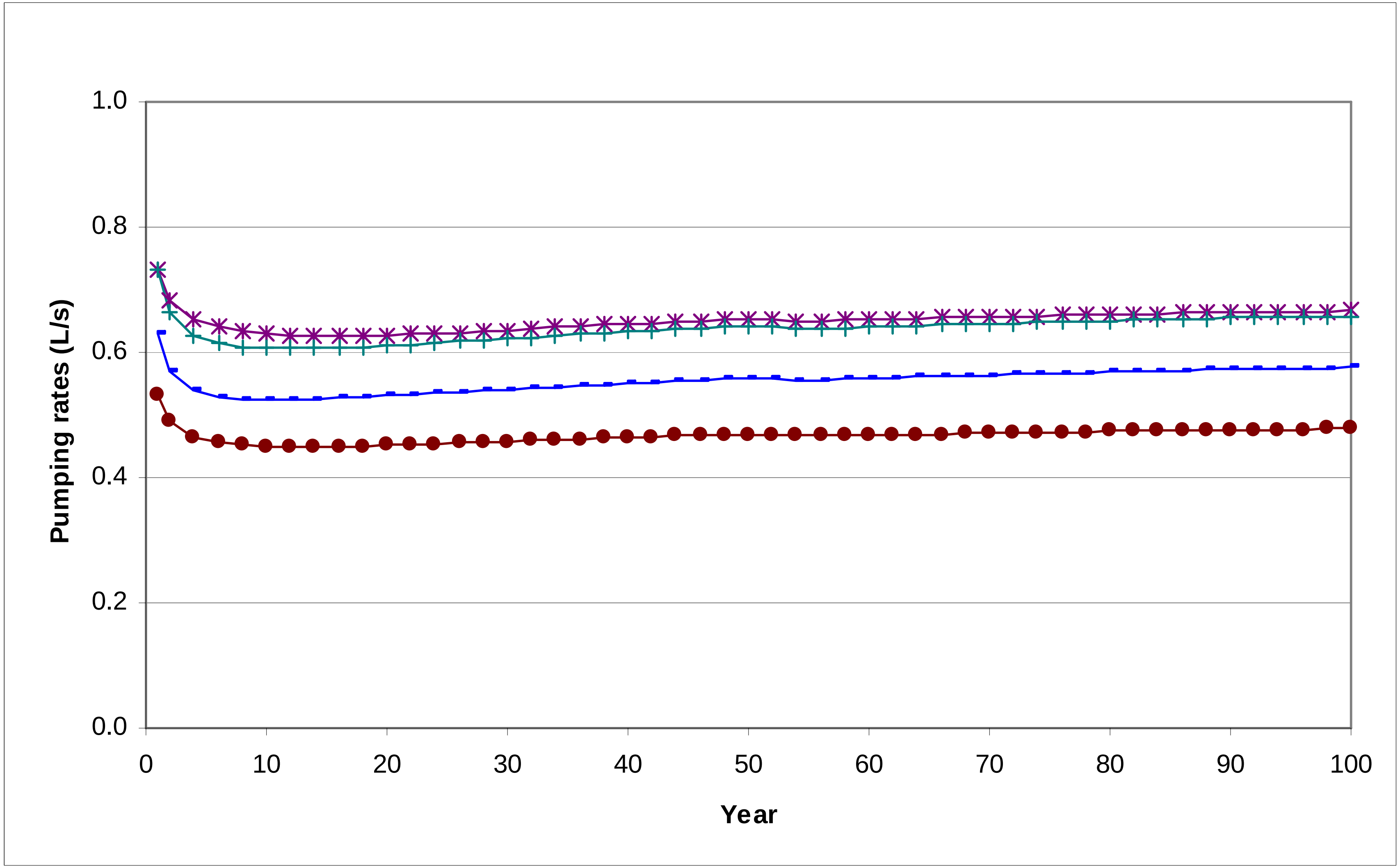
Appendix A-8-9a Potential locations of Group-2 and Group-3 highland SIS production wells Scenario-8 (Loxton Area)



Appendix A-8-9b Graph of predicted range of pumping rates from Group-2 highland SIS production wells Scenario-8 (Loxton Area)

Time (day)	Time (year)	Pumping rates (L/s) HLB0	Pumping rates (L/s) HLB1	Pumping rates (L/s) HLB2	Pumping rates (L/s) HLB3	Pumping rates (L/s) HLB4	Pumping rates (L/s) HLB5	Pumping rates (L/s) HLB6	Pumping rates (L/s) HLB7	Pumping rates (L/s) HLB8	Pumping rates (L/s) HLB9	Pumping rates (L/s) HLB10	Pumping rates (L/s) HLB11	Pumping rates (L/s) HLB12	Pumping rates (L/s) HLB13	Pumping rates (L/s) HLB14	Pumping rates (L/s) HLB15	Pumping rates (L/s) HLB16	Pumping rates (L/s) HLB17	Pumping rates (L/s) HLB18	Pumping rates (L/s) HLB19	Pumping rates (L/s) HLB20	Total (L/s)
365	1	1.23	2.53	3.46	3.15	3.31	3.54	3.17	3.53	4.14	2.00	2.14	2.45	1.48	1.32	1.38	3.31	3.11	2.41	2.27	1.01	0.98	52.32
730	2	1.12	2.28	3.05	2.78	2.92	3.53	2.79	3.11	3.64	1.75	1.87	2.13	1.29	1.11	1.09	2.91	2.72	2.00	1.96	0.82	0.85	45.63
1460	4	1.03	2.09	2.80	2.54	2.67	3.24	2.55	2.83	3.30	1.60	1.69	1.92	1.17	1.00	0.98	2.65	2.46	1.78	1.64	0.72	0.77	41.46
2190	6	0.99	2.01	2.67	2.42	2.54	3.10	2.44	2.70	3.14	1.54	1.60	1.83	1.12	0.96	0.93	2.53	2.34	1.69	1.56	0.68	0.74	39.53
2920	8	0.97	1.95	2.60	2.35	2.47	3.01	2.37	2.61	3.04	1.49	1.55	1.77	1.09	0.93	0.91	2.45	2.27	1.64	1.50	0.66	0.72	38.37
3650	10	0.96	1.93	2.55	2.30	2.42	2.95	2.32	2.55	2.98	1.47	1.52	1.73	1.07	0.91	0.89	2.41	2.23	1.61	1.47	0.65	0.71	37.62
4380	12	0.96	1.91	2.52	2.27	2.38	2.90	2.29	2.52	2.94	1.46	1.50	1.71	1.06	0.90	0.88	2.38	2.20	1.59	1.45	0.64	0.70	37.13
5110	14	0.96	1.90	2.50	2.25	2.36	2.88	2.27	2.50	2.91	1.44	1.49	1.69	1.05	0.89	0.87	2.36	2.18	1.57	1.44	0.64	0.70	36.82
5840	16	0.96	1.89	2.48	2.24	2.34	2.86	2.25	2.49	2.89	1.43	1.48	1.68	1.04	0.89	0.87	2.35	2.17	1.57	1.43	0.63	0.69	36.64
6570	18	0.96	1.89	2.48	2.23	2.34	2.86	2.25	2.48	2.88	1.43	1.48	1.68	1.04	0.88	0.87	2.35	2.17	1.56	1.43	0.63	0.69	36.55
7300	20	0.96	1.89	2.48	2.23	2.34	2.86	2.25	2.48	2.88	1.43	1.48	1.68	1.04	0.89	0.87	2.35	2.17	1.57	1.43	0.63	0.69	36.54
8030	22	0.96	1.89	2.48	2.23	2.34	2.86	2.25	2.48	2.89	1.43	1.48	1.68	1.04	0.89	0.87	2.35	2.17	1.57	1.43	0.63	0.69	36.60
8760	24	0.96	1.89	2.49	2.24	2.35	2.86	2.26	2.49	2.90	1.44	1.48	1.69	1.05	0.89	0.87	2.36	2.18	1.57	1.44	0.63	0.69	36.71
9490	26	0.96	1.90	2.49	2.25	2.36	2.88	2.27	2.50	2.91	1.44	1.49	1.69	1.05	0.89	0.87	2.37	2.19	1.58	1.44	0.64	0.70	36.85
10220	28	0.96	1.90	2.50	2.26	2.37	2.89	2.28	2.51	2.92	1.46	1.50	1.70	1.05	0.90	0.88	2.38	2.20	1.59	1.45	0.64	0.70	37.02
10950	30	0.96	1.91	2.52	2.27	2.38	2.91	2.29	2.53	2.94	1.46	1.50	1.71	1.06	0.90	0.88	2.39	2.21	1.59	1.45	0.64	0.70	37.20
11680	32	0.96	1.92	2.53	2.28	2.40	2.93	2.30	2.54	2.96	1.46	1.51	1.72	1.06	0.91	0.89	2.40	2.22	1.60	1.46	0.64	0.70	37.39
12410	34	0.96	1.92	2.54	2.30	2.41	2.94	2.32	2.55	2.98	1.47	1.52	1.73	1.07	0.91	0.89	2.41	2.23	1.61	1.47	0.65	0.71	37.59
13140	36	0.96	1.93	2.55	2.31	2.43	2.96	2.33	2.57	2.99	1.48	1.53	1.74	1.07	0.92	0.90	2.42	2.24	1.61	1.47	0.65	0.71	37.77
13870	38	0.96	1.94	2.55	2.32	2.44	2.98	2.35	2.59	3.01	1.48	1.54	1.75	1.08	0.92	0.90	2.43	2.25	1.62	1.48	0.65	0.71	37.96
14600	40	0.97	1.94	2.58	2.33	2.46	2.99	2.35	2.60	3.02	1.49	1.55	1.76	1.08	0.92	0.90	2.44	2.26	1.63	1.48	0.65	0.71	38.13
15330	42	0.97	1.95	2.59	2.34	2.47	3.01	2.37	2.61	3.04	1.49	1.55	1.77	1.09	0.93	0.91	2.45	2.27	1.63	1.49	0.65	0.71	38.29
16060	44	0.97	1.95	2.60	2.35	2.48	3.02	2.38	2.63	3.05	1.50	1.55	1.77	1.09	0.93	0.91	2.46	2.28	1.64	1.49	0.66	0.71	38.44
16790	46	0.97	1.95	2.60	2.35	2.49	3.03	2.39	2.64	3.07	1.51	1.55	1.78	1.10	0.93	0.91	2.47	2.28	1.64	1.50	0.66	0.72	38.58
17520	48	0.97	1.95	2.61	2.37	2.50	3.05	2.40	2.65	3.08	1.51	1.57	1.79	1.10	0.94	0.92	2.48	2.29	1.65	1.50	0.66	0.72	38.70
17885	49	0.97	1.95	2.62	2.38	2.50	3.05	2.40	2.65	3.08	1.51	1.57	1.79	1.10	0.94	0.92	2.48	2.29	1.65	1.50	0.66	0.72	38.76
18250	50	0.97	1.97	2.62	2.38	2.51	3.06	2.41	2.66	3.09	1.51	1.58	1.79	1.10	0.94	0.92	2.48	2.30	1.65	1.51	0.66	0.72	38.82
18980	52	0.98	1.97	2.63	2.39	2.51	3.07	2.41	2.66	3.10	1.52	1.58	1.80	1.11	0.94	0.92	2.49	2.30	1.66	1.51	0.66	0.72	38.92
19710	54	0.98	1.97	2.63	2.39	2.52	3.07	2.42	2.67	3.11	1.52	1.58	1.80	1.11	0.95	0.92	2.50	2.31	1.66	1.51	0.66	0.72	39.02
20440	56	0.98	1.97	2.64	2.40	2.53	3.08	2.43	2.68	3.11	1.53	1.59	1.81	1.11	0.95	0.93	2.50	2.31	1.66	1.52	0.67	0.72	39.10
21170	58	0.98	1.98	2.64	2.40	2.53	3.09	2.43	2.68	3.12	1.53	1.59	1.81	1.11	0.95	0.93	2.51	2.32	1.67	1.52	0.67	0.72	39.18
21900	60	0.98	1.98	2.65	2.41	2.54	3.10	2.44	2.69	3.13	1.53	1.60	1.81	1.12	0.95	0.93	2.51	2.32	1.67	1.52	0.67	0.72	39.25
22630	62	0.98	1.98	2.65	2.41	2.54	3.10	2.44	2.70	3.13	1.53	1.60	1.82	1.12	0.95	0.93	2.51	2.32	1.67	1.52	0.67	0.72	39.32
23360	64	0.98	1.98	2.65	2.42	2.55	3.11	2.46	2.70	3.14	1.54	1.60	1.82	1.12	0.95	0.93	2.52	2.33	1.67	1.52	0.67	0.73	39.38
24090	66	0.98	1.99	2.66	2.42	2.55	3.11	2.46	2.70	3.14	1.54	1.60	1.82	1.12	0.96	0.93	2.52	2.33	1.68	1.53	0.67	0.73	39.43
24820	68	0.98	1.99	2.66	2.42	2.55	3.12	2.46	2.71	3.15	1.54	1.61	1.83	1.12	0.96	0.93	2.52	2.33	1.68	1.53	0.67	0.73	39.48
25550	70	0.98	1.99	2.66	2.43	2.55	3.12	2.46	2.71	3.15	1.54	1.61	1.83	1.12	0.96	0.94	2.53	2.33	1.68	1.53	0.67	0.73	39.53
26280	72	0.98	1.99	2.67	2.43	2.55	3.12	2.46	2.72	3.16	1.54	1.61	1.83	1.12	0.96	0.94	2.53	2.34	1.68	1.53	0.67	0.73	39.57
27010	74	0.98	1.99	2.67	2.43	2.55	3.13	2.46	2.72	3.16	1.54	1.61	1.83	1.12	0.96	0.94	2.53	2.34	1.68	1.53	0.67	0.73	39.61
27740	76	0.98	1.99	2.67	2.43	2.57	3.13	2.47	2.72	3.16	1.55	1.61	1.83	1.13	0.96	0.94	2.53	2.34	1.68	1.53	0.67	0.73	39.64
28470	78	0.98	1.99	2.67	2.44	2.57	3.13	2.47	2.72	3.17	1.55	1.61	1.84	1.13	0.96	0.94	2.54	2.34	1.69	1.54	0.67	0.73	39.68
29200	80	0.98	1.99	2.67	2.44	2.57	3.14	2.47	2.73	3.17	1.55	1.62	1.84	1.13	0.96	0.94	2.54	2.34	1.69	1.54	0.67	0.73	39.71
29930	82	0.99	2.00	2.68	2.44	2.57	3.14	2.47	2.73	3.17	1.55	1.62	1.84	1.13	0.96	0.94	2.54	2.35	1.69	1.54	0.67	0.73	39.74
30660	84	0.99	2.00	2.68	2.44	2.58	3.14	2.47	2.73	3.17	1.55	1.62	1.84	1.13	0.96	0.94	2.54	2.35	1.69	1.54	0.67	0.73	39.76
31390	86	0.99	2.00	2.68	2.44	2.58	3.14	2.48	2.73	3.18	1.55	1.62	1.84	1.13	0.96	0.94	2.54	2.35	1.69	1.54	0.67	0.73	39.79
32120	88	0.99	2.00	2.68	2.46	2.58	3.15	2.48	2.73	3.18	1.55	1.62	1.84	1.13	0.97	0.94	2.54	2.35	1.69	1.54	0.68	0.73	39.81
32850	90	0.99	2.00	2.68	2.46	2.58	3.15	2.48	2.74	3.18	1.55	1.62	1.84	1.13	0.97	0.94	2.55	2.35	1.69	1.54	0.68	0.73	39.84
33580	92	0.99	2.00	2.68	2.46	2.58	3.15	2.48	2.74	3.18	1.55	1.62	1.85	1.13	0.97	0.94	2.55	2.35	1.69	1.54	0.68	0.73	39.86
34310	94	0.99	2.00	2.68	2.46	2.58	3.15	2.48	2.74	3.18	1.55	1.62	1.85	1.13	0.97	0.94	2.55	2.35	1.69	1.54	0.68	0.73	39.88
35040	96	0.99	2.00	2.69	2.46	2.59	3.15	2.48	2.74	3.19	1.56	1.62	1.85	1.13	0.97	0.94	2.55	2.36	1.69	1.54	0.68	0.73	39.90
35770	98	0.99	2.00	2.69	2.46	2.59	3.15	2.48	2.74	3.19	1.56	1.62	1.85	1.13	0.97	0.94	2.55	2.36	1.69	1.54	0.68	0.73	39.92
36500	100	0.99	2.00	2.69	2.46	2.59	3.16	2.49	2.74	3.19	1.56	1.63	1.85	1.13	0.97	0.94	2.55	2.36	1.70	1.54	0.68	0.73	39.93
54385	149	0.99	2.01	2.70	2.47	2.61	3.18	2.50	2.76	3.21	1.57	1.64	1.86	1.14	0.97	0.96	2.57	2.37	1.71	1.56	0.68	0.74	40.18

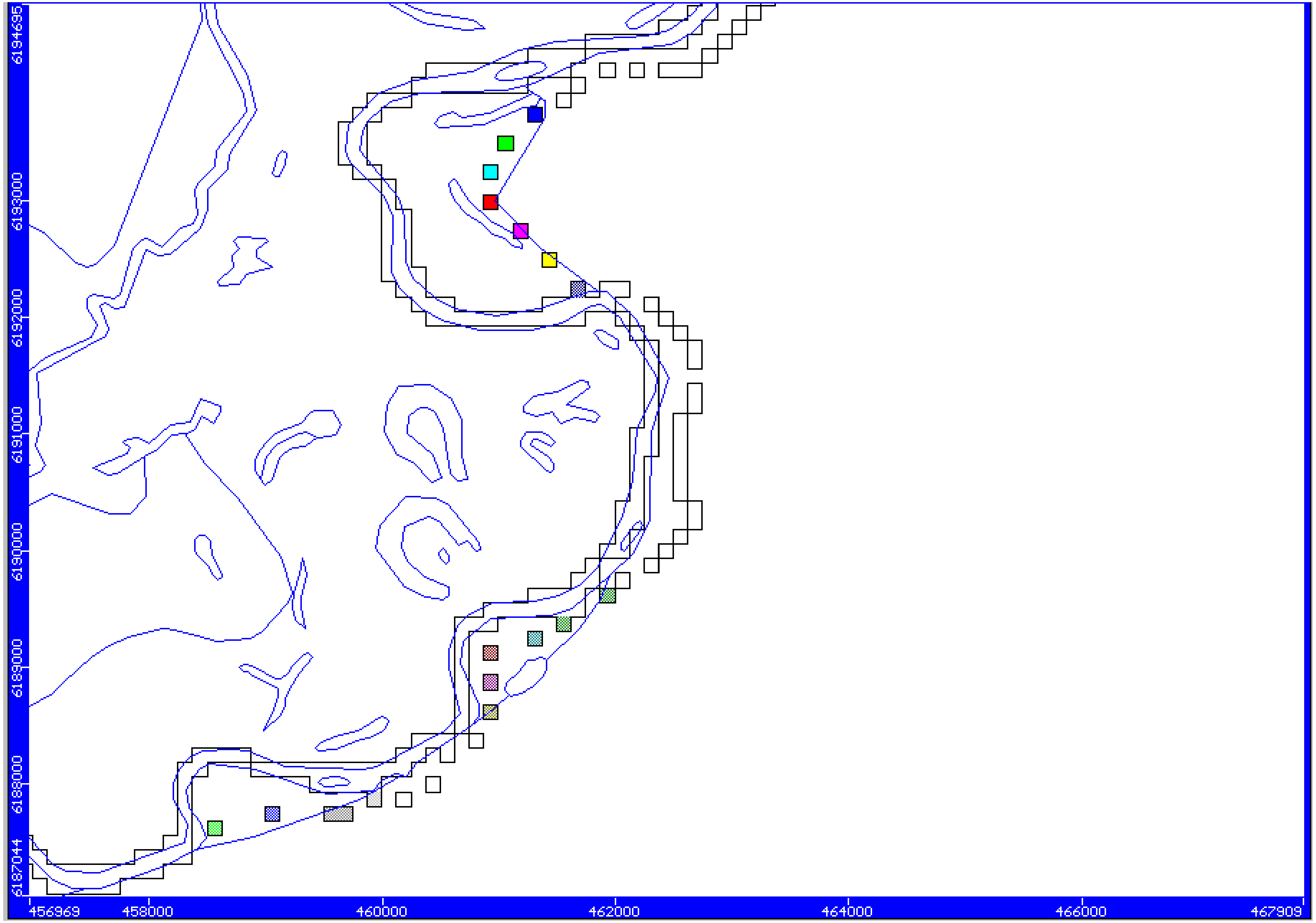
Appendix A-8-9c Predicted range of pumping rates from Group-2 highland SIS production wells Scenario-8 (Loxton Area)



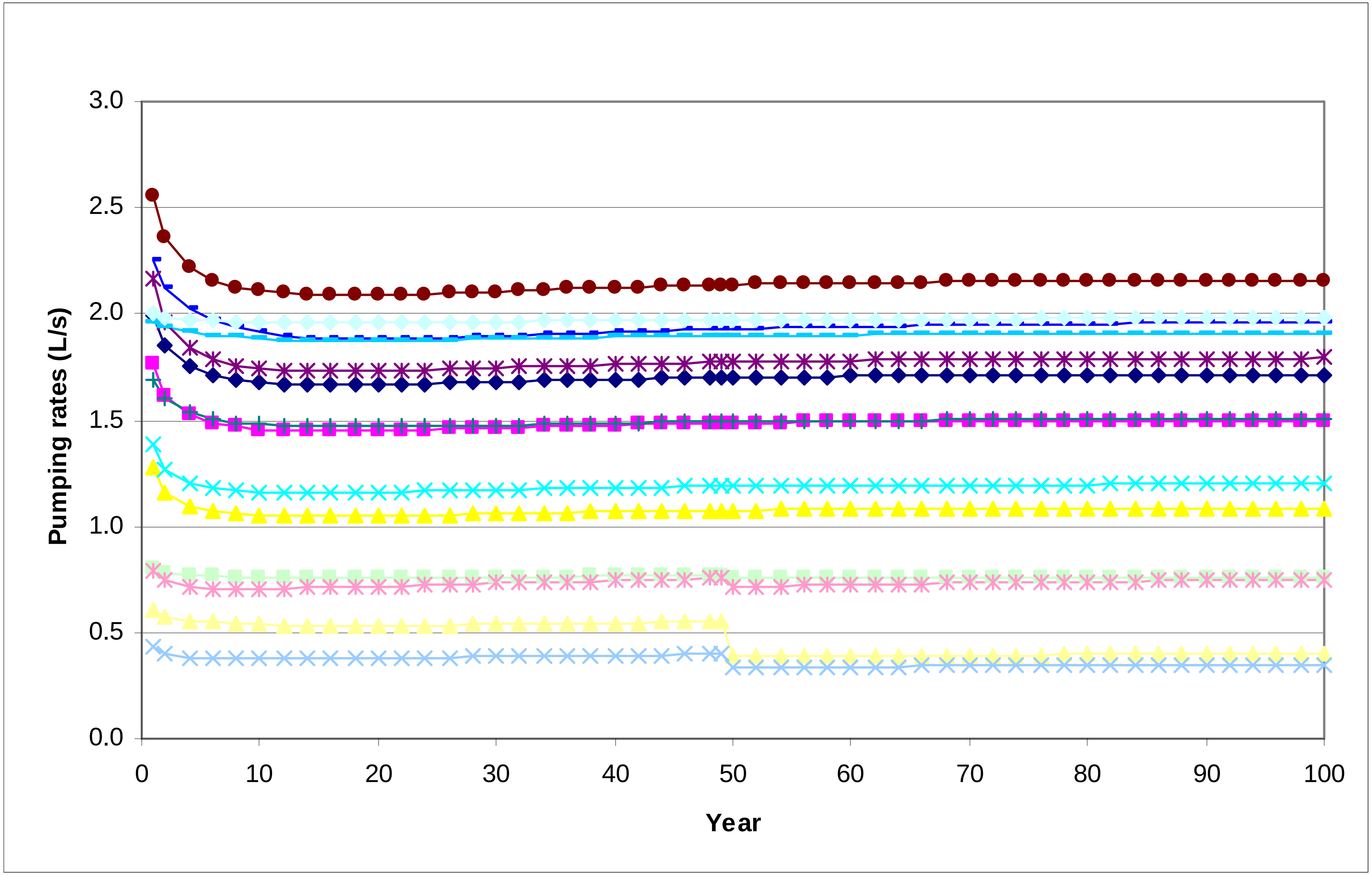
Appendix A-8-10a Graph of predicted range of pumping rates from Group-3 highland SIS production wells Scenario-8 (Loxton Area)

Time (day)	Time (year)	LX (L/s) FPE20	LX (L/s) FPE21	LX (L/s) FPE22	LX (L/s) FPE28	Total (L/s)
365	1	0.73	0.53	0.73	0.63	2.63
730	2	0.68	0.49	0.66	0.57	2.41
1460	4	0.65	0.46	0.63	0.54	2.28
2190	6	0.64	0.46	0.61	0.53	2.24
2920	8	0.63	0.45	0.61	0.52	2.22
3650	10	0.63	0.45	0.61	0.52	2.21
4380	12	0.63	0.45	0.61	0.52	2.21
5110	14	0.63	0.45	0.61	0.53	2.21
5840	16	0.63	0.45	0.61	0.53	2.21
6570	18	0.63	0.45	0.61	0.53	2.22
7300	20	0.63	0.45	0.61	0.53	2.22
8030	22	0.63	0.45	0.61	0.53	2.23
8760	24	0.63	0.45	0.61	0.53	2.23
9490	26	0.63	0.45	0.62	0.54	2.24
10220	28	0.63	0.46	0.62	0.54	2.25
10950	30	0.64	0.46	0.62	0.54	2.26
11680	32	0.64	0.46	0.62	0.54	2.26
12410	34	0.64	0.46	0.63	0.54	2.27
13140	36	0.64	0.46	0.63	0.55	2.28
13870	38	0.64	0.46	0.63	0.55	2.29
14600	40	0.65	0.46	0.63	0.55	2.29
15330	42	0.65	0.47	0.63	0.55	2.30
16060	44	0.65	0.47	0.64	0.55	2.31
16790	46	0.65	0.47	0.64	0.56	2.31
17520	48	0.65	0.47	0.64	0.56	2.32
18250	50	0.65	0.47	0.64	0.56	2.32
18980	52	0.65	0.47	0.64	0.56	2.32
19710	54	0.65	0.47	0.64	0.56	2.31
20440	56	0.65	0.47	0.64	0.56	2.31
21170	58	0.65	0.47	0.64	0.56	2.31
21900	60	0.65	0.47	0.64	0.56	2.32
22630	62	0.65	0.47	0.64	0.56	2.32
23360	64	0.65	0.47	0.64	0.56	2.33
24090	66	0.65	0.47	0.64	0.56	2.33
24820	68	0.66	0.47	0.64	0.56	2.33
25550	70	0.66	0.47	0.65	0.56	2.34
26280	72	0.66	0.47	0.65	0.56	2.34
27010	74	0.66	0.47	0.65	0.57	2.34
27740	76	0.66	0.47	0.65	0.57	2.35
28470	78	0.66	0.47	0.65	0.57	2.35
29200	80	0.66	0.47	0.65	0.57	2.35
29930	82	0.66	0.47	0.65	0.57	2.36
30660	84	0.66	0.47	0.65	0.57	2.36
31390	86	0.66	0.48	0.65	0.57	2.36
32120	88	0.66	0.48	0.65	0.57	2.36
32850	90	0.66	0.48	0.65	0.57	2.37
33580	92	0.66	0.48	0.66	0.57	2.37
34310	94	0.66	0.48	0.66	0.57	2.37
35040	96	0.67	0.48	0.66	0.57	2.37
35770	98	0.67	0.48	0.66	0.58	2.38
36500	100	0.67	0.48	0.66	0.58	2.38
54385	149	0.67	0.48	0.66	0.58	2.38

Appendix A-8-10b Predicted range of pumping rates from Group-3 highland SIS production wells Scenario-8 (Loxton Area)



Appendix A-8-11a Potential locations of floodplain SIS production wells Scenario-8 (Loxton Area)



Appendix A-8-11b Graph of predicted range of pumping rates from floodplain SIS production wells Scenario-8 (Loxton Area)

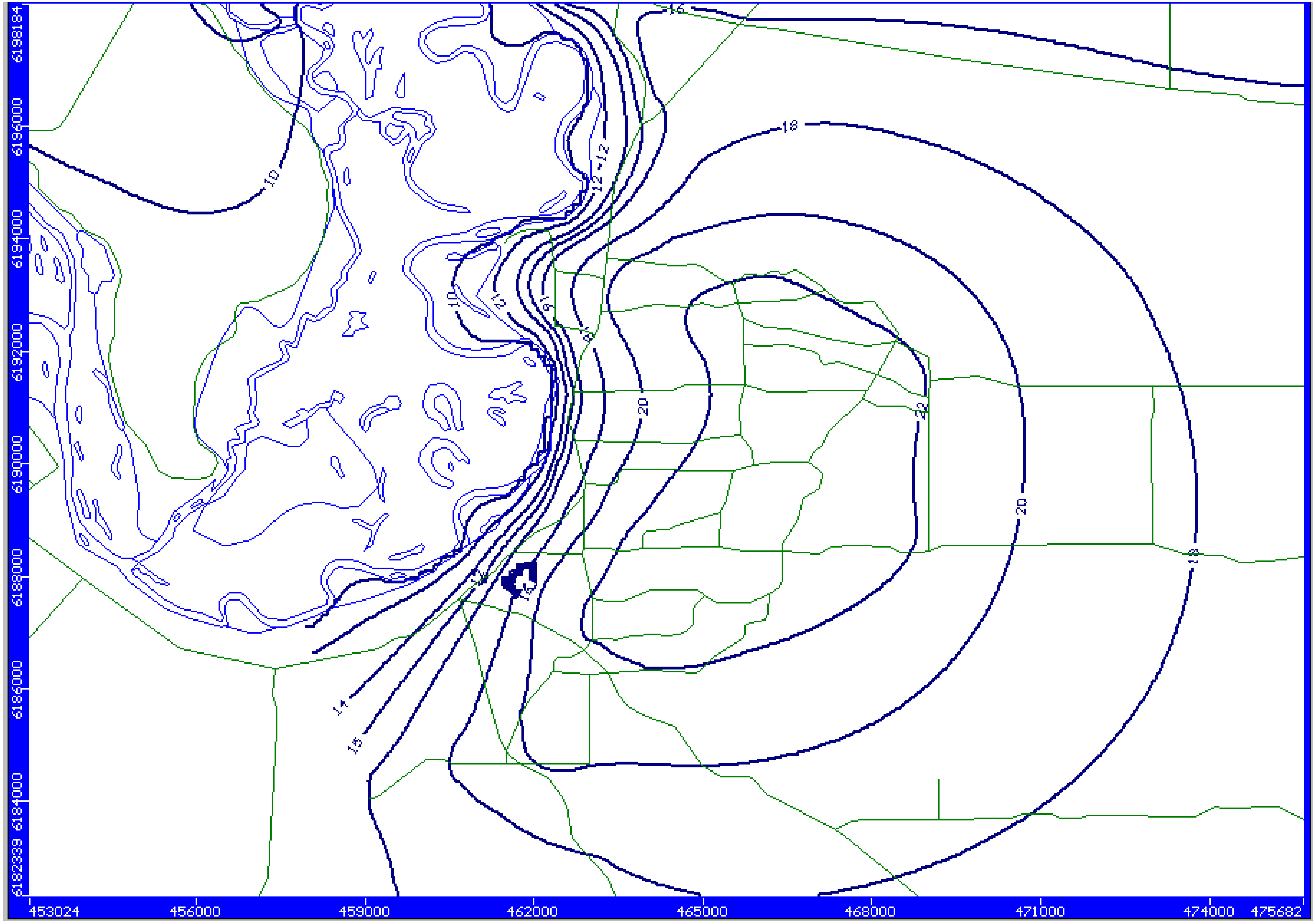
Time (day)	Time (year)	LXLoxFP80	LXLoxFP81	LXLoxFP82	LXLoxFP83	LXLoxFP84	LXLoxFP85	LXLoxFP86	LXLoxFP87	LXLoxFP88	LXLoxFP89	LXLoxFP90	LXLoxFP91	LXLoxFP92	LXLoxFP93	LXLoxFP94	LXLoxFP95	Total Lox
365	1	1.83	1.77	1.27	1.33	2.18	2.35	1.83	2.25	1.38	2.00	0.80	0.81	0.44	0.73	1.50	1.54	27.93
730	2	1.28	1.82	1.18	1.27	1.98	2.38	1.80	2.19	1.39	1.39	0.73	0.53	0.40	0.74	1.45	1.51	23.37
1460	4	1.78	1.53	1.10	1.21	1.84	2.22	1.54	2.02	1.31	1.37	0.77	0.58	0.33	0.72	1.44	1.50	21.32
2190	6	1.71	1.49	1.07	1.13	1.79	2.18	1.50	1.37	1.30	1.37	0.76	0.55	0.93	0.71	1.49	1.50	21.74
2920	8	1.83	1.47	1.08	1.17	1.76	2.13	1.49	1.33	1.33	1.38	0.76	0.54	0.93	0.71	1.43	1.50	21.94
3650	10	1.83	1.48	1.05	1.16	1.74	2.11	1.43	1.31	1.33	1.38	0.76	0.54	0.93	0.71	1.43	1.51	21.87
4380	12	1.87	1.45	1.05	1.18	1.74	2.10	1.47	1.30	1.33	1.38	0.76	0.59	0.93	0.71	1.44	1.51	21.78
5110	14	1.87	1.45	1.05	1.18	1.79	2.09	1.47	1.33	1.33	1.38	0.76	0.59	0.93	0.71	1.44	1.51	21.72
5840	16	1.87	1.45	1.05	1.18	1.79	2.09	1.47	1.33	1.37	1.38	0.76	0.59	0.93	0.71	1.44	1.51	21.77
6570	18	1.87	1.45	1.05	1.18	1.79	2.09	1.47	1.33	1.37	1.38	0.76	0.59	0.93	0.71	1.44	1.51	21.77
7300	20	1.87	1.45	1.05	1.18	1.79	2.09	1.47	1.33	1.37	1.38	0.76	0.59	0.93	0.72	1.45	1.51	21.72
8030	22	1.87	1.45	1.05	1.18	1.79	2.09	1.47	1.33	1.37	1.38	0.76	0.59	0.93	0.72	1.45	1.52	21.74
8760	24	1.87	1.48	1.05	1.17	1.74	2.10	1.47	1.33	1.33	1.38	0.76	0.59	0.93	0.72	1.45	1.52	21.78
9490	26	1.87	1.48	1.06	1.17	1.74	2.10	1.47	1.33	1.33	1.38	0.76	0.54	0.93	0.73	1.48	1.52	21.79
10220	28	1.83	1.48	1.06	1.17	1.74	2.10	1.47	1.33	1.33	1.38	0.76	0.54	0.99	0.73	1.48	1.52	21.83
10950	30	1.83	1.48	1.06	1.17	1.75	2.11	1.43	1.33	1.33	1.38	0.76	0.54	0.99	0.73	1.48	1.52	21.88
11680	32	1.83	1.47	1.06	1.17	1.75	2.11	1.43	1.30	1.33	1.37	0.76	0.54	0.99	0.73	1.48	1.53	21.89
12410	34	1.83	1.47	1.06	1.13	1.75	2.11	1.43	1.30	1.33	1.37	0.76	0.54	0.99	0.74	1.47	1.53	21.93
13140	36	1.83	1.47	1.07	1.13	1.76	2.12	1.43	1.31	1.33	1.37	0.76	0.54	0.99	0.74	1.47	1.53	21.98
13870	38	1.83	1.43	1.07	1.13	1.76	2.12	1.43	1.31	1.33	1.37	0.76	0.54	0.99	0.74	1.47	1.53	21.99
14600	40	1.83	1.43	1.07	1.13	1.76	2.12	1.49	1.32	1.33	1.37	0.76	0.55	0.99	0.74	1.47	1.53	21.02
15330	42	1.83	1.43	1.07	1.13	1.77	2.13	1.49	1.32	1.33	1.37	0.77	0.55	0.99	0.75	1.43	1.54	21.04
16060	44	1.70	1.43	1.07	1.13	1.77	2.13	1.49	1.32	1.33	1.37	0.77	0.55	0.40	0.75	1.43	1.54	21.07
16790	46	1.70	1.43	1.07	1.13	1.77	2.13	1.49	1.33	1.33	1.37	0.77	0.55	0.40	0.75	1.43	1.54	21.09
17520	48	1.70	1.43	1.07	1.13	1.77	2.14	1.49	1.33	1.30	1.37	0.77	0.55	0.40	0.75	1.43	1.54	21.77
17885	49	1.70	1.49	1.03	1.13	1.77	2.14	1.49	1.33	1.30	1.37	0.77	0.55	0.40	0.75	1.43	1.54	21.72
18250	50	1.70	1.49	1.03	1.13	1.77	2.14	1.49	1.33	1.30	1.37	0.76	0.39	0.94	0.72	1.43	1.54	21.88
18980	52	1.70	1.49	1.03	1.13	1.73	2.14	1.49	1.33	1.30	1.37	0.76	0.39	0.94	0.72	1.49	1.54	21.87
19710	54	1.70	1.49	1.03	1.13	1.73	2.14	1.50	1.33	1.30	1.37	0.76	0.39	0.94	0.72	1.49	1.54	21.88
20440	56	1.70	1.49	1.03	1.13	1.73	2.14	1.50	1.34	1.30	1.37	0.76	0.39	0.94	0.72	1.49	1.55	21.89
21170	58	1.71	1.49	1.03	1.13	1.73	2.14	1.50	1.34	1.30	1.37	0.76	0.39	0.94	0.72	1.49	1.55	21.97
21900	60	1.71	1.49	1.03	1.13	1.73	2.15	1.50	1.34	1.30	1.37	0.76	0.39	0.94	0.72	1.49	1.55	21.92
22630	62	1.71	1.49	1.03	1.13	1.73	2.15	1.50	1.34	1.30	1.37	0.76	0.39	0.94	0.73	1.50	1.55	21.93
23360	64	1.71	1.49	1.03	1.13	1.73	2.15	1.50	1.34	1.30	1.37	0.76	0.39	0.94	0.73	1.50	1.55	21.94
24090	66	1.71	1.49	1.03	1.13	1.73	2.15	1.50	1.35	1.30	1.33	0.76	0.39	0.94	0.73	1.50	1.55	21.95
24820	68	1.71	1.49	1.03	1.13	1.73	2.15	1.50	1.35	1.30	1.33	0.76	0.39	0.94	0.73	1.50	1.55	21.98
25550	70	1.71	1.49	1.03	1.13	1.79	2.15	1.50	1.35	1.30	1.33	0.76	0.39	0.94	0.73	1.50	1.55	21.97
26280	72	1.71	1.50	1.03	1.20	1.79	2.15	1.50	1.35	1.30	1.33	0.76	0.39	0.94	0.73	1.50	1.55	21.98
27010	74	1.71	1.50	1.03	1.20	1.79	2.15	1.50	1.35	1.31	1.33	0.76	0.39	0.94	0.74	1.50	1.56	21.99
27740	76	1.71	1.50	1.03	1.20	1.79	2.15	1.50	1.35	1.31	1.33	0.76	0.39	0.94	0.74	1.51	1.56	21.00
28470	78	1.71	1.50	1.03	1.20	1.79	2.15	1.50	1.35	1.31	1.33	0.76	0.40	0.95	0.74	1.51	1.56	21.07
29200	80	1.71	1.50	1.03	1.20	1.79	2.15	1.50	1.35	1.31	1.33	0.76	0.40	0.95	0.74	1.51	1.56	21.07
29930	82	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.35	1.31	1.33	0.76	0.40	0.95	0.74	1.51	1.56	21.02
30660	84	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.36	1.31	1.33	0.76	0.40	0.95	0.74	1.51	1.56	21.03
31390	86	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.36	1.31	1.33	0.76	0.40	0.95	0.74	1.51	1.56	21.03
32120	88	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.36	1.31	1.33	0.76	0.40	0.95	0.74	1.51	1.56	21.04
32850	90	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.36	1.31	1.33	0.76	0.40	0.95	0.74	1.51	1.56	21.04
33580	92	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.36	1.31	1.33	0.76	0.40	0.95	0.75	1.52	1.56	21.05
34310	94	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.36	1.31	1.33	0.76	0.40	0.95	0.75	1.52	1.56	21.05
35040	96	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.36	1.31	1.33	0.76	0.40	0.95	0.75	1.52	1.56	21.06
35770	98	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.36	1.31	1.33	0.76	0.40	0.95	0.75	1.52	1.56	21.06
36500	100	1.71	1.50	1.03	1.20	1.79	2.16	1.50	1.36	1.31	1.33	0.76	0.40	0.95	0.75	1.52	1.57	21.07
54385	149	1.72	1.50	1.03	1.20	1.80	2.16	1.51	1.57	1.32	1.33	0.77	0.40	0.96	0.76	1.53	1.53	21.74

Appendix A-8-11c Predicted range of pumping rates from floodplain SIS production wells Scenario-8 (Loxton Area)

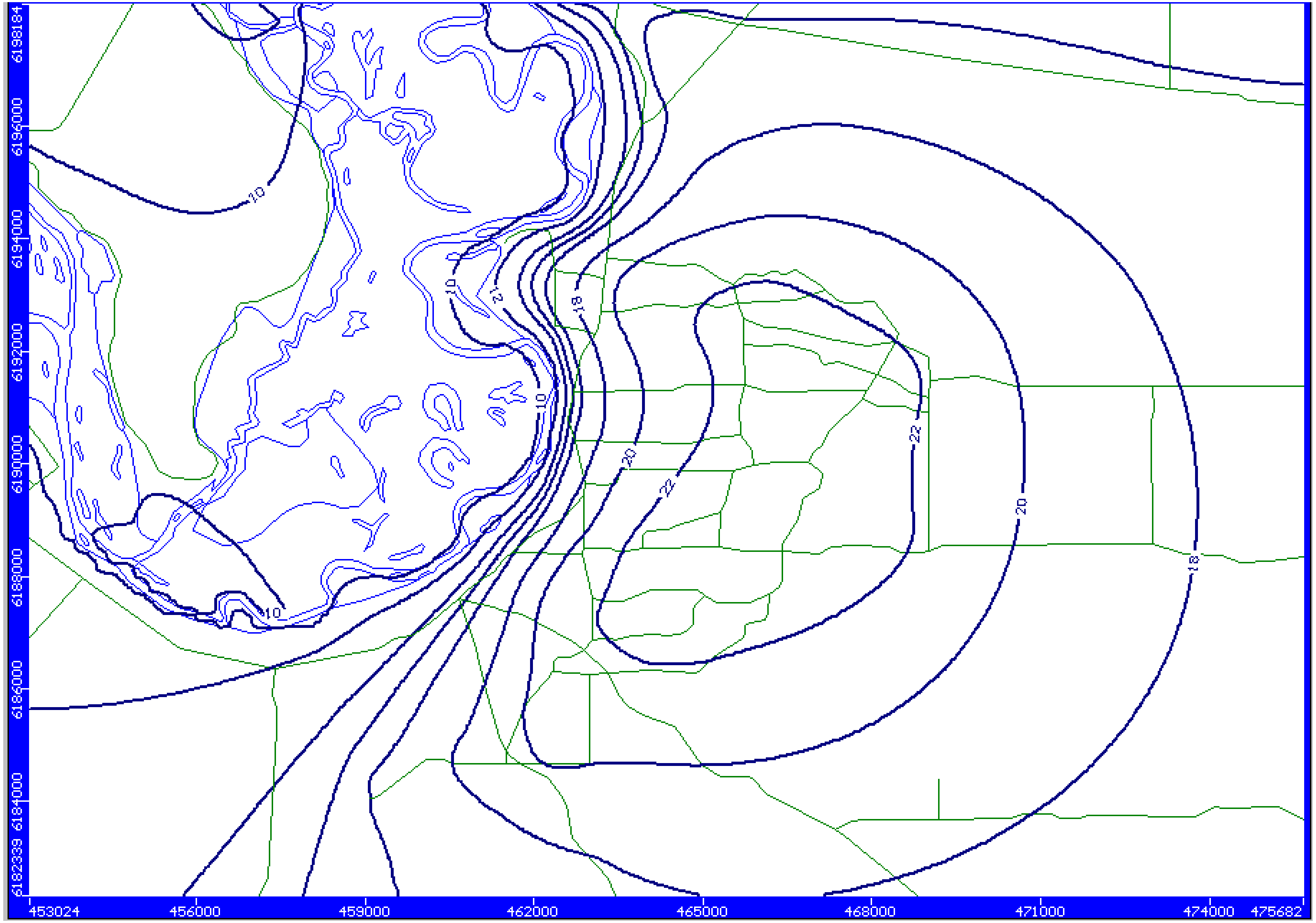
A-9 Sensitivity Test-1 Results (Loxton Area)

In this test all aquitards occurring between the Loxton Sands and Monoman Formation and the Upper Mannum Formation were removed from the entire model to test the hypothesis that the dominant contribution of salt to the River Murray occurs from the Upper Mannum Formation.

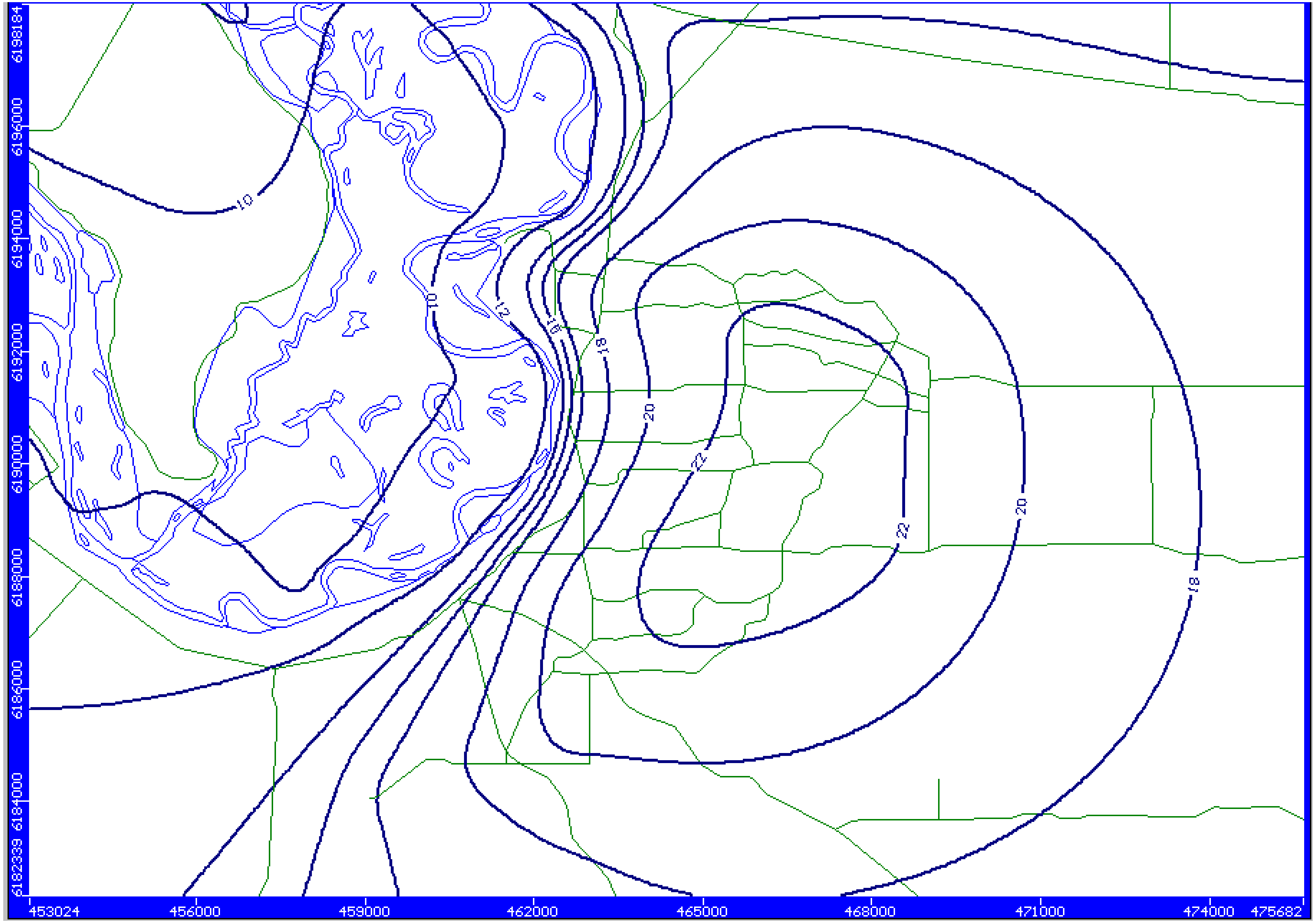
- Modelled potentiometric head contours (Loxton Area).
- Predicted lateral salt load (tonnes/day).
- Predicted upward salt load (tonnes/day).
- Predicted total salt load (tonnes/day).



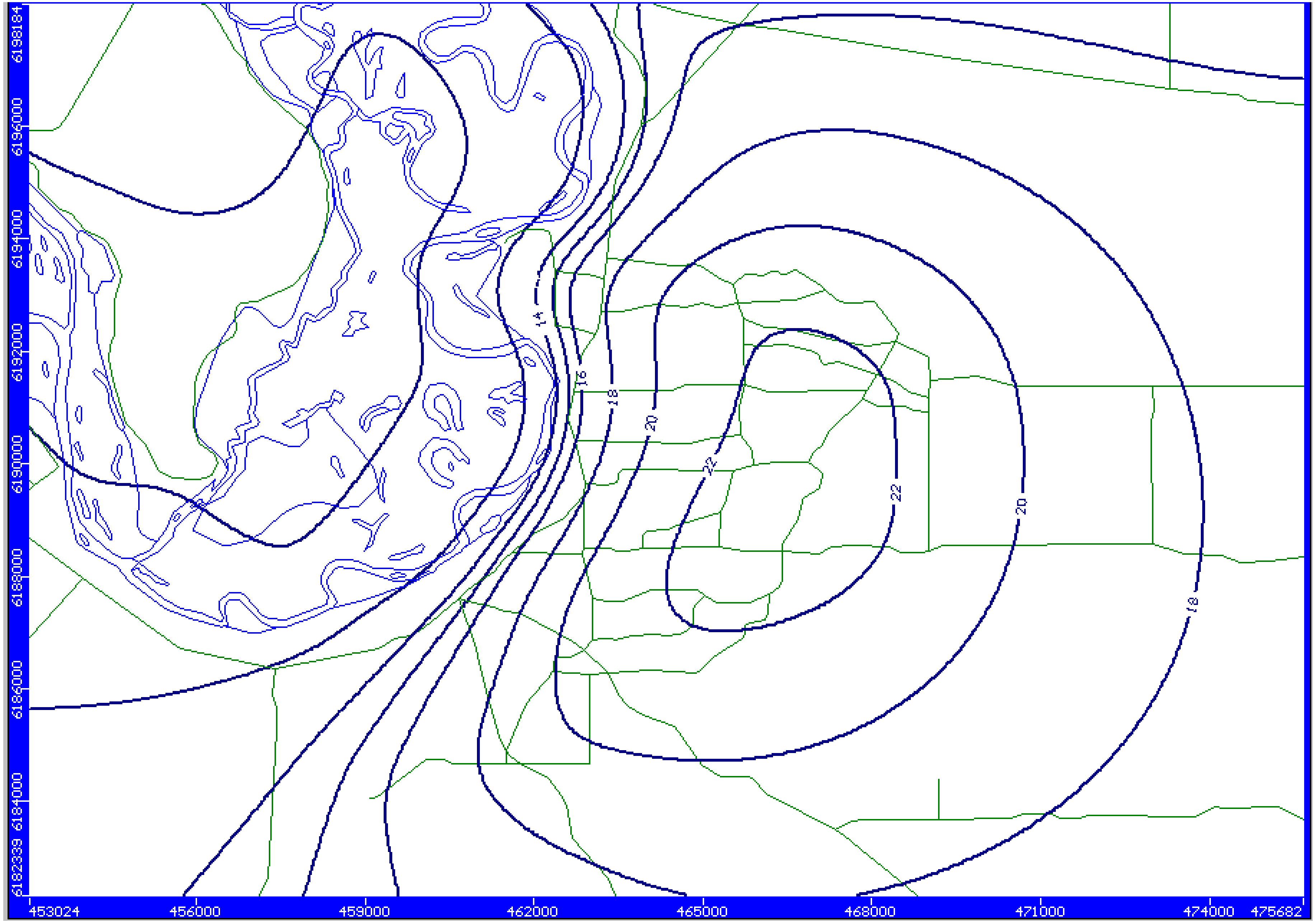
Appendix A-9-1 Modelled potentiometric surface in Layer-1 (Loxton Sands and Monoman Formation)



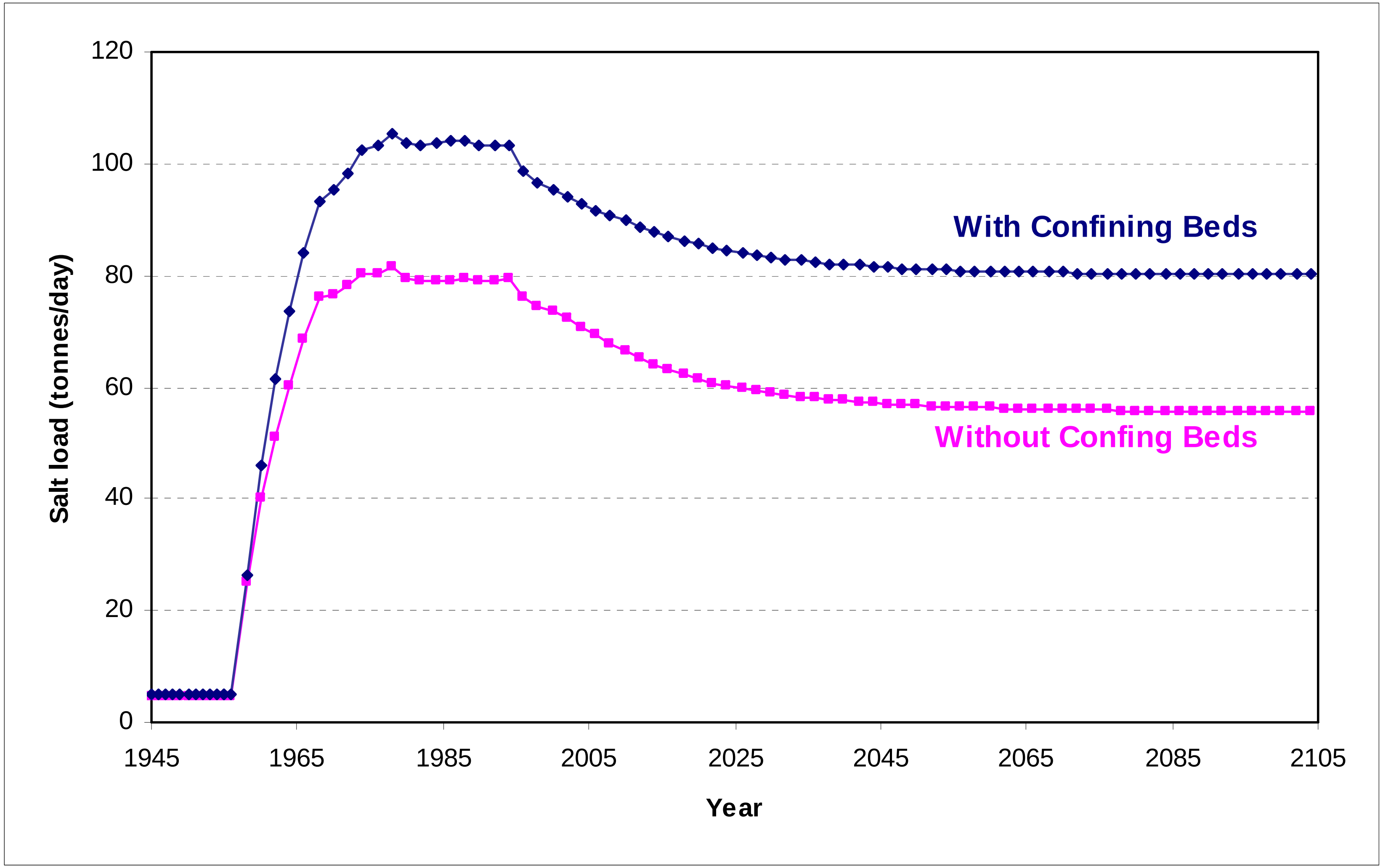
Appendix A-9-2 Modelled potentiometric surface in Layer-3 (Pata Formation)



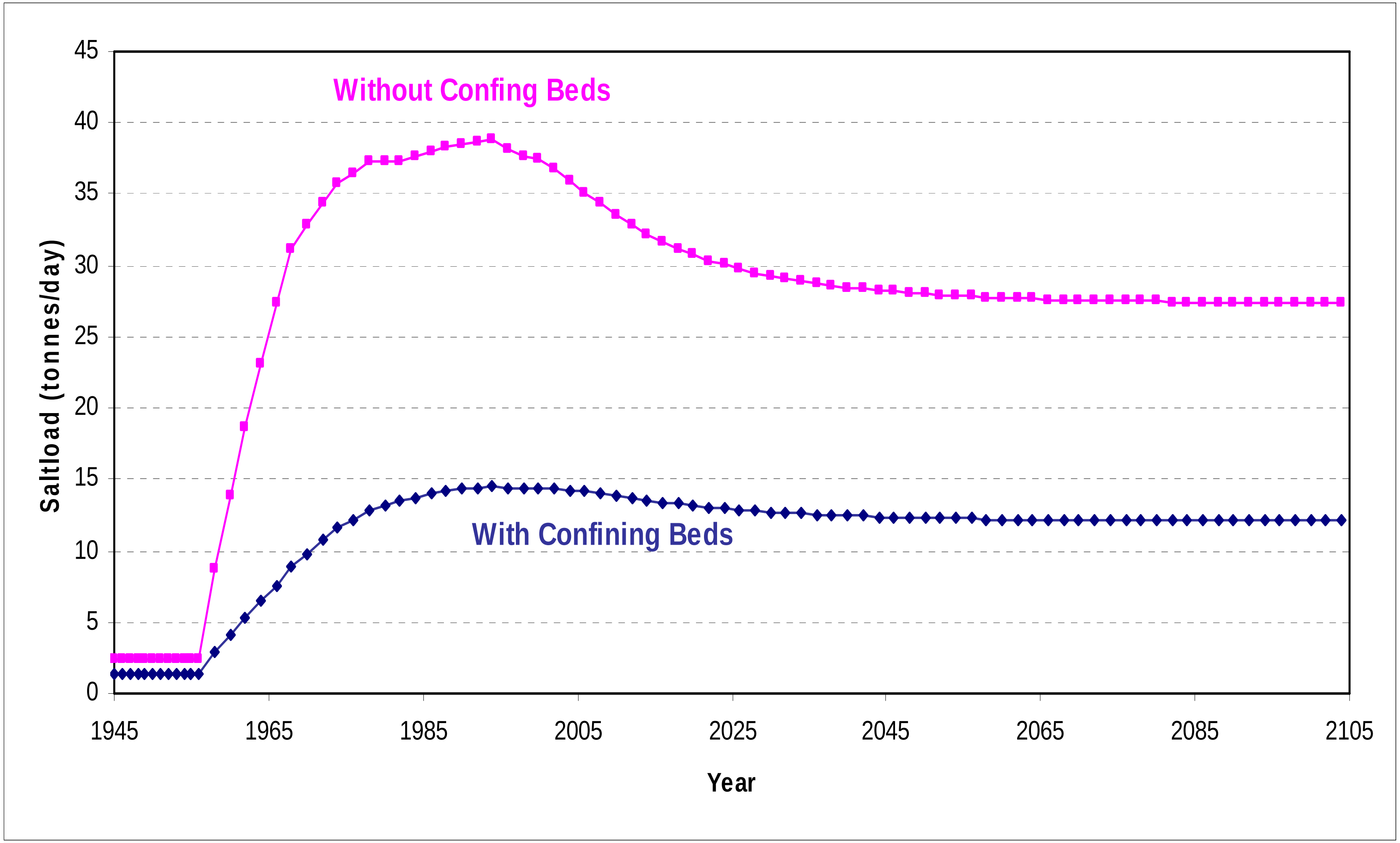
Appendix A-9-3 Modelled potentiometric surface in Layer-5 (Glenforslan Formation)



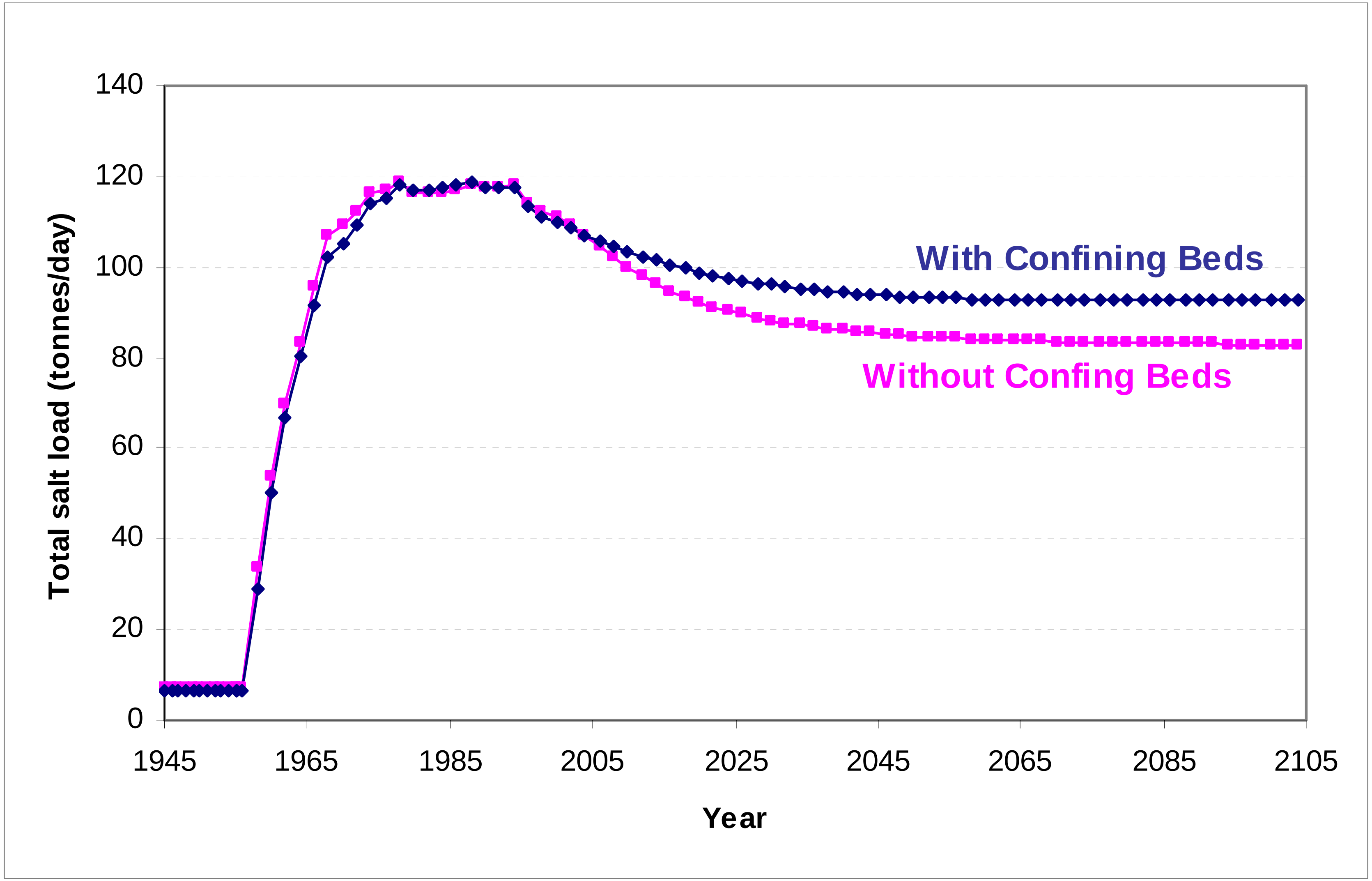
Appendix A-9-4 Modelled potentiometric surface in Layer-7 (Upper Mannum)



Appendix A-9-5 Graph of comparison predicted total lateral salt load entering the River Murray in Loxton Area



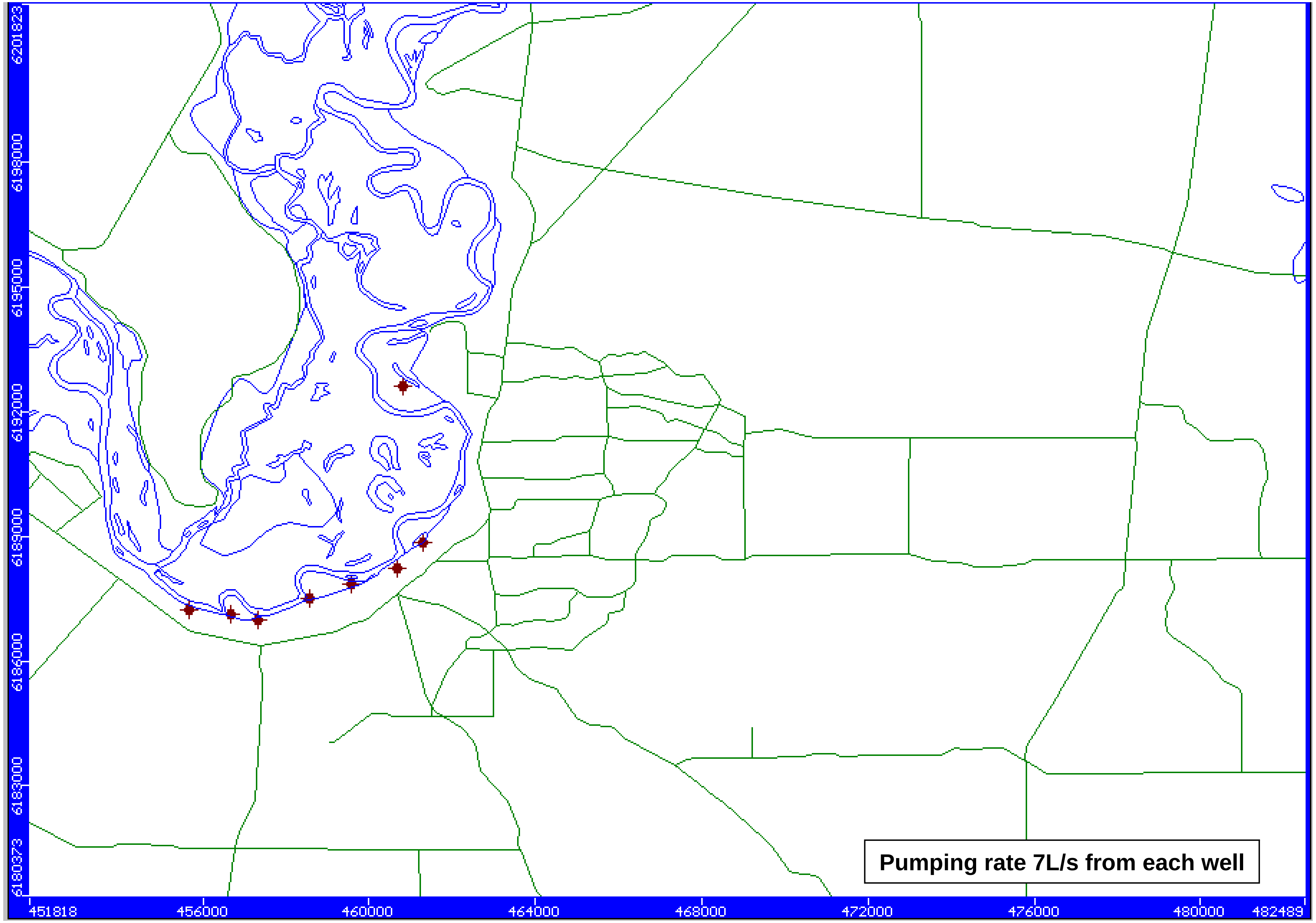
Appendix A-9-6 Graph of comparison predicted total upward salt load entering the River Murray in Loxton Area



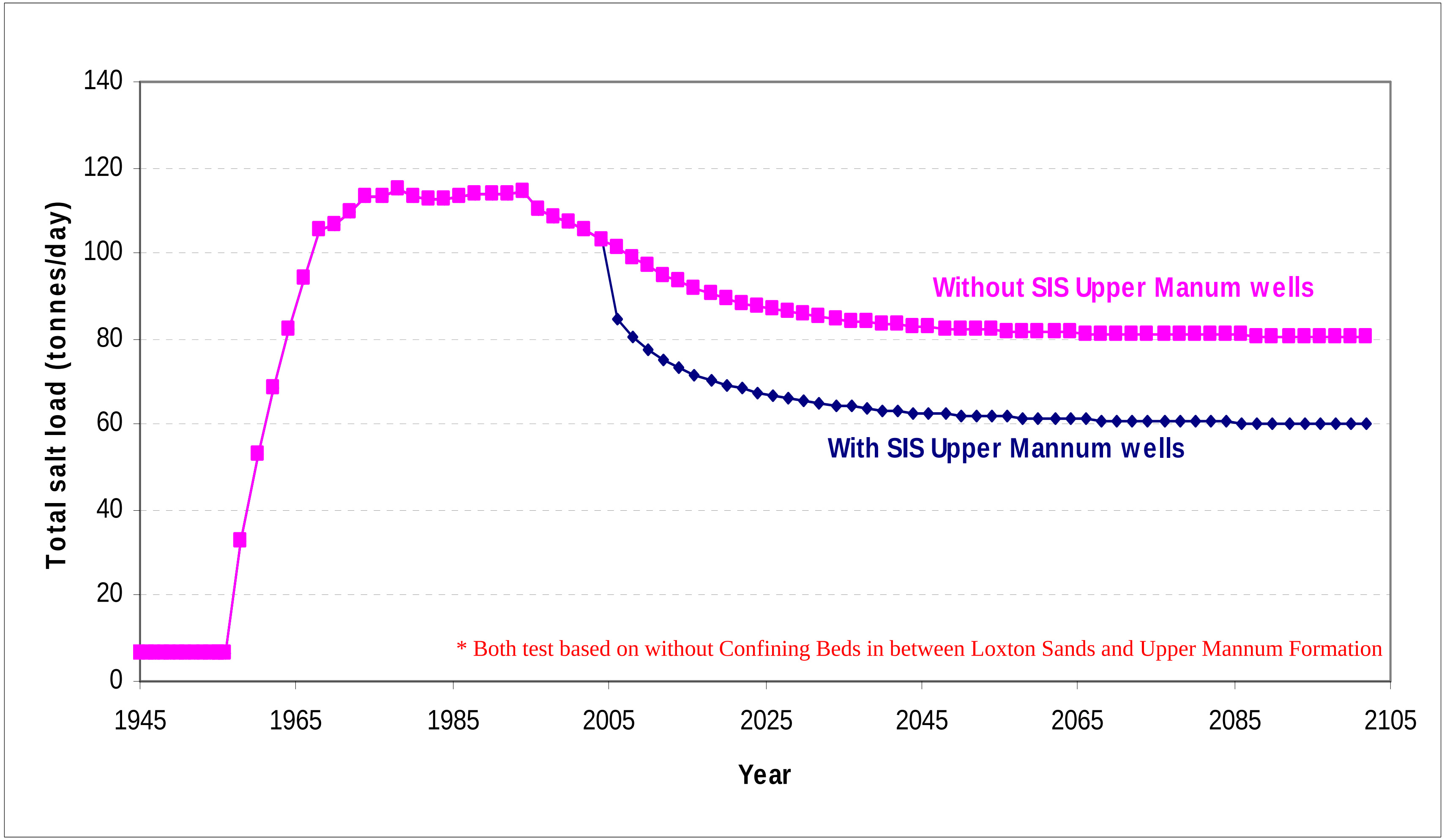
Appendix A-9-5 Graph of comparison predicted total salt load entering the River Murray in Loxton Area

A-10 Sensitivity Test-2 Results (Loxton Area)

- Location of Upper Mannum SIS wells.
- Predicted total salt load (tonnes/day).



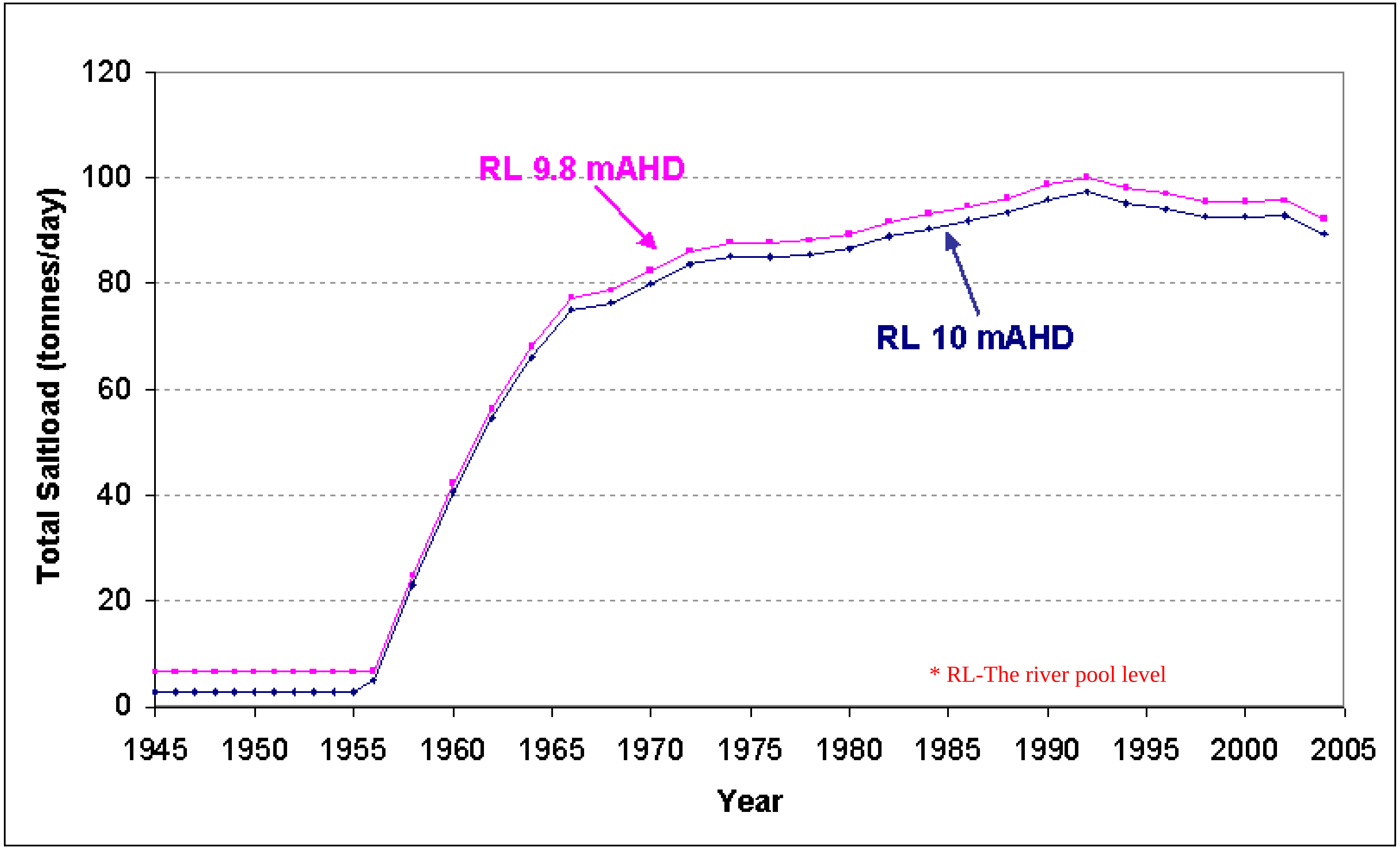
Appendix A-10-1 Locations of Upper Munnum SIS wells proposed by AWE 2003



Appendix A-10-2 Graph of comparison predicted total salt load entering the River Murray in Loxton Area

A-11 Sensitivity Test-3 Results (Loxton Area)

- Predicted total salt load (tonnes/day).

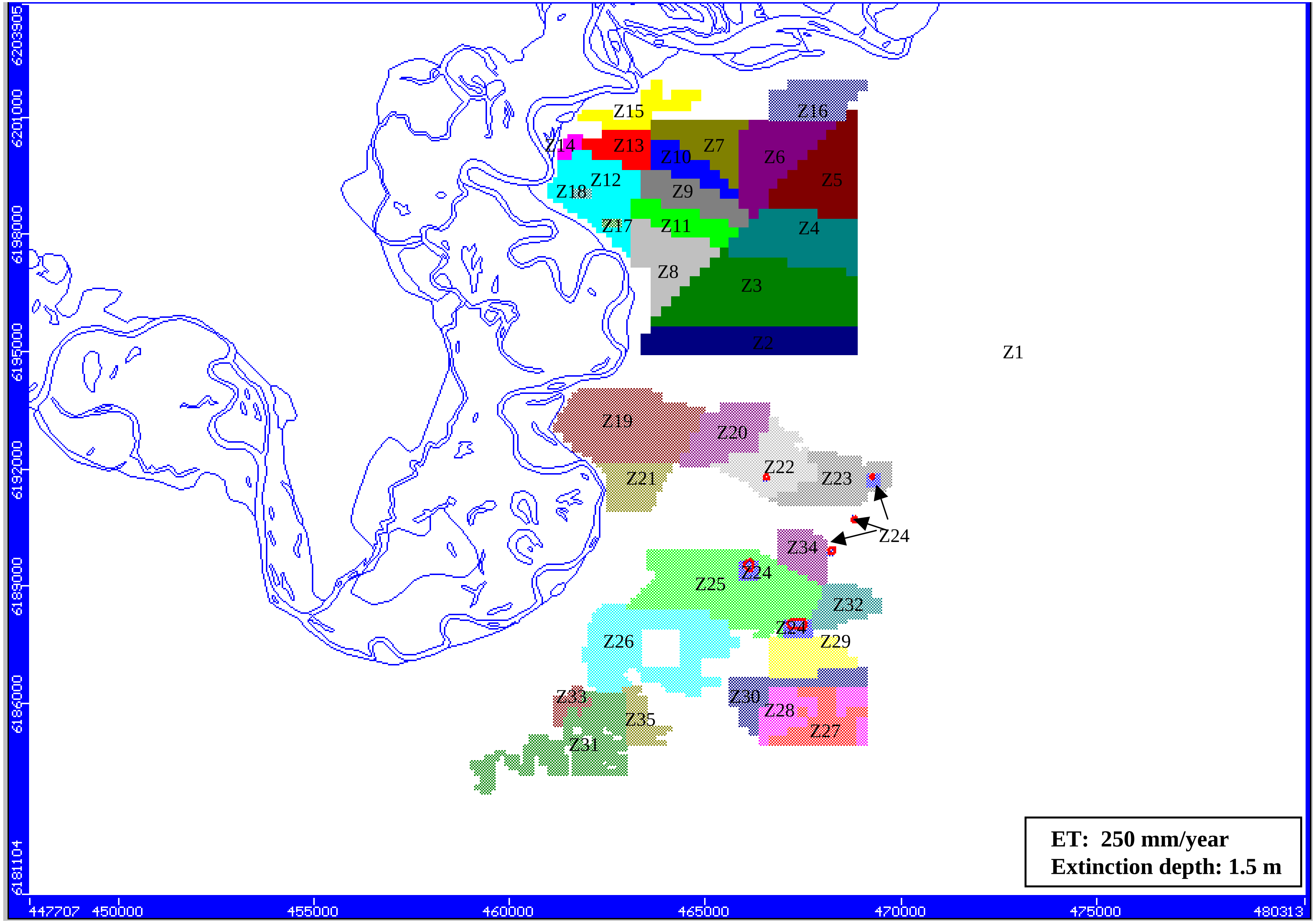


Appendix A-11 Graph of comparison predicted total salt load entering the River Murray in Loxton Area

13.2 APPENDIX B

B-1 Model Recharge (Bookpurnong Area)

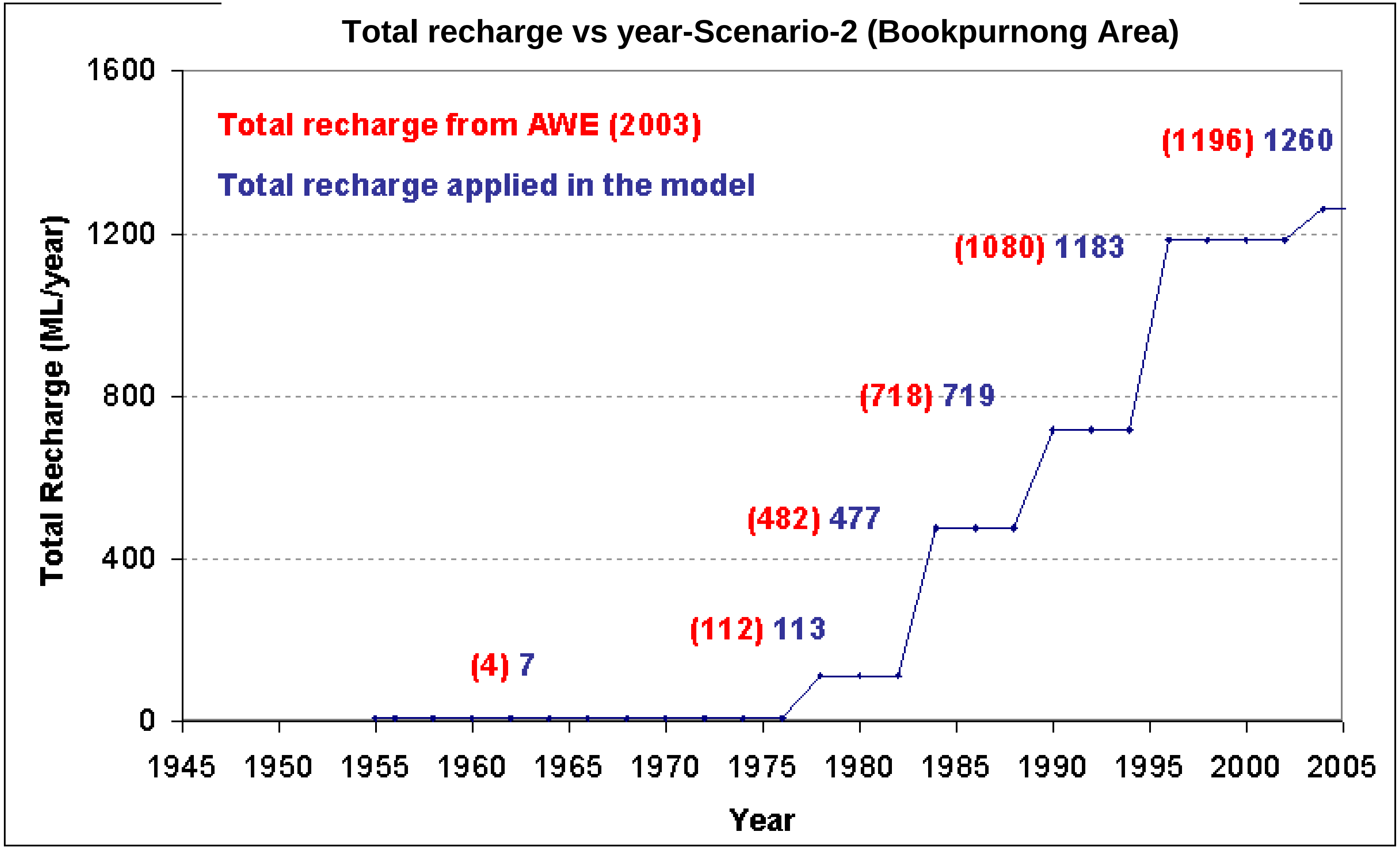
- Model recharge zones.
- Zone number and recharge rates (mm/year).
- Total recharge volumes (ML/year).



Appendix B-1-1 Model recharge zones

Day	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12	Zone 13	Zone 14	Zone 15	Zone 16	Zone 17	Zone 18	Model year
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1960
2555	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1962
3285	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1964
4015	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1966
4745	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1968
5475	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1970
6205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1972
6935	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1974
7665	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1976
8395	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1978
9125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1980
9855	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1982
10585	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1984
11315	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1986
12045	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1988
12775	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1990
13505	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1992
14235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1994
14965	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1996
15695	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1998
16425	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	2000
17155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	135.2	0.1	0.1	0.1	135.2	0.1	135.2	135.2	0.1	1270.1	187.9	2002
17885	0.1	0.1	0.1	0.1	0.1	0.1	0.1	135.2	0.1	0.1	0.1	135.2	0.1	135.2	135.2	0.1	1270.1	187.9	2004

Appendix B-1-2a Model recharge zones and recharge rates (mm/year) Scenario-2 (Bookpurnong Area)



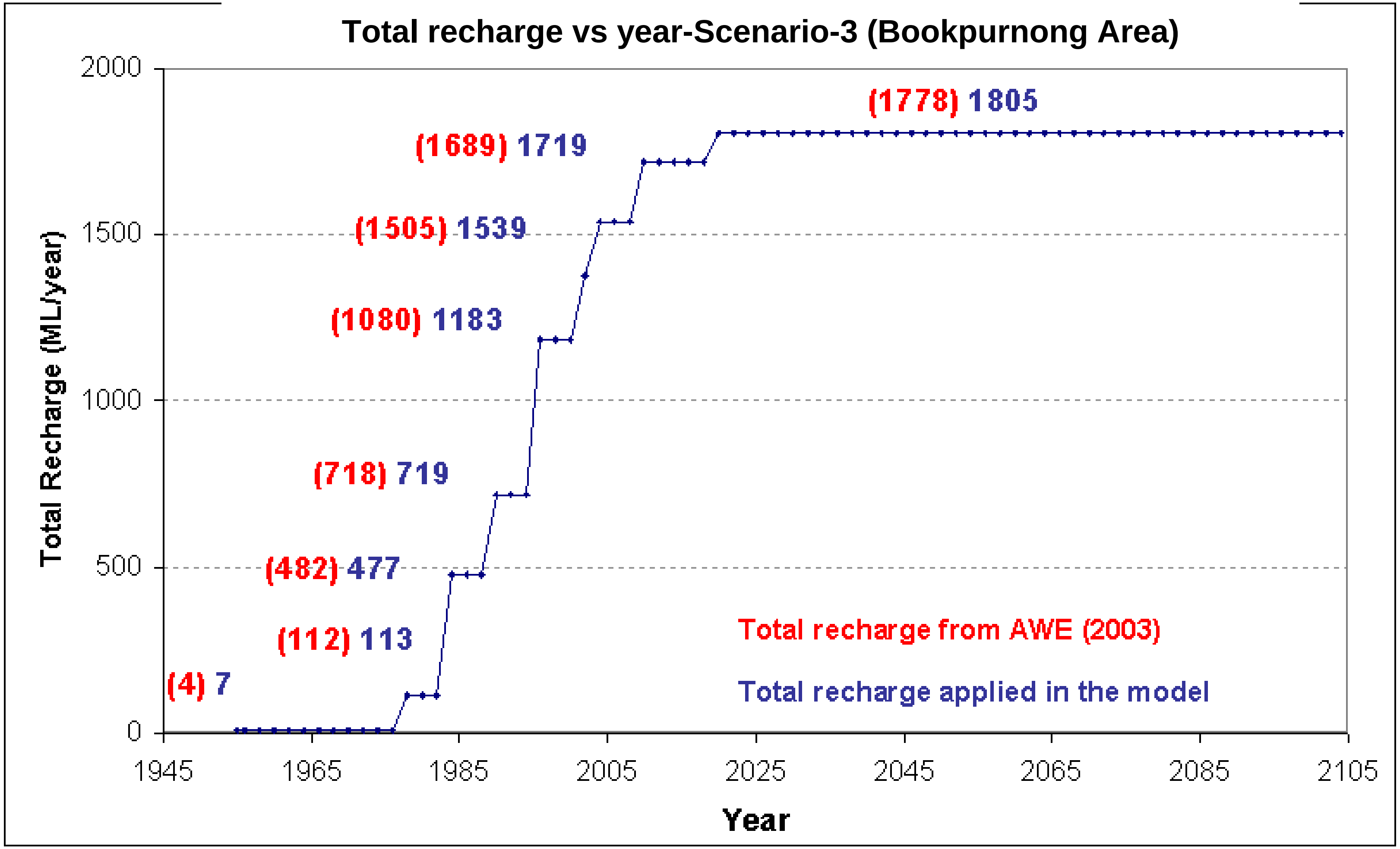
Appendix B-1-2b Total recharge volume to the Loxton Sands from all sources in Scenario-2 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1960
2555	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1962
3285	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1964
4015	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1966
4745	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1968
5475	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1970
6205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1972
6935	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1974
7665	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1976
8395	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1978
9125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1980
9855	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1982
10585	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1984
11315	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1986
12045	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1988
12775	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1990
13505	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1992
14235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1994
14965	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1996
15695	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1998
16425	0.1	0.1	0.1	0.1	0.1	0.1	0.1	135.2	0.1	0.1	0.1	135.2	0.1	135.2	135.2	0.1	2043.5	355.0	2000
17155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	1064.9	177.5	2002
17885	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	1064.9	177.5	2004
18615	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	1064.9	177.5	2006
19345	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	1064.9	177.5	2008
20075	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	1064.9	177.5	2010
20805	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	1064.9	177.5	2012
21535	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	1064.9	177.5	2014
22265	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	1064.9	177.5	2016
22995	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2018
23725	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2020
24455	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2022
25185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2024
25915	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2026
26645	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2028

Appendix B-1-3a Recharge zones and rates (mm/year) in Scenario-3 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
27375	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2030
28105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2032
28835	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2034
29565	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2036
30295	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2038
31025	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2040
31755	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2042
32485	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2044
33215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2046
33945	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2048
34675	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2050
35405	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2052
36135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2054
36865	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2056
37595	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2058
38325	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2060
39055	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2062
39785	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2064
40515	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2066
41245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2068
41975	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2070
42705	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2072
43435	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2074
44165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2076
44895	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2078
45625	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2080
46355	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2082
47085	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2084
47815	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2086
48545	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2088
49275	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2090
50005	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2092
50735	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2094
51465	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2096
52195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2098
52925	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2100
53655	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2102
54385	0.1	0.1	0.1	0.1	0.1	0.1	0.1	207.5	0.1	0.1	0.1	207.5	0.1	207.5	207.5	0.1	1064.9	177.5	2104

Appendix B-1-3b Recharge zones and rates (mm/year) in Scenario-3 (Bookpurnong Area)



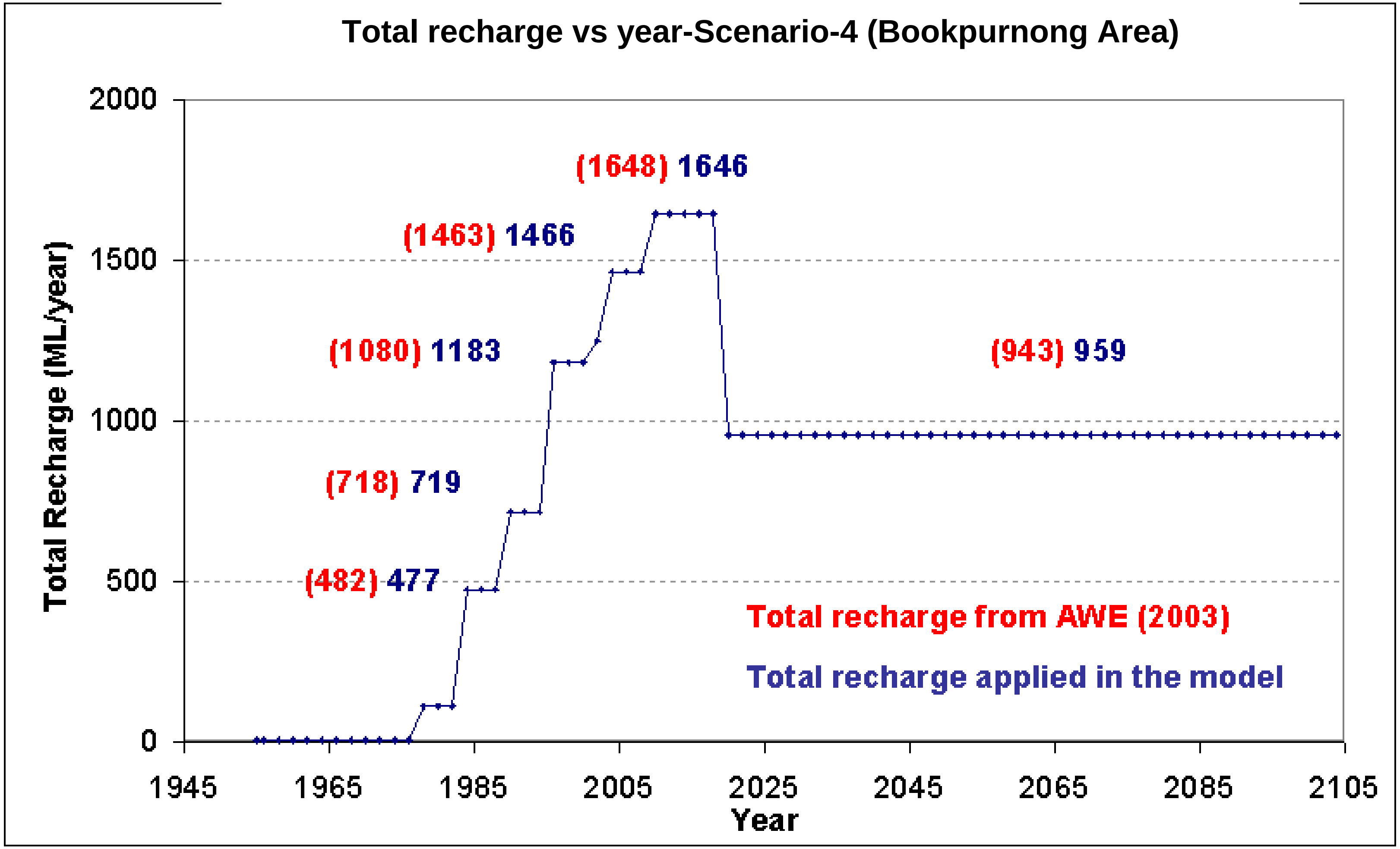
Appendix B-1-3c Total recharge volume to the Loxton Sands from all sources in Scenario-3 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1960
2555	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1962
3285	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1964
4015	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1966
4745	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1968
5475	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1970
6205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1972
6935	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1974
7665	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1976
8395	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1978
9125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1980
9855	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1982
10585	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1984
11315	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1986
12045	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1988
12775	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1990
13505	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1992
14235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1994
14965	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1996
15695	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1998
16425	0.1	0.1	0.1	0.1	0.1	0.1	0.1	135.2	0.1	0.1	0.1	135.2	0.1	135.2	135.2	0.1	1199.5	187.9	2000
17155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	563.8	94.0	2002
17885	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	563.8	94.0	2004
18615	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	563.8	94.0	2006
19345	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2008
20075	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2010
20805	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2012
21535	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2014
22265	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2016
22995	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2018
23725	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2020
24455	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2022
25185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2024
25915	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2026
26645	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2028

Appendix B-1-4a Recharge zones and rates (mm/year) in Scenario-4 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
27375	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2030
28105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2032
28835	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2034
29565	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2036
30295	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2038
31025	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2040
31755	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2042
32485	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2044
33215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2046
33945	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2048
34675	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2050
35405	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2052
36135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2054
36865	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2056
37595	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2058
38325	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2060
39055	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2062
39785	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2064
40515	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2066
41245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2068
41975	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2070
42705	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2072
43435	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2074
44165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2076
44895	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2078
45625	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2080
46355	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2082
47085	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2084
47815	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2086
48545	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2088
49275	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2090
50005	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2092
50735	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2094
51465	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2096
52195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2098
52925	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2100
53655	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2102
54385	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2104

Appendix B-1-4b Recharge zones and rates (mm/year) in Scenario-4 (Bookpurnong Area)



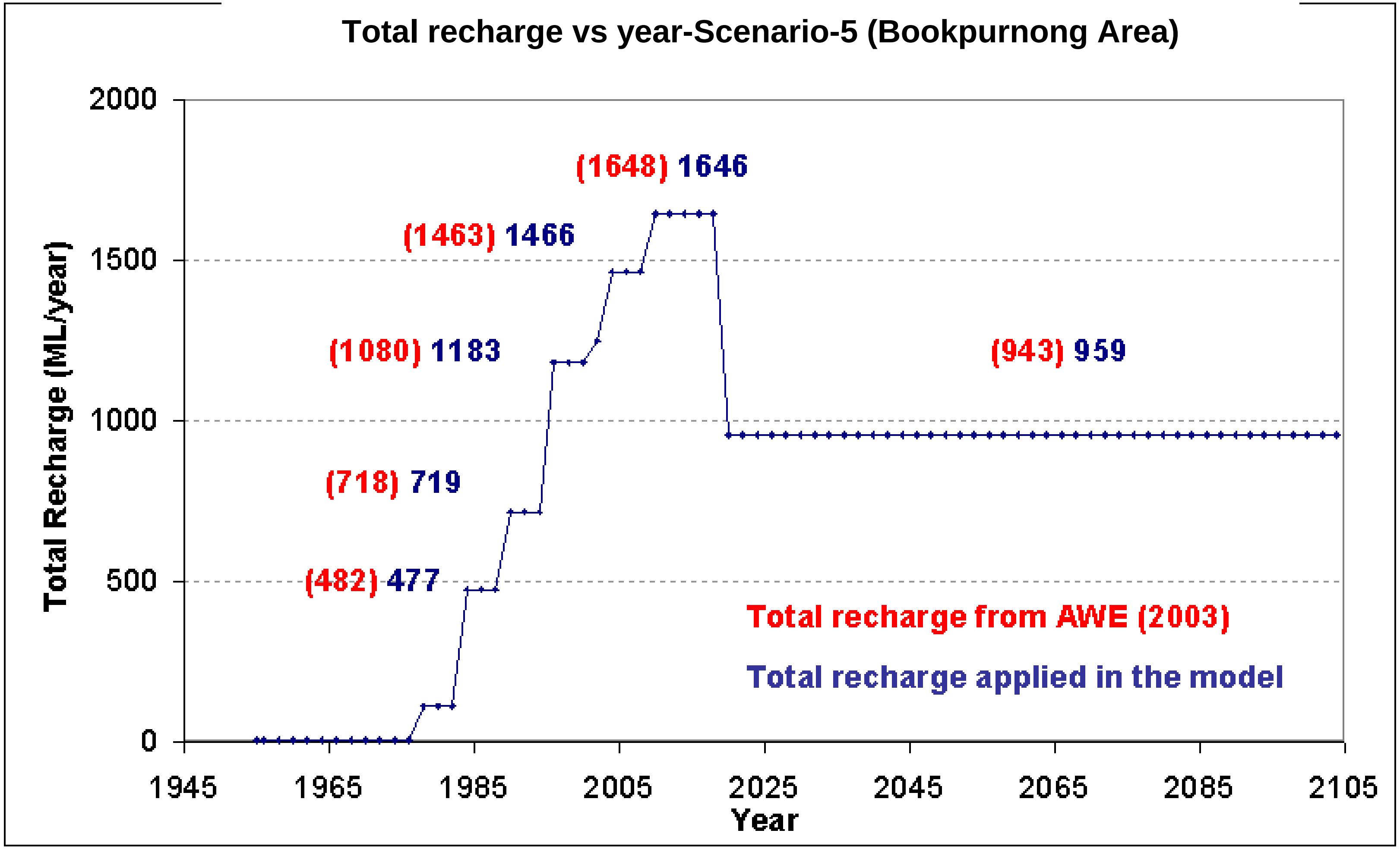
Appendix B-1-4c Total recharge volume to the Loxton Sands from all sources in Scenario-4 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1960
2555	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1962
3285	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1964
4015	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1966
4745	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1968
5475	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1970
6205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1972
6935	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1974
7665	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1976
8395	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1978
9125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1980
9855	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1982
10585	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1984
11315	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1986
12045	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1988
12775	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1990
13505	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1992
14235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1994
14965	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1996
15695	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1998
16425	0.1	0.1	0.1	0.1	0.1	0.1	0.1	135.2	0.1	0.1	0.1	135.2	0.1	135.2	135.2	0.1	1199.5	187.9	2000
17155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	563.8	94.0	2002
17885	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	563.8	94.0	2004
18615	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	563.8	94.0	2006
19345	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2008
20075	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2010
20805	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2012
21535	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2014
22265	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2016
22995	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2018
23725	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2020
24455	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2022
25185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2024
25915	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2026
26645	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2028

Appendix B-1-5a Recharge zones and rates (mm/year) in Scenario-5 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
27375	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2030
28105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2032
28835	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2034
29565	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2036
30295	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2038
31025	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2040
31755	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2042
32485	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2044
33215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2046
33945	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2048
34675	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2050
35405	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2052
36135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2054
36865	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2056
37595	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2058
38325	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2060
39055	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2062
39785	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2064
40515	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2066
41245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2068
41975	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2070
42705	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2072
43435	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2074
44165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2076
44895	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2078
45625	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2080
46355	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2082
47085	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2084
47815	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2086
48545	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2088
49275	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2090
50005	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2092
50735	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2094
51465	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2096
52195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2098
52925	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2100
53655	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2102
54385	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2104

Appendix B-1-5b Recharge zones and rates (mm/year) in Scenario-5 (Bookpurnong Area)



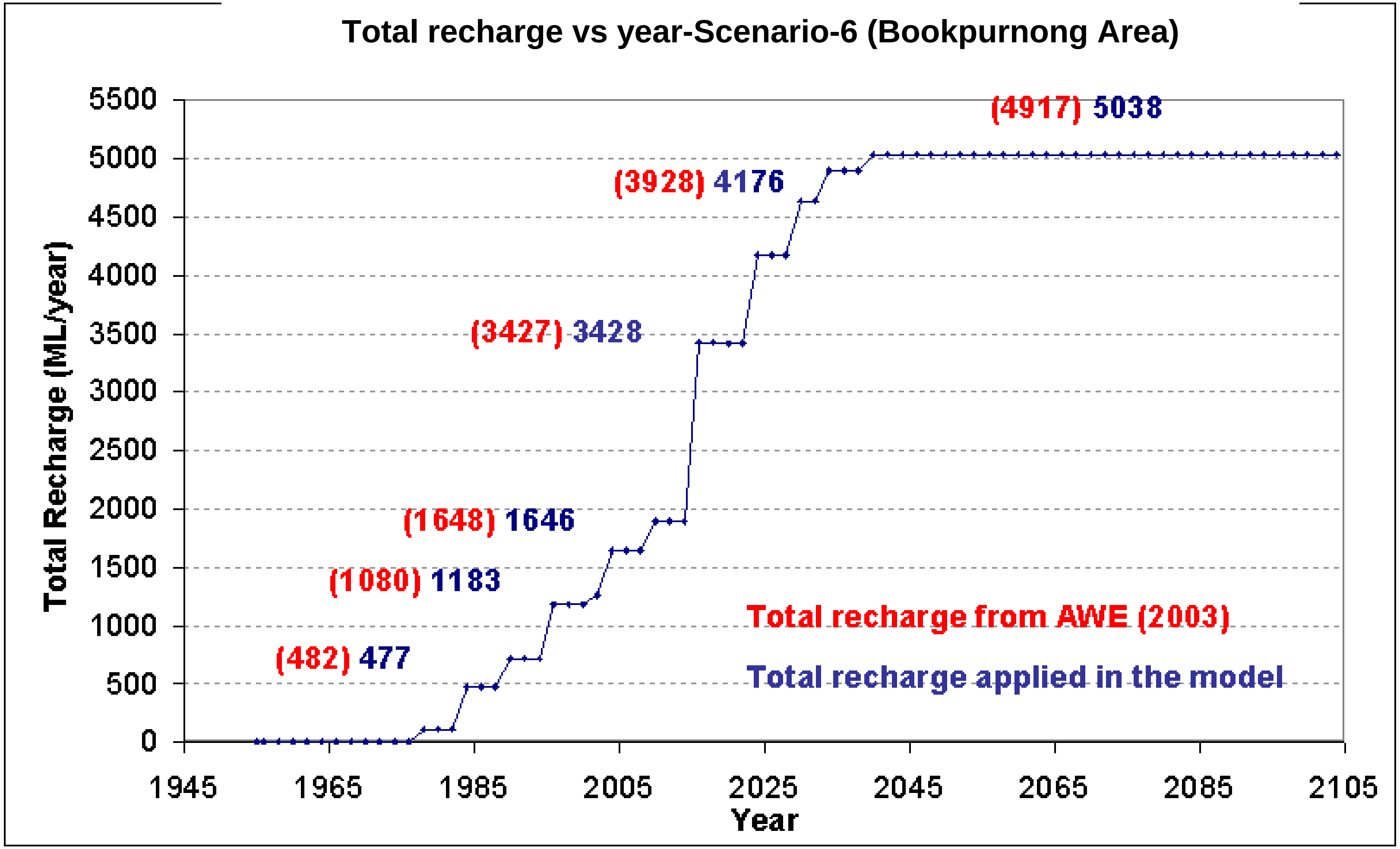
Appendix B-1-5c Total recharge volume to the Loxton Sands from all sources in Scenario-5 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1960
2555	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1962
3285	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1964
4015	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1966
4745	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1968
5475	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1970
6205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1972
6935	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1974
7665	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1976
8395	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1978
9125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1980
9855	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1982
10585	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1984
11315	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1986
12045	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1988
12775	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1990
13505	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1992
14235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1994
14965	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1996
15695	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1998
16425	0.1	0.1	0.1	0.1	0.1	0.1	0.1	135.2	0.1	0.1	0.1	135.2	0.1	135.2	135.2	0.1	1270.1	187.9	2000
17155	0.1	1.0	5.4	0.1	0.1	1.0	2.4	173.9	0.1	4.0	7.0	173.9	7.0	173.9	173.9	4.1	1199.5	211.7	2002
17885	0.1	1.0	5.4	0.1	0.1	1.0	2.4	173.9	0.1	4.0	7.0	173.9	7.0	173.9	173.9	4.1	1199.5	211.7	2004
18615	0.1	1.0	5.4	0.1	0.1	1.0	2.4	173.9	0.1	4.0	7.0	173.9	7.0	173.9	173.9	4.1	1199.5	211.7	2006
19345	0.1	2.0	6.0	0.5	0.5	2.1	2.4	202.2	0.7	4.0	8.9	202.2	7.0	202.2	202.2	6.8	1199.5	211.7	2008
20075	0.1	2.0	6.0	0.5	0.5	2.1	2.4	202.2	0.7	4.0	8.9	202.2	7.0	202.2	202.2	6.9	1199.5	211.7	2010
20805	0.1	2.0	6.0	0.5	0.5	2.1	2.4	202.2	0.7	4.0	8.9	202.2	7.0	202.2	202.2	6.9	1199.5	211.7	2012
21535	0.1	2.3	36.6	1.2	1.3	2.2	2.4	357.1	2.0	4.0	9.1	357.1	51.0	357.1	357.1	11.3	1199.5	211.7	2014
22265	0.1	2.3	36.6	1.2	1.3	2.2	2.4	357.1	2.0	4.0	9.1	357.1	51.0	357.1	357.1	11.3	1199.5	211.7	2016
22995	0.1	10.5	101.8	1.7	1.8	6.2	32.2	234.5	3.3	55.1	71.1	234.5	139.0	234.5	234.5	39.2	1199.5	211.7	2018
23725	0.1	10.5	101.8	1.7	1.8	6.2	32.2	234.5	3.3	55.1	71.1	234.5	139.0	234.5	234.5	39.2	1199.5	211.7	2020
24455	0.1	22.1	109.0	2.2	2.3	21.7	47.1	274.5	4.0	80.7	143.0	274.5	139.0	274.5	274.5	85.3	1199.5	211.7	2022
25185	0.1	22.1	109.0	2.2	2.3	21.7	47.1	274.5	4.0	80.7	143.0	274.5	139.0	274.5	274.5	85.3	1199.5	211.7	2024
25915	0.1	22.1	109.0	2.2	2.3	21.7	47.1	274.5	4.0	80.7	143.0	274.5	139.0	274.5	274.5	85.3	1199.5	211.7	2026
26645	0.1	38.2	119.1	11.4	12.2	40.7	47.1	274.5	17.6	80.7	177.8	274.5	139.0	274.5	274.5	134.2	1199.5	211.7	2028

Appendix B-1-6a Recharge zones and rates (mm/year) in Scenario-6 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
27375	0.1	38.2	119.1	11.4	12.2	40.7	47.1	274.5	17.6	80.7	177.8	274.5	139.0	274.5	274.5	134.2	1199.5	211.7	2030
28105	0.1	45.6	127.0	22.8	24.3	43.6	47.1	274.5	39.7	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2032
28835	0.1	45.6	127.0	22.8	24.3	43.6	47.1	274.5	39.7	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2034
29565	0.1	45.6	127.0	22.8	24.3	43.6	47.1	274.5	39.7	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2036
30295	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2038
31025	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2040
31755	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2042
32485	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2044
33215	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2046
33945	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2048
34675	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2050
35405	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2052
36135	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2054
36865	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2056
37595	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2058
38325	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2060
39055	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2062
39785	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2064
40515	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2066
41245	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2068
41975	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2070
42705	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2072
43435	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2074
44165	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2076
44895	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2078
45625	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2080
46355	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2082
47085	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2084
47815	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2086
48545	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2088
49275	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2090
50005	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2092
50735	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2094
51465	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2096
52195	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2098
52925	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2100
53655	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2102
54385	0.1	45.6	128.1	34.2	36.5	43.6	47.1	274.5	61.8	80.7	182.7	274.5	139.0	274.5	274.5	142.1	1199.5	211.7	2104

Appendix B-1-6b Recharge zones and rates (mm/year) in Scenario-6 (Bookpurnong Area)



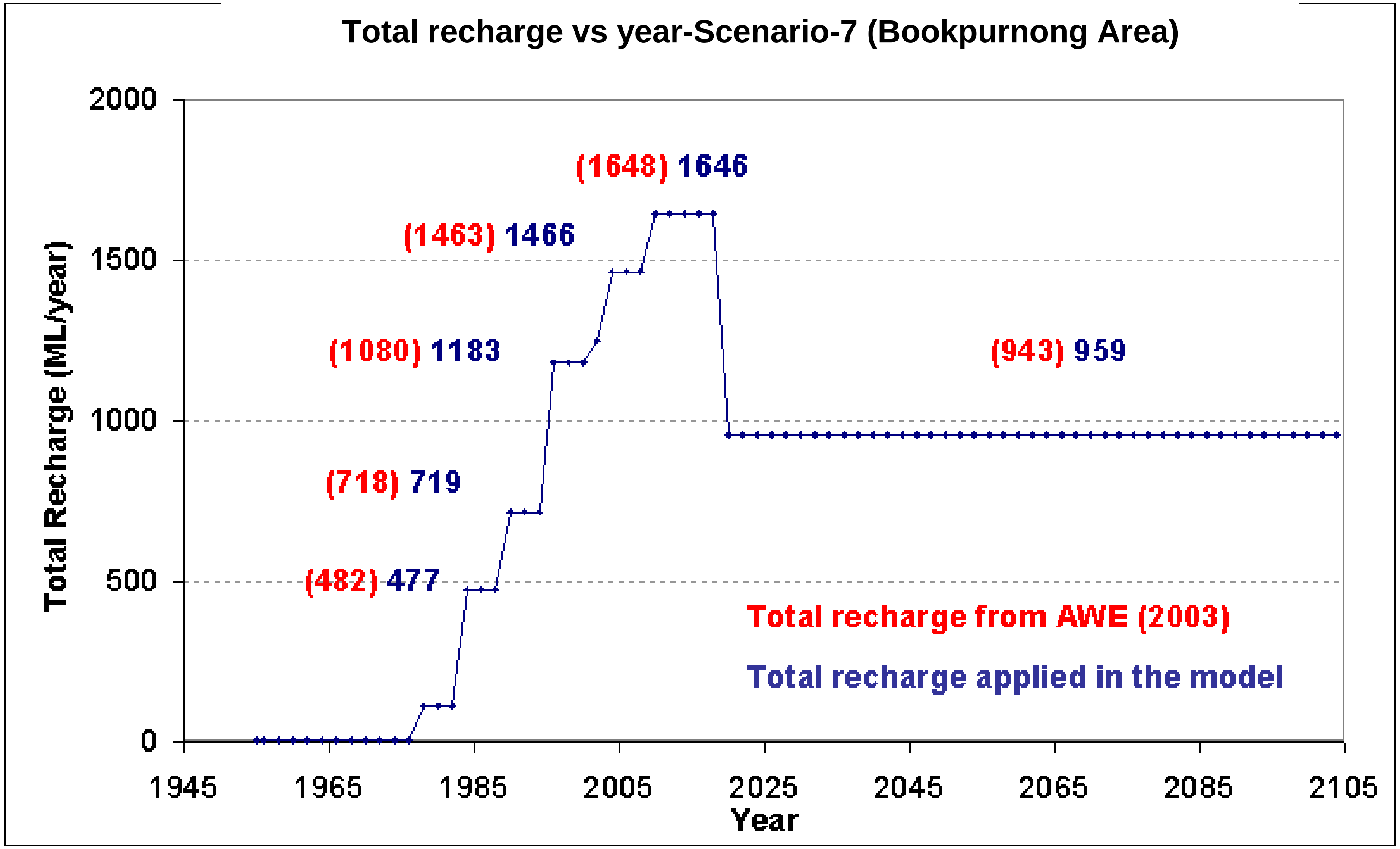
Appendix B-1-6c Total recharge volume to the Loxton Sands from all sources in Scenario-6 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1955
365	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1956
1095	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1958
1825	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1960
2555	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1962
3285	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1964
4015	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1966
4745	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1968
5475	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1970
6205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1972
6935	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1974
7665	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1976
8395	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1978
9125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.6	0.1	0.1	0.1	5.6	0.1	5.6	5.6	0.1	374.4	124.8	1980
9855	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1982
10585	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1984
11315	0.1	0.1	0.1	0.1	0.1	0.1	0.1	40.4	0.1	0.1	0.1	40.4	0.1	40.4	40.4	0.1	900.6	300.2	1986
12045	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1988
12775	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1990
13505	0.1	0.1	0.1	0.1	0.1	0.1	0.1	66.2	0.1	0.1	0.1	66.2	0.1	66.2	66.2	0.1	1149.5	355.0	1992
14235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1994
14965	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1996
15695	0.1	0.1	0.1	0.1	0.1	0.1	0.1	110.7	0.1	0.1	0.1	110.7	0.1	110.7	110.7	0.1	2043.5	355.0	1998
16425	0.1	0.1	0.1	0.1	0.1	0.1	0.1	135.2	0.1	0.1	0.1	135.2	0.1	135.2	135.2	0.1	1199.5	187.9	2000
17155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	563.8	94.0	2002
17885	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	563.8	94.0	2004
18615	0.1	0.1	0.1	0.1	0.1	0.1	0.1	173.9	0.1	0.1	0.1	173.9	0.1	173.9	173.9	0.1	563.8	94.0	2006
19345	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2008
20075	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2010
20805	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2012
21535	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2014
22265	0.1	0.1	0.1	0.1	0.1	0.1	0.1	196.6	0.1	0.1	0.1	196.6	0.1	196.6	196.6	0.1	563.8	94.0	2016
22995	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2018
23725	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2020
24455	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2022
25185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2024
25915	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2026
26645	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2028

Appendix B-1-7a Recharge zones and rates (mm/year) in Scenario-7 (Bookpurnong Area)

Day	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Zone9	Zone10	Zone11	Zone12	Zone13	Zone14	Zone15	Zone16	Zone17	Zone18	Model year
27375	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2030
28105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2032
28835	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2034
29565	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2036
30295	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2038
31025	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2040
31755	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2042
32485	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2044
33215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2046
33945	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2048
34675	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2050
35405	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2052
36135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2054
36865	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2056
37595	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2058
38325	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2060
39055	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2062
39785	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2064
40515	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2066
41245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2068
41975	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2070
42705	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2072
43435	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2074
44165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2076
44895	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2078
45625	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2080
46355	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2082
47085	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2084
47815	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2086
48545	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2088
49275	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2090
50005	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2092
50735	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2094
51465	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2096
52195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2098
52925	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2100
53655	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2102
54385	0.1	0.1	0.1	0.1	0.1	0.1	0.1	109.9	0.1	0.1	0.1	109.9	0.1	109.9	109.9	0.1	563.8	94.0	2104

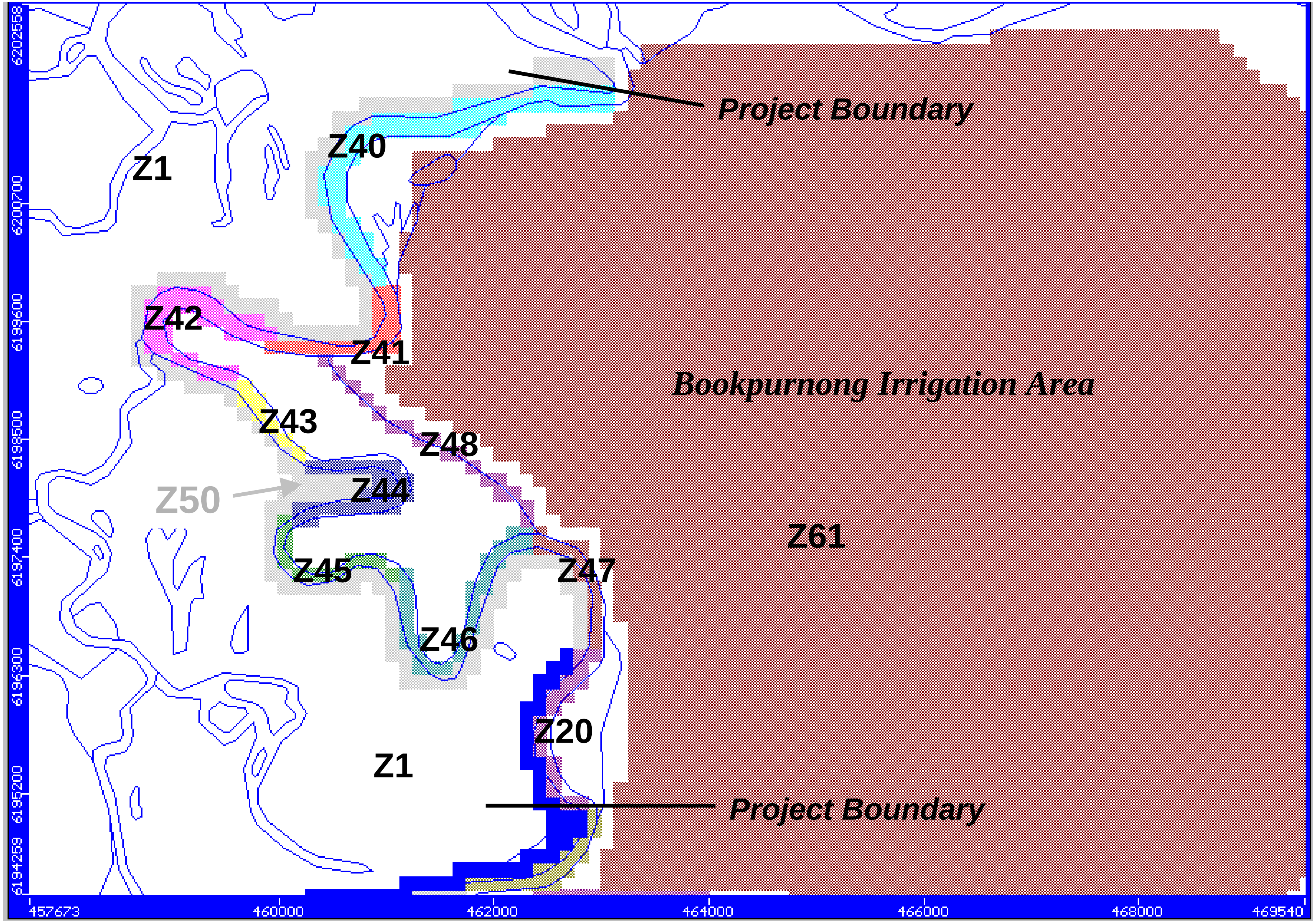
Appendix B-1-7b Recharge zones and rates (mm/year) in Scenario-7 (Bookpurnong Area)



Appendix B-1-7c Total recharge volume to the Loxton Sands from all sources in Scenario-7 (Bookpurnong Area)

B-2 Groundwater flux and salt load entering the River Murray Scenario-2 (Bookpurnong Area)

- Flow budget zones (Bookpurnong Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



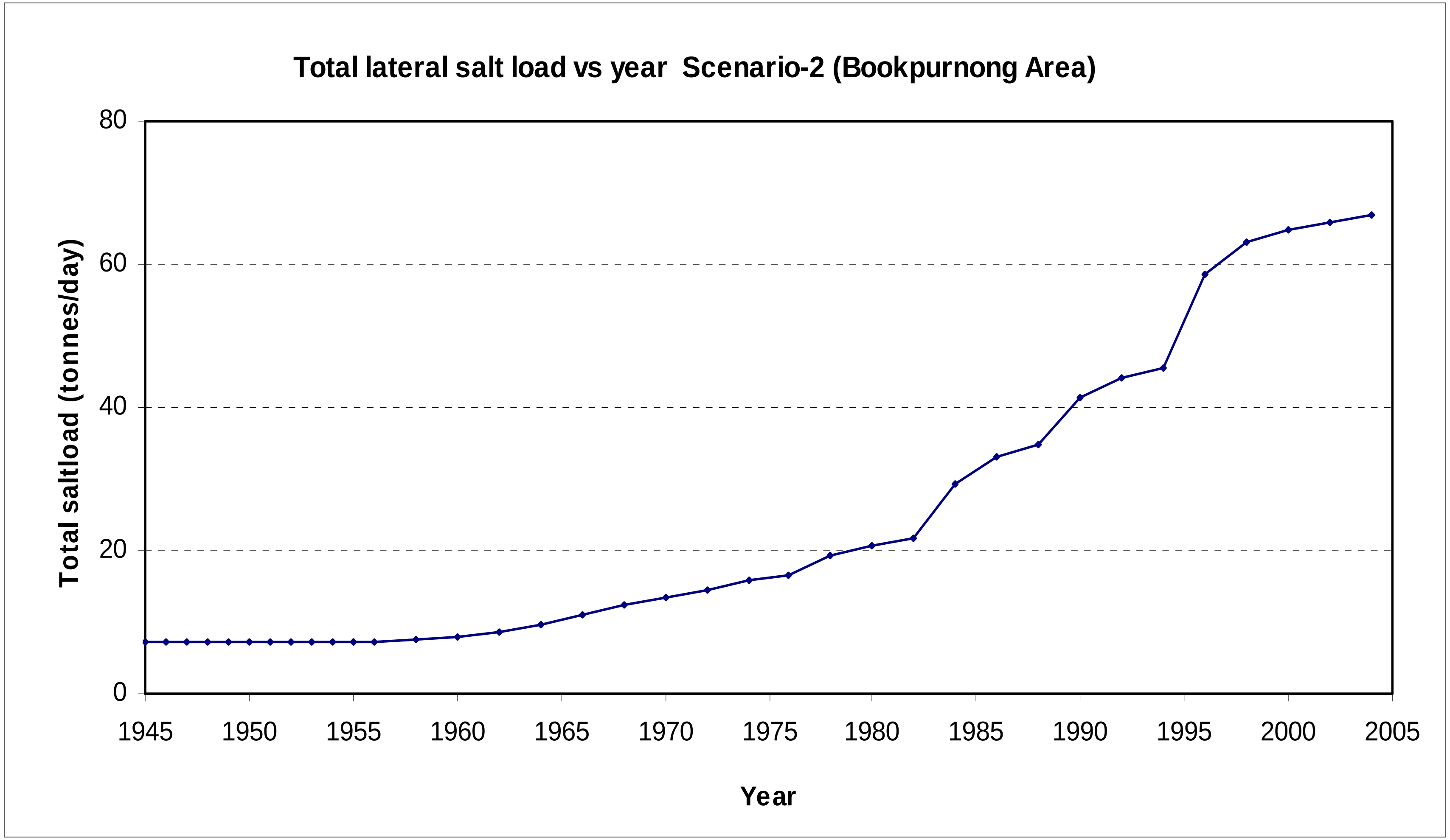
Appendix B-2-1 Flow budget zones in model Layer-1 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
30	1955	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
365	1956	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
1095	1958	0.0	87.9	0.0	0.0	28.4	0.0	14.8	70.6	0.0	47.1	249
1825	1960	0.0	88.5	0.0	0.0	29.9	0.0	15.6	73.7	0.0	57.6	265
2555	1962	0.0	89.3	0.0	0.0	31.7	0.0	16.6	78.3	0.0	73.4	289
3285	1964	0.0	90.2	0.0	0.0	33.7	0.0	17.8	84.1	0.0	97.0	323
4015	1966	0.0	91.2	0.0	0.0	35.8	0.0	19.0	91.2	0.0	127.6	365
4745	1968	0.0	92.2	0.0	0.0	37.7	0.0	20.2	99.1	0.0	159.1	408
5475	1970	0.0	93.2	0.0	0.0	39.7	0.0	21.4	107.5	0.0	188.4	450
6205	1972	0.0	94.2	0.0	0.0	41.6	0.0	22.5	116.1	0.0	214.2	488
6935	1974	0.0	95.2	0.0	0.0	43.4	0.0	23.7	124.2	0.0	236.6	523
7665	1976	0.0	96.1	0.0	0.0	45.0	0.0	24.7	131.8	0.0	255.1	553
8395	1978	0.0	106.0	0.0	0.0	64.6	0.0	41.8	164.5	0.0	272.2	649
9125	1980	0.0	110.5	0.0	0.0	73.3	0.2	46.9	177.3	0.0	285.8	694
9855	1982	0.0	112.6	0.0	0.0	76.8	0.3	49.1	185.4	0.0	297.1	721
10585	1984	26.5	149.8	0.0	0.0	128.1	2.1	84.8	269.0	0.0	321.8	982
11315	1986	51.0	162.3	0.0	0.0	148.7	3.0	96.0	297.9	0.9	340.9	1101
12045	1988	65.1	167.1	0.0	0.0	156.1	3.4	100.1	312.2	1.3	354.5	1160
12775	1990	111.8	195.0	0.0	0.2	190.4	4.5	123.6	374.6	5.4	376.9	1382
13505	1992	134.3	203.6	0.0	0.5	203.3	5.1	131.3	396.6	8.1	393.3	1476
14235	1994	145.9	207.0	0.0	0.7	208.1	5.3	134.3	407.6	9.2	403.5	1521
14965	1996	230.8	253.0	0.0	1.7	268.2	7.4	185.5	536.4	39.2	430.6	1953
15695	1998	271.6	267.0	0.0	2.5	288.2	8.3	197.5	570.5	46.1	446.9	2099
16425	2000	291.1	272.1	0.0	2.9	294.9	8.6	201.7	585.0	48.5	455.5	2160
17155	2002	301.0	274.4	0.0	3.0	298.0	8.7	203.6	592.7	49.7	460.7	2192
17885	2004	346.6	288.5	0.0	3.5	292.3	8.2	185.6	592.5	40.0	473.4	2231
18615	2006	357.9	290.3	0.0	3.6	292.8	8.2	185.8	599.8	40.3	477.2	2256
19345	2008	362.3	291.1	0.0	3.7	293.8	8.2	186.5	603.0	40.7	475.9	2265
20075	2010	364.7	291.6	0.0	3.7	294.3	8.2	186.8	604.0	41.0	472.6	2267
54385	2104	361.6	290.5	0.0	3.4	292.0	8.0	184.9	588.9	40.2	426.5	2196
TDS	*mg/L*	*30000*	*30000*	*30000*	*30000*	*30000*	*30000*	*30000*	*30000*	*30000*	*30000*	

Appendix B-2-2 Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-2 (Bookpurnong Area)

day	year	Z1 to Z40 (tonne/day)	Z1 to Z41 (tonne/day)	Z1 to Z42 (tonne/day)	Z1 to Z43 (tonne/day)	Z1 to Z44 (tonne/day)	Z1 to Z45 (tonne/day)	Z1 to Z46 (tonne/day)	Z1 to Z47 (tonne/day)	Z1 to Z48 (tonne/day)	Z1 to Z20 (tonne/day)	Total Lateral (tonne/day)
0	1945	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1946	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1947	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1948	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1949	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1950	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1951	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1952	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1953	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1954	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
30	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
365	1956	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
1095	1958	0.0	2.6	0.0	0.0	0.9	0.0	0.4	2.1	0.0	1.4	7
1825	1960	0.0	2.7	0.0	0.0	0.9	0.0	0.5	2.2	0.0	1.7	8
2555	1962	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.3	0.0	2.2	9
3285	1964	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.5	0.0	2.9	10
4015	1966	0.0	2.7	0.0	0.0	1.1	0.0	0.6	2.7	0.0	3.8	11
4745	1968	0.0	2.8	0.0	0.0	1.1	0.0	0.6	3.0	0.0	4.8	12
5475	1970	0.0	2.8	0.0	0.0	1.2	0.0	0.6	3.2	0.0	5.7	14
6205	1972	0.0	2.8	0.0	0.0	1.2	0.0	0.7	3.5	0.0	6.4	15
6935	1974	0.0	2.9	0.0	0.0	1.3	0.0	0.7	3.7	0.0	7.1	16
7665	1976	0.0	2.9	0.0	0.0	1.4	0.0	0.7	4.0	0.0	7.7	17
8395	1978	0.0	3.2	0.0	0.0	1.9	0.0	1.3	4.9	0.0	8.2	19
9125	1980	0.0	3.3	0.0	0.0	2.2	0.0	1.4	5.3	0.0	8.6	21
9855	1982	0.0	3.4	0.0	0.0	2.3	0.0	1.5	5.6	0.0	8.9	22
10585	1984	0.8	4.5	0.0	0.0	3.8	0.1	2.5	8.1	0.0	9.7	29
11315	1986	1.5	4.9	0.0	0.0	4.5	0.1	2.9	8.9	0.0	10.2	33
12045	1988	2.0	5.0	0.0	0.0	4.7	0.1	3.0	9.4	0.0	10.6	35
12775	1990	3.4	5.8	0.0	0.0	5.7	0.1	3.7	11.2	0.2	11.3	41
13505	1992	4.0	6.1	0.0	0.0	6.1	0.2	3.9	11.9	0.2	11.8	44
14235	1994	4.4	6.2	0.0	0.0	6.2	0.2	4.0	12.2	0.3	12.1	48
14965	1996	6.9	7.6	0.0	0.1	8.0	0.2	5.6	16.1	1.2	12.9	59
15695	1998	8.1	8.0	0.0	0.1	8.6	0.2	5.9	17.1	1.4	13.4	63
16425	2000	8.7	8.2	0.0	0.1	8.8	0.3	6.0	17.5	1.5	13.7	65
17155	2002	9.0	8.2	0.0	0.1	8.9	0.3	6.1	17.8	1.5	13.8	66
17885	2004	10.4	8.7	0.0	0.1	8.8	0.2	5.6	17.8	1.2	14.2	67
18615	2006	10.7	8.7	0.0	0.1	8.8	0.2	5.6	18.0	1.2	14.3	68
19345	2008	10.9	8.7	0.0	0.1	8.8	0.2	5.6	18.1	1.2	14.3	68
20075	2010	10.9	8.7	0.0	0.1	8.8	0.2	5.6	18.1	1.2	14.2	68
54385	2104	10.8	8.7	0.0	0.1	8.8	0.2	5.5	17.7	1.2	12.8	66
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

Appendix B-2-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-2 (Bookpurnong Area)



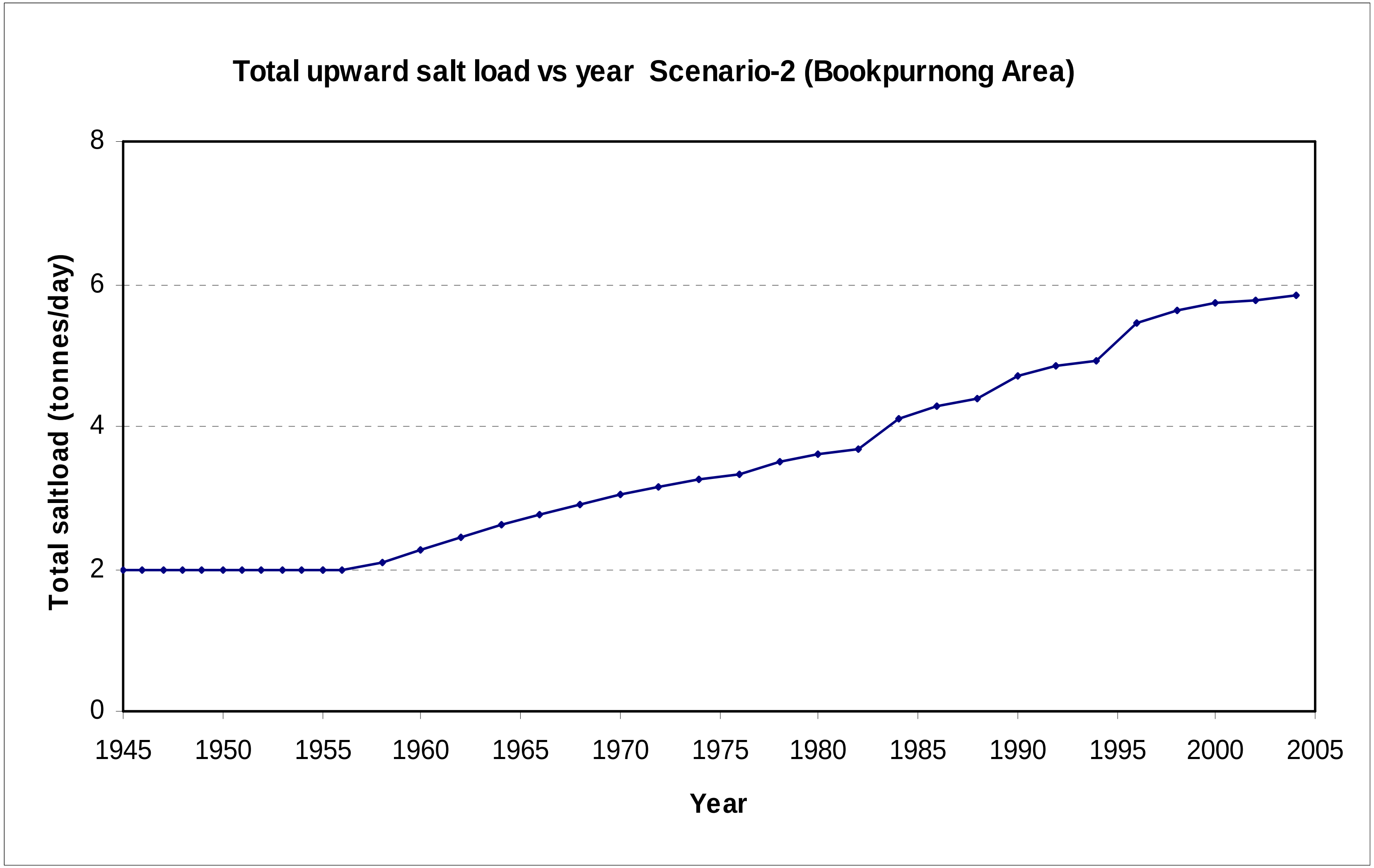
Appendix B-2-3b Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-2 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upwards (m^3/day)
30	1955	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
365	1956	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
1095	1958	0.0	18.9	18.5	2.3	8.7	2.3	7.8	8.0	9.5	8.1	84
1825	1960	0.0	19.1	18.8	2.4	9.3	2.7	9.2	8.7	9.9	10.6	91
2555	1962	0.0	19.4	19.1	2.5	9.9	3.0	10.5	9.5	10.4	13.0	97
3285	1964	0.0	19.7	19.3	2.6	10.5	3.4	11.8	10.4	10.9	15.5	104
4015	1966	0.0	20.0	19.6	2.7	11.1	3.7	13.1	11.4	11.3	17.9	111
4745	1968	0.0	20.3	19.8	2.8	11.6	3.9	14.0	12.3	11.7	19.6	116
5475	1970	0.0	20.6	20.0	2.9	12.1	4.2	14.9	13.1	12.1	21.3	121
6205	1972	0.0	20.8	20.2	3.0	12.5	4.4	15.8	14.0	12.5	22.8	126
6935	1974	0.0	21.1	20.4	3.0	12.8	4.5	16.5	14.7	12.9	24.0	130
7665	1976	0.0	21.3	20.5	3.1	13.1	4.7	17.1	15.3	13.2	24.8	133
8395	1978	0.0	22.4	20.8	3.2	14.1	4.9	18.5	16.8	14.2	25.8	141
9125	1980	0.0	22.9	21.0	3.3	14.6	5.1	19.2	17.6	14.6	26.6	145
9855	1982	0.0	23.2	21.2	3.3	14.9	5.2	19.8	18.2	14.8	27.2	148
10585	1984	0.1	26.4	21.8	3.6	17.1	5.7	22.6	21.5	16.8	28.8	164
11315	1986	0.5	27.6	22.2	3.7	18.0	6.0	23.7	22.9	17.4	29.8	172
12045	1988	0.9	28.1	22.4	3.8	18.4	6.1	24.4	23.6	17.8	30.5	176
12775	1990	2.3	30.3	22.8	4.0	19.9	6.5	26.3	26.0	19.0	31.8	189
13505	1992	3.1	31.0	23.1	4.1	20.5	6.6	27.1	27.0	19.5	32.6	195
14235	1994	3.6	31.4	23.2	4.1	20.8	6.7	27.5	27.5	19.8	32.9	197
14965	1996	6.6	34.8	23.9	4.4	23.1	7.2	30.6	31.5	21.8	34.3	218
15695	1998	8.0	35.9	24.2	4.5	23.8	7.4	31.5	32.7	22.4	35.0	226
16425	2000	8.8	36.3	24.4	4.6	24.2	7.5	32.0	33.3	22.7	35.3	229
17155	2002	9.3	36.6	24.5	4.6	24.4	7.6	32.2	33.6	22.9	35.6	231
17885	2004	10.6	37.3	24.6	4.7	24.3	7.6	31.9	33.9	23.0	35.8	234
18615	2006	11.0	37.5	24.6	4.7	24.4	7.6	31.9	34.1	23.1	35.7	234
19345	2008	11.2	37.5	24.6	4.7	24.4	7.5	31.8	34.2	23.1	35.5	235
20075	2010	11.3	37.6	24.6	4.7	24.4	7.5	31.8	34.2	23.1	35.3	234
54385	2104	11.0	37.3	24.4	4.6	23.8	7.2	30.6	33.1	22.7	32.9	228
TDS	*mg/L*	*25000*	*25000*	*25000*	*25000*	*25000*	*25000*	*25000*	*25000*	*25000*	*25000*	

Appendix B-2-4 Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-2 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1946	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1947	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1948	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1949	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1950	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1951	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1952	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1953	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1954	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
30	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
365	1956	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1095	1958	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1825	1960	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.3	2
2555	1962	0.0	0.5	0.5	0.1	0.2	0.1	0.3	0.2	0.3	0.3	2
3285	1964	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4015	1966	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4745	1968	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
5475	1970	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
6205	1972	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.6	3
6935	1974	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
7665	1976	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
8395	1978	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.6	4
9125	1980	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.7	4
9855	1982	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.5	0.4	0.7	4
10585	1984	0.0	0.7	0.5	0.1	0.4	0.1	0.6	0.5	0.4	0.7	4
11315	1986	0.0	0.7	0.6	0.1	0.4	0.1	0.6	0.6	0.4	0.7	4
12045	1988	0.0	0.7	0.6	0.1	0.5	0.2	0.6	0.6	0.4	0.8	4
12775	1990	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.6	0.5	0.8	5
13505	1992	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14235	1994	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14965	1996	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	5
15695	1998	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
16425	2000	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17155	2002	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17885	2004	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
18615	2006	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
19345	2008	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
20075	2010	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
54385	2104	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.8	6
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

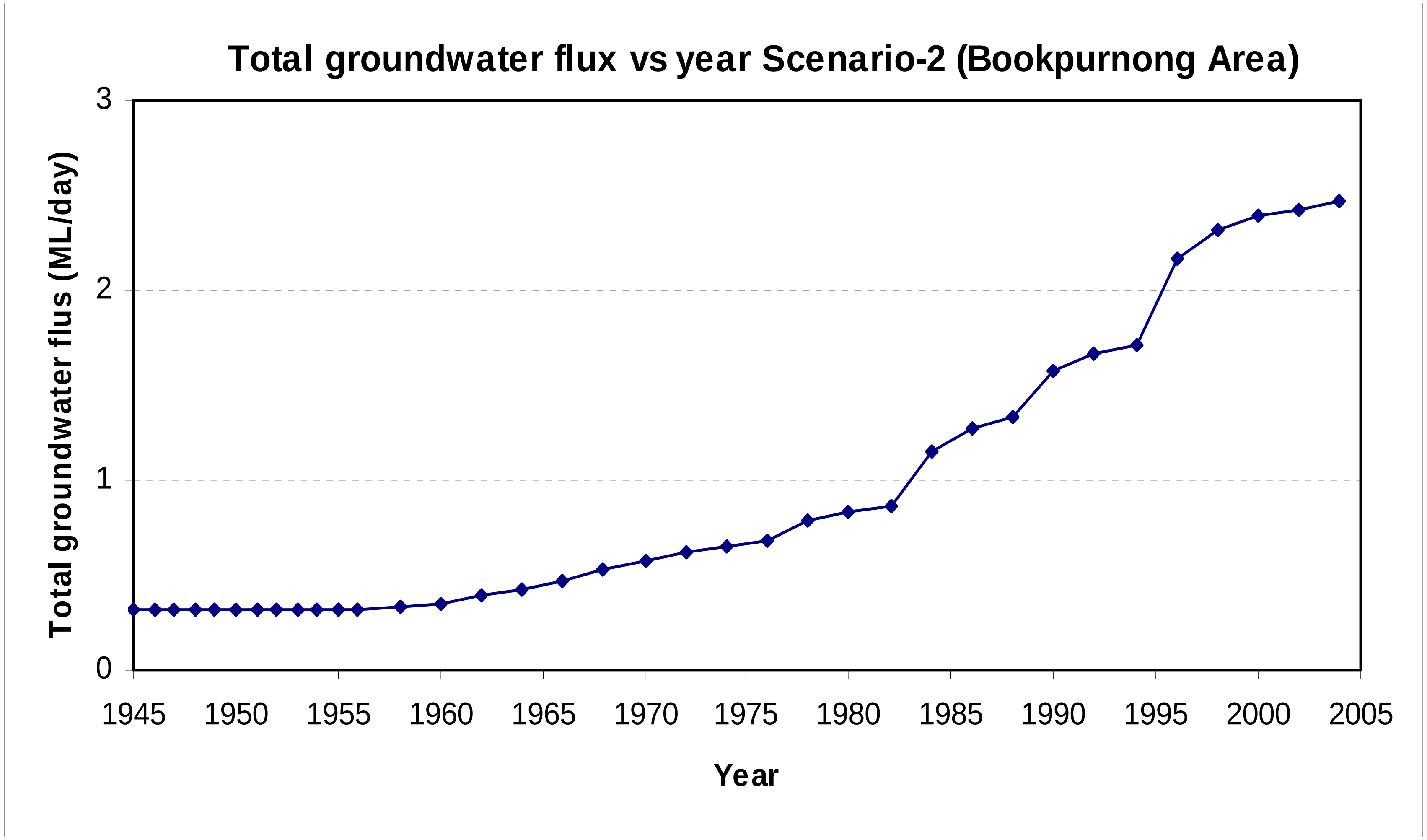
Appendix B-2-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-2 (Bookpurnong Area)



Appendix B-2-5b Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-2 (Bookpurnong Area)

day	year	Lateral flux (m^3/day)	Upward leackage (m^3/day)	Total flux (m^3/day)
0	1945	0.241	0.079	0.320
0	1946	0.241	0.079	0.320
0	1947	0.241	0.079	0.320
0	1948	0.241	0.079	0.320
0	1949	0.241	0.079	0.320
0	1950	0.241	0.079	0.320
0	1951	0.241	0.079	0.320
0	1952	0.241	0.079	0.320
0	1953	0.241	0.079	0.320
0	1954	0.241	0.079	0.320
0	1955	0.241	0.079	0.320
30	1955	0.241	0.079	0.320
365	1956	0.241	0.079	0.320
1095	1958	0.249	0.084	0.333
1825	1960	0.265	0.091	0.356
2555	1962	0.289	0.097	0.387
3285	1964	0.323	0.104	0.427
4015	1966	0.365	0.111	0.476
4745	1968	0.408	0.116	0.525
5475	1970	0.450	0.121	0.571
6205	1972	0.488	0.126	0.614
6935	1974	0.523	0.130	0.653
7665	1976	0.553	0.133	0.686
8395	1978	0.649	0.141	0.790
9125	1980	0.694	0.145	0.839
9855	1982	0.721	0.148	0.869
10585	1984	0.982	0.164	1.147
11315	1986	1.101	0.172	1.272
12045	1988	1.160	0.176	1.336
12775	1990	1.382	0.189	1.571
13505	1992	1.476	0.195	1.671
14235	1994	1.521	0.197	1.719
14965	1996	1.953	0.218	2.171
15695	1998	2.099	0.226	2.324
16425	2000	2.160	0.229	2.389
17155	2002	2.192	0.231	2.423
17885	2004	2.231	0.234	2.464

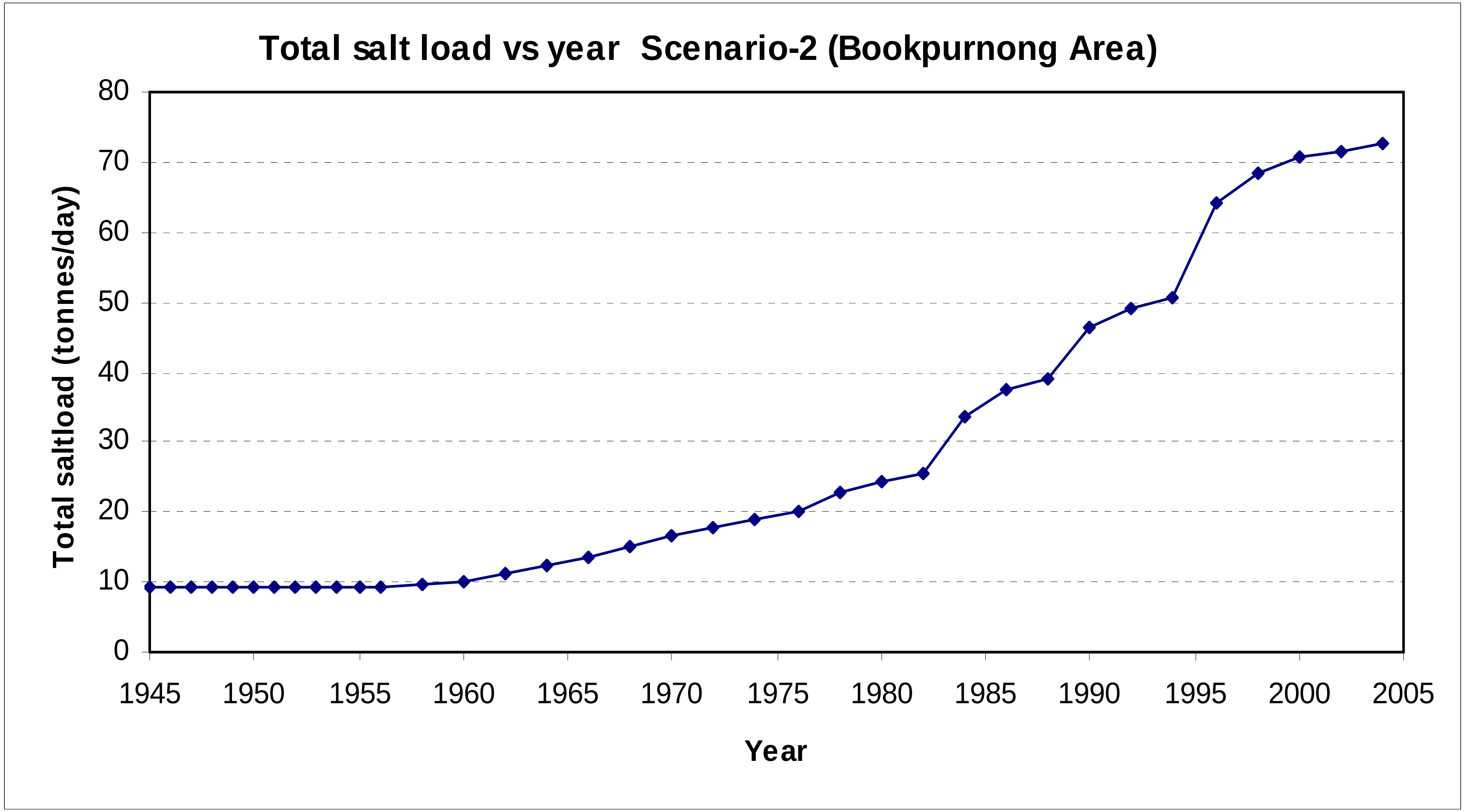
Appendix B-2-6a Predicted total groundwater flux (ML/day) in Scenario-2 (Bookpurnong Area)



Appendix B-2-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-2 (Bookpurnong Area)

day	year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Total Saltload (tonnes/day)
0	1945	7.24	1.98	9.21
0	1946	7.24	1.98	9.21
0	1947	7.24	1.98	9.21
0	1948	7.24	1.98	9.21
0	1949	7.24	1.98	9.21
0	1950	7.24	1.98	9.21
0	1951	7.24	1.98	9.21
0	1952	7.24	1.98	9.21
0	1953	7.24	1.98	9.21
0	1954	7.24	1.98	9.21
0	1955	7.24	1.98	9.21
30	1955	7.24	1.98	9.21
365	1956	7.24	1.98	9.21
1095	1958	7.46	2.10	9.56
1825	1960	7.96	2.27	10.22
2555	1962	8.68	2.43	11.11
3285	1964	9.68	2.61	12.29
4015	1966	10.94	2.77	13.72
4745	1968	12.25	2.90	15.15
5475	1970	13.50	3.03	16.53
6205	1972	14.65	3.15	17.80
6935	1974	15.69	3.25	18.94
7665	1976	16.58	3.33	19.91
8395	1978	19.47	3.52	22.99
9125	1980	20.82	3.62	24.44
9855	1982	21.64	3.70	25.34
10585	1984	29.46	4.11	33.57
11315	1986	33.02	4.29	37.32
12045	1988	34.80	4.40	39.19
12775	1990	41.47	4.72	46.19
13505	1992	44.28	4.87	49.15
14235	1994	45.64	4.94	50.58
14965	1996	58.58	5.45	64.04
15695	1998	62.96	5.64	68.60
16425	2000	64.80	5.73	70.53
17155	2002	65.76	5.78	71.54
17885	2004	66.92	5.84	72.76

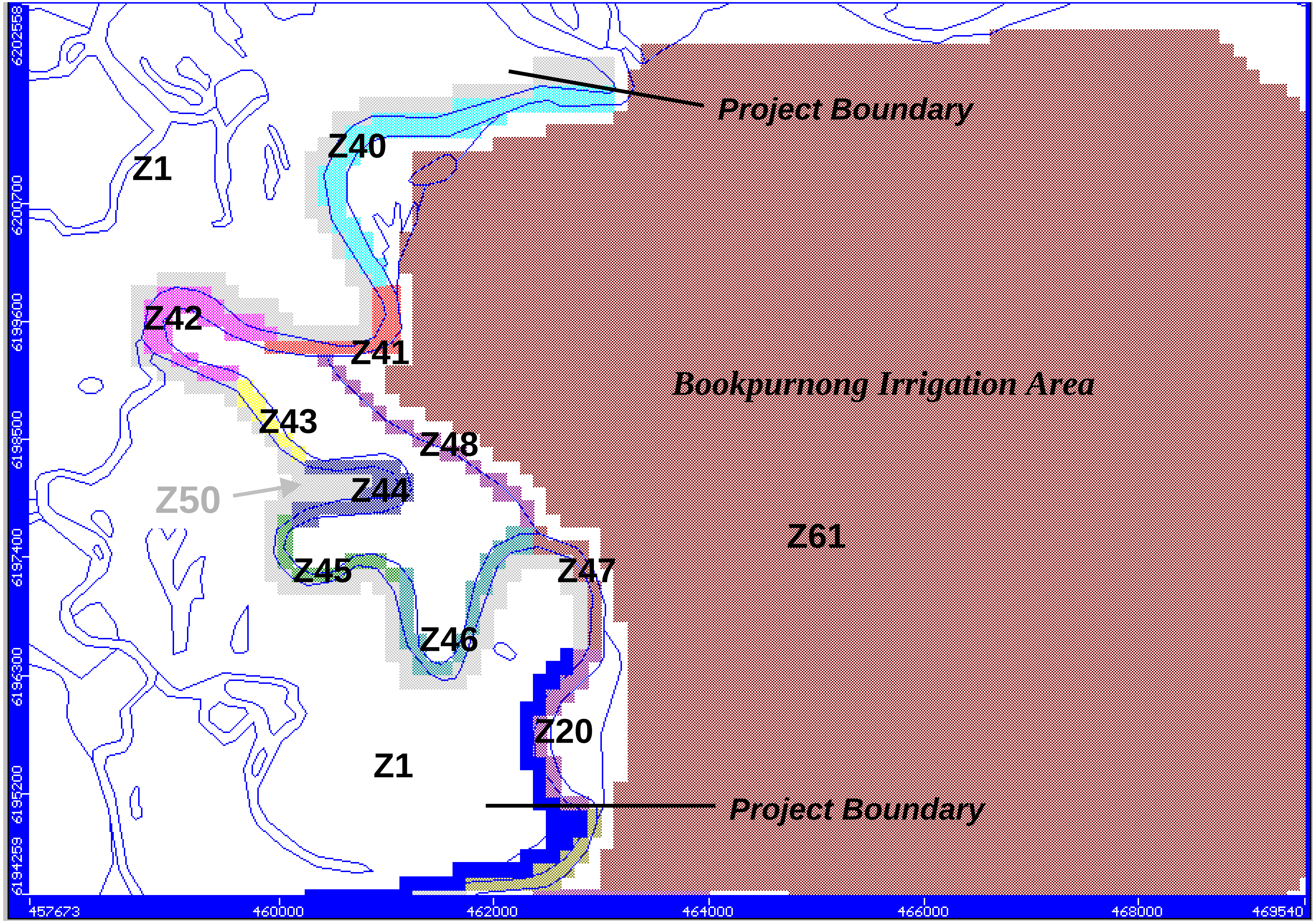
Appendix B-2-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-2 (Bookpurnong Area)



Appendix B-2-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-2 (Bookpurnong Area)

B-3 Groundwater flux and salt load entering the River Murray Scenario-3 (Bookpurnong Area)

- Flow budget zones (Bookpurnong Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix B-3-1 Flow budget zones in model Layer-1 (Bookpurnong Area)

day	year	Z1 to Z40 (m³/day)	Z1 to Z41 (m³/day)	Z1 to Z42 (m³/day)	Z1 to Z43 (m³/day)	Z1 to Z44 (m³/day)	Z1 to Z45 (m³/day)	Z1 to Z46 (m³/day)	Z1 to Z47 (m³/day)	Seepage Z48 Drain (m³/day)	Z1 to Z20 (m³/day)	Total Lateral (m³/day)
30	1955	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
365	1956	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
1095	1958	0.0	87.9	0.0	0.0	28.4	0.0	14.8	70.6	0.0	47.1	249
1825	1960	0.0	88.5	0.0	0.0	29.9	0.0	15.6	73.7	0.0	57.6	265
2555	1962	0.0	89.3	0.0	0.0	31.7	0.0	16.6	78.3	0.0	73.4	289
3285	1964	0.0	90.2	0.0	0.0	33.7	0.0	17.8	84.1	0.0	97.0	323
4015	1966	0.0	91.2	0.0	0.0	35.8	0.0	19.0	91.2	0.0	127.6	365
4745	1968	0.0	92.2	0.0	0.0	37.7	0.0	20.2	99.1	0.0	159.1	408
5475	1970	0.0	93.2	0.0	0.0	39.7	0.0	21.4	107.5	0.0	188.4	450
6205	1972	0.0	94.2	0.0	0.0	41.6	0.0	22.5	116.1	0.0	214.2	488
6935	1974	0.0	95.2	0.0	0.0	43.4	0.0	23.7	124.2	0.0	236.6	523
7665	1976	0.0	96.1	0.0	0.0	45.0	0.0	24.7	131.8	0.0	255.1	553
8395	1978	0.0	106.0	0.0	0.0	64.6	0.0	41.8	164.5	0.0	272.2	649
9125	1980	0.0	110.5	0.0	0.0	73.3	0.2	46.9	177.3	0.0	285.8	694
9855	1982	0.0	112.6	0.0	0.0	76.8	0.3	49.1	185.4	0.0	297.1	721
10585	1984	26.5	149.8	0.0	0.0	128.1	2.1	84.8	269.0	0.0	321.8	982
11315	1986	51.0	162.3	0.0	0.0	148.7	3.0	96.0	297.9	0.9	340.9	1101
12045	1988	65.1	167.1	0.0	0.0	156.1	3.4	100.1	312.2	1.3	354.5	1160
12775	1990	111.8	195.0	0.0	0.2	190.4	4.5	123.6	374.6	5.4	376.9	1382
13505	1992	134.3	203.6	0.0	0.5	203.3	5.1	131.3	396.6	8.1	393.3	1476
14235	1994	146.9	207.0	0.0	0.7	208.3	5.3	134.4	407.9	9.2	404.9	1524
14965	1996	231.1	253.1	0.0	1.7	268.5	7.5	185.8	537.4	39.3	435.3	1960
15695	1998	272.2	267.2	0.0	2.6	288.8	8.3	197.9	572.4	46.3	456.0	2112
16425	2000	292.0	272.4	0.0	2.9	295.7	8.6	202.2	588.1	48.8	468.9	2180
17155	2002	348.7	298.0	0.0	4.7	319.7	9.4	215.2	638.9	57.8	489.9	2382
17885	2004	442.0	329.9	0.0	6.7	327.7	9.2	200.0	665.5	51.2	521.3	2554
18615	2006	469.5	335.8	0.0	7.4	333.4	9.4	203.4	685.4	53.5	539.0	2637
19345	2008	481.4	338.5	0.0	7.7	336.9	9.6	205.7	695.9	54.9	549.1	2680
20075	2010	535.3	362.0	0.0	9.4	358.0	10.3	217.2	742.8	64.3	567.6	2867
20805	2012	555.4	367.6	0.0	10.1	365.2	10.7	221.6	758.3	67.2	578.9	2935
21535	2014	564.5	369.7	0.0	10.4	368.0	10.8	223.4	765.9	68.4	585.7	2967
22265	2016	569.5	370.8	0.0	10.5	369.5	10.9	224.4	770.4	69.0	590.5	2986
22995	2018	572.6	371.5	0.0	10.6	370.4	11.0	225.1	773.5	69.4	594.2	2998
23725	2020	597.9	382.7	0.0	11.4	380.3	11.3	230.5	795.6	73.8	602.7	3086
24455	2022	607.1	385.2	0.0	11.8	383.7	11.5	232.5	802.7	75.2	608.0	3118
25185	2024	611.3	386.2	0.0	11.9	384.9	11.6	233.3	806.2	75.7	611.3	3132
25915	2026	613.7	386.7	0.0	12.0	385.6	11.6	233.8	808.4	76.0	613.7	3142
26645	2028	615.3	387.0	0.0	12.0	386.1	11.6	234.1	810.0	76.2	615.6	3148

Appendix B-3-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-3 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
27375	2030	616.4	387.3	0.0	12.0	386.4	11.7	234.4	811.2	76.3	617.2	3153
28105	2032	617.3	387.4	0.0	12.1	386.7	11.7	234.6	812.2	76.4	618.5	3157
28835	2034	618.0	387.6	0.0	12.1	386.9	11.7	234.7	813.1	76.5	619.7	3160
29565	2036	618.6	387.7	0.0	12.1	387.1	11.7	234.9	813.8	76.6	620.7	3163
30295	2038	619.2	387.8	0.0	12.1	387.3	11.7	235.0	814.5	76.7	621.6	3166
31025	2040	619.7	387.9	0.0	12.2	387.4	11.7	235.1	815.1	76.7	622.4	3168
31755	2042	620.1	388.0	0.0	12.2	387.5	11.7	235.2	815.6	76.8	623.1	3170
32485	2044	620.5	388.1	0.0	12.2	387.7	11.7	235.3	816.1	76.8	623.8	3172
33215	2046	620.9	388.2	0.0	12.2	387.8	11.8	235.4	816.6	76.9	624.5	3174
33945	2048	621.2	388.3	0.0	12.2	387.9	11.8	235.5	817.0	76.9	625.0	3176
34675	2050	621.6	388.3	0.0	12.2	388.0	11.8	235.5	817.4	77.0	625.6	3177
35405	2052	621.9	388.4	0.0	12.2	388.1	11.8	235.6	817.8	77.0	626.1	3179
36135	2054	622.1	388.5	0.0	12.2	388.2	11.8	235.7	818.1	77.1	626.6	3180
36865	2056	622.4	388.5	0.0	12.3	388.3	11.8	235.7	818.5	77.1	627.0	3182
37595	2058	622.7	388.6	0.0	12.3	388.3	11.8	235.8	818.8	77.1	627.4	3183
38325	2060	622.9	388.6	0.0	12.3	388.4	11.8	235.9	819.1	77.2	627.8	3184
39055	2062	623.2	388.7	0.0	12.3	388.5	11.8	235.9	819.4	77.2	628.2	3185
39785	2064	623.4	388.7	0.0	12.3	388.6	11.8	236.0	819.6	77.2	628.6	3186
40515	2066	623.6	388.8	0.0	12.3	388.6	11.8	236.0	819.9	77.2	628.9	3187
41245	2068	623.8	388.8	0.0	12.3	388.7	11.8	236.1	820.1	77.3	629.3	3188
41975	2070	624.0	388.8	0.0	12.3	388.7	11.8	236.1	820.4	77.3	629.6	3189
42705	2072	624.2	388.9	0.0	12.3	388.8	11.8	236.1	820.6	77.3	629.9	3190
43435	2074	624.3	388.9	0.0	12.3	388.9	11.8	236.2	820.8	77.3	630.1	3191
44165	2076	624.5	388.9	0.0	12.3	388.9	11.8	236.2	821.0	77.4	630.4	3191
44895	2078	624.7	389.0	0.0	12.3	389.0	11.8	236.3	821.2	77.4	630.7	3192
45625	2080	624.8	389.0	0.0	12.3	389.0	11.9	236.3	821.4	77.4	630.9	3193
46355	2082	625.0	389.0	0.0	12.3	389.1	11.9	236.3	821.5	77.4	631.2	3194
47085	2084	625.1	389.1	0.0	12.4	389.1	11.9	236.4	821.7	77.4	631.4	3194
47815	2086	625.2	389.1	0.0	12.4	389.1	11.9	236.4	821.9	77.4	631.6	3195
48545	2088	625.4	389.1	0.0	12.4	389.2	11.9	236.4	822.0	77.5	631.8	3196
49275	2090	625.5	389.2	0.0	12.4	389.2	11.9	236.4	822.2	77.5	632.0	3196
50005	2092	625.6	389.2	0.0	12.4	389.3	11.9	236.5	822.3	77.5	632.2	3197
50735	2094	625.7	389.2	0.0	12.4	389.3	11.9	236.5	822.5	77.5	632.4	3197
51465	2096	625.9	389.2	0.0	12.4	389.3	11.9	236.5	822.6	77.5	632.6	3198
52195	2098	626.0	389.2	0.0	12.4	389.4	11.9	236.5	822.7	77.5	632.8	3198
52925	2100	626.1	389.3	0.0	12.4	389.4	11.9	236.6	822.9	77.6	632.9	3199
53655	2102	626.2	389.3	0.0	12.4	389.4	11.9	236.6	823.0	77.6	633.1	3199
54385	2104	626.3	389.3	0.0	12.4	389.5	11.9	236.6	823.1	77.6	633.3	3200
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

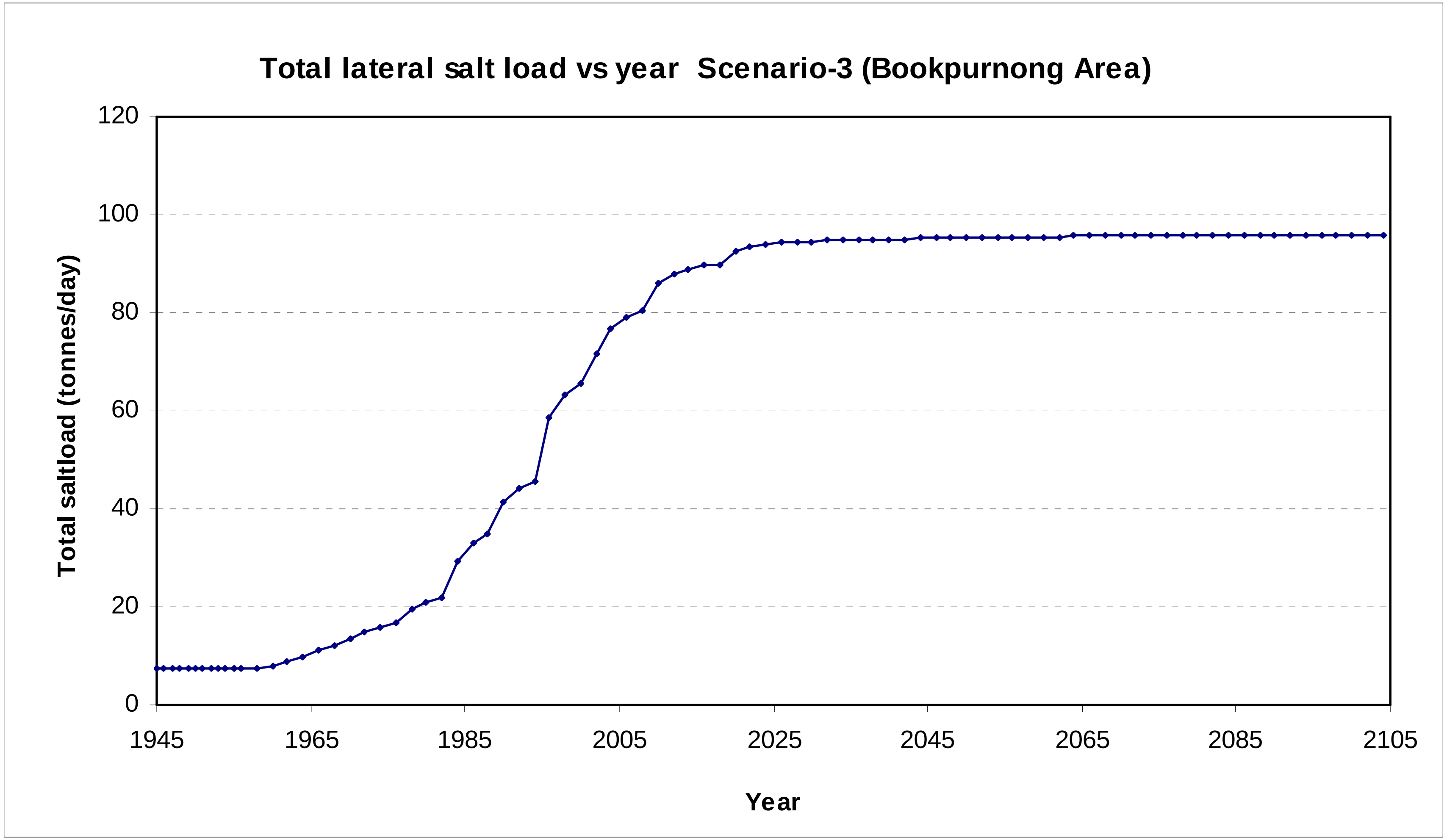
Appendix B-3-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-3 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1946	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1947	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1948	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1949	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1950	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1951	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1952	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1953	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1954	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
30	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
365	1956	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
1095	1958	0.0	2.6	0.0	0.0	0.9	0.0	0.4	2.1	0.0	1.4	7
1825	1960	0.0	2.7	0.0	0.0	0.9	0.0	0.5	2.2	0.0	1.7	8
2555	1962	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.3	0.0	2.2	9
3285	1964	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.5	0.0	2.9	10
4015	1966	0.0	2.7	0.0	0.0	1.1	0.0	0.6	2.7	0.0	3.8	11
4745	1968	0.0	2.8	0.0	0.0	1.1	0.0	0.6	3.0	0.0	4.8	12
5475	1970	0.0	2.8	0.0	0.0	1.2	0.0	0.6	3.2	0.0	5.7	14
6205	1972	0.0	2.8	0.0	0.0	1.2	0.0	0.7	3.5	0.0	6.4	15
6935	1974	0.0	2.9	0.0	0.0	1.3	0.0	0.7	3.7	0.0	7.1	16
7665	1976	0.0	2.9	0.0	0.0	1.4	0.0	0.7	4.0	0.0	7.7	17
8395	1978	0.0	3.2	0.0	0.0	1.9	0.0	1.3	4.9	0.0	8.2	19
9125	1980	0.0	3.3	0.0	0.0	2.2	0.0	1.4	5.3	0.0	8.6	21
9855	1982	0.0	3.4	0.0	0.0	2.3	0.0	1.5	5.6	0.0	8.9	22
10585	1984	0.8	4.5	0.0	0.0	3.8	0.1	2.5	8.1	0.0	9.7	29
11315	1986	1.5	4.9	0.0	0.0	4.5	0.1	2.9	8.9	0.0	10.2	33
12045	1988	2.0	5.0	0.0	0.0	4.7	0.1	3.0	9.4	0.0	10.6	35
12775	1990	3.4	5.8	0.0	0.0	5.7	0.1	3.7	11.2	0.2	11.3	41
13505	1992	4.0	6.1	0.0	0.0	6.1	0.2	3.9	11.9	0.2	11.8	44
14235	1994	4.4	6.2	0.0	0.0	6.2	0.2	4.0	12.2	0.3	12.1	46
14965	1996	6.9	7.6	0.0	0.1	8.1	0.2	5.6	16.1	1.2	13.1	59
15695	1998	8.2	8.0	0.0	0.1	8.7	0.3	5.9	17.2	1.4	13.7	63
16425	2000	8.8	8.2	0.0	0.1	8.9	0.3	6.1	17.6	1.5	14.1	65
17155	2002	10.5	8.9	0.0	0.1	9.6	0.3	6.5	19.2	1.7	14.7	71
17885	2004	13.3	9.9	0.0	0.2	9.8	0.3	6.0	20.0	1.5	15.6	77
18615	2006	14.1	10.1	0.0	0.2	10.0	0.3	6.1	20.6	1.6	16.2	79
19345	2008	14.4	10.2	0.0	0.2	10.1	0.3	6.2	20.9	1.6	16.5	80
20075	2010	16.1	10.9	0.0	0.3	10.7	0.3	6.5	22.3	1.9	17.0	86
20805	2012	16.7	11.0	0.0	0.3	11.0	0.3	6.6	22.7	2.0	17.4	88
21535	2014	16.9	11.1	0.0	0.3	11.0	0.3	6.7	23.0	2.1	17.6	89
22265	2016	17.1	11.1	0.0	0.3	11.1	0.3	6.7	23.1	2.1	17.7	90

Appendix B-3-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-3 (Bookpurnong Area)

day	year	Z1 to Z40 (tonne/day)	Z1 to Z41 (tonne/day)	Z1 to Z42 (tonne/day)	Z1 to Z43 (tonne/day)	Z1 to Z44 (tonne/day)	Z1 to Z45 (tonne/day)	Z1 to Z46 (tonne/day)	Z1 to Z47 (tonne/day)	Z1 to Z48 (tonne/day)	Z1 to Z20 (tonne/day)	Total Lateral (tonne/day)
22995	2018	17.2	11.1	0.0	0.3	11.1	0.3	6.8	23.2	2.1	17.8	90
23725	2020	17.9	11.5	0.0	0.3	11.4	0.3	6.9	23.9	2.2	18.1	93
24455	2022	18.2	11.6	0.0	0.4	11.5	0.3	7.0	24.1	2.3	18.2	94
25185	2024	18.3	11.6	0.0	0.4	11.5	0.3	7.0	24.2	2.3	18.3	94
25915	2026	18.4	11.6	0.0	0.4	11.6	0.3	7.0	24.3	2.3	18.4	94
26645	2028	18.5	11.6	0.0	0.4	11.6	0.3	7.0	24.3	2.3	18.5	94
27375	2030	18.5	11.6	0.0	0.4	11.6	0.3	7.0	24.3	2.3	18.5	95
28105	2032	18.5	11.6	0.0	0.4	11.6	0.4	7.0	24.4	2.3	18.6	95
28835	2034	18.5	11.6	0.0	0.4	11.6	0.4	7.0	24.4	2.3	18.6	95
29565	2036	18.6	11.6	0.0	0.4	11.6	0.4	7.0	24.4	2.3	18.6	95
30295	2038	18.6	11.6	0.0	0.4	11.6	0.4	7.0	24.4	2.3	18.6	95
31025	2040	18.6	11.6	0.0	0.4	11.6	0.4	7.1	24.5	2.3	18.7	95
31755	2042	18.6	11.6	0.0	0.4	11.6	0.4	7.1	24.5	2.3	18.7	95
32485	2044	18.6	11.6	0.0	0.4	11.6	0.4	7.1	24.5	2.3	18.7	95
33215	2046	18.6	11.6	0.0	0.4	11.6	0.4	7.1	24.5	2.3	18.7	95
33945	2048	18.6	11.6	0.0	0.4	11.6	0.4	7.1	24.5	2.3	18.8	95
34675	2050	18.6	11.6	0.0	0.4	11.6	0.4	7.1	24.5	2.3	18.8	95
35405	2052	18.7	11.7	0.0	0.4	11.6	0.4	7.1	24.5	2.3	18.8	95
36135	2054	18.7	11.7	0.0	0.4	11.6	0.4	7.1	24.5	2.3	18.8	95
36865	2056	18.7	11.7	0.0	0.4	11.6	0.4	7.1	24.6	2.3	18.8	95
37595	2058	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.8	95
38325	2060	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.8	96
39055	2062	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.8	96
39785	2064	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
40515	2066	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
41245	2068	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
41975	2070	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
42705	2072	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
43435	2074	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
44165	2076	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
44895	2078	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
45625	2080	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
46355	2082	18.7	11.7	0.0	0.4	11.7	0.4	7.1	24.6	2.3	18.9	96
47085	2084	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	18.9	96
47815	2086	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	18.9	96
48545	2088	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	19.0	96
49275	2090	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	19.0	96
50005	2092	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	19.0	96
50735	2094	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	19.0	96
51465	2096	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	19.0	96
52195	2098	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	19.0	96
52925	2100	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	19.0	96
53655	2102	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	19.0	96
54385	2104	18.8	11.7	0.0	0.4	11.7	0.4	7.1	24.7	2.3	19.0	96
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

Appendix B-3-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-3 (Bookpurnong Area)



Appendix B-3-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-3 (Bookpurnong Area)

day	year	Z2 to Z40 (m³/day)	Z2 to Z41 (m³/day)	Z2 to Z42 (m³/day)	Z2 to Z43 (m³/day)	Z2 to Z44 (m³/day)	Z2 to Z45 (m³/day)	Z2 to Z46 (m³/day)	Z2 to Z47 (m³/day)	Z2 to Z48 (m³/day)	Z2 to Z20 (m³/day)	Total Upwards (m³/day)
30	1955	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
365	1956	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
1095	1958	0.0	18.9	18.5	2.3	8.7	2.3	7.8	8.0	9.5	8.1	84
1825	1960	0.0	19.1	18.8	2.4	9.3	2.7	9.2	8.7	9.9	10.6	91
2555	1962	0.0	19.4	19.1	2.5	9.9	3.0	10.5	9.5	10.4	13.0	97
3285	1964	0.0	19.7	19.3	2.6	10.5	3.4	11.8	10.4	10.9	15.5	104
4015	1966	0.0	20.0	19.6	2.7	11.1	3.7	13.1	11.4	11.3	17.9	111
4745	1968	0.0	20.3	19.8	2.8	11.6	3.9	14.0	12.3	11.7	19.6	116
5475	1970	0.0	20.6	20.0	2.9	12.1	4.2	14.9	13.1	12.1	21.3	121
6205	1972	0.0	20.8	20.2	3.0	12.5	4.4	15.8	14.0	12.5	22.8	126
6935	1974	0.0	21.1	20.4	3.0	12.8	4.5	16.5	14.7	12.9	24.0	130
7665	1976	0.0	21.3	20.5	3.1	13.1	4.7	17.1	15.3	13.2	24.8	133
8395	1978	0.0	22.4	20.8	3.2	14.1	4.9	18.5	16.8	14.2	25.8	141
9125	1980	0.0	22.9	21.0	3.3	14.6	5.1	19.2	17.6	14.6	26.6	145
9855	1982	0.0	23.2	21.2	3.3	14.9	5.2	19.8	18.2	14.8	27.2	148
10585	1984	0.1	26.4	21.8	3.6	17.1	5.7	22.6	21.5	16.8	28.8	164
11315	1986	0.5	27.6	22.2	3.7	18.0	6.0	23.7	22.9	17.4	29.8	172
12045	1988	0.9	28.1	22.4	3.8	18.4	6.1	24.4	23.6	17.8	30.5	176
12775	1990	2.3	30.3	22.8	4.0	19.9	6.5	26.3	26.0	19.0	31.8	189
13505	1992	3.1	31.0	23.1	4.1	20.5	6.6	27.1	27.0	19.5	32.6	195
14235	1994	3.6	31.4	23.2	4.1	20.8	6.8	27.6	27.6	19.8	33.2	198
14965	1996	6.6	34.8	24.0	4.4	23.2	7.3	30.8	31.6	21.9	34.8	220
15695	1998	8.1	35.9	24.3	4.6	24.0	7.5	31.9	32.9	22.5	35.7	228
16425	2000	9.0	36.4	24.5	4.6	24.4	7.6	32.4	33.6	22.9	36.3	232
17155	2002	10.9	38.2	24.9	4.8	25.4	7.9	33.7	35.3	23.8	37.3	242
17885	2004	13.7	40.0	25.2	4.9	26.0	8.1	34.0	36.7	24.4	38.5	252
18615	2006	14.6	40.6	25.4	5.0	26.4	8.2	34.6	37.5	24.8	39.1	256
19345	2008	15.2	40.8	25.5	5.0	26.6	8.3	35.0	37.9	25.0	39.6	259
20075	2010	17.0	42.3	25.8	5.1	27.5	8.5	36.0	39.4	25.8	40.4	268
20805	2012	17.7	42.7	26.0	5.2	27.8	8.6	36.4	39.9	26.0	40.8	271
21535	2014	18.2	42.9	26.1	5.2	28.0	8.6	36.7	40.2	26.2	41.1	273
22265	2016	18.4	43.1	26.1	5.2	28.1	8.7	36.9	40.4	26.3	41.3	275
22995	2018	18.6	43.1	26.2	5.2	28.2	8.7	37.0	40.6	26.4	41.5	276
23725	2020	19.4	43.8	26.3	5.3	28.6	8.8	37.5	41.3	26.7	41.9	280
24455	2022	19.8	44.0	26.4	5.3	28.8	8.9	37.7	41.5	26.8	42.1	281
25185	2024	20.0	44.1	26.4	5.3	28.8	8.9	37.9	41.7	26.9	42.3	282
25915	2026	20.1	44.2	26.5	5.4	28.9	8.9	38.0	41.8	27.0	42.4	283
26645	2028	20.2	44.2	26.5	5.4	28.9	8.9	38.0	41.9	27.0	42.5	284

Appendix B-3-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-3 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upwards (m^3/day)
27375	2030	20.3	44.3	26.5	5.4	29.0	9.0	38.1	41.9	27.1	42.6	284
28105	2032	20.3	44.3	26.5	5.4	29.0	9.0	38.1	42.0	27.1	42.6	284
28835	2034	20.4	44.3	26.5	5.4	29.0	9.0	38.2	42.0	27.1	42.7	285
29565	2036	20.4	44.3	26.6	5.4	29.1	9.0	38.2	42.1	27.1	42.7	285
30295	2038	20.5	44.4	26.6	5.4	29.1	9.0	38.3	42.1	27.2	42.8	285
31025	2040	20.5	44.4	26.6	5.4	29.1	9.0	38.3	42.1	27.2	42.8	285
31755	2042	20.5	44.4	26.6	5.4	29.1	9.0	38.3	42.2	27.2	42.9	286
32485	2044	20.6	44.4	26.6	5.4	29.1	9.0	38.4	42.2	27.2	42.9	286
33215	2046	20.6	44.4	26.6	5.4	29.2	9.0	38.4	42.2	27.2	43.0	286
33945	2048	20.6	44.4	26.6	5.4	29.2	9.0	38.4	42.2	27.2	43.0	286
34675	2050	20.7	44.4	26.6	5.4	29.2	9.1	38.4	42.3	27.3	43.0	286
35405	2052	20.7	44.4	26.6	5.4	29.2	9.1	38.5	42.3	27.3	43.0	287
36135	2054	20.7	44.5	26.6	5.4	29.2	9.1	38.5	42.3	27.3	43.1	287
36865	2056	20.7	44.5	26.7	5.4	29.2	9.1	38.5	42.3	27.3	43.1	287
37595	2058	20.8	44.5	26.7	5.4	29.2	9.1	38.5	42.4	27.3	43.1	287
38325	2060	20.8	44.5	26.7	5.4	29.3	9.1	38.6	42.4	27.3	43.2	287
39055	2062	20.8	44.5	26.7	5.4	29.3	9.1	38.6	42.4	27.3	43.2	287
39785	2064	20.8	44.5	26.7	5.4	29.3	9.1	38.6	42.4	27.3	43.2	287
40515	2066	20.8	44.5	26.7	5.4	29.3	9.1	38.6	42.4	27.3	43.2	287
41245	2068	20.8	44.5	26.7	5.4	29.3	9.1	38.6	42.4	27.3	43.2	288
41975	2070	20.9	44.5	26.7	5.4	29.3	9.1	38.6	42.4	27.4	43.3	288
42705	2072	20.9	44.5	26.7	5.4	29.3	9.1	38.7	42.5	27.4	43.3	288
43435	2074	20.9	44.5	26.7	5.4	29.3	9.1	38.7	42.5	27.4	43.3	288
44165	2076	20.9	44.5	26.7	5.4	29.3	9.1	38.7	42.5	27.4	43.3	288
44895	2078	20.9	44.5	26.7	5.4	29.3	9.1	38.7	42.5	27.4	43.3	288
45625	2080	20.9	44.6	26.7	5.4	29.3	9.1	38.7	42.5	27.4	43.3	288
46355	2082	20.9	44.6	26.7	5.4	29.4	9.1	38.7	42.5	27.4	43.4	288
47085	2084	21.0	44.6	26.7	5.4	29.4	9.1	38.7	42.5	27.4	43.4	288
47815	2086	21.0	44.6	26.7	5.4	29.4	9.1	38.7	42.5	27.4	43.4	288
48545	2088	21.0	44.6	26.7	5.4	29.4	9.1	38.7	42.5	27.4	43.4	288
49275	2090	21.0	44.6	26.7	5.4	29.4	9.1	38.8	42.6	27.4	43.4	288
50005	2092	21.0	44.6	26.7	5.4	29.4	9.1	38.8	42.6	27.4	43.4	288
50735	2094	21.0	44.6	26.8	5.4	29.4	9.1	38.8	42.6	27.4	43.4	289
51465	2096	21.0	44.6	26.8	5.4	29.4	9.1	38.8	42.6	27.4	43.4	289
52195	2098	21.0	44.6	26.8	5.4	29.4	9.1	38.8	42.6	27.4	43.5	289
52925	2100	21.0	44.6	26.8	5.5	29.4	9.1	38.8	42.6	27.4	43.5	289
53655	2102	21.0	44.6	26.8	5.5	29.4	9.1	38.8	42.6	27.5	43.5	289
54385	2104	21.0	44.6	26.8	5.5	29.4	9.2	38.8	42.6	27.5	43.5	289
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

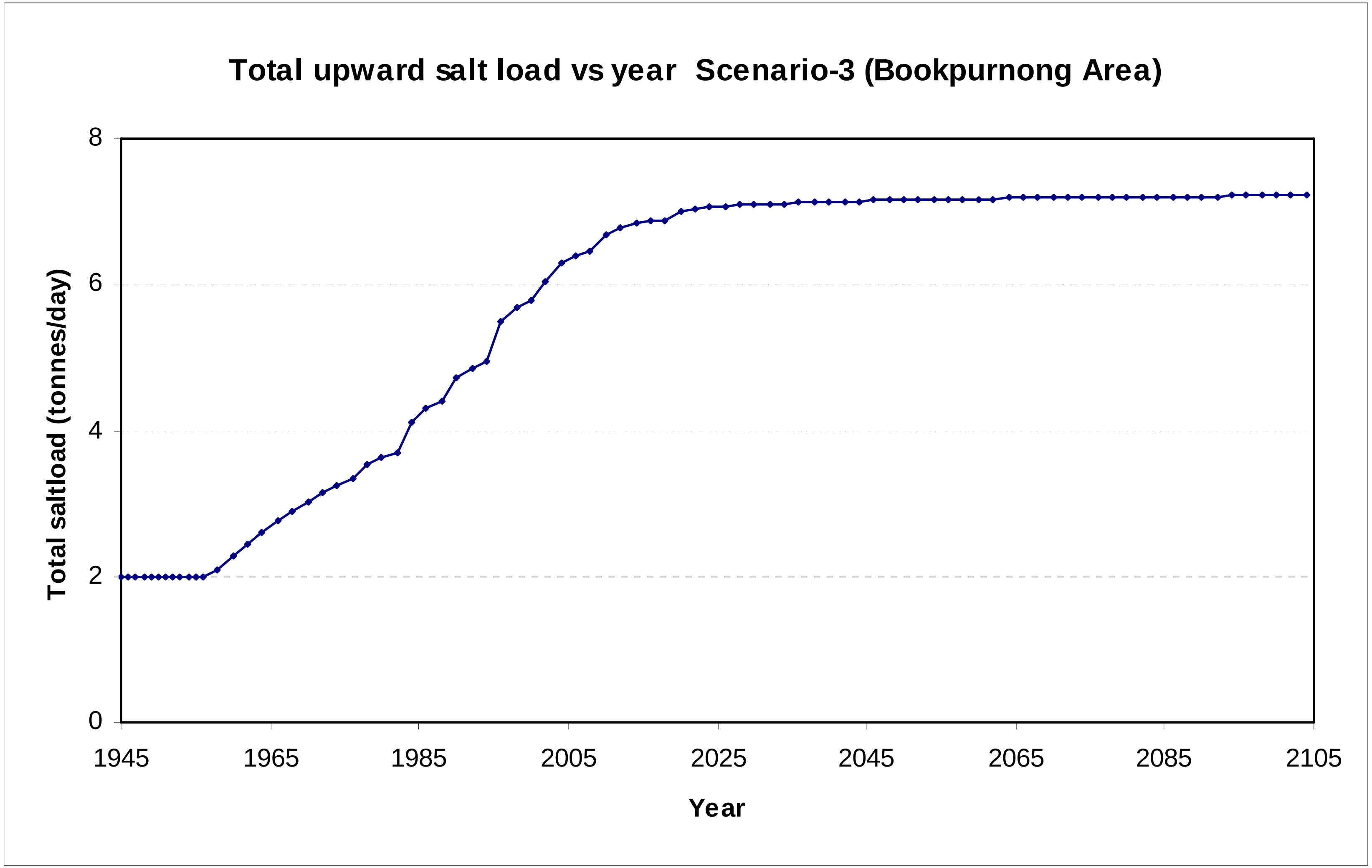
Appendix B-3-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-3 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1946	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1947	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1948	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1949	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1950	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1951	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1952	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1953	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1954	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
30	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
365	1956	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1095	1958	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1825	1960	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.3	2
2555	1962	0.0	0.5	0.5	0.1	0.2	0.1	0.3	0.2	0.3	0.3	2
3285	1964	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4015	1966	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4745	1968	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
5475	1970	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
6205	1972	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.6	3
6935	1974	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
7665	1976	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
8395	1978	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.6	4
9125	1980	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.7	4
9855	1982	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.5	0.4	0.7	4
10585	1984	0.0	0.7	0.5	0.1	0.4	0.1	0.6	0.5	0.4	0.7	4
11315	1986	0.0	0.7	0.6	0.1	0.4	0.1	0.6	0.6	0.4	0.7	4
12045	1988	0.0	0.7	0.6	0.1	0.5	0.2	0.6	0.6	0.4	0.8	4
12775	1990	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.6	0.5	0.8	5
13505	1992	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14235	1994	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14965	1996	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	5
15695	1998	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
16425	2000	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17155	2002	0.3	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
17885	2004	0.3	1.0	0.6	0.1	0.7	0.2	0.9	0.9	0.6	1.0	6
18615	2006	0.4	1.0	0.6	0.1	0.7	0.2	0.9	0.9	0.6	1.0	6
19345	2008	0.4	1.0	0.6	0.1	0.7	0.2	0.9	0.9	0.6	1.0	6
20075	2010	0.4	1.1	0.6	0.1	0.7	0.2	0.9	1.0	0.6	1.0	7
20805	2012	0.4	1.1	0.6	0.1	0.7	0.2	0.9	1.0	0.7	1.0	7
21535	2014	0.5	1.1	0.7	0.1	0.7	0.2	0.9	1.0	0.7	1.0	7
22265	2016	0.5	1.1	0.7	0.1	0.7	0.2	0.9	1.0	0.7	1.0	7

Appendix B-3-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-3 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	0.5	1.1	0.7	0.1	0.7	0.2	0.9	1.0	0.7	1.0	7
23725	2020	0.5	1.1	0.7	0.1	0.7	0.2	0.9	1.0	0.7	1.0	7
24455	2022	0.5	1.1	0.7	0.1	0.7	0.2	0.9	1.0	0.7	1.1	7
25185	2024	0.5	1.1	0.7	0.1	0.7	0.2	0.9	1.0	0.7	1.1	7
25915	2026	0.5	1.1	0.7	0.1	0.7	0.2	0.9	1.0	0.7	1.1	7
26645	2028	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.0	0.7	1.1	7
27375	2030	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.0	0.7	1.1	7
28105	2032	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.0	0.7	1.1	7
28835	2034	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
29565	2036	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
30295	2038	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
31025	2040	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
31755	2042	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
32485	2044	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
33215	2046	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
33945	2048	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
34675	2050	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
35405	2052	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
36135	2054	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
36865	2056	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
37595	2058	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
38325	2060	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
39055	2062	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
39785	2064	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
40515	2066	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
41245	2068	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
41975	2070	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
42705	2072	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
43435	2074	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
44165	2076	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
44895	2078	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
45625	2080	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
46355	2082	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
47085	2084	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
47815	2086	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
48545	2088	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
49275	2090	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
50005	2092	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
50735	2094	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
51465	2096	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
52195	2098	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
52925	2100	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
53655	2102	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
54385	2104	0.5	1.1	0.7	0.1	0.7	0.2	1.0	1.1	0.7	1.1	7
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

Appendix B-3-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-3 (Bookpurnong Area)

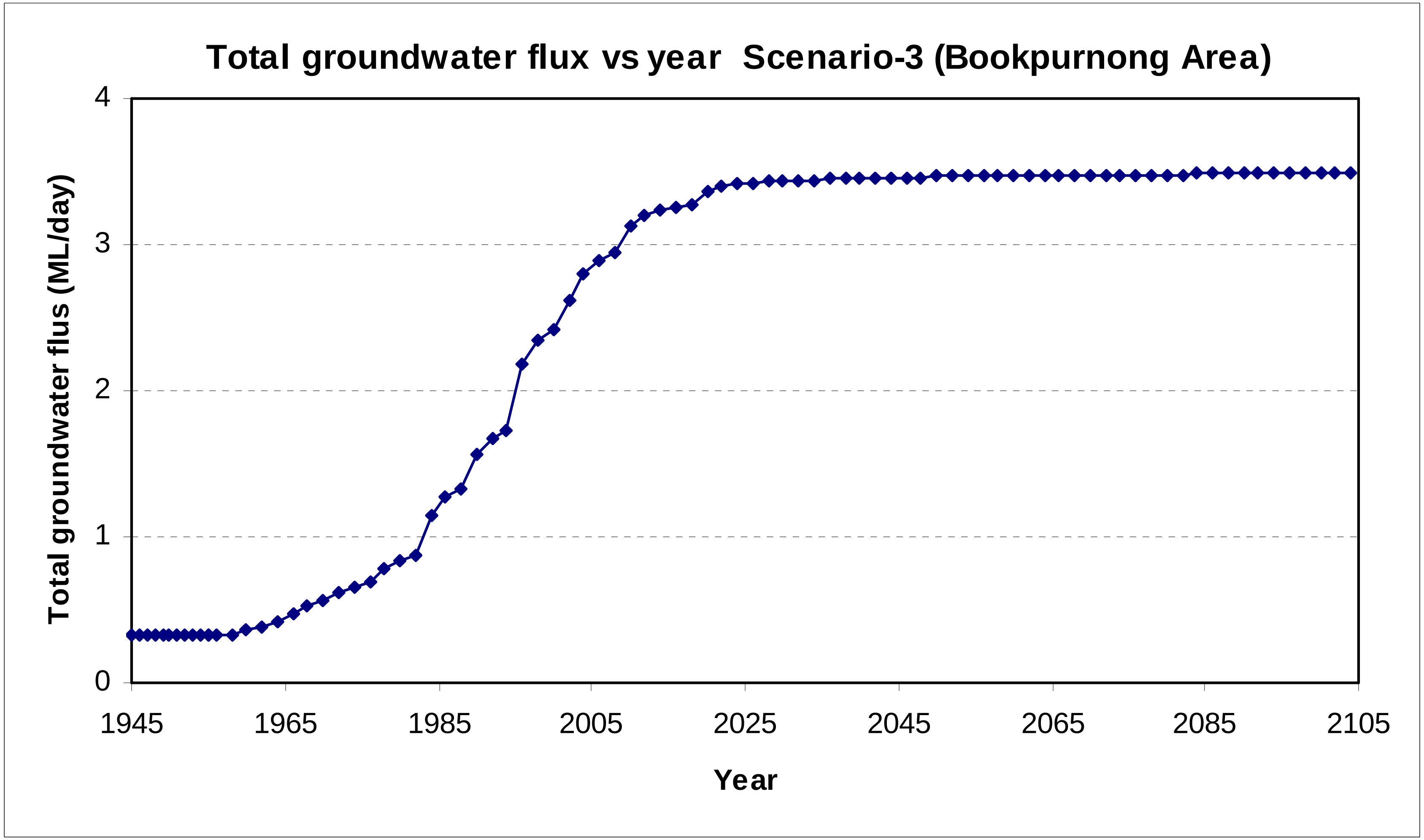


Appendix B-3-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-3 (Bookpurnong Area)

day	year	Lateral flux (m^3/day)	Upward leackage (m^3/day)	Total flux (m^3/day)
0	1945	0.241	0.079	0.320
0	1946	0.241	0.079	0.320
0	1947	0.241	0.079	0.320
0	1948	0.241	0.079	0.320
0	1949	0.241	0.079	0.320
0	1950	0.241	0.079	0.320
0	1951	0.241	0.079	0.320
0	1952	0.241	0.079	0.320
0	1953	0.241	0.079	0.320
0	1954	0.241	0.079	0.320
0	1955	0.241	0.079	0.320
30	1955	0.241	0.079	0.320
365	1956	0.241	0.079	0.320
1095	1958	0.249	0.084	0.333
1825	1960	0.265	0.091	0.356
2555	1962	0.289	0.097	0.387
3285	1964	0.323	0.104	0.427
4015	1966	0.365	0.111	0.476
4745	1968	0.408	0.116	0.525
5475	1970	0.450	0.121	0.571
6205	1972	0.488	0.126	0.614
6935	1974	0.523	0.130	0.653
7665	1976	0.553	0.133	0.686
8395	1978	0.649	0.141	0.790
9125	1980	0.694	0.145	0.839
9855	1982	0.721	0.148	0.869
10585	1984	0.982	0.164	1.147
11315	1986	1.101	0.172	1.272
12045	1988	1.160	0.176	1.336
12775	1990	1.382	0.189	1.571
13505	1992	1.476	0.195	1.671
14235	1994	1.524	0.198	1.722
14965	1996	1.960	0.220	2.179
15695	1998	2.112	0.228	2.339
16425	2000	2.180	0.232	2.411
17155	2002	2.382	0.242	2.624
17885	2004	2.554	0.252	2.805
18615	2006	2.637	0.256	2.893
19345	2008	2.680	0.259	2.939
20075	2010	2.867	0.268	3.135
20805	2012	2.935	0.271	3.206
21535	2014	2.967	0.273	3.240
22265	2016	2.986	0.275	3.260

day	year	Lateral flux (m^3/day)	Upward leackage (m^3/day)	Total flux (m^3/day)
22995	2018	2.998	0.276	3.274
23725	2020	3.086	0.280	3.366
24455	2022	3.118	0.281	3.399
25185	2024	3.132	0.282	3.415
25915	2026	3.142	0.283	3.425
26645	2028	3.148	0.284	3.431
27375	2030	3.153	0.284	3.437
28105	2032	3.157	0.284	3.441
28835	2034	3.160	0.285	3.445
29565	2036	3.163	0.285	3.448
30295	2038	3.166	0.285	3.451
31025	2040	3.168	0.285	3.454
31755	2042	3.170	0.286	3.456
32485	2044	3.172	0.286	3.458
33215	2046	3.174	0.286	3.460
33945	2048	3.176	0.286	3.462
34675	2050	3.177	0.286	3.464
35405	2052	3.179	0.287	3.465
36135	2054	3.180	0.287	3.467
36865	2056	3.182	0.287	3.468
37595	2058	3.183	0.287	3.470
38325	2060	3.184	0.287	3.471
39055	2062	3.185	0.287	3.472
39785	2064	3.186	0.287	3.473
40515	2066	3.187	0.287	3.475
41245	2068	3.188	0.288	3.476
41975	2070	3.189	0.288	3.477
42705	2072	3.190	0.288	3.478
43435	2074	3.191	0.288	3.478
44165	2076	3.191	0.288	3.479
44895	2078	3.192	0.288	3.480
45625	2080	3.193	0.288	3.481
46355	2082	3.194	0.288	3.482
47085	2084	3.194	0.288	3.483
47815	2086	3.195	0.288	3.483
48545	2088	3.196	0.288	3.484
49275	2090	3.196	0.288	3.485
50005	2092	3.197	0.288	3.485
50735	2094	3.197	0.289	3.486
51465	2096	3.198	0.289	3.486
52195	2098	3.198	0.289	3.487
52925	2100	3.199	0.289	3.488
53655	2102	3.199	0.289	3.488
54385	2104	3.200	0.289	3.489

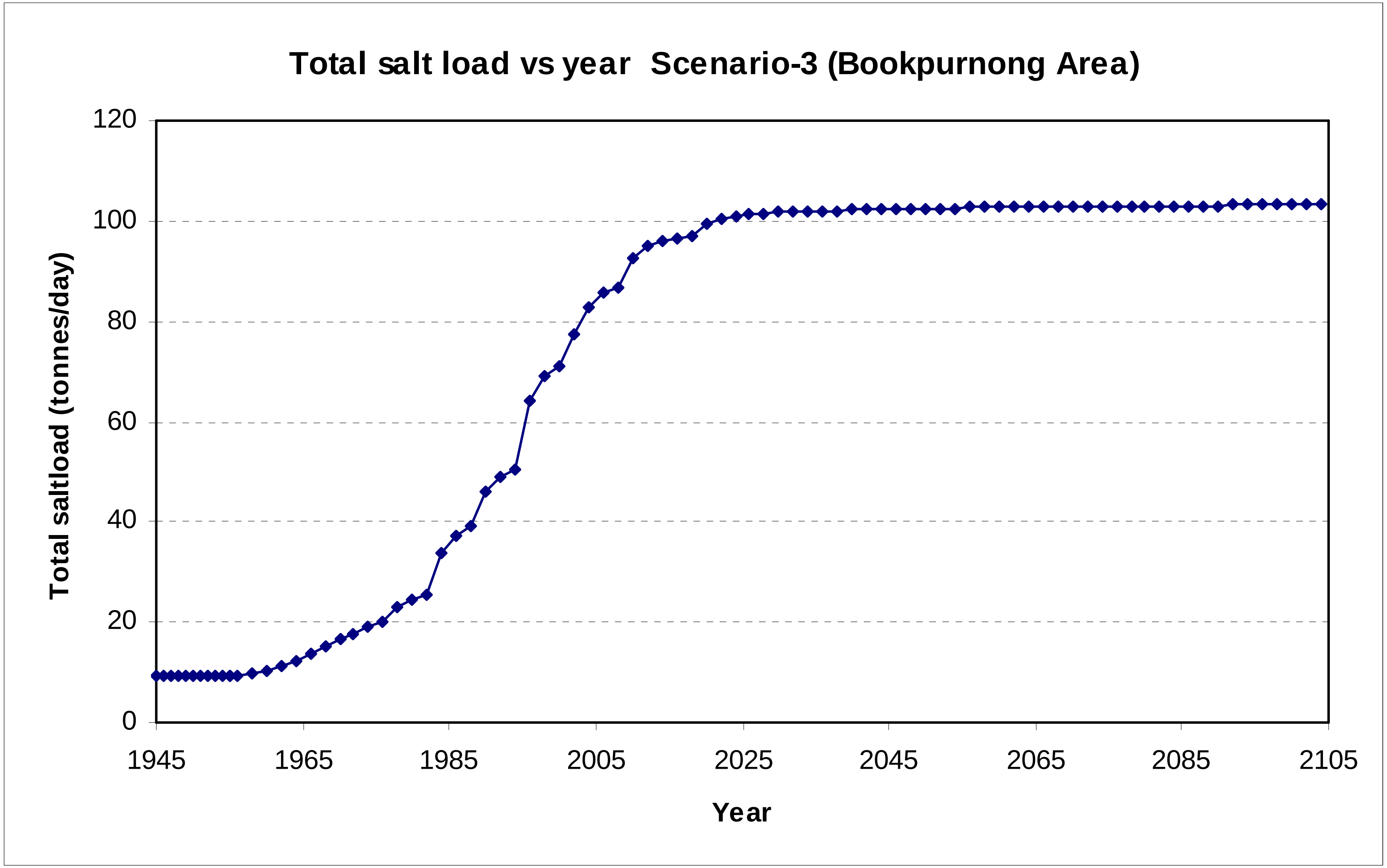
Appendix B-3-6a Predicted total groundwater flux (ML/day) in Scenario-3 (Bookpurnong Area)



Appendix B-3-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-3 (Bookpurnong Area)

day	year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Total Saltload (tonnes/day)
0	1945	7.24	1.98	9.21
0	1946	7.24	1.98	9.21
0	1947	7.24	1.98	9.21
0	1948	7.24	1.98	9.21
0	1949	7.24	1.98	9.21
0	1950	7.24	1.98	9.21
0	1951	7.24	1.98	9.21
0	1952	7.24	1.98	9.21
0	1953	7.24	1.98	9.21
0	1954	7.24	1.98	9.21
0	1955	7.24	1.98	9.21
30	1955	7.24	1.98	9.21
365	1956	7.24	1.98	9.21
1095	1958	7.46	2.10	9.56
1825	1960	7.96	2.27	10.22
2555	1962	8.68	2.43	11.11
3285	1964	9.68	2.61	12.29
4015	1966	10.94	2.77	13.72
4745	1968	12.25	2.90	15.15
5475	1970	13.50	3.03	16.53
6205	1972	14.65	3.15	17.80
6935	1974	15.69	3.25	18.94
7665	1976	16.58	3.33	19.91
8395	1978	19.47	3.52	22.99
9125	1980	20.82	3.62	24.44
9855	1982	21.64	3.70	25.34
10585	1984	29.46	4.11	33.57
11315	1986	33.02	4.29	37.32
12045	1988	34.80	4.40	39.19
12775	1990	41.47	4.72	46.19
13505	1992	44.28	4.87	49.15
14235	1994	45.71	4.95	50.66
14965	1996	58.79	5.49	64.28
15695	1998	63.35	5.69	69.04
16425	2000	65.39	5.80	71.19
17155	2002	71.47	6.05	77.52
17885	2004	76.61	6.29	82.89
18615	2006	79.10	6.40	85.51
19345	2008	80.39	6.47	86.86
20075	2010	86.01	6.69	92.70
20805	2012	88.05	6.78	94.83
21535	2014	89.01	6.83	95.84
22265	2016	89.57	6.87	96.43
22995	2018	89.95	6.89	96.84
23725	2020	92.59	6.99	99.58
24455	2022	93.53	7.03	100.56
25185	2024	93.97	7.06	101.03
25915	2026	94.25	7.08	101.32
26645	2028	94.44	7.09	101.53
27375	2030	94.59	7.10	101.68
28105	2032	94.71	7.11	101.81
28835	2034	94.81	7.12	101.92
29565	2036	94.90	7.12	102.02
30295	2038	94.97	7.13	102.10
31025	2040	95.05	7.14	102.18
31755	2042	95.11	7.14	102.25
32485	2044	95.17	7.15	102.31
33215	2046	95.22	7.15	102.37
33945	2048	95.27	7.16	102.43
34675	2050	95.32	7.16	102.48
35405	2052	95.36	7.16	102.53
36135	2054	95.41	7.17	102.57
36865	2056	95.45	7.17	102.62
37595	2058	95.48	7.17	102.66
38325	2060	95.52	7.18	102.69
39055	2062	95.55	7.18	102.73
39785	2064	95.58	7.18	102.77
40515	2066	95.61	7.19	102.80
41245	2068	95.64	7.19	102.83
41975	2070	95.67	7.19	102.86
42705	2072	95.70	7.19	102.89
43435	2074	95.72	7.19	102.92
44165	2076	95.74	7.20	102.94
44895	2078	95.77	7.20	102.97
45625	2080	95.79	7.20	102.99
46355	2082	95.81	7.20	103.01
47085	2084	95.83	7.21	103.04
47815	2086	95.85	7.21	103.06
48545	2088	95.87	7.21	103.08
49275	2090	95.89	7.21	103.10
50005	2092	95.90	7.21	103.12
50735	2094	95.92	7.21	103.13
51465	2096	95.94	7.21	103.15
52195	2098	95.95	7.22	103.17
52925	2100	95.97	7.22	103.18
53655	2102	95.98	7.22	103.20
54385	2104	95.99	7.22	103.21

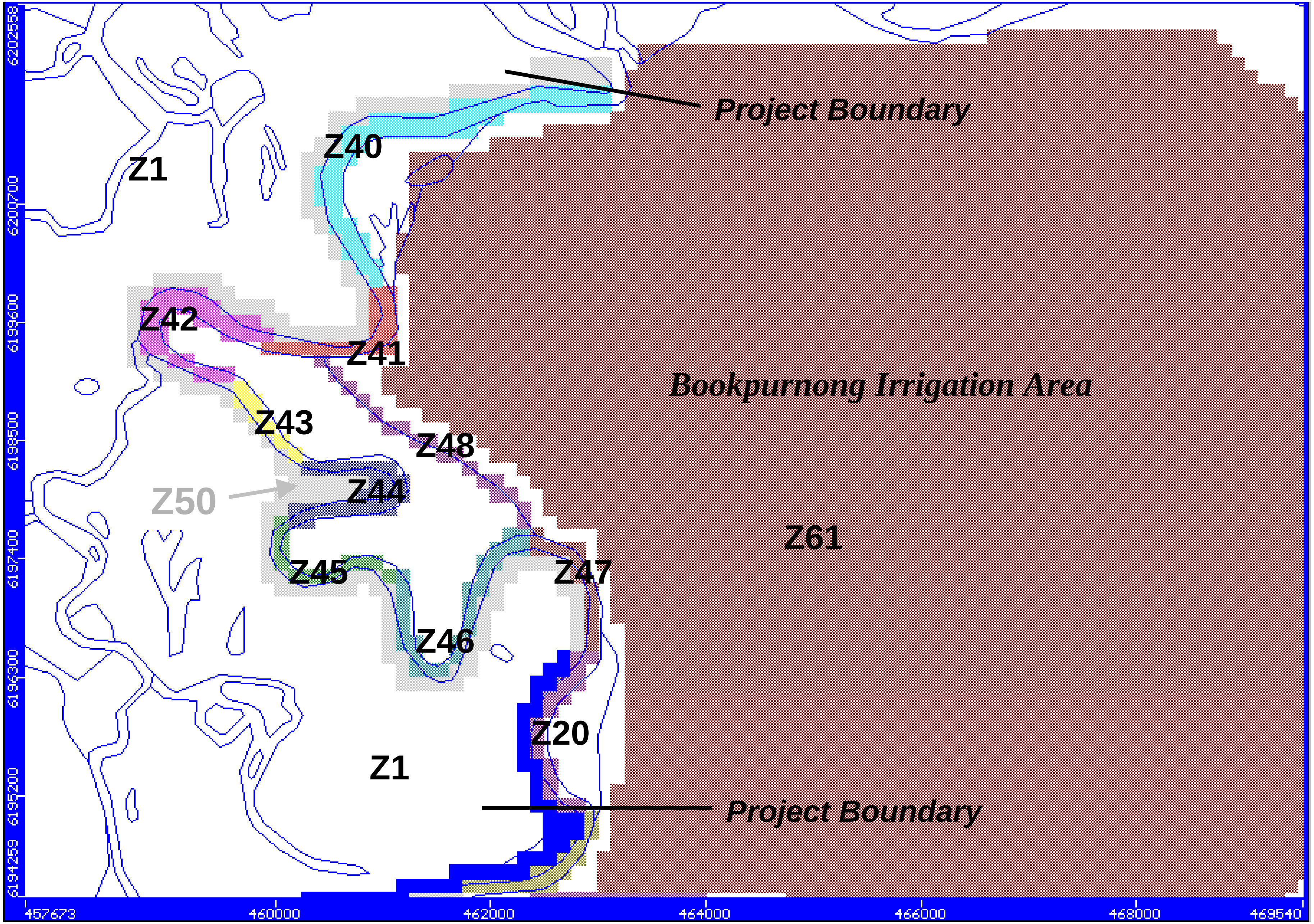
Appendix B-3-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-3 (Bookpurnong Area)



Appendix B-3-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-3 (Bookpurnong Area)

B-4 Groundwater flux and salt load entering the River Murray Scenario-4 (Bookpurnong Area)

- Flow budget zones (Bookpurnong Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix B-4-1 Flow budget zones in model Layer-1 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
30	1955	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
365	1956	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
1095	1958	0.0	87.9	0.0	0.0	28.4	0.0	14.8	70.6	0.0	47.1	249
1825	1960	0.0	88.5	0.0	0.0	29.9	0.0	15.6	73.7	0.0	57.6	265
2555	1962	0.0	89.3	0.0	0.0	31.7	0.0	16.6	78.3	0.0	73.4	289
3285	1964	0.0	90.2	0.0	0.0	33.7	0.0	17.8	84.1	0.0	97.0	323
4015	1966	0.0	91.2	0.0	0.0	35.8	0.0	19.0	91.2	0.0	127.6	365
4745	1968	0.0	92.2	0.0	0.0	37.7	0.0	20.2	99.1	0.0	159.1	408
5475	1970	0.0	93.2	0.0	0.0	39.7	0.0	21.4	107.5	0.0	188.4	450
6205	1972	0.0	94.2	0.0	0.0	41.6	0.0	22.5	116.1	0.0	214.2	488
6935	1974	0.0	95.2	0.0	0.0	43.4	0.0	23.7	124.2	0.0	236.6	523
7665	1976	0.0	96.1	0.0	0.0	45.0	0.0	24.7	131.8	0.0	255.1	553
8395	1978	0.0	106.0	0.0	0.0	64.6	0.0	41.8	164.5	0.0	272.2	649
9125	1980	0.0	110.5	0.0	0.0	73.3	0.2	46.9	177.3	0.0	285.8	694
9855	1982	0.0	112.6	0.0	0.0	76.8	0.3	49.1	185.4	0.0	297.1	721
10585	1984	26.5	149.8	0.0	0.0	128.1	2.1	84.8	269.0	0.0	321.8	982
11315	1986	51.0	162.3	0.0	0.0	148.7	3.0	96.0	297.9	0.9	340.9	1101
12045	1988	65.1	167.1	0.0	0.0	156.1	3.4	100.1	312.2	1.3	354.5	1160
12775	1990	111.8	195.0	0.0	0.2	190.4	4.5	123.6	374.6	5.4	376.9	1382
13505	1992	134.3	203.6	0.0	0.5	203.3	5.1	131.3	396.6	8.1	393.3	1476
14235	1994	145.9	207.0	0.0	0.7	208.1	5.3	134.3	407.6	9.2	403.5	1521
14965	1996	230.8	253.0	0.0	1.7	268.2	7.4	185.5	536.4	39.2	430.6	1953
15695	1998	271.6	267.0	0.0	2.5	288.2	8.3	197.5	570.5	46.1	446.9	2099
16425	2000	291.1	272.1	0.0	2.9	294.9	8.6	201.7	585.0	48.5	455.5	2160
17155	2002	340.8	287.0	0.0	3.3	289.1	8.1	182.2	584.1	38.0	471.4	2204
17885	2004	426.6	319.3	0.0	5.2	302.6	8.1	176.0	622.7	36.6	498.4	2396
18615	2006	453.2	325.7	0.0	6.0	309.6	8.3	180.0	641.9	39.1	512.7	2477
19345	2008	464.6	328.3	0.0	6.3	313.1	8.5	182.2	651.2	40.4	520.0	2515
20075	2010	517.7	351.6	0.0	8.0	334.1	9.1	193.4	696.5	49.2	536.0	2696
20805	2012	537.3	357.1	0.0	8.7	341.2	9.4	197.7	711.0	52.1	545.4	2760
21535	2014	546.0	359.2	0.0	8.9	343.9	9.5	199.4	717.8	53.3	550.7	2789
22265	2016	550.6	360.2	0.0	9.1	345.2	9.6	200.3	721.7	53.8	554.3	2805
22995	2018	553.4	360.8	0.0	9.1	346.0	9.7	200.9	724.3	54.2	557.1	2815
23725	2020	379.2	278.4	0.0	3.5	273.6	7.7	163.6	575.1	25.1	515.9	2222
24455	2022	323.8	260.9	0.0	2.1	250.9	6.8	150.7	535.4	17.2	494.8	2043
25185	2024	301.8	255.2	0.0	1.8	243.4	6.5	146.1	520.0	14.7	485.7	1975
25915	2026	291.7	252.8	0.0	1.7	240.2	6.4	144.1	512.7	13.7	481.2	1944
26645	2028	286.7	251.6	0.0	1.7	238.7	6.3	143.1	509.0	13.2	478.7	1929

Appendix B-4-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-4 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
27375	2030	284.0	251.0	0.0	1.6	237.9	6.3	142.6	507.0	12.9	477.5	1921
28105	2032	282.6	250.7	0.0	1.6	237.5	6.2	142.3	506.0	12.8	476.8	1917
28835	2034	281.8	250.6	0.0	1.6	237.3	6.2	142.2	505.4	12.7	476.6	1915
29565	2036	281.5	250.5	0.0	1.6	237.2	6.2	142.1	505.2	12.7	476.7	1914
30295	2038	281.4	250.5	0.0	1.6	237.2	6.2	142.1	505.2	12.7	476.9	1914
31025	2040	281.4	250.5	0.0	1.6	237.2	6.2	142.1	505.4	12.7	477.2	1914
31755	2042	281.5	250.5	0.0	1.6	237.3	6.2	142.2	505.5	12.7	477.6	1915
32485	2044	281.6	250.5	0.0	1.6	237.3	6.2	142.2	505.8	12.7	478.0	1916
33215	2046	281.8	250.6	0.0	1.6	237.4	6.3	142.3	506.1	12.7	478.5	1917
33945	2048	282.0	250.6	0.0	1.6	237.5	6.3	142.3	506.3	12.8	479.0	1918
34675	2050	282.2	250.7	0.0	1.6	237.5	6.3	142.4	506.6	12.8	479.5	1920
35405	2052	282.4	250.7	0.0	1.6	237.6	6.3	142.4	506.9	12.8	480.0	1921
36135	2054	282.7	250.8	0.0	1.6	237.7	6.3	142.5	507.2	12.8	480.5	1922
36865	2056	282.9	250.8	0.0	1.7	237.8	6.3	142.5	507.5	12.9	481.0	1923
37595	2058	283.1	250.9	0.0	1.7	237.8	6.3	142.6	507.8	12.9	481.4	1924
38325	2060	283.3	250.9	0.0	1.7	237.9	6.3	142.6	508.1	12.9	481.9	1926
39055	2062	283.5	251.0	0.0	1.7	238.0	6.3	142.7	508.4	12.9	482.4	1927
39785	2064	283.7	251.0	0.0	1.7	238.1	6.3	142.8	508.7	12.9	482.8	1928
40515	2066	283.9	251.0	0.0	1.7	238.1	6.3	142.8	508.9	13.0	483.3	1929
41245	2068	284.1	251.1	0.0	1.7	238.2	6.3	142.9	509.2	13.0	483.7	1930
41975	2070	284.3	251.1	0.0	1.7	238.3	6.3	142.9	509.4	13.0	484.1	1931
42705	2072	284.5	251.2	0.0	1.7	238.3	6.3	142.9	509.7	13.0	484.5	1932
43435	2074	284.6	251.2	0.0	1.7	238.4	6.3	143.0	509.9	13.0	484.9	1933
44165	2076	284.8	251.2	0.0	1.7	238.4	6.3	143.0	510.2	13.1	485.3	1934
44895	2078	285.0	251.3	0.0	1.7	238.5	6.3	143.1	510.4	13.1	485.7	1935
45625	2080	285.1	251.3	0.0	1.7	238.6	6.3	143.1	510.6	13.1	486.0	1936
46355	2082	285.3	251.4	0.0	1.7	238.6	6.3	143.2	510.8	13.1	486.3	1937
47085	2084	285.4	251.4	0.0	1.7	238.7	6.3	143.2	511.0	13.1	486.7	1937
47815	2086	285.6	251.4	0.0	1.7	238.7	6.3	143.2	511.2	13.1	487.0	1938
48545	2088	285.7	251.4	0.0	1.7	238.8	6.3	143.3	511.4	13.2	487.3	1939
49275	2090	285.9	251.5	0.0	1.7	238.8	6.3	143.3	511.6	13.2	487.6	1940
50005	2092	286.0	251.5	0.0	1.7	238.9	6.4	143.3	511.7	13.2	487.9	1941
50735	2094	286.1	251.5	0.0	1.7	238.9	6.4	143.4	511.9	13.2	488.1	1941
51465	2096	286.2	251.6	0.0	1.7	238.9	6.4	143.4	512.1	13.2	488.4	1942
52195	2098	286.3	251.6	0.0	1.7	239.0	6.4	143.4	512.2	13.2	488.7	1942
52925	2100	286.5	251.6	0.0	1.7	239.0	6.4	143.5	512.4	13.2	488.9	1943
53655	2102	286.6	251.6	0.0	1.7	239.1	6.4	143.5	512.5	13.2	489.1	1944
54385	2104	286.7	251.7	0.0	1.7	239.1	6.4	143.5	512.7	13.3	489.4	1944
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

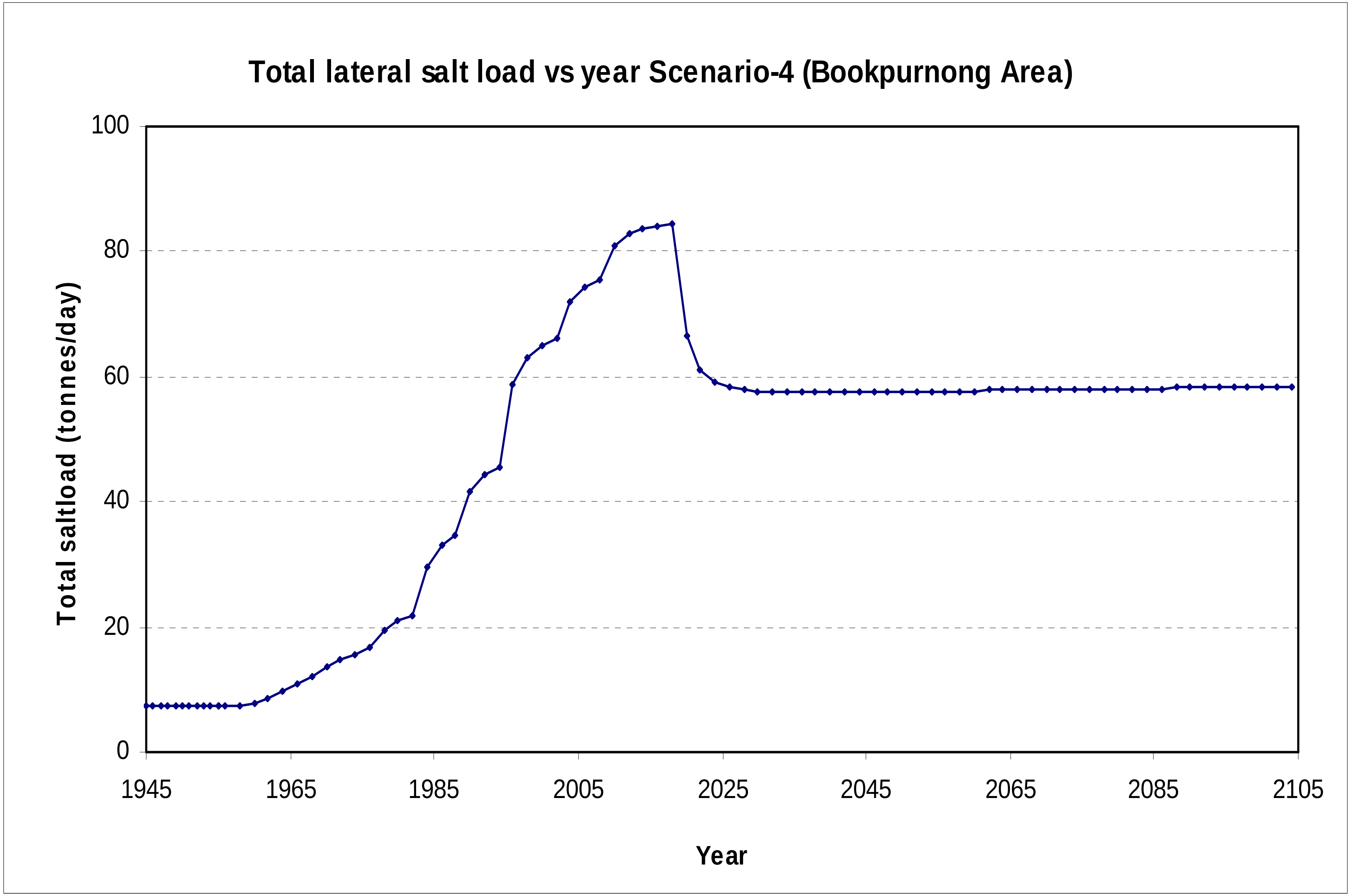
Appendix B-4-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-4 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1946	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1947	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1948	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1949	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1950	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1951	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1952	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1953	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1954	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
30	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
365	1956	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
1095	1958	0.0	2.6	0.0	0.0	0.9	0.0	0.4	2.1	0.0	1.4	7
1825	1960	0.0	2.7	0.0	0.0	0.9	0.0	0.5	2.2	0.0	1.7	8
2555	1962	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.3	0.0	2.2	9
3285	1964	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.5	0.0	2.9	10
4015	1966	0.0	2.7	0.0	0.0	1.1	0.0	0.6	2.7	0.0	3.8	11
4745	1968	0.0	2.8	0.0	0.0	1.1	0.0	0.6	3.0	0.0	4.8	12
5475	1970	0.0	2.8	0.0	0.0	1.2	0.0	0.6	3.2	0.0	5.7	14
6205	1972	0.0	2.8	0.0	0.0	1.2	0.0	0.7	3.5	0.0	6.4	15
6935	1974	0.0	2.9	0.0	0.0	1.3	0.0	0.7	3.7	0.0	7.1	16
7665	1976	0.0	2.9	0.0	0.0	1.4	0.0	0.7	4.0	0.0	7.7	17
8395	1978	0.0	3.2	0.0	0.0	1.9	0.0	1.3	4.9	0.0	8.2	19
9125	1980	0.0	3.3	0.0	0.0	2.2	0.0	1.4	5.3	0.0	8.6	21
9855	1982	0.0	3.4	0.0	0.0	2.3	0.0	1.5	5.6	0.0	8.9	22
10585	1984	0.8	4.5	0.0	0.0	3.8	0.1	2.5	8.1	0.0	9.7	29
11315	1986	1.5	4.9	0.0	0.0	4.5	0.1	2.9	8.9	0.0	10.2	33
12045	1988	2.0	5.0	0.0	0.0	4.7	0.1	3.0	9.4	0.0	10.6	35
12775	1990	3.4	5.8	0.0	0.0	5.7	0.1	3.7	11.2	0.2	11.3	41
13505	1992	4.0	6.1	0.0	0.0	6.1	0.2	3.9	11.9	0.2	11.8	44
14235	1994	4.4	6.2	0.0	0.0	6.2	0.2	4.0	12.2	0.3	12.1	48
14965	1996	6.9	7.6	0.0	0.1	8.0	0.2	5.6	16.1	1.2	12.9	59
15695	1998	8.1	8.0	0.0	0.1	8.6	0.2	5.9	17.1	1.4	13.4	63
16425	2000	8.7	8.2	0.0	0.1	8.8	0.3	6.0	17.5	1.5	13.7	65
17155	2002	10.2	8.6	0.0	0.1	8.7	0.2	5.5	17.5	1.1	14.1	68
17885	2004	12.8	9.6	0.0	0.2	9.1	0.2	5.3	18.7	1.1	15.0	72
18615	2006	13.6	9.8	0.0	0.2	9.3	0.3	5.4	19.3	1.2	15.4	74
19345	2008	13.9	9.8	0.0	0.2	9.4	0.3	5.5	19.5	1.2	15.6	75
20075	2010	15.5	10.5	0.0	0.2	10.0	0.3	5.8	20.9	1.5	16.1	81
20805	2012	16.1	10.7	0.0	0.3	10.2	0.3	5.9	21.3	1.6	16.4	83
21535	2014	16.4	10.8	0.0	0.3	10.3	0.3	6.0	21.5	1.6	16.5	84
22265	2016	16.5	10.8	0.0	0.3	10.4	0.3	6.0	21.7	1.6	16.6	84

Appendix B-4-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-4 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	16.6	10.8	0.0	0.3	10.4	0.3	6.0	21.7	1.6	16.7	84
23725	2020	11.4	8.4	0.0	0.1	8.2	0.2	4.9	17.3	0.8	15.5	67
24455	2022	9.7	7.8	0.0	0.1	7.5	0.2	4.5	16.1	0.5	14.8	61
25185	2024	9.1	7.7	0.0	0.1	7.3	0.2	4.4	15.6	0.4	14.6	59
25915	2026	8.8	7.6	0.0	0.1	7.2	0.2	4.3	15.4	0.4	14.4	58
26645	2028	8.6	7.5	0.0	0.0	7.2	0.2	4.3	15.3	0.4	14.4	58
27375	2030	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.3	58
28105	2032	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.3	57
28835	2034	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.3	57
29565	2036	8.4	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.3	57
30295	2038	8.4	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.3	57
31025	2040	8.4	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.3	57
31755	2042	8.4	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.3	57
32485	2044	8.4	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.3	57
33215	2046	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.4	58
33945	2048	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.4	58
34675	2050	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.4	58
35405	2052	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.4	58
36135	2054	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.4	58
36865	2056	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.4	58
37595	2058	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.4	58
38325	2060	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.2	0.4	14.5	58
39055	2062	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.3	0.4	14.5	58
39785	2064	8.5	7.5	0.0	0.0	7.1	0.2	4.3	15.3	0.4	14.5	58
40515	2066	8.5	7.5	0.0	0.1	7.1	0.2	4.3	15.3	0.4	14.5	58
41245	2068	8.5	7.5	0.0	0.1	7.1	0.2	4.3	15.3	0.4	14.5	58
41975	2070	8.5	7.5	0.0	0.1	7.1	0.2	4.3	15.3	0.4	14.5	58
42705	2072	8.5	7.5	0.0	0.1	7.1	0.2	4.3	15.3	0.4	14.5	58
43435	2074	8.5	7.5	0.0	0.1	7.2	0.2	4.3	15.3	0.4	14.5	58
44165	2076	8.5	7.5	0.0	0.1	7.2	0.2	4.3	15.3	0.4	14.6	58
44895	2078	8.5	7.5	0.0	0.1	7.2	0.2	4.3	15.3	0.4	14.6	58
45625	2080	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.3	0.4	14.6	58
46355	2082	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.3	0.4	14.6	58
47085	2084	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.3	0.4	14.6	58
47815	2086	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.3	0.4	14.6	58
48545	2088	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.3	0.4	14.6	58
49275	2090	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.3	0.4	14.6	58
50005	2092	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.4	0.4	14.6	58
50735	2094	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.4	0.4	14.6	58
51465	2096	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.4	0.4	14.7	58
52195	2098	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.4	0.4	14.7	58
52925	2100	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.4	0.4	14.7	58
53655	2102	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.4	0.4	14.7	58
54385	2104	8.6	7.5	0.0	0.1	7.2	0.2	4.3	15.4	0.4	14.7	58
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

Appendix B-4-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-4 (Bookpurnong Area)



Appendix B-4-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-4 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upwards (m^3/day)
30	1955	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
365	1956	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
1095	1958	0.0	18.9	18.5	2.3	8.7	2.3	7.8	8.0	9.5	8.1	84
1825	1960	0.0	19.1	18.8	2.4	9.3	2.7	9.2	8.7	9.9	10.6	91
2555	1962	0.0	19.4	19.1	2.5	9.9	3.0	10.5	9.5	10.4	13.0	97
3285	1964	0.0	19.7	19.3	2.6	10.5	3.4	11.8	10.4	10.9	15.5	104
4015	1966	0.0	20.0	19.6	2.7	11.1	3.7	13.1	11.4	11.3	17.9	111
4745	1968	0.0	20.3	19.8	2.8	11.6	3.9	14.0	12.3	11.7	19.6	116
5475	1970	0.0	20.6	20.0	2.9	12.1	4.2	14.9	13.1	12.1	21.3	121
6205	1972	0.0	20.8	20.2	3.0	12.5	4.4	15.8	14.0	12.5	22.8	126
6935	1974	0.0	21.1	20.4	3.0	12.8	4.5	16.5	14.7	12.9	24.0	130
7665	1976	0.0	21.3	20.5	3.1	13.1	4.7	17.1	15.3	13.2	24.8	133
8395	1978	0.0	22.4	20.8	3.2	14.1	4.9	18.5	16.8	14.2	25.8	141
9125	1980	0.0	22.9	21.0	3.3	14.6	5.1	19.2	17.6	14.6	26.6	145
9855	1982	0.0	23.2	21.2	3.3	14.9	5.2	19.8	18.2	14.8	27.2	148
10585	1984	0.1	26.4	21.8	3.6	17.1	5.7	22.6	21.5	16.8	28.8	164
11315	1986	0.5	27.6	22.2	3.7	18.0	6.0	23.7	22.9	17.4	29.8	172
12045	1988	0.9	28.1	22.4	3.8	18.4	6.1	24.4	23.6	17.8	30.5	176
12775	1990	2.3	30.3	22.8	4.0	19.9	6.5	26.3	26.0	19.0	31.8	189
13505	1992	3.1	31.0	23.1	4.1	20.5	6.6	27.1	27.0	19.5	32.6	195
14235	1994	3.6	31.4	23.2	4.1	20.8	6.7	27.5	27.5	19.8	32.9	197
14965	1996	6.6	34.8	23.9	4.4	23.1	7.2	30.6	31.5	21.8	34.3	218
15695	1998	8.0	35.9	24.2	4.5	23.8	7.4	31.5	32.7	22.4	35.0	226
16425	2000	8.8	36.3	24.4	4.6	24.2	7.5	32.0	33.3	22.7	35.3	229
17155	2002	10.3	37.2	24.5	4.6	24.2	7.6	31.8	33.7	22.9	35.9	233
17885	2004	12.9	39.1	24.9	4.8	25.0	7.8	32.4	35.2	23.7	37.0	243
18615	2006	13.9	39.7	25.1	4.8	25.4	7.9	32.9	36.0	24.0	37.5	247
19345	2008	14.3	39.9	25.2	4.9	25.6	7.9	33.2	36.3	24.2	37.8	249
20075	2010	16.0	41.4	25.5	5.0	26.4	8.1	34.2	37.7	24.9	38.5	258
20805	2012	16.8	41.8	25.6	5.0	26.7	8.2	34.6	38.3	25.2	38.8	261
21535	2014	17.1	42.0	25.7	5.1	26.9	8.3	34.8	38.5	25.4	39.1	263
22265	2016	17.4	42.1	25.8	5.1	27.0	8.3	35.0	38.7	25.4	39.3	264
22995	2018	17.5	42.2	25.8	5.1	27.1	8.3	35.1	38.8	25.5	39.4	265
23725	2020	12.3	37.1	24.9	4.7	24.4	7.8	32.2	34.4	23.2	37.6	239
24455	2022	10.5	35.8	24.6	4.6	23.6	7.6	31.2	33.1	22.5	36.9	230
25185	2024	9.6	35.3	24.5	4.6	23.2	7.5	30.8	32.5	22.2	36.6	227
25915	2026	9.2	35.1	24.4	4.5	23.1	7.5	30.6	32.2	22.1	36.4	225
26645	2028	9.0	35.0	24.4	4.5	23.0	7.4	30.5	32.1	22.0	36.3	224

Appendix B-4-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-4 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upward (m^3/day)
27375	2030	8.9	34.9	24.3	4.5	23.0	7.4	30.4	32.0	21.9	36.3	224
28105	2032	8.9	34.9	24.3	4.5	22.9	7.4	30.4	31.9	21.9	36.2	223
28835	2034	8.8	34.9	24.3	4.5	22.9	7.4	30.4	31.9	21.9	36.2	223
29565	2036	8.8	34.9	24.3	4.5	22.9	7.4	30.4	31.9	21.9	36.3	223
30295	2038	8.8	34.9	24.3	4.5	22.9	7.4	30.4	31.9	21.9	36.3	224
31025	2040	8.8	34.9	24.3	4.5	22.9	7.4	30.4	31.9	21.9	36.3	224
31755	2042	8.9	34.9	24.3	4.5	23.0	7.5	30.4	32.0	21.9	36.3	224
32485	2044	8.9	34.9	24.4	4.5	23.0	7.5	30.5	32.0	22.0	36.4	224
33215	2046	8.9	34.9	24.4	4.5	23.0	7.5	30.5	32.0	22.0	36.4	224
33945	2048	8.9	34.9	24.4	4.5	23.0	7.5	30.5	32.0	22.0	36.4	224
34675	2050	8.9	34.9	24.4	4.5	23.0	7.5	30.5	32.0	22.0	36.5	224
35405	2052	8.9	35.0	24.4	4.5	23.0	7.5	30.6	32.1	22.0	36.5	224
36135	2054	9.0	35.0	24.4	4.5	23.0	7.5	30.6	32.1	22.0	36.5	225
36865	2056	9.0	35.0	24.4	4.5	23.1	7.5	30.6	32.1	22.0	36.6	225
37595	2058	9.0	35.0	24.4	4.5	23.1	7.5	30.6	32.1	22.0	36.6	225
38325	2060	9.0	35.0	24.4	4.5	23.1	7.5	30.6	32.2	22.0	36.6	225
39055	2062	9.0	35.0	24.4	4.5	23.1	7.5	30.7	32.2	22.1	36.6	225
39785	2064	9.0	35.0	24.4	4.5	23.1	7.5	30.7	32.2	22.1	36.7	225
40515	2066	9.1	35.0	24.4	4.6	23.1	7.5	30.7	32.2	22.1	36.7	225
41245	2068	9.1	35.0	24.4	4.6	23.1	7.5	30.7	32.2	22.1	36.7	226
41975	2070	9.1	35.0	24.4	4.6	23.1	7.5	30.7	32.2	22.1	36.8	226
42705	2072	9.1	35.0	24.4	4.6	23.1	7.5	30.8	32.3	22.1	36.8	226
43435	2074	9.1	35.0	24.5	4.6	23.2	7.5	30.8	32.3	22.1	36.8	226
44165	2076	9.1	35.1	24.5	4.6	23.2	7.5	30.8	32.3	22.1	36.8	226
44895	2078	9.1	35.1	24.5	4.6	23.2	7.5	30.8	32.3	22.1	36.8	226
45625	2080	9.2	35.1	24.5	4.6	23.2	7.6	30.8	32.3	22.1	36.9	226
46355	2082	9.2	35.1	24.5	4.6	23.2	7.6	30.8	32.3	22.2	36.9	226
47085	2084	9.2	35.1	24.5	4.6	23.2	7.6	30.9	32.4	22.2	36.9	226
47815	2086	9.2	35.1	24.5	4.6	23.2	7.6	30.9	32.4	22.2	36.9	226
48545	2088	9.2	35.1	24.5	4.6	23.2	7.6	30.9	32.4	22.2	36.9	227
49275	2090	9.2	35.1	24.5	4.6	23.2	7.6	30.9	32.4	22.2	37.0	227
50005	2092	9.2	35.1	24.5	4.6	23.2	7.6	30.9	32.4	22.2	37.0	227
50735	2094	9.2	35.1	24.5	4.6	23.2	7.6	30.9	32.4	22.2	37.0	227
51465	2096	9.2	35.1	24.5	4.6	23.2	7.6	30.9	32.4	22.2	37.0	227
52195	2098	9.3	35.1	24.5	4.6	23.2	7.6	31.0	32.4	22.2	37.0	227
52925	2100	9.3	35.1	24.5	4.6	23.3	7.6	31.0	32.4	22.2	37.0	227
53655	2102	9.3	35.1	24.5	4.6	23.3	7.6	31.0	32.5	22.2	37.1	227
54385	2104	9.3	35.1	24.5	4.6	23.3	7.6	31.0	32.5	22.2	37.1	227
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

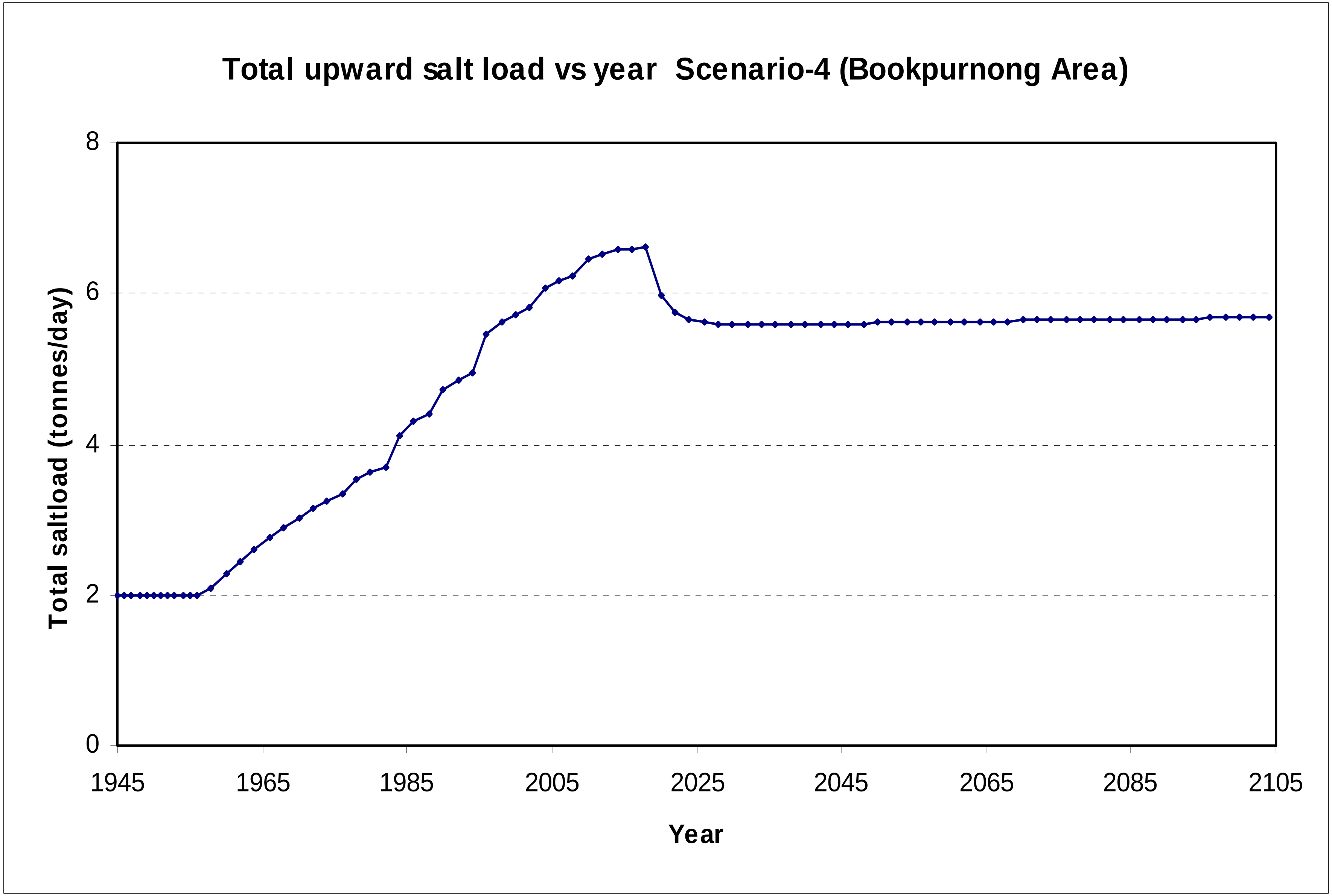
Appendix B-4-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-4 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1946	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1947	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1948	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1949	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1950	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1951	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1952	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1953	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1954	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
30	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
365	1956	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1095	1958	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1825	1960	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.3	2
2555	1962	0.0	0.5	0.5	0.1	0.2	0.1	0.3	0.2	0.3	0.3	2
3285	1964	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4015	1966	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4745	1968	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
5475	1970	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
6205	1972	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.6	3
6935	1974	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
7665	1976	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
8395	1978	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.6	4
9125	1980	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.7	4
9855	1982	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.5	0.4	0.7	4
10585	1984	0.0	0.7	0.5	0.1	0.4	0.1	0.6	0.5	0.4	0.7	4
11315	1986	0.0	0.7	0.6	0.1	0.4	0.1	0.6	0.6	0.4	0.7	4
12045	1988	0.0	0.7	0.6	0.1	0.5	0.2	0.6	0.6	0.4	0.8	4
12775	1990	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.6	0.5	0.8	5
13505	1992	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14235	1994	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14965	1996	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	5
15695	1998	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
16425	2000	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17155	2002	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17885	2004	0.3	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
18615	2006	0.3	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
19345	2008	0.4	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
20075	2010	0.4	1.0	0.6	0.1	0.7	0.2	0.9	0.9	0.6	1.0	6
20805	2012	0.4	1.0	0.6	0.1	0.7	0.2	0.9	1.0	0.6	1.0	7
21535	2014	0.4	1.0	0.6	0.1	0.7	0.2	0.9	1.0	0.6	1.0	7
22265	2016	0.4	1.1	0.6	0.1	0.7	0.2	0.9	1.0	0.6	1.0	7

Appendix B-4-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-4 (Bookpurnong Area)

day	year	Z2 to Z40 (tonne/day)	Z2 to Z41 (tonne/day)	Z2 to Z42 (tonne/day)	Z2 to Z43 (tonne/day)	Z2 to Z44 (tonne/day)	Z2 to Z45 (tonne/day)	Z2 to Z46 (tonne/day)	Z2 to Z47 (tonne/day)	Z2 to Z48 (tonne/day)	Z2 to Z20 (tonne/day)	Total Lateral (tonne/day)
22995	2018	0.4	1.1	0.6	0.1	0.7	0.2	0.9	1.0	0.6	1.0	7
23725	2020	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
24455	2022	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
25185	2024	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
25915	2026	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
26645	2028	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
27375	2030	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
28105	2032	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
28835	2034	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
29565	2036	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
30295	2038	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
31025	2040	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
31755	2042	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
32485	2044	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
33215	2046	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
33945	2048	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
34675	2050	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	6
35405	2052	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
36135	2054	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
36865	2056	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
37595	2058	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
38325	2060	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
39055	2062	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
39785	2064	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
40515	2066	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
41245	2068	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
41975	2070	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
42705	2072	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
43435	2074	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
44165	2076	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
44895	2078	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
45625	2080	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
46355	2082	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
47085	2084	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
47815	2086	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
48545	2088	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
49275	2090	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
50005	2092	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
50735	2094	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
51465	2096	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
52195	2098	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
52925	2100	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
53655	2102	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
54385	2104	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

Appendix B-4-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-4 (Bookpurnong Area)

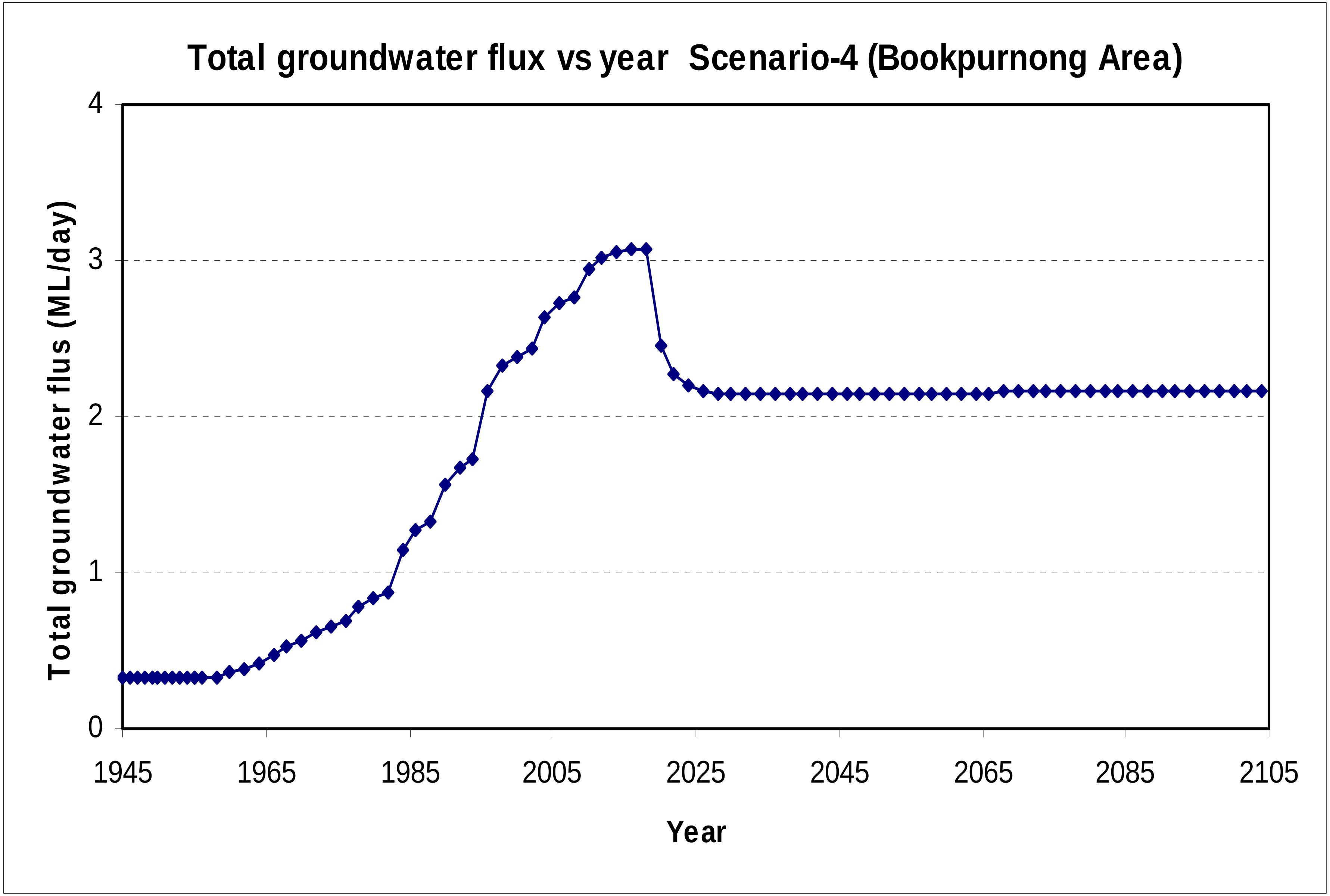


Appendix B-4-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-4 (Bookpurnong Area)

day	year	Lateral flux (m^3/day)	Upward leackage (m^3/day)	Total flux (m^3/day)
0	1945	0.241	0.079	0.320
0	1946	0.241	0.079	0.320
0	1947	0.241	0.079	0.320
0	1948	0.241	0.079	0.320
0	1949	0.241	0.079	0.320
0	1950	0.241	0.079	0.320
0	1951	0.241	0.079	0.320
0	1952	0.241	0.079	0.320
0	1953	0.241	0.079	0.320
0	1954	0.241	0.079	0.320
0	1955	0.241	0.079	0.320
30	1955	0.241	0.079	0.320
365	1956	0.241	0.079	0.320
1095	1958	0.249	0.084	0.333
1825	1960	0.265	0.091	0.356
2555	1962	0.289	0.097	0.387
3285	1964	0.323	0.104	0.427
4015	1966	0.365	0.111	0.476
4745	1968	0.408	0.116	0.525
5475	1970	0.450	0.121	0.571
6205	1972	0.488	0.126	0.614
6935	1974	0.523	0.130	0.653
7665	1976	0.553	0.133	0.686
8395	1978	0.649	0.141	0.790
9125	1980	0.694	0.145	0.839
9855	1982	0.721	0.148	0.869
10585	1984	0.982	0.164	1.147
11315	1986	1.101	0.172	1.272
12045	1988	1.160	0.176	1.336
12775	1990	1.382	0.189	1.571
13505	1992	1.476	0.195	1.671
14235	1994	1.521	0.197	1.719
14965	1996	1.953	0.218	2.171
15695	1998	2.099	0.226	2.324
16425	2000	2.160	0.229	2.389
17155	2002	2.204	0.233	2.437
17885	2004	2.395	0.243	2.638
18615	2006	2.477	0.247	2.723
19345	2008	2.515	0.249	2.764
20075	2010	2.696	0.258	2.953
20805	2012	2.760	0.261	3.021
21535	2014	2.789	0.263	3.052
22265	2016	2.805	0.264	3.069

day	year	Lateral flux (m^3/day)	Upward leackage (m^3/day)	Total flux (m^3/day)
22995	2018	2.815	0.265	3.080
23725	2020	2.222	0.239	2.461
24455	2022	2.043	0.230	2.273
25185	2024	1.975	0.227	2.202
25915	2026	1.944	0.225	2.169
26645	2028	1.929	0.224	2.153
27375	2030	1.921	0.224	2.144
28105	2032	1.917	0.223	2.140
28835	2034	1.915	0.223	2.138
29565	2036	1.914	0.223	2.137
30295	2038	1.914	0.224	2.137
31025	2040	1.914	0.224	2.138
31755	2042	1.915	0.224	2.139
32485	2044	1.916	0.224	2.140
33215	2046	1.917	0.224	2.141
33945	2048	1.918	0.224	2.142
34675	2050	1.920	0.224	2.144
35405	2052	1.921	0.224	2.145
36135	2054	1.922	0.225	2.147
36865	2056	1.923	0.225	2.148
37595	2058	1.924	0.225	2.149
38325	2060	1.926	0.225	2.151
39055	2062	1.927	0.225	2.152
39785	2064	1.928	0.225	2.153
40515	2066	1.929	0.225	2.154
41245	2068	1.930	0.226	2.156
41975	2070	1.931	0.226	2.157
42705	2072	1.932	0.226	2.158
43435	2074	1.933	0.226	2.159
44165	2076	1.934	0.226	2.160
44895	2078	1.935	0.226	2.161
45625	2080	1.936	0.226	2.162
46355	2082	1.937	0.226	2.163
47085	2084	1.937	0.226	2.164
47815	2086	1.938	0.226	2.165
48545	2088	1.939	0.227	2.166
49275	2090	1.940	0.227	2.166
50005	2092	1.941	0.227	2.167
50735	2094	1.941	0.227	2.168
51465	2096	1.942	0.227	2.169
52195	2098	1.942	0.227	2.169
52925	2100	1.943	0.227	2.170
53655	2102	1.944	0.227	2.171
54385	2104	1.944	0.227	2.171

Appendix B-4-6a Predicted total groundwater flux (ML/day) in Scenario-4 (Bookpurnong Area)

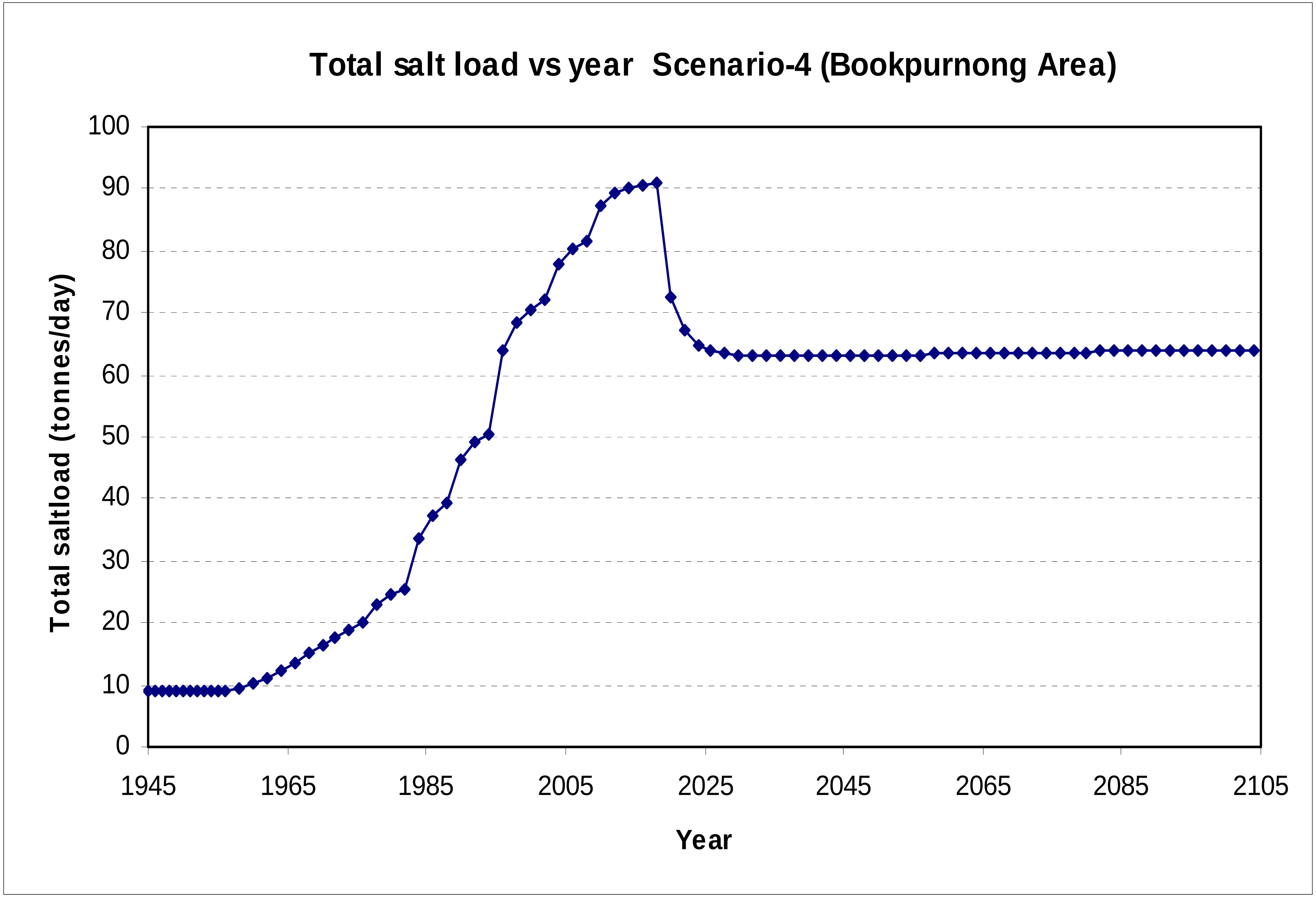


Appendix B-4-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-4 (Bookpurnong Area)

day	year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Total Saltload (tonnes/day)
0	1945	7.24	1.98	9.21
0	1946	7.24	1.98	9.21
0	1947	7.24	1.98	9.21
0	1948	7.24	1.98	9.21
0	1949	7.24	1.98	9.21
0	1950	7.24	1.98	9.21
0	1951	7.24	1.98	9.21
0	1952	7.24	1.98	9.21
0	1953	7.24	1.98	9.21
0	1954	7.24	1.98	9.21
0	1955	7.24	1.98	9.21
30	1955	7.24	1.98	9.21
365	1956	7.24	1.98	9.21
1095	1958	7.46	2.10	9.56
1825	1960	7.96	2.27	10.22
2555	1962	8.68	2.43	11.11
3285	1964	9.68	2.61	12.29
4015	1966	10.94	2.77	13.72
4745	1968	12.25	2.90	15.15
5475	1970	13.50	3.03	16.53
6205	1972	14.65	3.15	17.80
6935	1974	15.69	3.25	18.94
7665	1976	16.58	3.33	19.91
8395	1978	19.47	3.52	22.99
9125	1980	20.82	3.62	24.44
9855	1982	21.64	3.70	25.34
10585	1984	29.46	4.11	33.57
11315	1986	33.02	4.29	37.32
12045	1988	34.80	4.40	39.19
12775	1990	41.47	4.72	46.19
13505	1992	44.28	4.87	49.15
14235	1994	45.64	4.94	50.58
14965	1996	58.58	5.45	64.04
15695	1998	62.96	5.64	68.60
16425	2000	64.80	5.73	70.53
17155	2002	66.12	5.82	71.94
17885	2004	71.86	6.07	77.93
18615	2006	74.30	6.17	80.47
19345	2008	75.44	6.23	81.67
20075	2010	80.87	6.44	87.31
20805	2012	82.80	6.53	89.32
21535	2014	83.66	6.57	90.23
22265	2016	84.15	6.60	90.75

day	year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Total Saltload (tonnes/day)
22995	2018	84.46	6.62	91.08
23725	2020	66.66	5.97	72.63
24455	2022	61.28	5.76	67.03
25185	2024	59.25	5.67	64.92
25915	2026	58.33	5.62	63.96
26645	2028	57.87	5.60	63.47
27375	2030	57.62	5.59	63.21
28105	2032	57.50	5.59	63.08
28835	2034	57.44	5.59	63.02
29565	2036	57.41	5.59	63.00
30295	2038	57.41	5.59	63.00
31025	2040	57.43	5.59	63.02
31755	2042	57.45	5.59	63.04
32485	2044	57.48	5.60	63.08
33215	2046	57.51	5.60	63.11
33945	2048	57.55	5.60	63.15
34675	2050	57.59	5.61	63.19
35405	2052	57.62	5.61	63.23
36135	2054	57.66	5.61	63.28
36865	2056	57.70	5.62	63.32
37595	2058	57.73	5.62	63.35
38325	2060	57.77	5.63	63.39
39055	2062	57.80	5.63	63.43
39785	2064	57.84	5.63	63.47
40515	2066	57.87	5.63	63.50
41245	2068	57.90	5.64	63.54
41975	2070	57.93	5.64	63.57
42705	2072	57.96	5.64	63.61
43435	2074	57.99	5.65	63.64
44165	2076	58.02	5.65	63.67
44895	2078	58.05	5.65	63.70
45625	2080	58.07	5.65	63.73
46355	2082	58.10	5.66	63.76
47085	2084	58.12	5.66	63.78
47815	2086	58.15	5.66	63.81
48545	2088	58.17	5.66	63.83
49275	2090	58.19	5.67	63.86
50005	2092	58.22	5.67	63.88
50735	2094	58.24	5.67	63.91
51465	2096	58.26	5.67	63.93
52195	2098	58.27	5.67	63.95
52925	2100	58.29	5.67	63.97
53655	2102	58.31	5.68	63.99
54385	2104	58.33	5.68	64.01

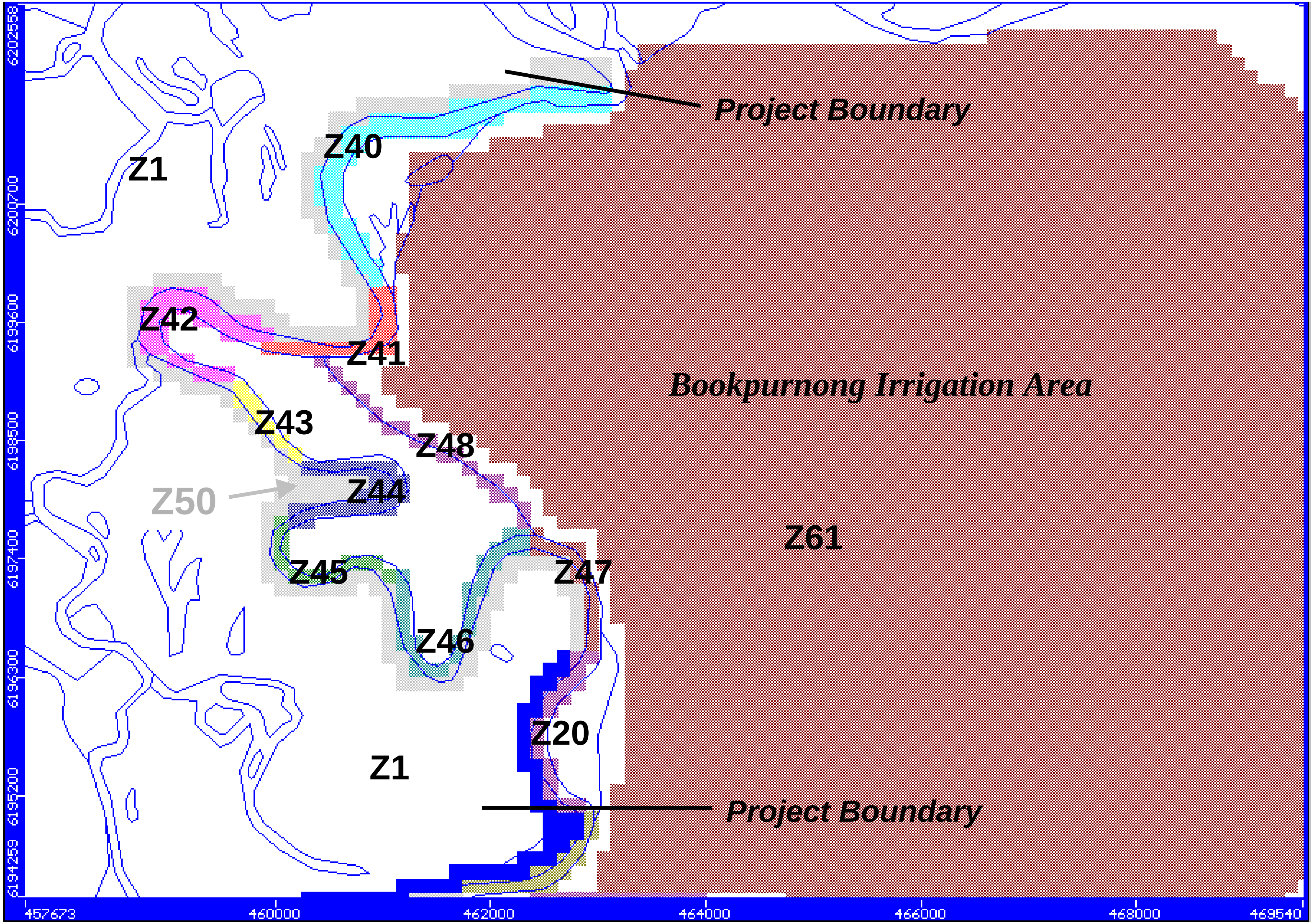
Appendix B-4-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-4 (Bookpurnong Area)



Appendix B-4-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-4 (Bookpurnong Area)

B-5 Groundwater flux and salt load entering the River Murray Scenario-5 (Bookpurnong Area)

- Flow budget zones (Bookpurnong Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix B-5-1 Flow budget zones in model Layer-1 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
30	1955	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
365	1956	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
1095	1958	0.0	87.9	0.0	0.0	28.4	0.0	14.8	70.6	0.0	47.1	249
1825	1960	0.0	88.5	0.0	0.0	29.9	0.0	15.6	73.7	0.0	57.6	265
2555	1962	0.0	89.3	0.0	0.0	31.7	0.0	16.6	78.3	0.0	73.4	289
3285	1964	0.0	90.2	0.0	0.0	33.7	0.0	17.8	84.1	0.0	97.0	323
4015	1966	0.0	91.2	0.0	0.0	35.8	0.0	19.0	91.2	0.0	127.6	365
4745	1968	0.0	92.2	0.0	0.0	37.7	0.0	20.2	99.1	0.0	159.1	408
5475	1970	0.0	93.2	0.0	0.0	39.7	0.0	21.4	107.5	0.0	188.4	450
6205	1972	0.0	94.2	0.0	0.0	41.6	0.0	22.5	116.1	0.0	214.2	488
6935	1974	0.0	95.2	0.0	0.0	43.4	0.0	23.7	124.2	0.0	236.6	523
7665	1976	0.0	96.1	0.0	0.0	45.0	0.0	24.7	131.8	0.0	255.1	553
8395	1978	0.0	106.0	0.0	0.0	64.6	0.0	41.8	164.5	0.0	272.2	649
9125	1980	0.0	110.5	0.0	0.0	73.3	0.2	46.9	177.3	0.0	285.8	694
9855	1982	0.0	112.6	0.0	0.0	76.8	0.3	49.1	185.4	0.0	297.1	721
10585	1984	26.5	149.8	0.0	0.0	128.1	2.1	84.8	269.0	0.0	321.8	982
11315	1986	51.0	162.3	0.0	0.0	148.7	3.0	96.0	297.9	0.9	340.9	1101
12045	1988	65.1	167.1	0.0	0.0	156.1	3.4	100.1	312.2	1.3	354.5	1160
12775	1990	111.8	195.0	0.0	0.2	190.4	4.5	123.6	374.6	5.4	376.9	1382
13505	1992	134.3	203.6	0.0	0.5	203.3	5.1	131.3	396.6	8.1	393.3	1476
14235	1994	145.9	207.0	0.0	0.7	208.1	5.3	134.3	407.6	9.2	403.5	1521
14965	1996	230.8	253.0	0.0	1.7	268.2	7.4	185.5	536.4	39.2	430.6	1953
15695	1998	271.6	267.0	0.0	2.5	288.2	8.3	197.5	570.5	46.1	446.9	2099
16425	2000	291.1	272.1	0.0	2.9	294.9	8.6	201.7	585.0	48.5	455.5	2160
17155	2002	340.8	287.0	0.0	3.3	289.1	8.1	182.2	584.1	38.0	471.4	2204
17885	2004	426.4	319.2	0.0	5.2	302.4	8.1	175.9	622.2	36.6	496.7	2393
18615	2006	452.6	325.5	0.0	5.9	309.1	8.3	179.6	640.4	39.0	506.9	2467
19345	2008	463.5	327.9	0.0	6.1	312.2	8.4	181.5	648.1	40.2	508.6	2497
20075	2010	515.9	351.0	0.0	7.8	332.8	9.0	192.4	691.3	48.8	518.4	2667
20805	2012	534.6	356.3	0.0	8.4	339.5	9.2	196.4	703.6	51.5	521.7	2721
21535	2014	542.3	358.1	0.0	8.6	341.7	9.3	197.8	708.1	52.5	521.1	2739
22265	2016	545.9	358.8	0.0	8.7	342.6	9.3	198.3	709.7	52.9	519.2	2745
22995	2018	547.6	359.2	0.0	8.7	343.0	9.3	198.5	710.0	53.1	516.8	2746
23725	2020	372.7	276.6	0.0	3.1	270.2	7.4	161.0	559.7	23.9	471.4	2146
24455	2022	316.4	258.9	0.0	1.9	247.0	6.5	147.7	518.1	16.0	446.1	1959
25185	2024	293.5	252.9	0.0	1.6	239.1	6.1	142.8	500.9	13.5	433.1	1884
25915	2026	282.5	250.3	0.0	1.5	235.5	6.0	140.5	492.0	12.4	425.0	1846
26645	2028	276.5	248.9	0.0	1.4	233.6	5.9	139.2	486.7	11.9	419.3	1823

Appendix B-5-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-5 (Bookpurnong Area)

day	year	Z1 to Z40 (m³/day)	Z1 to Z41 (m³/day)	Z1 to Z42 (m³/day)	Z1 to Z43 (m³/day)	Z1 to Z44 (m³/day)	Z1 to Z45 (m³/day)	Z1 to Z46 (m³/day)	Z1 to Z47 (m³/day)	Seepage Z48 Drain (m³/day)	Z1 to Z20 (m³/day)	Total Lateral (m³/day)
27375	2030	273.0	248.1	0.0	1.4	232.5	5.8	138.4	483.3	11.6	415.0	1809
28105	2032	270.9	247.7	0.0	1.4	231.8	5.8	137.9	480.9	11.4	411.6	1799
28835	2034	269.4	247.3	0.0	1.4	231.3	5.8	137.6	479.1	11.2	408.9	1792
29565	2036	268.4	247.1	0.0	1.3	231.0	5.7	137.3	477.8	11.1	406.6	1786
30295	2038	267.6	246.9	0.0	1.3	230.7	5.7	137.1	476.7	11.1	404.7	1782
31025	2040	267.0	246.8	0.0	1.3	230.5	5.7	137.0	475.8	11.0	403.0	1778
31755	2042	266.6	246.7	0.0	1.3	230.3	5.7	136.8	475.1	11.0	401.6	1775
32485	2044	266.2	246.6	0.0	1.3	230.1	5.7	136.7	474.5	11.0	400.4	1772
33215	2046	265.9	246.5	0.0	1.3	230.0	5.7	136.6	474.0	10.9	399.4	1770
33945	2048	265.6	246.4	0.0	1.3	229.9	5.7	136.6	473.5	10.9	398.4	1768
34675	2050	265.4	246.4	0.0	1.3	229.8	5.7	136.5	473.1	10.9	397.6	1767
35405	2052	265.2	246.3	0.0	1.3	229.7	5.7	136.4	472.8	10.9	396.9	1765
36135	2054	265.0	246.3	0.0	1.3	229.7	5.7	136.4	472.5	10.8	396.3	1764
36865	2056	264.9	246.3	0.0	1.3	229.6	5.7	136.3	472.3	10.8	395.8	1763
37595	2058	264.7	246.2	0.0	1.3	229.6	5.7	136.3	472.0	10.8	395.3	1762
38325	2060	264.6	246.2	0.0	1.3	229.5	5.7	136.3	471.8	10.8	394.9	1761
39055	2062	264.5	246.2	0.0	1.3	229.5	5.7	136.2	471.7	10.8	394.5	1760
39785	2064	264.5	246.2	0.0	1.3	229.4	5.7	136.2	471.5	10.8	394.2	1760
40515	2066	264.4	246.2	0.0	1.3	229.4	5.7	136.2	471.4	10.8	394.0	1759
41245	2068	264.3	246.1	0.0	1.3	229.4	5.6	136.2	471.3	10.8	393.7	1759
41975	2070	264.3	246.1	0.0	1.3	229.4	5.6	136.2	471.2	10.8	393.5	1758
42705	2072	264.2	246.1	0.0	1.3	229.4	5.6	136.1	471.1	10.8	393.4	1758
43435	2074	264.2	246.1	0.0	1.3	229.3	5.6	136.1	471.0	10.8	393.2	1758
44165	2076	264.2	246.1	0.0	1.3	229.3	5.6	136.1	471.0	10.8	393.1	1758
44895	2078	264.2	246.1	0.0	1.3	229.3	5.6	136.1	471.0	10.8	393.0	1757
45625	2080	264.1	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	393.0	1757
46355	2082	264.1	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	392.9	1757
47085	2084	264.1	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	392.9	1757
47815	2086	264.1	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	392.9	1757
48545	2088	264.1	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	392.8	1757
49275	2090	264.1	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	392.8	1757
50005	2092	264.1	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	392.9	1757
50735	2094	264.1	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	392.9	1757
51465	2096	264.2	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	392.9	1757
52195	2098	264.2	246.1	0.0	1.3	229.3	5.6	136.1	470.9	10.8	393.0	1757
52925	2100	264.2	246.1	0.0	1.3	229.3	5.6	136.1	471.0	10.8	393.0	1757
53655	2102	264.2	246.1	0.0	1.3	229.4	5.6	136.1	471.0	10.8	393.1	1758
54385	2104	264.2	246.1	0.0	1.3	229.4	5.6	136.2	471.0	10.8	393.1	1758
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

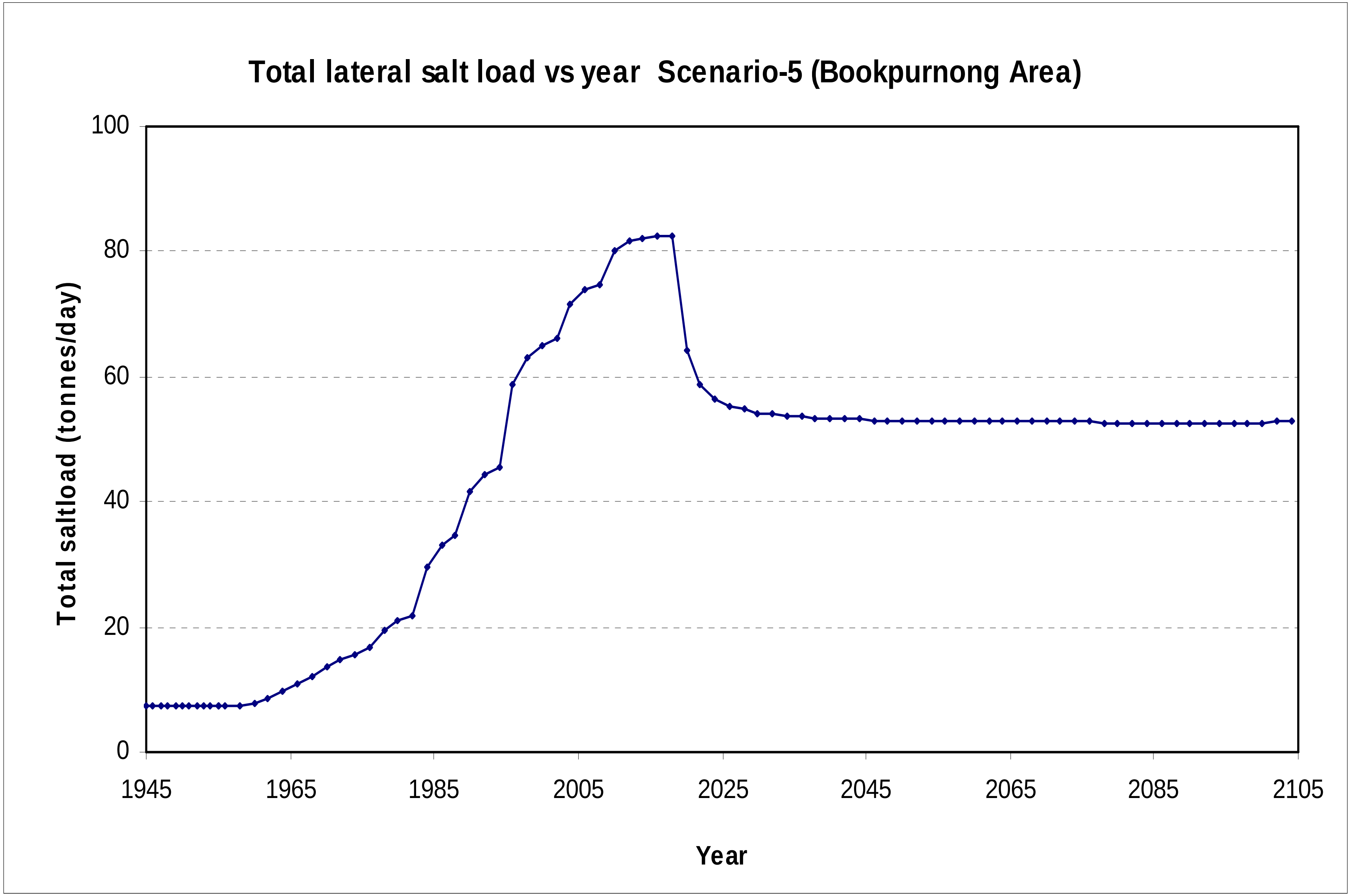
Appendix B-5-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-5 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1946	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1947	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1948	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1949	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1950	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1951	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1952	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1953	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1954	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
30	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
365	1956	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
1095	1958	0.0	2.6	0.0	0.0	0.9	0.0	0.4	2.1	0.0	1.4	7
1825	1960	0.0	2.7	0.0	0.0	0.9	0.0	0.5	2.2	0.0	1.7	8
2555	1962	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.3	0.0	2.2	9
3285	1964	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.5	0.0	2.9	10
4015	1966	0.0	2.7	0.0	0.0	1.1	0.0	0.6	2.7	0.0	3.8	11
4745	1968	0.0	2.8	0.0	0.0	1.1	0.0	0.6	3.0	0.0	4.8	12
5475	1970	0.0	2.8	0.0	0.0	1.2	0.0	0.6	3.2	0.0	5.7	14
6205	1972	0.0	2.8	0.0	0.0	1.2	0.0	0.7	3.5	0.0	6.4	15
6935	1974	0.0	2.9	0.0	0.0	1.3	0.0	0.7	3.7	0.0	7.1	16
7665	1976	0.0	2.9	0.0	0.0	1.4	0.0	0.7	4.0	0.0	7.7	17
8395	1978	0.0	3.2	0.0	0.0	1.9	0.0	1.3	4.9	0.0	8.2	19
9125	1980	0.0	3.3	0.0	0.0	2.2	0.0	1.4	5.3	0.0	8.6	21
9855	1982	0.0	3.4	0.0	0.0	2.3	0.0	1.5	5.6	0.0	8.9	22
10585	1984	0.8	4.5	0.0	0.0	3.8	0.1	2.5	8.1	0.0	9.7	29
11315	1986	1.5	4.9	0.0	0.0	4.5	0.1	2.9	8.9	0.0	10.2	33
12045	1988	2.0	5.0	0.0	0.0	4.7	0.1	3.0	9.4	0.0	10.6	35
12775	1990	3.4	5.8	0.0	0.0	5.7	0.1	3.7	11.2	0.2	11.3	41
13505	1992	4.0	6.1	0.0	0.0	6.1	0.2	3.9	11.9	0.2	11.8	44
14235	1994	4.4	6.2	0.0	0.0	6.2	0.2	4.0	12.2	0.3	12.1	46
14965	1996	6.9	7.6	0.0	0.1	8.0	0.2	5.6	16.1	1.2	12.9	59
15695	1998	8.1	8.0	0.0	0.1	8.6	0.2	5.9	17.1	1.4	13.4	63
16425	2000	8.7	8.2	0.0	0.1	8.8	0.3	6.0	17.5	1.5	13.7	65
17155	2002	10.2	8.6	0.0	0.1	8.7	0.2	5.5	17.5	1.1	14.1	66
17885	2004	12.8	9.6	0.0	0.2	9.1	0.2	5.3	18.7	1.1	14.9	72
18615	2006	13.6	9.8	0.0	0.2	9.3	0.2	5.4	19.2	1.2	15.2	74
19345	2008	13.9	9.8	0.0	0.2	9.4	0.3	5.4	19.4	1.2	15.3	75
20075	2010	15.5	10.5	0.0	0.2	10.0	0.3	5.8	20.7	1.5	15.6	80
20805	2012	16.0	10.7	0.0	0.3	10.2	0.3	5.9	21.1	1.5	15.6	82
21535	2014	16.3	10.7	0.0	0.3	10.3	0.3	5.9	21.2	1.6	15.6	82
22265	2016	16.4	10.8	0.0	0.3	10.3	0.3	5.9	21.3	1.6	15.6	82

Appendix B-5-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-5 (Bookpurnong Area)

day	year	Z1 to Z40 (tonne s/day)	Z1 to Z41 (tonne s/day)	Z1 to Z42 (tonne s/day)	Z1 to Z43 (tonne s/day)	Z1 to Z44 (tonne s/day)	Z1 to Z45 (tonne s/day)	Z1 to Z46 (tonne s/day)	Z1 to Z47 (tonne s/day)	Z1 to Z48 (tonne s/day)	Z1 to Z20 (tonne s/day)	Total Lateral (tonne s/day)
22995	2018	16.4	10.8	0.0	0.3	10.3	0.3	6.0	21.3	1.6	15.5	82
23725	2020	11.2	8.3	0.0	0.1	8.1	0.2	4.8	16.8	0.7	14.1	64
24455	2022	9.5	7.8	0.0	0.1	7.4	0.2	4.4	15.5	0.5	13.4	59
25185	2024	8.8	7.6	0.0	0.0	7.2	0.2	4.3	15.0	0.4	13.0	57
25915	2026	8.5	7.5	0.0	0.0	7.1	0.2	4.2	14.8	0.4	12.8	55
26645	2028	8.3	7.5	0.0	0.0	7.0	0.2	4.2	14.6	0.4	12.6	55
27375	2030	8.2	7.4	0.0	0.0	7.0	0.2	4.2	14.5	0.3	12.5	54
28105	2032	8.1	7.4	0.0	0.0	7.0	0.2	4.1	14.4	0.3	12.3	54
28835	2034	8.1	7.4	0.0	0.0	6.9	0.2	4.1	14.4	0.3	12.3	54
29565	2036	8.1	7.4	0.0	0.0	6.9	0.2	4.1	14.3	0.3	12.2	54
30295	2038	8.0	7.4	0.0	0.0	6.9	0.2	4.1	14.3	0.3	12.1	53
31025	2040	8.0	7.4	0.0	0.0	6.9	0.2	4.1	14.3	0.3	12.1	53
31755	2042	8.0	7.4	0.0	0.0	6.9	0.2	4.1	14.3	0.3	12.0	53
32485	2044	8.0	7.4	0.0	0.0	6.9	0.2	4.1	14.2	0.3	12.0	53
33215	2046	8.0	7.4	0.0	0.0	6.9	0.2	4.1	14.2	0.3	12.0	53
33945	2048	8.0	7.4	0.0	0.0	6.9	0.2	4.1	14.2	0.3	12.0	53
34675	2050	8.0	7.4	0.0	0.0	6.9	0.2	4.1	14.2	0.3	11.9	53
35405	2052	8.0	7.4	0.0	0.0	6.9	0.2	4.1	14.2	0.3	11.9	53
36135	2054	8.0	7.4	0.0	0.0	6.9	0.2	4.1	14.2	0.3	11.9	53
36865	2056	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.2	0.3	11.9	53
37595	2058	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.2	0.3	11.9	53
38325	2060	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.2	0.3	11.8	53
39055	2062	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
39785	2064	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
40515	2066	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
41245	2068	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
41975	2070	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
42705	2072	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
43435	2074	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
44165	2076	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
44895	2078	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
45625	2080	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
46355	2082	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
47085	2084	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
47815	2086	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
48545	2088	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
49275	2090	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
50005	2092	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
50735	2094	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
51465	2096	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
52195	2098	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
52925	2100	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
53655	2102	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
54385	2104	7.9	7.4	0.0	0.0	6.9	0.2	4.1	14.1	0.3	11.8	53
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

Appendix B-5-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-5 (Bookpurnong Area)



Appendix B-5-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-5 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upward (m^3/day)
30	1955	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
365	1956	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
1095	1958	0.0	18.9	18.5	2.3	8.7	2.3	7.8	8.0	9.5	8.1	84
1825	1960	0.0	19.1	18.8	2.4	9.3	2.7	9.2	8.7	9.9	10.6	91
2555	1962	0.0	19.4	19.1	2.5	9.9	3.0	10.5	9.5	10.4	13.0	97
3285	1964	0.0	19.7	19.3	2.6	10.5	3.4	11.8	10.4	10.9	15.5	104
4015	1966	0.0	20.0	19.6	2.7	11.1	3.7	13.1	11.4	11.3	17.9	111
4745	1968	0.0	20.3	19.8	2.8	11.6	3.9	14.0	12.3	11.7	19.6	116
5475	1970	0.0	20.6	20.0	2.9	12.1	4.2	14.9	13.1	12.1	21.3	121
6205	1972	0.0	20.8	20.2	3.0	12.5	4.4	15.8	14.0	12.5	22.8	126
6935	1974	0.0	21.1	20.4	3.0	12.8	4.5	16.5	14.7	12.9	24.0	130
7665	1976	0.0	21.3	20.5	3.1	13.1	4.7	17.1	15.3	13.2	24.8	133
8395	1978	0.0	22.4	20.8	3.2	14.1	4.9	18.5	16.8	14.2	25.8	141
9125	1980	0.0	22.9	21.0	3.3	14.6	5.1	19.2	17.6	14.6	26.6	145
9855	1982	0.0	23.2	21.2	3.3	14.9	5.2	19.8	18.2	14.8	27.2	148
10585	1984	0.1	26.4	21.8	3.6	17.1	5.7	22.6	21.5	16.8	28.8	164
11315	1986	0.5	27.6	22.2	3.7	18.0	6.0	23.7	22.9	17.4	29.8	172
12045	1988	0.9	28.1	22.4	3.8	18.4	6.1	24.4	23.6	17.8	30.5	176
12775	1990	2.3	30.3	22.8	4.0	19.9	6.5	26.3	26.0	19.0	31.8	189
13505	1992	3.1	31.0	23.1	4.1	20.5	6.6	27.1	27.0	19.5	32.6	195
14235	1994	3.6	31.4	23.2	4.1	20.8	6.7	27.5	27.5	19.8	32.9	197
14965	1996	6.6	34.8	23.9	4.4	23.1	7.2	30.6	31.5	21.8	34.3	218
15695	1998	8.0	35.9	24.2	4.5	23.8	7.4	31.5	32.7	22.4	35.0	226
16425	2000	8.8	36.3	24.4	4.6	24.2	7.5	32.0	33.3	22.7	35.3	229
17155	2002	10.3	37.2	24.5	4.6	24.2	7.6	31.8	33.7	22.9	35.9	233
17885	2004	12.9	39.1	24.9	4.8	24.9	7.7	32.2	35.1	23.6	36.6	242
18615	2006	13.8	39.6	25.0	4.8	25.2	7.8	32.5	35.7	23.9	36.7	245
19345	2008	14.2	39.8	25.1	4.8	25.3	7.8	32.6	36.0	24.0	36.7	246
20075	2010	15.8	41.2	25.3	4.9	26.0	7.9	33.4	37.2	24.7	37.0	253
20805	2012	16.4	41.6	25.4	5.0	26.3	8.0	33.6	37.6	24.8	37.1	256
21535	2014	16.7	41.7	25.5	5.0	26.3	8.0	33.7	37.7	24.9	37.0	256
22265	2016	16.9	41.8	25.5	5.0	26.3	8.0	33.6	37.7	24.9	36.8	257
22995	2018	17.0	41.8	25.5	5.0	26.3	8.0	33.6	37.7	24.9	36.7	256
23725	2020	11.7	36.7	24.6	4.6	23.6	7.4	30.6	33.1	22.5	34.7	229
24455	2022	9.8	35.3	24.2	4.5	22.7	7.1	29.4	31.6	21.8	33.7	220
25185	2024	8.9	34.8	24.0	4.4	22.3	7.0	28.8	30.9	21.4	33.1	216
25915	2026	8.4	34.5	23.9	4.4	22.1	6.9	28.5	30.5	21.2	32.8	213
26645	2028	8.2	34.4	23.9	4.3	21.9	6.9	28.3	30.3	21.1	32.5	212

Appendix B-5-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-5 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upward (m^3/day)
27375	2030	8.0	34.3	23.8	4.3	21.8	6.9	28.1	30.1	21.0	32.3	211
28105	2032	7.9	34.2	23.8	4.3	21.8	6.8	28.0	29.9	20.9	32.1	210
28835	2034	7.8	34.2	23.8	4.3	21.7	6.8	27.9	29.8	20.9	32.0	209
29565	2036	7.7	34.1	23.8	4.3	21.7	6.8	27.9	29.8	20.8	31.9	209
30295	2038	7.7	34.1	23.7	4.3	21.6	6.8	27.8	29.7	20.8	31.8	208
31025	2040	7.7	34.1	23.7	4.3	21.6	6.8	27.7	29.6	20.8	31.7	208
31755	2042	7.6	34.1	23.7	4.3	21.6	6.8	27.7	29.6	20.8	31.6	208
32485	2044	7.6	34.1	23.7	4.3	21.6	6.7	27.7	29.6	20.7	31.6	208
33215	2046	7.6	34.1	23.7	4.3	21.6	6.7	27.6	29.5	20.7	31.5	207
33945	2048	7.6	34.0	23.7	4.3	21.5	6.7	27.6	29.5	20.7	31.5	207
34675	2050	7.6	34.0	23.7	4.3	21.5	6.7	27.6	29.5	20.7	31.4	207
35405	2052	7.5	34.0	23.7	4.3	21.5	6.7	27.6	29.5	20.7	31.4	207
36135	2054	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.7	31.3	207
36865	2056	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.7	31.3	207
37595	2058	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.7	31.3	207
38325	2060	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.7	31.3	206
39055	2062	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.7	31.3	206
39785	2064	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.7	31.2	206
40515	2066	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.6	31.2	206
41245	2068	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.6	31.2	206
41975	2070	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.6	31.2	206
42705	2072	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.6	31.2	206
43435	2074	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
44165	2076	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
44895	2078	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
45625	2080	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
46355	2082	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
47085	2084	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
47815	2086	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
48545	2088	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
49275	2090	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
50005	2092	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
50735	2094	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
51465	2096	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
52195	2098	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
52925	2100	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.3	20.6	31.2	206
53655	2102	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.6	31.2	206
54385	2104	7.5	34.0	23.7	4.3	21.5	6.7	27.5	29.4	20.6	31.2	206
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

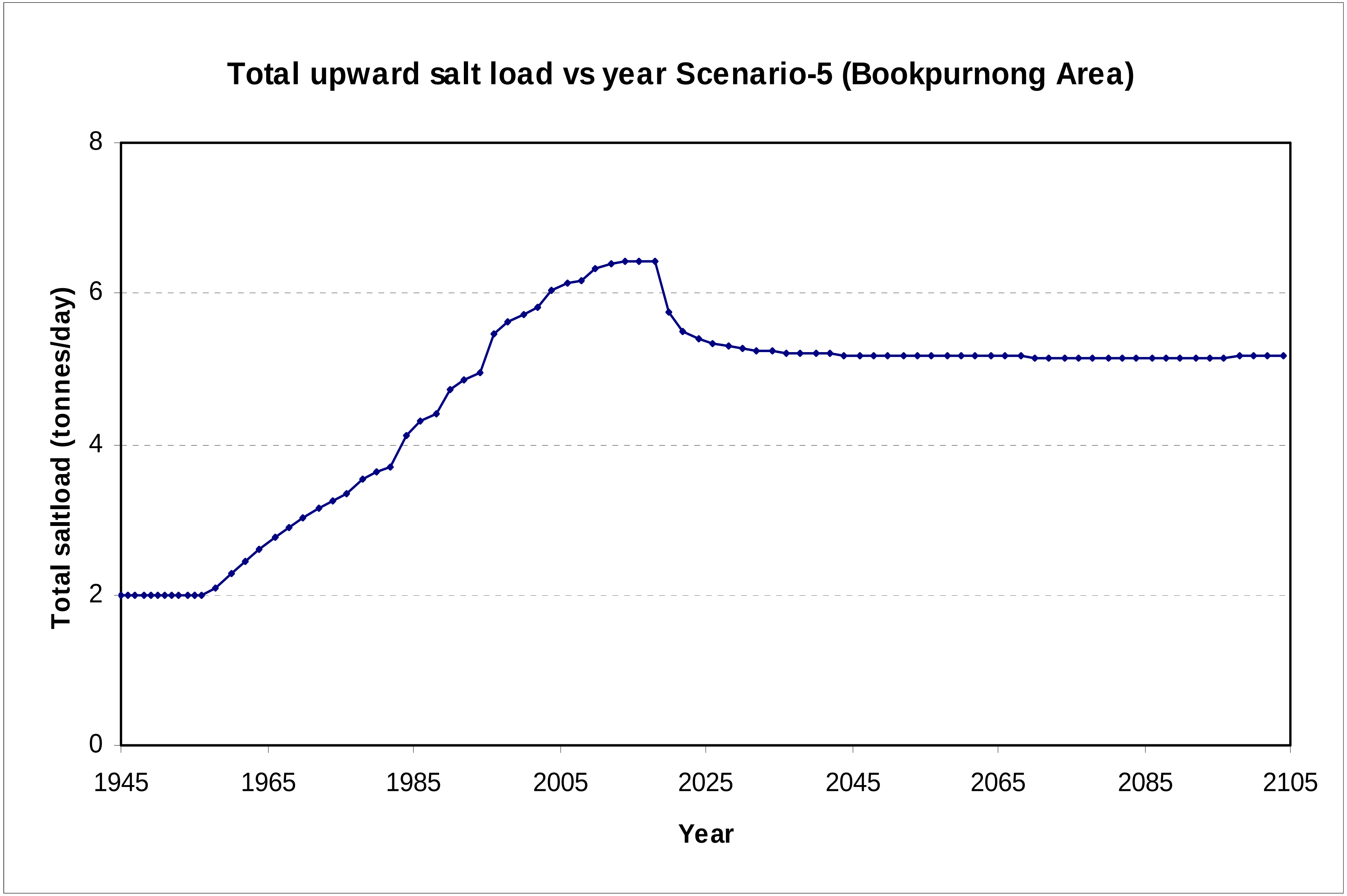
Appendix B-5-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-5 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1946	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1947	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1948	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1949	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1950	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1951	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1952	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1953	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1954	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
30	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
365	1956	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1095	1958	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1825	1960	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.3	2
2555	1962	0.0	0.5	0.5	0.1	0.2	0.1	0.3	0.2	0.3	0.3	2
3285	1964	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4015	1966	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4745	1968	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
5475	1970	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
6205	1972	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.6	3
6935	1974	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
7665	1976	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
8395	1978	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.6	4
9125	1980	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.7	4
9855	1982	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.5	0.4	0.7	4
10585	1984	0.0	0.7	0.5	0.1	0.4	0.1	0.6	0.5	0.4	0.7	4
11315	1986	0.0	0.7	0.6	0.1	0.4	0.1	0.6	0.6	0.4	0.7	4
12045	1988	0.0	0.7	0.6	0.1	0.5	0.2	0.6	0.6	0.4	0.8	4
12775	1990	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.6	0.5	0.8	5
13505	1992	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14235	1994	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14965	1996	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	5
15695	1998	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
16425	2000	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17155	2002	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17885	2004	0.3	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
18615	2006	0.3	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
19345	2008	0.4	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
20075	2010	0.4	1.0	0.6	0.1	0.7	0.2	0.8	0.9	0.6	0.9	6
20805	2012	0.4	1.0	0.6	0.1	0.7	0.2	0.8	0.9	0.6	0.9	6
21535	2014	0.4	1.0	0.6	0.1	0.7	0.2	0.8	0.9	0.6	0.9	6
22265	2016	0.4	1.0	0.6	0.1	0.7	0.2	0.8	0.9	0.6	0.9	6

Appendix B-5-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-5 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	0.4	1.0	0.6	0.1	0.7	0.2	0.8	0.9	0.6	0.9	6
23725	2020	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
24455	2022	0.2	0.9	0.6	0.1	0.6	0.2	0.7	0.8	0.5	0.8	6
25185	2024	0.2	0.9	0.6	0.1	0.6	0.2	0.7	0.8	0.5	0.8	5
25915	2026	0.2	0.9	0.6	0.1	0.6	0.2	0.7	0.8	0.5	0.8	5
26645	2028	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.8	0.5	0.8	5
27375	2030	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.8	0.5	0.8	5
28105	2032	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
28835	2034	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
29565	2036	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
30295	2038	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
31025	2040	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
31755	2042	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
32485	2044	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
33215	2046	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
33945	2048	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
34675	2050	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
35405	2052	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
36135	2054	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
36865	2056	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
37595	2058	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
38325	2060	0.2	0.9	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
39055	2062	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
39785	2064	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
40515	2066	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
41245	2068	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
41975	2070	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
42705	2072	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
43435	2074	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
44165	2076	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
44895	2078	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
45625	2080	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
46355	2082	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
47085	2084	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
47815	2086	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
48545	2088	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
49275	2090	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
50005	2092	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
50735	2094	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
51465	2096	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
52195	2098	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
52925	2100	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
53655	2102	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
54385	2104	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

Appendix B-5-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-5 (Bookpurnong Area)

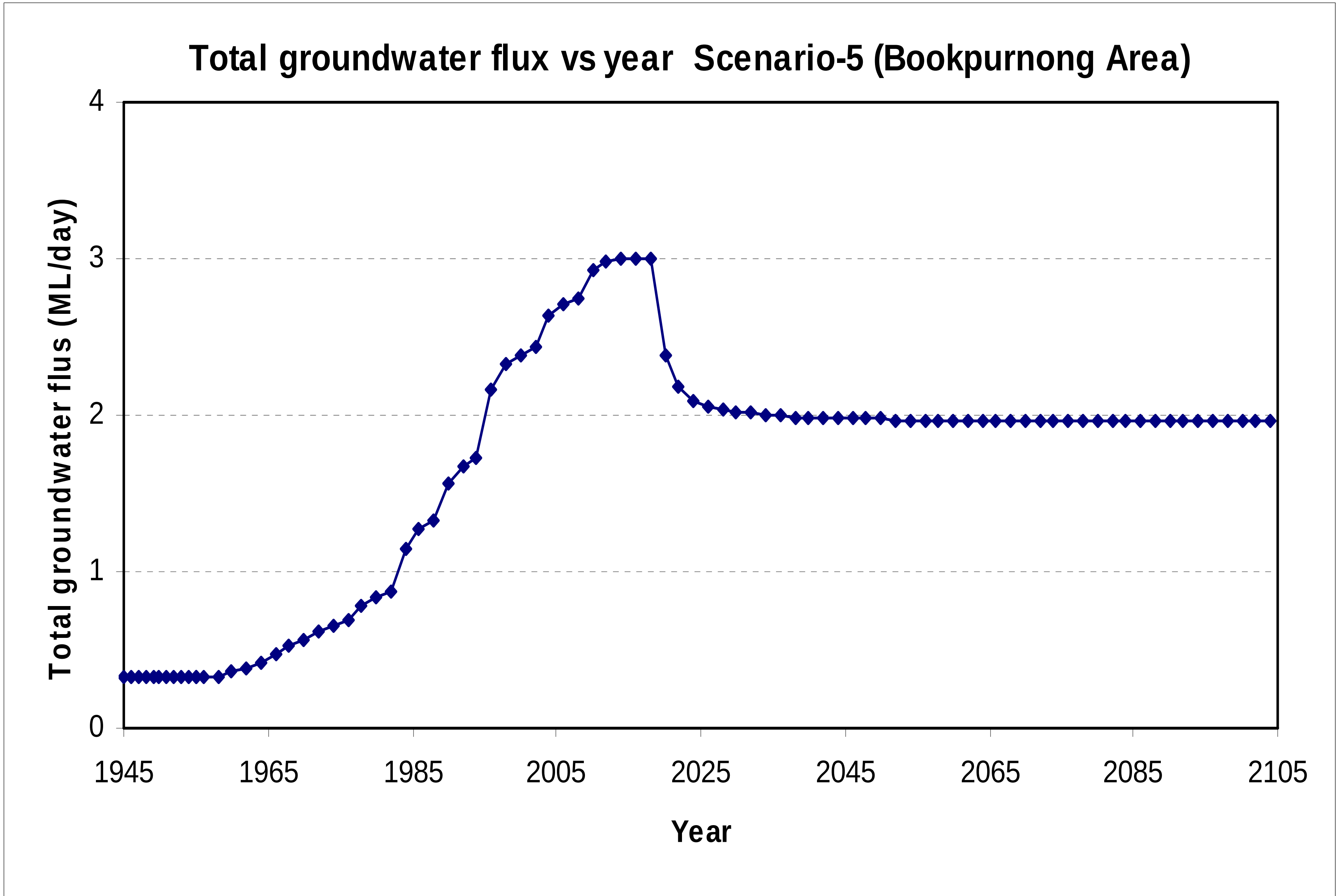


Appendix B-5-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-5 (Bookpurnong Area)

day	year	Lateral flux (m^3/day)	Upward leackage (m^3/day)	Total flux (m^3/day)
0	1945	0.241	0.079	0.320
0	1946	0.241	0.079	0.320
0	1947	0.241	0.079	0.320
0	1948	0.241	0.079	0.320
0	1949	0.241	0.079	0.320
0	1950	0.241	0.079	0.320
0	1951	0.241	0.079	0.320
0	1952	0.241	0.079	0.320
0	1953	0.241	0.079	0.320
0	1954	0.241	0.079	0.320
0	1955	0.241	0.079	0.320
30	1955	0.241	0.079	0.320
365	1956	0.241	0.079	0.320
1095	1958	0.249	0.084	0.333
1825	1960	0.265	0.091	0.356
2555	1962	0.289	0.097	0.387
3285	1964	0.323	0.104	0.427
4015	1966	0.365	0.111	0.476
4745	1968	0.408	0.116	0.525
5475	1970	0.450	0.121	0.571
6205	1972	0.488	0.126	0.614
6935	1974	0.523	0.130	0.653
7665	1976	0.553	0.133	0.686
8395	1978	0.649	0.141	0.790
9125	1980	0.694	0.145	0.839
9855	1982	0.721	0.148	0.869
10585	1984	0.982	0.164	1.147
11315	1986	1.101	0.172	1.272
12045	1988	1.160	0.176	1.336
12775	1990	1.382	0.189	1.571
13505	1992	1.476	0.195	1.671
14235	1994	1.521	0.197	1.719
14965	1996	1.953	0.218	2.171
15695	1998	2.099	0.226	2.324
16425	2000	2.160	0.229	2.389
17155	2002	2.204	0.233	2.437
17885	2004	2.393	0.242	2.634
18615	2006	2.467	0.245	2.712
19345	2008	2.497	0.246	2.743
20075	2010	2.667	0.253	2.921
20805	2012	2.721	0.256	2.977
21535	2014	2.739	0.256	2.996
22265	2016	2.745	0.257	3.002

day	year	Lateral flux (m^3/day)	Upward leackage (m^3/day)	Total flux (m^3/day)
22995	2018	2.746	0.256	3.003
23725	2020	2.146	0.229	2.376
24455	2022	1.959	0.220	2.179
25185	2024	1.884	0.216	2.099
25915	2026	1.846	0.213	2.059
26645	2028	1.823	0.212	2.035
27375	2030	1.809	0.211	2.020
28105	2032	1.799	0.210	2.009
28835	2034	1.792	0.209	2.001
29565	2036	1.786	0.209	1.995
30295	2038	1.782	0.208	1.990
31025	2040	1.778	0.208	1.986
31755	2042	1.775	0.208	1.983
32485	2044	1.772	0.208	1.980
33215	2046	1.770	0.207	1.978
33945	2048	1.768	0.207	1.975
34675	2050	1.767	0.207	1.974
35405	2052	1.765	0.207	1.972
36135	2054	1.764	0.207	1.971
36865	2056	1.763	0.207	1.970
37595	2058	1.762	0.207	1.968
38325	2060	1.761	0.206	1.968
39055	2062	1.760	0.206	1.967
39785	2064	1.760	0.206	1.966
40515	2066	1.759	0.206	1.966
41245	2068	1.759	0.206	1.965
41975	2070	1.758	0.206	1.965
42705	2072	1.758	0.206	1.964
43435	2074	1.758	0.206	1.964
44165	2076	1.758	0.206	1.964
44895	2078	1.757	0.206	1.964
45625	2080	1.757	0.206	1.963
46355	2082	1.757	0.206	1.963
47085	2084	1.757	0.206	1.963
47815	2086	1.757	0.206	1.963
48545	2088	1.757	0.206	1.963
49275	2090	1.757	0.206	1.963
50005	2092	1.757	0.206	1.963
50735	2094	1.757	0.206	1.963
51465	2096	1.757	0.206	1.963
52195	2098	1.757	0.206	1.964
52925	2100	1.757	0.206	1.964
53655	2102	1.758	0.206	1.964
54385	2104	1.758	0.206	1.964

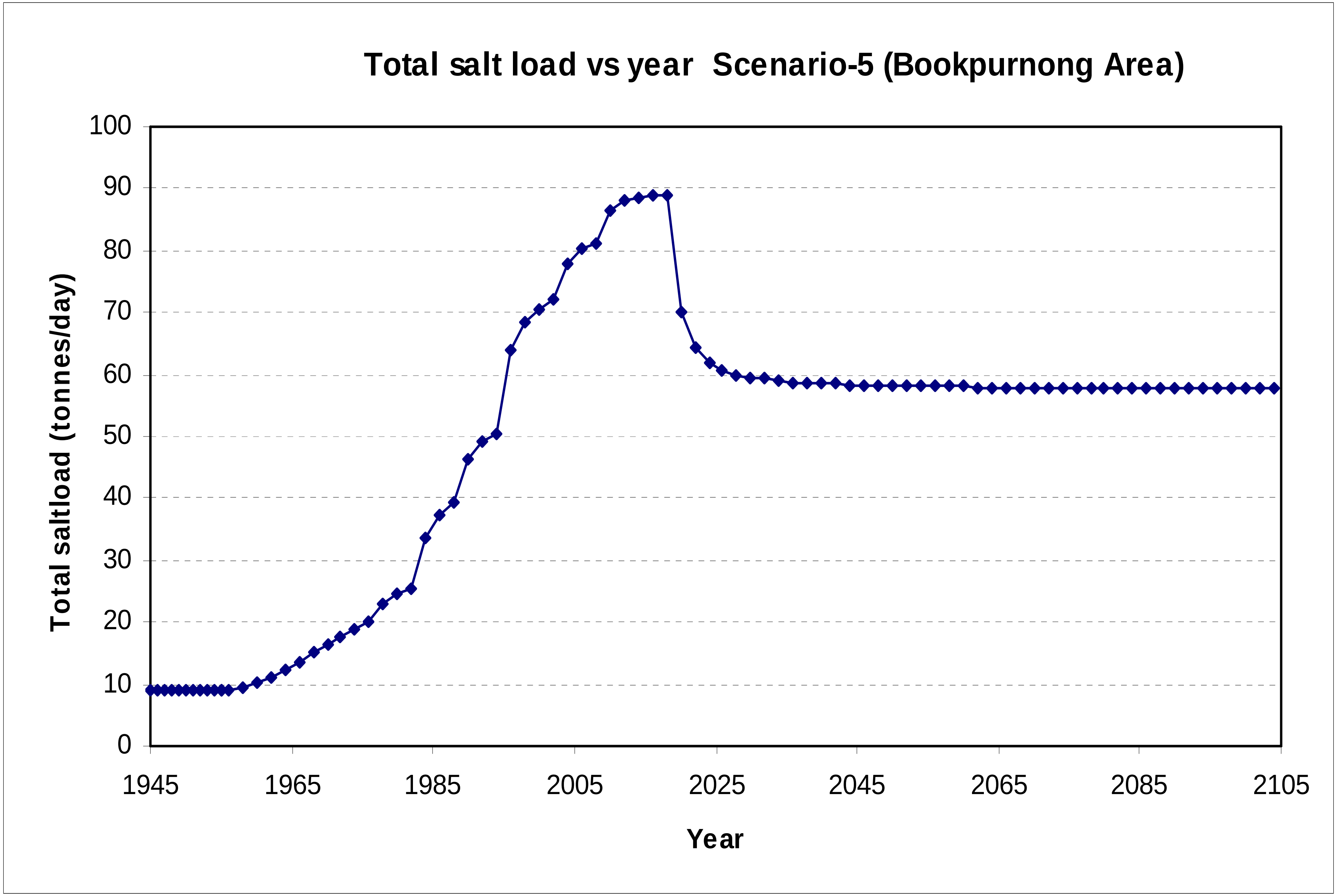
Appendix B-5-6a Predicted total groundwater flux (ML/day) in Scenario-5 (Bookpurnong Area)



Appendix B-5-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-5 (Bookpurnong Area)

day	year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Total Saltload (tonnes/day)
0	1945	7.24	1.98	9.21
0	1946	7.24	1.98	9.21
0	1947	7.24	1.98	9.21
0	1948	7.24	1.98	9.21
0	1949	7.24	1.98	9.21
0	1950	7.24	1.98	9.21
0	1951	7.24	1.98	9.21
0	1952	7.24	1.98	9.21
0	1953	7.24	1.98	9.21
0	1954	7.24	1.98	9.21
0	1955	7.24	1.98	9.21
30	1955	7.24	1.98	9.21
365	1956	7.24	1.98	9.21
1095	1958	7.46	2.10	9.56
1825	1960	7.96	2.27	10.22
2555	1962	8.68	2.43	11.11
3285	1964	9.68	2.61	12.29
4015	1966	10.94	2.77	13.72
4745	1968	12.25	2.90	15.15
5475	1970	13.50	3.03	16.53
6205	1972	14.65	3.15	17.80
6935	1974	15.69	3.25	18.94
7665	1976	16.58	3.33	19.91
8395	1978	19.47	3.52	22.99
9125	1980	20.82	3.62	24.44
9855	1982	21.64	3.70	25.34
10585	1984	29.46	4.11	33.57
11315	1986	33.02	4.29	37.32
12045	1988	34.80	4.40	39.19
12775	1990	41.47	4.72	46.19
13505	1992	44.28	4.87	49.15
14235	1994	45.64	4.94	50.58
14965	1996	58.58	5.45	64.04
15695	1998	62.96	5.64	68.60
16425	2000	64.80	5.73	70.53
17155	2002	66.12	5.82	71.94
17885	2004	71.78	6.04	77.82
18615	2006	74.02	6.12	80.14
19345	2008	74.90	6.15	81.05
20075	2010	80.02	6.34	86.36
20805	2012	81.63	6.39	88.03
21535	2014	82.18	6.41	88.59
22265	2016	82.36	6.41	88.78
22995	2018	82.38	6.41	88.79
23725	2020	64.38	5.74	70.12
24455	2022	58.76	5.50	64.26
25185	2024	56.51	5.39	61.90
25915	2026	55.37	5.33	60.70
26645	2028	54.70	5.29	60.00
27375	2030	54.28	5.27	59.54
28105	2032	53.98	5.25	59.22
28835	2034	53.76	5.23	58.99
29565	2036	53.59	5.22	58.81
30295	2038	53.45	5.21	58.66
31025	2040	53.34	5.20	58.55
31755	2042	53.25	5.19	58.45
32485	2044	53.17	5.19	58.36
33215	2046	53.11	5.18	58.29
33945	2048	53.05	5.18	58.23
34675	2050	53.00	5.17	58.17
35405	2052	52.96	5.17	58.13
36135	2054	52.92	5.17	58.09
36865	2056	52.89	5.17	58.05
37595	2058	52.86	5.16	58.02
38325	2060	52.83	5.16	58.00
39055	2062	52.81	5.16	57.97
39785	2064	52.79	5.16	57.95
40515	2066	52.78	5.16	57.93
41245	2068	52.76	5.16	57.92
41975	2070	52.75	5.16	57.91
42705	2072	52.74	5.16	57.90
43435	2074	52.73	5.16	57.89
44165	2076	52.73	5.16	57.88
44895	2078	52.72	5.15	57.88
45625	2080	52.72	5.15	57.87
46355	2082	52.71	5.15	57.87
47085	2084	52.71	5.15	57.87
47815	2086	52.71	5.15	57.87
48545	2088	52.71	5.16	57.87
49275	2090	52.71	5.16	57.87
50005	2092	52.71	5.16	57.87
50735	2094	52.71	5.16	57.87
51465	2096	52.72	5.16	57.87
52195	2098	52.72	5.16	57.88
52925	2100	52.72	5.16	57.88
53655	2102	52.73	5.16	57.88
54385	2104	52.73	5.16	57.89

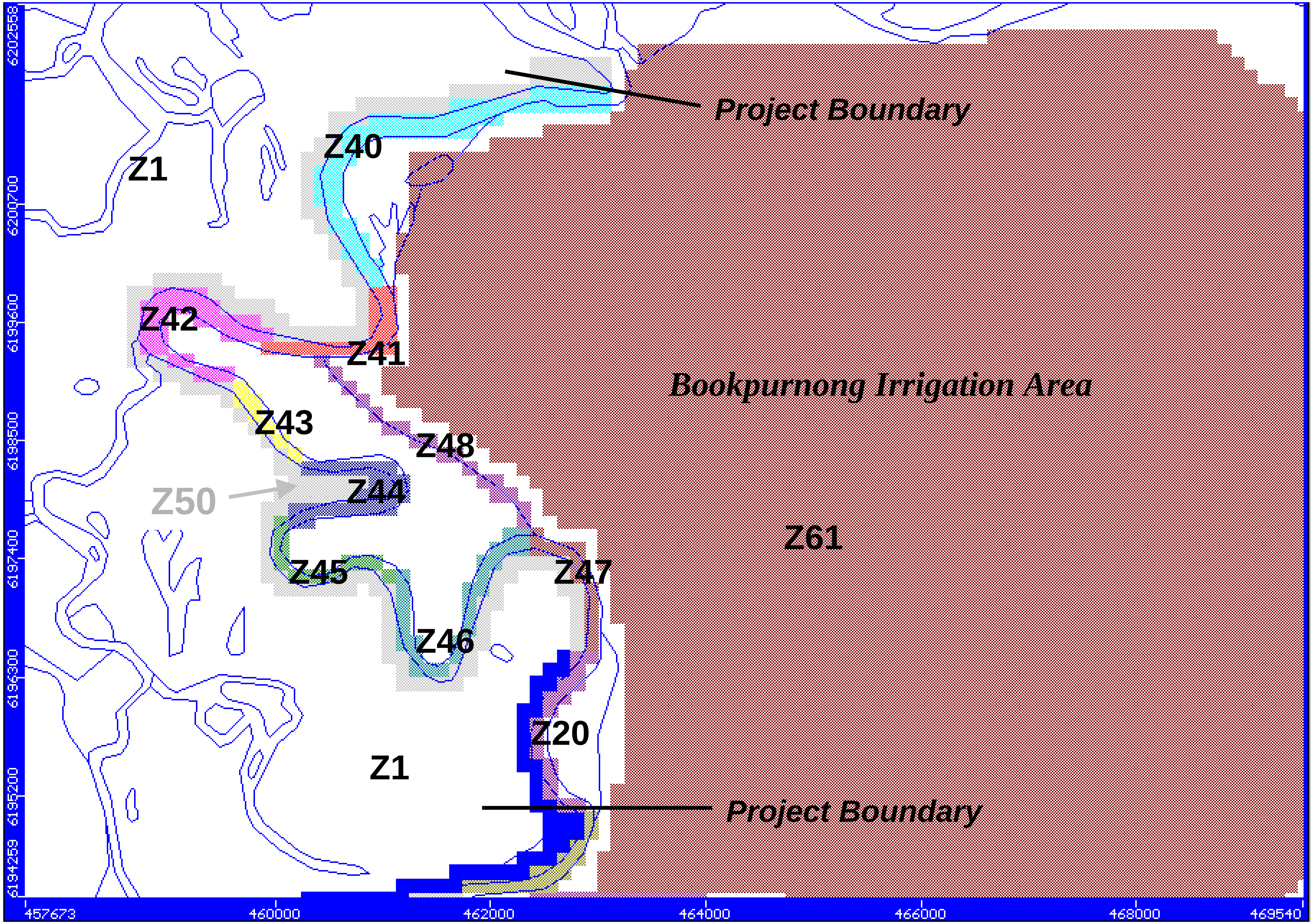
Appendix B-5-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-5 (Bookpurnong Area)



Appendix B-5-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-5 (Bookpurnong Area)

B-6 Groundwater flux and salt load entering the River Murray Scenario-6 (Bookpurnong Area)

- Flow budget zones (Bookpurnong Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix B-6-1 Flow budget zones in model Layer-1 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
30	1955	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
365	1956	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
1095	1958	0.0	87.9	0.0	0.0	28.4	0.0	14.8	70.6	0.0	47.1	249
1825	1960	0.0	88.5	0.0	0.0	29.9	0.0	15.6	73.7	0.0	57.6	265
2555	1962	0.0	89.3	0.0	0.0	31.7	0.0	16.6	78.3	0.0	73.4	289
3285	1964	0.0	90.2	0.0	0.0	33.7	0.0	17.8	84.1	0.0	97.0	323
4015	1966	0.0	91.2	0.0	0.0	35.8	0.0	19.0	91.2	0.0	127.6	365
4745	1968	0.0	92.2	0.0	0.0	37.7	0.0	20.2	99.1	0.0	159.1	408
5475	1970	0.0	93.2	0.0	0.0	39.7	0.0	21.4	107.5	0.0	188.4	450
6205	1972	0.0	94.2	0.0	0.0	41.6	0.0	22.5	116.1	0.0	214.2	488
6935	1974	0.0	95.2	0.0	0.0	43.4	0.0	23.7	124.2	0.0	236.6	523
7665	1976	0.0	96.1	0.0	0.0	45.0	0.0	24.7	131.8	0.0	255.1	553
8395	1978	0.0	106.0	0.0	0.0	64.6	0.0	41.8	164.5	0.0	272.2	649
9125	1980	0.0	110.5	0.0	0.0	73.3	0.2	46.9	177.3	0.0	285.8	694
9855	1982	0.0	112.6	0.0	0.0	76.8	0.3	49.1	185.4	0.0	297.1	721
10585	1984	26.5	149.8	0.0	0.0	128.1	2.1	84.8	269.0	0.0	321.8	982
11315	1986	51.0	162.3	0.0	0.0	148.7	3.0	96.0	297.9	0.9	340.9	1101
12045	1988	65.1	167.1	0.0	0.0	156.1	3.4	100.1	312.2	1.3	354.5	1160
12775	1990	111.8	195.0	0.0	0.2	190.4	4.5	123.6	374.6	5.4	376.9	1382
13505	1992	134.3	203.6	0.0	0.5	203.3	5.1	131.3	396.6	8.1	393.3	1476
14235	1994	145.9	207.0	0.0	0.7	208.1	5.3	134.3	407.6	9.2	403.5	1521
14965	1996	230.8	253.0	0.0	1.7	268.2	7.4	185.5	536.4	39.2	430.6	1953
15695	1998	271.6	267.0	0.0	2.5	288.2	8.3	197.5	570.5	46.1	446.9	2099
16425	2000	291.1	272.1	0.0	2.9	294.9	8.6	201.7	585.0	48.5	455.5	2160
17155	2002	341.1	287.3	0.0	3.4	290.8	8.1	184.6	588.2	39.4	471.5	2214
17885	2004	438.9	328.0	0.0	6.2	325.3	9.0	200.8	663.5	52.1	500.5	2524
18615	2006	475.8	338.1	0.0	7.4	338.0	9.5	208.2	690.0	56.9	514.3	2638
19345	2008	491.9	341.8	0.0	7.9	342.7	9.7	211.2	701.5	58.9	518.6	2684
20075	2010	559.2	371.2	0.0	10.0	368.9	10.6	225.5	758.2	70.7	534.0	2908
20805	2012	583.9	378.1	0.0	10.8	377.6	11.0	230.7	775.4	74.2	541.0	2983
21535	2014	594.6	380.5	0.0	11.1	380.7	11.2	232.7	782.4	75.5	543.0	3012
22265	2016	985.7	543.2	0.0	22.2	521.2	15.7	308.2	1087.1	139.2	638.8	4261
22995	2018	1117.2	578.0	0.0	26.4	564.2	17.7	334.9	1176.2	157.3	692.5	4664
23725	2020	973.5	474.4	0.0	20.0	479.0	15.5	291.6	1011.5	116.9	687.0	4069
24455	2022	957.4	464.9	0.0	18.6	466.3	15.0	285.7	1009.4	112.8	700.4	4031
25185	2024	1069.7	508.5	0.0	21.7	506.0	16.4	309.8	1121.5	132.7	750.4	4437
25915	2026	1124.8	521.5	0.0	23.3	522.9	17.3	321.5	1169.6	140.3	784.9	4626
26645	2028	1153.6	527.6	0.0	24.0	530.6	17.7	327.1	1194.9	143.9	806.7	4726

Appendix B-6-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-6 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
27375	2030	1176.3	532.3	0.0	24.6	537.4	18.1	333.0	1226.5	147.5	837.3	4833
28105	2032	1197.6	536.6	0.0	25.1	543.3	18.4	337.8	1251.1	150.4	860.7	4921
28835	2034	1217.3	540.6	0.0	25.6	548.6	18.7	342.3	1275.4	153.2	886.3	5008
29565	2036	1234.5	544.0	0.0	26.0	553.3	19.0	346.0	1295.1	155.4	905.9	5079
30295	2038	1246.6	546.4	0.0	26.4	556.5	19.2	348.6	1308.5	157.0	920.4	5129
31025	2040	1258.7	548.8	0.0	26.7	559.8	19.4	351.3	1322.3	158.6	933.0	5179
31755	2042	1269.8	551.1	0.0	26.9	562.8	19.6	353.7	1334.3	160.1	944.3	5223
32485	2044	1277.7	552.6	0.0	27.1	564.9	19.7	355.4	1342.8	161.1	953.6	5255
33215	2046	1283.1	553.7	0.0	27.3	566.4	19.8	356.5	1349.1	161.8	961.0	5279
33945	2048	1286.9	554.5	0.0	27.4	567.4	19.9	357.4	1353.8	162.3	967.2	5297
34675	2050	1289.8	555.1	0.0	27.5	568.3	19.9	358.0	1357.5	162.7	972.3	5311
35405	2052	1292.1	555.6	0.0	27.5	568.9	20.0	358.6	1360.5	163.0	976.6	5323
36135	2054	1293.9	555.9	0.0	27.6	569.5	20.0	359.0	1363.1	163.2	980.4	5333
36865	2056	1295.4	556.3	0.0	27.6	569.9	20.0	359.4	1365.2	163.4	983.7	5341
37595	2058	1296.7	556.5	0.0	27.7	570.3	20.1	359.7	1367.1	163.6	986.6	5348
38325	2060	1297.8	556.8	0.0	27.7	570.6	20.1	360.0	1368.8	163.7	989.2	5355
39055	2062	1298.8	557.0	0.0	27.8	571.0	20.1	360.2	1370.3	163.9	991.5	5360
39785	2064	1299.8	557.2	0.0	27.8	571.2	20.1	360.5	1371.7	164.0	993.6	5366
40515	2066	1300.6	557.3	0.0	27.8	571.5	20.2	360.7	1372.9	164.1	995.5	5371
41245	2068	1301.3	557.5	0.0	27.8	571.7	20.2	360.9	1374.0	164.2	997.2	5375
41975	2070	1302.0	557.6	0.0	27.9	571.9	20.2	361.0	1375.1	164.3	998.7	5379
42705	2072	1302.6	557.8	0.0	27.9	572.1	20.2	361.2	1376.0	164.4	1000.2	5382
43435	2074	1303.2	557.9	0.0	27.9	572.3	20.2	361.3	1376.9	164.5	1001.5	5386
44165	2076	1303.8	558.0	0.0	27.9	572.5	20.2	361.5	1377.7	164.6	1002.7	5389
44895	2078	1304.3	558.1	0.0	27.9	572.6	20.2	361.6	1378.4	164.6	1003.8	5392
45625	2080	1304.8	558.2	0.0	28.0	572.8	20.2	361.7	1379.1	164.7	1004.9	5394
46355	2082	1305.2	558.3	0.0	28.0	572.9	20.3	361.8	1379.8	164.8	1005.8	5397
47085	2084	1305.6	558.4	0.0	28.0	573.0	20.3	361.9	1380.4	164.8	1006.8	5399
47815	2086	1306.0	558.5	0.0	28.0	573.1	20.3	362.0	1381.0	164.9	1007.6	5401
48545	2088	1306.4	558.6	0.0	28.0	573.3	20.3	362.1	1381.5	164.9	1008.4	5403
49275	2090	1306.7	558.6	0.0	28.0	573.4	20.3	362.2	1382.0	165.0	1009.2	5405
50005	2092	1307.0	558.7	0.0	28.0	573.5	20.3	362.3	1382.5	165.0	1009.9	5407
50735	2094	1307.4	558.8	0.0	28.0	573.6	20.3	362.4	1382.9	165.0	1010.5	5409
51465	2096	1307.6	558.8	0.0	28.1	573.7	20.3	362.5	1383.4	165.1	1011.1	5410
52195	2098	1307.9	558.9	0.0	28.1	573.7	20.3	362.5	1383.8	165.1	1011.7	5412
52925	2100	1308.2	558.9	0.0	28.1	573.8	20.3	362.6	1384.2	165.2	1012.3	5414
53655	2102	1308.4	559.0	0.0	28.1	573.9	20.3	362.7	1384.5	165.2	1012.8	5415
54385	2104	1308.7	559.0	0.0	28.1	574.0	20.3	362.7	1384.9	165.2	1013.3	5416
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

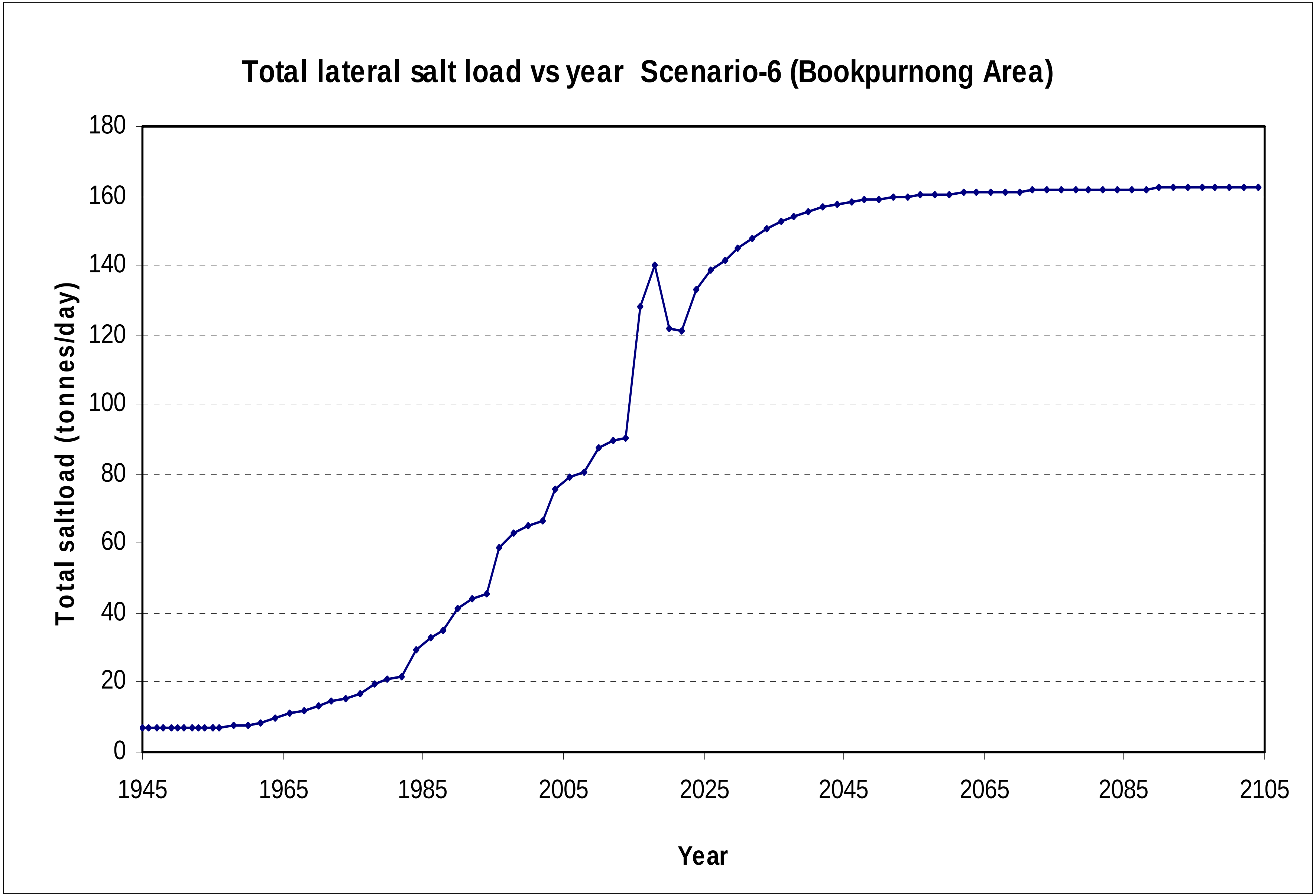
Appendix B-6-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-6 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1946	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1947	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1948	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1949	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1950	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1951	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1952	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1953	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1954	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
30	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
365	1956	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
1095	1958	0.0	2.6	0.0	0.0	0.9	0.0	0.4	2.1	0.0	1.4	7
1825	1960	0.0	2.7	0.0	0.0	0.9	0.0	0.5	2.2	0.0	1.7	8
2555	1962	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.3	0.0	2.2	9
3285	1964	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.5	0.0	2.9	10
4015	1966	0.0	2.7	0.0	0.0	1.1	0.0	0.6	2.7	0.0	3.8	11
4745	1968	0.0	2.8	0.0	0.0	1.1	0.0	0.6	3.0	0.0	4.8	12
5475	1970	0.0	2.8	0.0	0.0	1.2	0.0	0.6	3.2	0.0	5.7	14
6205	1972	0.0	2.8	0.0	0.0	1.2	0.0	0.7	3.5	0.0	6.4	15
6935	1974	0.0	2.9	0.0	0.0	1.3	0.0	0.7	3.7	0.0	7.1	16
7665	1976	0.0	2.9	0.0	0.0	1.4	0.0	0.7	4.0	0.0	7.7	17
8395	1978	0.0	3.2	0.0	0.0	1.9	0.0	1.3	4.9	0.0	8.2	19
9125	1980	0.0	3.3	0.0	0.0	2.2	0.0	1.4	5.3	0.0	8.6	21
9855	1982	0.0	3.4	0.0	0.0	2.3	0.0	1.5	5.6	0.0	8.9	22
10585	1984	0.8	4.5	0.0	0.0	3.8	0.1	2.5	8.1	0.0	9.7	29
11315	1986	1.5	4.9	0.0	0.0	4.5	0.1	2.9	8.9	0.0	10.2	33
12045	1988	2.0	5.0	0.0	0.0	4.7	0.1	3.0	9.4	0.0	10.6	35
12775	1990	3.4	5.8	0.0	0.0	5.7	0.1	3.7	11.2	0.2	11.3	41
13505	1992	4.0	6.1	0.0	0.0	6.1	0.2	3.9	11.9	0.2	11.8	44
14235	1994	4.4	6.2	0.0	0.0	6.2	0.2	4.0	12.2	0.3	12.1	46
14965	1996	6.9	7.6	0.0	0.1	8.0	0.2	5.6	16.1	1.2	12.9	59
15695	1998	8.1	8.0	0.0	0.1	8.6	0.2	5.9	17.1	1.4	13.4	63
16425	2000	8.7	8.2	0.0	0.1	8.8	0.3	6.0	17.5	1.5	13.7	65
17155	2002	10.2	8.6	0.0	0.1	8.7	0.2	5.5	17.6	1.2	14.1	66
17885	2004	13.2	9.8	0.0	0.2	9.8	0.3	6.0	19.9	1.6	15.0	76
18615	2006	14.3	10.1	0.0	0.2	10.1	0.3	6.2	20.7	1.7	15.4	79
19345	2008	14.8	10.3	0.0	0.2	10.3	0.3	6.3	21.0	1.8	15.6	81
20075	2010	16.8	11.1	0.0	0.3	11.1	0.3	6.8	22.7	2.1	16.0	87
20805	2012	17.5	11.3	0.0	0.3	11.3	0.3	6.9	23.3	2.2	16.2	89
21535	2014	17.8	11.4	0.0	0.3	11.4	0.3	7.0	23.5	2.3	16.3	90
22265	2016	29.6	16.3	0.0	0.7	15.6	0.5	9.2	32.6	4.2	19.2	128

Appendix B-6-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-6 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	33.5	17.3	0.0	0.8	16.9	0.5	10.0	35.3	4.7	20.8	140
23725	2020	29.2	14.2	0.0	0.6	14.4	0.5	8.7	30.3	3.5	20.6	122
24455	2022	28.7	13.9	0.0	0.6	14.0	0.4	8.6	30.3	3.4	21.0	121
25185	2024	32.1	15.3	0.0	0.7	15.2	0.5	9.3	33.6	4.0	22.5	133
25915	2026	33.7	15.6	0.0	0.7	15.7	0.5	9.6	35.1	4.2	23.5	139
26645	2028	34.6	15.8	0.0	0.7	15.9	0.5	9.8	35.8	4.3	24.2	142
27375	2030	35.3	16.0	0.0	0.7	16.1	0.5	10.0	36.8	4.4	25.1	145
28105	2032	35.9	16.1	0.0	0.8	16.3	0.6	10.1	37.5	4.5	25.8	148
28835	2034	36.5	16.2	0.0	0.8	16.5	0.6	10.3	38.3	4.6	26.6	150
29565	2036	37.0	16.3	0.0	0.8	16.6	0.6	10.4	38.9	4.7	27.2	152
30295	2038	37.4	16.4	0.0	0.8	16.7	0.6	10.5	39.3	4.7	27.6	154
31025	2040	37.8	16.5	0.0	0.8	16.8	0.6	10.5	39.7	4.8	28.0	155
31755	2042	38.1	16.5	0.0	0.8	16.9	0.6	10.6	40.0	4.8	28.3	157
32485	2044	38.3	16.6	0.0	0.8	16.9	0.6	10.7	40.3	4.8	28.6	158
33215	2046	38.5	16.6	0.0	0.8	17.0	0.6	10.7	40.5	4.9	28.8	158
33945	2048	38.6	16.6	0.0	0.8	17.0	0.6	10.7	40.6	4.9	29.0	159
34675	2050	38.7	16.7	0.0	0.8	17.0	0.6	10.7	40.7	4.9	29.2	159
35405	2052	38.8	16.7	0.0	0.8	17.1	0.6	10.8	40.8	4.9	29.3	160
36135	2054	38.8	16.7	0.0	0.8	17.1	0.6	10.8	40.9	4.9	29.4	160
36865	2056	38.9	16.7	0.0	0.8	17.1	0.6	10.8	41.0	4.9	29.5	160
37595	2058	38.9	16.7	0.0	0.8	17.1	0.6	10.8	41.0	4.9	29.6	160
38325	2060	38.9	16.7	0.0	0.8	17.1	0.6	10.8	41.1	4.9	29.7	161
39055	2062	39.0	16.7	0.0	0.8	17.1	0.6	10.8	41.1	4.9	29.7	161
39785	2064	39.0	16.7	0.0	0.8	17.1	0.6	10.8	41.2	4.9	29.8	161
40515	2066	39.0	16.7	0.0	0.8	17.1	0.6	10.8	41.2	4.9	29.9	161
41245	2068	39.0	16.7	0.0	0.8	17.2	0.6	10.8	41.2	4.9	29.9	161
41975	2070	39.1	16.7	0.0	0.8	17.2	0.6	10.8	41.3	4.9	30.0	161
42705	2072	39.1	16.7	0.0	0.8	17.2	0.6	10.8	41.3	4.9	30.0	161
43435	2074	39.1	16.7	0.0	0.8	17.2	0.6	10.8	41.3	4.9	30.0	162
44165	2076	39.1	16.7	0.0	0.8	17.2	0.6	10.8	41.3	4.9	30.1	162
44895	2078	39.1	16.7	0.0	0.8	17.2	0.6	10.8	41.4	4.9	30.1	162
45625	2080	39.1	16.7	0.0	0.8	17.2	0.6	10.9	41.4	4.9	30.1	162
46355	2082	39.2	16.7	0.0	0.8	17.2	0.6	10.9	41.4	4.9	30.2	162
47085	2084	39.2	16.8	0.0	0.8	17.2	0.6	10.9	41.4	4.9	30.2	162
47815	2086	39.2	16.8	0.0	0.8	17.2	0.6	10.9	41.4	4.9	30.2	162
48545	2088	39.2	16.8	0.0	0.8	17.2	0.6	10.9	41.4	4.9	30.3	162
49275	2090	39.2	16.8	0.0	0.8	17.2	0.6	10.9	41.5	4.9	30.3	162
50005	2092	39.2	16.8	0.0	0.8	17.2	0.6	10.9	41.5	5.0	30.3	162
50735	2094	39.2	16.8	0.0	0.8	17.2	0.6	10.9	41.5	5.0	30.3	162
51465	2096	39.2	16.8	0.0	0.8	17.2	0.6	10.9	41.5	5.0	30.3	162
52195	2098	39.2	16.8	0.0	0.8	17.2	0.6	10.9	41.5	5.0	30.4	162
52925	2100	39.2	16.8	0.0	0.8	17.2	0.6	10.9	41.5	5.0	30.4	162
53655	2102	39.3	16.8	0.0	0.8	17.2	0.6	10.9	41.5	5.0	30.4	162
54385	2104	39.3	16.8	0.0	0.8	17.2	0.6	10.9	41.5	5.0	30.4	162
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

Appendix B-6-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-6 (Bookpurnong Area)



Appendix B-6-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-6 (Bookpurnong Area)

day	year	Z2 to Z40 (m³/day)	Z2 to Z41 (m³/day)	Z2 to Z42 (m³/day)	Z2 to Z43 (m³/day)	Z2 to Z44 (m³/day)	Z2 to Z45 (m³/day)	Z2 to Z46 (m³/day)	Z2 to Z47 (m³/day)	Z2 to Z48 (m³/day)	Z2 to Z20 (m³/day)	Total Upward (m³/day)
30	1955	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
365	1956	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
1095	1958	0.0	18.9	18.5	2.3	8.7	2.3	7.8	8.0	9.5	8.1	84
1825	1960	0.0	19.1	18.8	2.4	9.3	2.7	9.2	8.7	9.9	10.6	91
2555	1962	0.0	19.4	19.1	2.5	9.9	3.0	10.5	9.5	10.4	13.0	97
3285	1964	0.0	19.7	19.3	2.6	10.5	3.4	11.8	10.4	10.9	15.5	104
4015	1966	0.0	20.0	19.6	2.7	11.1	3.7	13.1	11.4	11.3	17.9	111
4745	1968	0.0	20.3	19.8	2.8	11.6	3.9	14.0	12.3	11.7	19.6	116
5475	1970	0.0	20.6	20.0	2.9	12.1	4.2	14.9	13.1	12.1	21.3	121
6205	1972	0.0	20.8	20.2	3.0	12.5	4.4	15.8	14.0	12.5	22.8	126
6935	1974	0.0	21.1	20.4	3.0	12.8	4.5	16.5	14.7	12.9	24.0	130
7665	1976	0.0	21.3	20.5	3.1	13.1	4.7	17.1	15.3	13.2	24.8	133
8395	1978	0.0	22.4	20.8	3.2	14.1	4.9	18.5	16.8	14.2	25.8	141
9125	1980	0.0	22.9	21.0	3.3	14.6	5.1	19.2	17.6	14.6	26.6	145
9855	1982	0.0	23.2	21.2	3.3	14.9	5.2	19.8	18.2	14.8	27.2	148
10585	1984	0.1	26.4	21.8	3.6	17.1	5.7	22.6	21.5	16.8	28.8	164
11315	1986	0.5	27.6	22.2	3.7	18.0	6.0	23.7	22.9	17.4	29.8	172
12045	1988	0.9	28.1	22.4	3.8	18.4	6.1	24.4	23.6	17.8	30.5	176
12775	1990	2.3	30.3	22.8	4.0	19.9	6.5	26.3	26.0	19.0	31.8	189
13505	1992	3.1	31.0	23.1	4.1	20.5	6.6	27.1	27.0	19.5	32.6	195
14235	1994	3.6	31.4	23.2	4.1	20.8	6.7	27.5	27.5	19.8	32.9	197
14965	1996	6.6	34.8	23.9	4.4	23.1	7.2	30.6	31.5	21.8	34.3	218
15695	1998	8.0	35.9	24.2	4.5	23.8	7.4	31.5	32.7	22.4	35.0	226
16425	2000	8.8	36.3	24.4	4.6	24.2	7.5	32.0	33.3	22.7	35.3	229
17155	2002	10.4	37.2	24.6	4.6	24.3	7.6	31.9	33.8	22.9	35.9	233
17885	2004	13.5	39.9	25.1	4.8	25.7	7.9	33.3	36.2	24.2	36.9	248
18615	2006	14.8	40.6	25.3	4.9	26.2	8.0	33.9	37.1	24.6	37.2	253
19345	2008	15.4	40.9	25.4	4.9	26.4	8.0	34.1	37.5	24.8	37.3	255
20075	2010	17.6	42.7	25.7	5.1	27.3	8.2	35.2	39.1	25.7	37.9	265
20805	2012	18.5	43.2	25.9	5.1	27.7	8.3	35.6	39.7	25.9	38.1	268
21535	2014	18.9	43.4	25.9	5.2	27.8	8.3	35.8	39.9	26.1	38.2	270
22265	2016	30.7	52.7	27.7	5.8	32.8	9.4	41.4	48.2	30.0	42.1	321
22995	2018	35.2	55.0	28.3	6.1	34.4	9.9	43.4	50.9	31.1	43.8	338
23725	2020	32.5	50.3	28.0	5.9	32.5	9.7	41.9	47.9	30.2	43.8	323
24455	2022	32.7	50.1	28.0	5.9	32.5	9.7	42.2	48.2	30.5	44.5	324
25185	2024	37.2	52.8	28.8	6.2	34.3	10.2	44.6	51.5	32.1	46.5	344
25915	2026	39.5	53.9	29.2	6.3	35.2	10.5	45.9	53.1	32.8	47.8	354
26645	2028	40.9	54.4	29.4	6.4	35.7	10.7	46.6	54.0	33.3	48.7	360

Appendix B-6-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-6 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upwards (m^3/day)
27375	2030	42.4	55.0	29.7	6.5	36.3	10.9	47.6	55.2	33.9	49.9	367
28105	2032	43.5	55.4	29.9	6.6	36.8	11.1	48.4	56.1	34.3	50.8	373
28835	2034	44.8	55.9	30.2	6.7	37.3	11.2	49.2	57.1	34.8	51.8	379
29565	2036	45.8	56.3	30.3	6.7	37.6	11.4	49.8	57.8	35.2	52.5	383
30295	2038	46.4	56.5	30.5	6.8	37.9	11.5	50.2	58.3	35.4	53.1	387
31025	2040	47.2	56.8	30.6	6.8	38.2	11.6	50.7	58.9	35.7	53.7	390
31755	2042	47.8	57.1	30.8	6.9	38.5	11.7	51.1	59.3	35.9	54.2	393
32485	2044	48.3	57.2	30.8	6.9	38.6	11.8	51.4	59.6	36.1	54.5	395
33215	2046	48.6	57.4	30.9	6.9	38.8	11.8	51.6	59.9	36.2	54.9	397
33945	2048	48.9	57.4	31.0	6.9	38.9	11.9	51.8	60.1	36.3	55.1	398
34675	2050	49.1	57.5	31.0	7.0	39.0	11.9	52.0	60.2	36.4	55.3	399
35405	2052	49.2	57.6	31.0	7.0	39.0	11.9	52.1	60.4	36.5	55.5	400
36135	2054	49.3	57.6	31.1	7.0	39.1	12.0	52.2	60.5	36.5	55.7	401
36865	2056	49.4	57.7	31.1	7.0	39.1	12.0	52.3	60.6	36.6	55.8	402
37595	2058	49.5	57.7	31.1	7.0	39.2	12.0	52.4	60.7	36.6	56.0	402
38325	2060	49.6	57.7	31.2	7.0	39.2	12.0	52.5	60.7	36.6	56.1	403
39055	2062	49.7	57.8	31.2	7.0	39.3	12.0	52.5	60.8	36.7	56.2	403
39785	2064	49.8	57.8	31.2	7.0	39.3	12.1	52.6	60.9	36.7	56.3	404
40515	2066	49.8	57.8	31.2	7.0	39.3	12.1	52.7	60.9	36.7	56.4	404
41245	2068	49.9	57.8	31.2	7.0	39.4	12.1	52.7	61.0	36.8	56.5	404
41975	2070	50.0	57.9	31.3	7.0	39.4	12.1	52.8	61.0	36.8	56.5	405
42705	2072	50.0	57.9	31.3	7.1	39.4	12.1	52.8	61.1	36.8	56.6	405
43435	2074	50.1	57.9	31.3	7.1	39.5	12.1	52.8	61.1	36.8	56.7	405
44165	2076	50.1	57.9	31.3	7.1	39.5	12.1	52.9	61.1	36.9	56.7	406
44895	2078	50.1	57.9	31.3	7.1	39.5	12.1	52.9	61.2	36.9	56.8	406
45625	2080	50.2	58.0	31.3	7.1	39.5	12.1	53.0	61.2	36.9	56.8	406
46355	2082	50.2	58.0	31.3	7.1	39.5	12.2	53.0	61.2	36.9	56.9	406
47085	2084	50.3	58.0	31.3	7.1	39.6	12.2	53.0	61.3	36.9	56.9	406
47815	2086	50.3	58.0	31.3	7.1	39.6	12.2	53.0	61.3	36.9	56.9	407
48545	2088	50.3	58.0	31.4	7.1	39.6	12.2	53.1	61.3	37.0	57.0	407
49275	2090	50.4	58.0	31.4	7.1	39.6	12.2	53.1	61.4	37.0	57.0	407
50005	2092	50.4	58.0	31.4	7.1	39.6	12.2	53.1	61.4	37.0	57.1	407
50735	2094	50.4	58.0	31.4	7.1	39.6	12.2	53.1	61.4	37.0	57.1	407
51465	2096	50.4	58.0	31.4	7.1	39.6	12.2	53.2	61.4	37.0	57.1	408
52195	2098	50.5	58.1	31.4	7.1	39.7	12.2	53.2	61.4	37.0	57.1	408
52925	2100	50.5	58.1	31.4	7.1	39.7	12.2	53.2	61.5	37.0	57.2	408
53655	2102	50.5	58.1	31.4	7.1	39.7	12.2	53.2	61.5	37.0	57.2	408
54385	2104	50.5	58.1	31.4	7.1	39.7	12.2	53.2	61.5	37.0	57.2	408
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

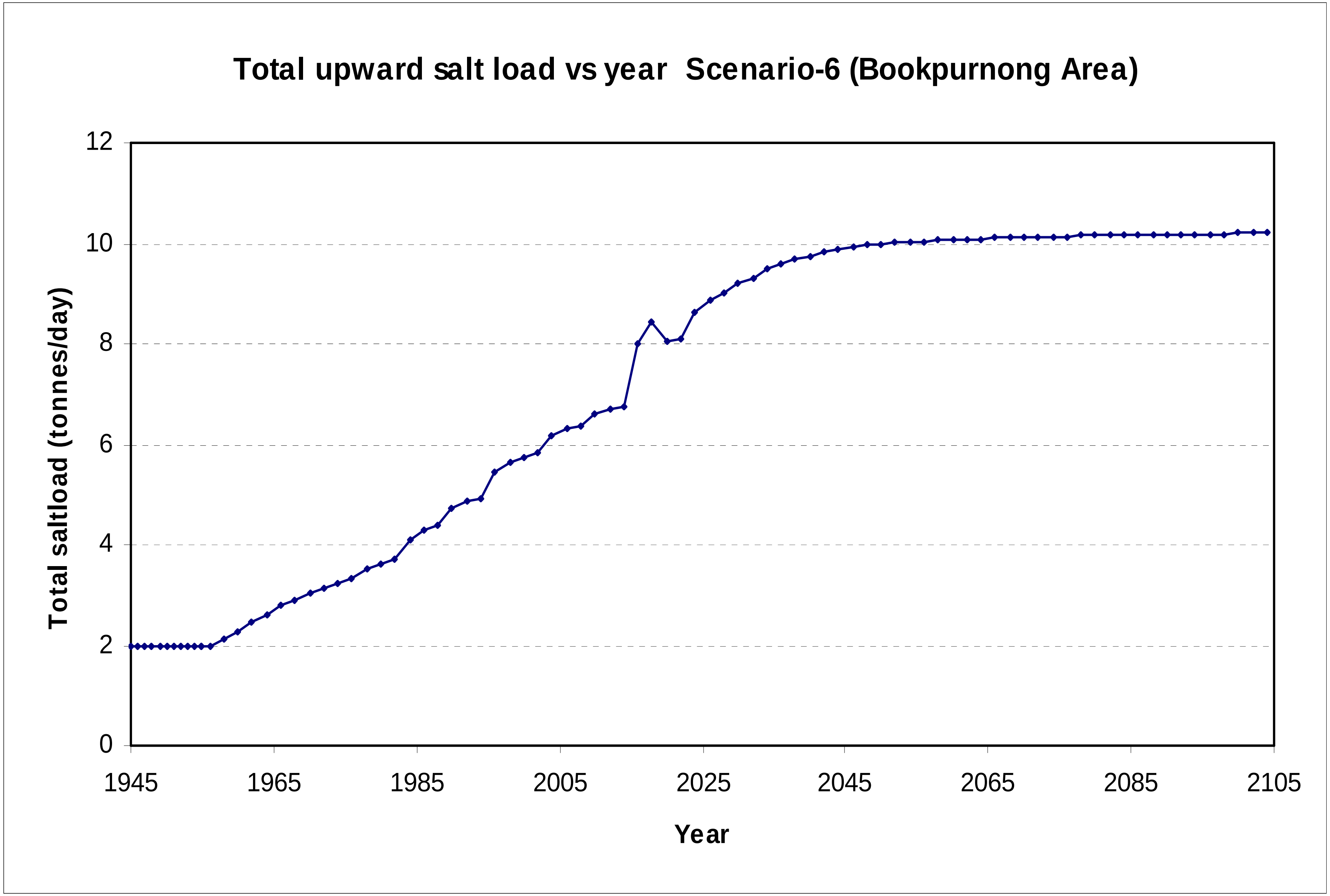
Appendix B-6-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-6 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1946	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1947	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1948	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1949	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1950	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1951	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1952	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1953	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1954	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
30	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
365	1956	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1095	1958	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1825	1960	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.3	2
2555	1962	0.0	0.5	0.5	0.1	0.2	0.1	0.3	0.2	0.3	0.3	2
3285	1964	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4015	1966	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4745	1968	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
5475	1970	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
6205	1972	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.6	3
6935	1974	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
7665	1976	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
8395	1978	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.6	4
9125	1980	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.7	4
9855	1982	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.5	0.4	0.7	4
10585	1984	0.0	0.7	0.5	0.1	0.4	0.1	0.6	0.5	0.4	0.7	4
11315	1986	0.0	0.7	0.6	0.1	0.4	0.1	0.6	0.6	0.4	0.7	4
12045	1988	0.0	0.7	0.6	0.1	0.5	0.2	0.6	0.6	0.4	0.8	4
12775	1990	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.6	0.5	0.8	5
13505	1992	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14235	1994	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14965	1996	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	5
15695	1998	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
16425	2000	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17155	2002	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17885	2004	0.3	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
18615	2006	0.4	1.0	0.6	0.1	0.7	0.2	0.8	0.9	0.6	0.9	6
19345	2008	0.4	1.0	0.6	0.1	0.7	0.2	0.9	0.9	0.6	0.9	6
20075	2010	0.4	1.1	0.6	0.1	0.7	0.2	0.9	1.0	0.6	0.9	7
20805	2012	0.5	1.1	0.6	0.1	0.7	0.2	0.9	1.0	0.6	1.0	7
21535	2014	0.5	1.1	0.6	0.1	0.7	0.2	0.9	1.0	0.7	1.0	7
22265	2016	0.8	1.3	0.7	0.1	0.8	0.2	1.0	1.2	0.8	1.1	8

Appendix B-6-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-6 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	0.9	1.4	0.7	0.2	0.9	0.2	1.1	1.3	0.8	1.1	8
23725	2020	0.8	1.3	0.7	0.1	0.8	0.2	1.0	1.2	0.8	1.1	8
24455	2022	0.8	1.3	0.7	0.1	0.8	0.2	1.1	1.2	0.8	1.1	8
25185	2024	0.9	1.3	0.7	0.2	0.9	0.3	1.1	1.3	0.8	1.2	9
25915	2026	1.0	1.3	0.7	0.2	0.9	0.3	1.1	1.3	0.8	1.2	9
26645	2028	1.0	1.4	0.7	0.2	0.9	0.3	1.2	1.4	0.8	1.2	9
27375	2030	1.1	1.4	0.7	0.2	0.9	0.3	1.2	1.4	0.8	1.2	9
28105	2032	1.1	1.4	0.7	0.2	0.9	0.3	1.2	1.4	0.9	1.3	9
28835	2034	1.1	1.4	0.8	0.2	0.9	0.3	1.2	1.4	0.9	1.3	9
29565	2036	1.1	1.4	0.8	0.2	0.9	0.3	1.2	1.4	0.9	1.3	10
30295	2038	1.2	1.4	0.8	0.2	0.9	0.3	1.3	1.5	0.9	1.3	10
31025	2040	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.3	10
31755	2042	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
32485	2044	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
33215	2046	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
33945	2048	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
34675	2050	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
35405	2052	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
36135	2054	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
36865	2056	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
37595	2058	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
38325	2060	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
39055	2062	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
39785	2064	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
40515	2066	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
41245	2068	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
41975	2070	1.2	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
42705	2072	1.3	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
43435	2074	1.3	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
44165	2076	1.3	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
44895	2078	1.3	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
45625	2080	1.3	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
46355	2082	1.3	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
47085	2084	1.3	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
47815	2086	1.3	1.4	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
48545	2088	1.3	1.5	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
49275	2090	1.3	1.5	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
50005	2092	1.3	1.5	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
50735	2094	1.3	1.5	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
51465	2096	1.3	1.5	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
52195	2098	1.3	1.5	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
52925	2100	1.3	1.5	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
53655	2102	1.3	1.5	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
54385	2104	1.3	1.5	0.8	0.2	1.0	0.3	1.3	1.5	0.9	1.4	10
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

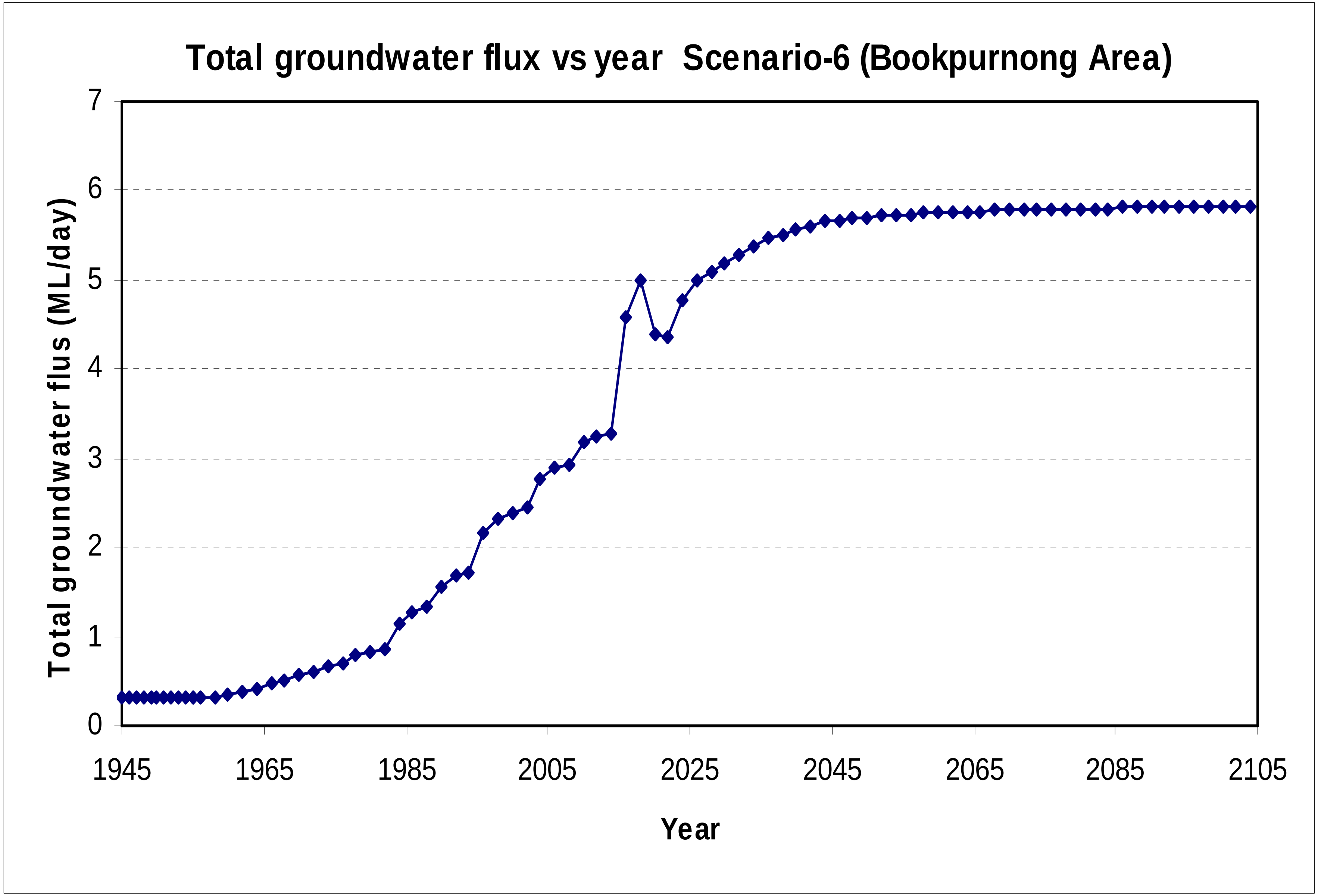
Appendix B-6-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-6 (Bookpurnong Area)



Appendix B-6-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-6 (Bookpurnong Area)

day	year	Lateral flux (m^3/day)	Upward leakage (m^3/day)	Total flux (m^3/day)
0	1945	0.241	0.079	0.320
0	1946	0.241	0.079	0.320
0	1947	0.241	0.079	0.320
0	1948	0.241	0.079	0.320
0	1949	0.241	0.079	0.320
0	1950	0.241	0.079	0.320
0	1951	0.241	0.079	0.320
0	1952	0.241	0.079	0.320
0	1953	0.241	0.079	0.320
0	1954	0.241	0.079	0.320
0	1955	0.241	0.079	0.320
30	1955	0.241	0.079	0.320
365	1956	0.241	0.079	0.320
1095	1958	0.249	0.084	0.333
1825	1960	0.265	0.091	0.356
2555	1962	0.289	0.097	0.387
3285	1964	0.323	0.104	0.427
4015	1966	0.365	0.111	0.476
4745	1968	0.408	0.116	0.525
5475	1970	0.450	0.121	0.571
6205	1972	0.488	0.126	0.614
6935	1974	0.523	0.130	0.653
7665	1976	0.553	0.133	0.686
8395	1978	0.649	0.141	0.790
9125	1980	0.694	0.145	0.839
9855	1982	0.721	0.148	0.869
10585	1984	0.982	0.164	1.147
11315	1986	1.101	0.172	1.272
12045	1988	1.160	0.176	1.336
12775	1990	1.382	0.189	1.571
13505	1992	1.476	0.195	1.671
14235	1994	1.521	0.197	1.719
14965	1996	1.953	0.218	2.171
15695	1998	2.099	0.226	2.324
16425	2000	2.160	0.229	2.389
17155	2002	2.214	0.233	2.448
17885	2004	2.524	0.248	2.772
18615	2006	2.638	0.253	2.891
19345	2008	2.684	0.255	2.939
20075	2010	2.908	0.265	3.173
20805	2012	2.983	0.268	3.251
21535	2014	3.012	0.270	3.281
22265	2016	4.261	0.321	4.582
22995	2018	4.664	0.338	5.003
23725	2020	4.069	0.323	4.392
24455	2022	4.031	0.324	4.355
25185	2024	4.437	0.344	4.781
25915	2026	4.626	0.354	4.980
26645	2028	4.726	0.360	5.086
27375	2030	4.833	0.367	5.200
28105	2032	4.921	0.373	5.294
28835	2034	5.008	0.379	5.387
29565	2036	5.079	0.383	5.463
30295	2038	5.129	0.387	5.516
31025	2040	5.179	0.390	5.569
31755	2042	5.223	0.393	5.616
32485	2044	5.255	0.395	5.650
33215	2046	5.279	0.397	5.676
33945	2048	5.297	0.398	5.695
34675	2050	5.311	0.399	5.710
35405	2052	5.323	0.400	5.723
36135	2054	5.333	0.401	5.734
36865	2056	5.341	0.402	5.743
37595	2058	5.348	0.402	5.750
38325	2060	5.355	0.403	5.757
39055	2062	5.360	0.403	5.764
39785	2064	5.366	0.404	5.769
40515	2066	5.371	0.404	5.775
41245	2068	5.375	0.404	5.779
41975	2070	5.379	0.405	5.784
42705	2072	5.382	0.405	5.787
43435	2074	5.386	0.405	5.791
44165	2076	5.389	0.406	5.794
44895	2078	5.392	0.406	5.797
45625	2080	5.394	0.406	5.800
46355	2082	5.397	0.406	5.803
47085	2084	5.399	0.406	5.806
47815	2086	5.401	0.407	5.808
48545	2088	5.403	0.407	5.810
49275	2090	5.405	0.407	5.812
50005	2092	5.407	0.407	5.814
50735	2094	5.409	0.407	5.816
51465	2096	5.410	0.408	5.818
52195	2098	5.412	0.408	5.820
52925	2100	5.414	0.408	5.821
53655	2102	5.415	0.408	5.823
54385	2104	5.416	0.408	5.824

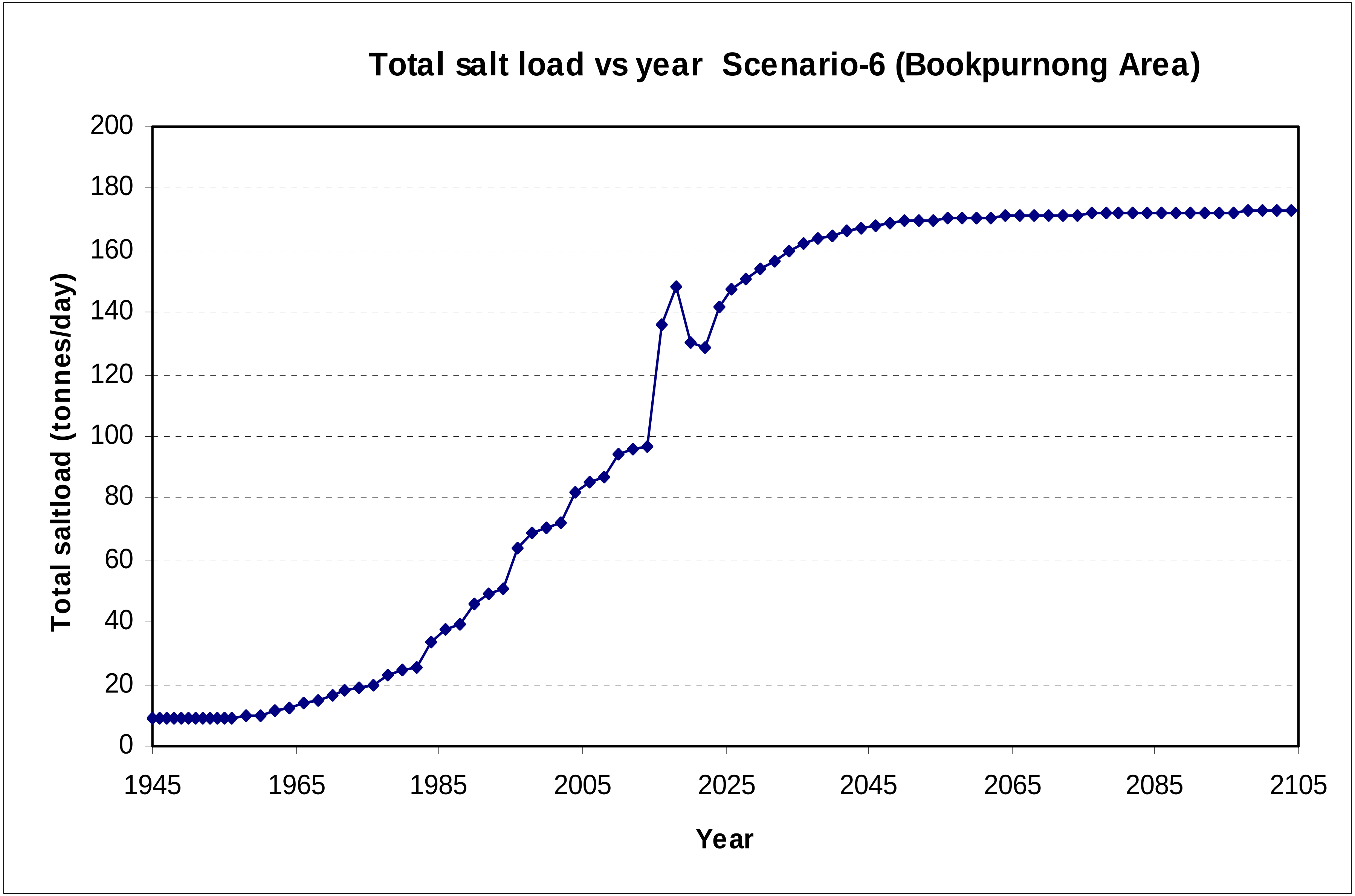
Appendix B-6-6a Predicted total groundwater flux (ML/day) in Scenario-6 (Bookpurnong Area)



Appendix B-6-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-6 (Bookpurnong Area)

day	year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Total Saltload (tonnes/day)
0	1945	7.24	1.98	9.21
0	1946	7.24	1.98	9.21
0	1947	7.24	1.98	9.21
0	1948	7.24	1.98	9.21
0	1949	7.24	1.98	9.21
0	1950	7.24	1.98	9.21
0	1951	7.24	1.98	9.21
0	1952	7.24	1.98	9.21
0	1953	7.24	1.98	9.21
0	1954	7.24	1.98	9.21
0	1955	7.24	1.98	9.21
30	1955	7.24	1.98	9.21
365	1956	7.24	1.98	9.21
1095	1958	7.46	2.10	9.56
1825	1960	7.96	2.27	10.22
2555	1962	8.68	2.43	11.11
3285	1964	9.68	2.61	12.29
4015	1966	10.94	2.77	13.72
4745	1968	12.25	2.90	15.15
5475	1970	13.50	3.03	16.53
6205	1972	14.65	3.15	17.80
6935	1974	15.69	3.25	18.94
7665	1976	16.58	3.33	19.91
8395	1978	19.47	3.52	22.99
9125	1980	20.82	3.62	24.44
9855	1982	21.64	3.70	25.34
10585	1984	29.46	4.11	33.57
11315	1986	33.02	4.29	37.32
12045	1988	34.80	4.40	39.19
12775	1990	41.47	4.72	46.19
13505	1992	44.28	4.87	49.15
14235	1994	45.64	4.94	50.58
14965	1996	58.58	5.45	64.04
15695	1998	62.96	5.64	68.60
16425	2000	64.80	5.73	70.53
17155	2002	66.43	5.83	72.26
17885	2004	75.73	6.19	81.91
18615	2006	79.14	6.31	85.46
19345	2008	80.52	6.37	86.89
20075	2010	87.25	6.62	93.86
20805	2012	89.48	6.70	96.18
21535	2014	90.35	6.74	97.09
22265	2016	127.84	8.02	135.86
22995	2018	139.93	8.45	148.39
23725	2020	122.08	8.07	130.15
24455	2022	120.92	8.11	129.02
25185	2024	133.10	8.61	141.71
25915	2026	138.78	8.86	147.64
26645	2028	141.78	9.00	150.79
27375	2030	144.99	9.18	154.18
28105	2032	147.63	9.32	156.95
28835	2034	150.24	9.47	159.71
29565	2036	152.38	9.58	161.96
30295	2038	153.88	9.67	163.55
31025	2040	155.36	9.76	165.11
31755	2042	156.68	9.83	166.51
32485	2044	157.64	9.88	167.53
33215	2046	158.36	9.92	168.28
33945	2048	158.90	9.96	168.86
34675	2050	159.33	9.98	169.31
35405	2052	159.68	10.01	169.69
36135	2054	159.98	10.02	170.00
36865	2056	160.23	10.04	170.27
37595	2058	160.45	10.06	170.50
38325	2060	160.64	10.07	170.71
39055	2062	160.81	10.08	170.89
39785	2064	160.97	10.09	171.07
40515	2066	161.12	10.10	171.22
41245	2068	161.24	10.11	171.35
41975	2070	161.36	10.12	171.48
42705	2072	161.47	10.13	171.60
43435	2074	161.57	10.13	171.70
44165	2076	161.66	10.14	171.80
44895	2078	161.75	10.15	171.89
45625	2080	161.83	10.15	171.98
46355	2082	161.90	10.16	172.06
47085	2084	161.98	10.16	172.14
47815	2086	162.04	10.17	172.21
48545	2088	162.10	10.17	172.27
49275	2090	162.16	10.18	172.34
50005	2092	162.22	10.18	172.40
50735	2094	162.27	10.18	172.45
51465	2096	162.31	10.19	172.50
52195	2098	162.36	10.19	172.55
52925	2100	162.41	10.19	172.60
53655	2102	162.45	10.20	172.64
54385	2104	162.49	10.20	172.69

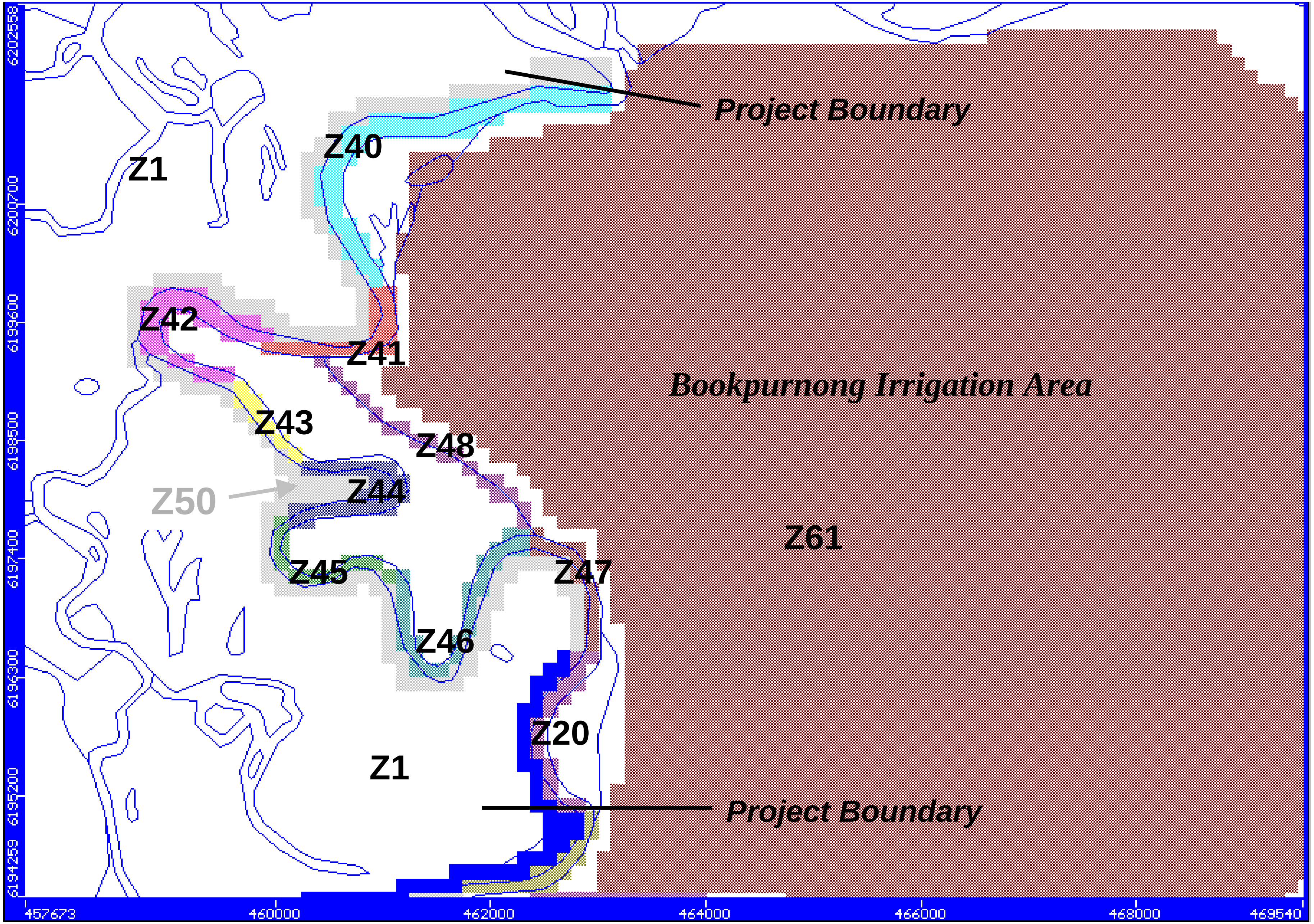
Appendix B-6-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-6 (Bookpurnong Area)



Appendix B-6-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-6 (Bookpurnong Area)

B-7 Groundwater flux and salt load entering the River Murray Scenario-7 (Bookpurnong Area)

- Flow budget zones (Bookpurnong Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).



Appendix B-7-1 Flow budget zones in model Layer-1 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
30	1955	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
365	1956	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
1095	1958	0.0	87.9	0.0	0.0	28.4	0.0	14.8	70.6	0.0	47.1	249
1825	1960	0.0	88.5	0.0	0.0	29.9	0.0	15.6	73.7	0.0	57.6	265
2555	1962	0.0	89.3	0.0	0.0	31.7	0.0	16.6	78.3	0.0	73.4	289
3285	1964	0.0	90.2	0.0	0.0	33.7	0.0	17.8	84.1	0.0	97.0	323
4015	1966	0.0	91.2	0.0	0.0	35.8	0.0	19.0	91.2	0.0	127.6	365
4745	1968	0.0	92.2	0.0	0.0	37.7	0.0	20.2	99.1	0.0	159.1	408
5475	1970	0.0	93.2	0.0	0.0	39.7	0.0	21.4	107.5	0.0	188.4	450
6205	1972	0.0	94.2	0.0	0.0	41.6	0.0	22.5	116.1	0.0	214.2	488
6935	1974	0.0	95.2	0.0	0.0	43.4	0.0	23.7	124.2	0.0	236.6	523
7665	1976	0.0	96.1	0.0	0.0	45.0	0.0	24.7	131.8	0.0	255.1	553
8395	1978	0.0	106.0	0.0	0.0	64.6	0.0	41.8	164.5	0.0	272.2	649
9125	1980	0.0	110.5	0.0	0.0	73.3	0.2	46.9	177.3	0.0	285.8	694
9855	1982	0.0	112.6	0.0	0.0	76.8	0.3	49.1	185.4	0.0	297.1	721
10585	1984	26.5	149.8	0.0	0.0	128.1	2.1	84.8	269.0	0.0	321.8	982
11315	1986	51.0	162.3	0.0	0.0	148.7	3.0	96.0	297.9	0.9	340.9	1101
12045	1988	65.1	167.1	0.0	0.0	156.1	3.4	100.1	312.2	1.3	354.5	1160
12775	1990	111.8	195.0	0.0	0.2	190.4	4.5	123.6	374.6	5.4	376.9	1382
13505	1992	134.3	203.6	0.0	0.5	203.3	5.1	131.3	396.6	8.1	393.3	1476
14235	1994	145.9	207.0	0.0	0.7	208.1	5.3	134.3	407.6	9.2	403.5	1521
14965	1996	230.8	253.0	0.0	1.7	268.2	7.4	185.5	536.4	39.2	430.6	1953
15695	1998	271.6	267.0	0.0	2.5	288.2	8.3	197.5	570.5	46.1	446.9	2099
16425	2000	291.1	272.1	0.0	2.9	294.9	8.6	201.7	585.0	48.5	455.5	2160
17155	2002	340.8	287.0	0.0	3.3	289.1	8.1	182.2	584.1	38.0	471.4	2204
17885	2004	426.4	319.2	0.0	5.2	302.4	8.1	175.9	622.2	36.6	496.7	2393
18615	2006	295.9	260.6	0.0	0.0	9.9	0.0	0.0	198.1	0.0	211.4	976
19345	2008	285.2	255.4	0.0	0.0	3.3	0.0	0.0	196.8	0.0	199.4	940
20075	2010	319.8	275.2	0.0	0.0	13.6	0.0	0.0	222.5	0.0	203.2	1034
20805	2012	333.3	279.6	0.0	0.0	17.5	0.0	0.0	231.1	0.0	202.8	1064
21535	2014	338.9	281.1	0.0	0.0	18.8	0.0	0.0	233.7	0.0	199.7	1072
22265	2016	341.4	281.7	0.0	0.0	19.2	0.0	0.0	234.2	0.0	195.7	1072
22995	2018	342.5	281.9	0.0	0.0	19.4	0.0	0.0	233.9	0.0	191.6	1069
23725	2020	206.8	205.3	0.0	0.0	0.0	0.0	0.0	133.5	0.0	145.9	691
24455	2022	159.5	188.8	0.0	0.0	0.0	0.0	0.0	104.2	0.0	119.1	571
25185	2024	139.6	183.0	0.0	0.0	0.0	0.0	0.0	92.8	0.0	105.2	521
25915	2026	129.9	180.4	0.0	0.0	0.0	0.0	0.0	87.3	0.0	96.9	495
26645	2028	124.6	179.1	0.0	0.0	0.0	0.0	0.0	83.9	0.0	91.1	479

Appendix B-7-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-7 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
27375	2030	121.4	178.3	0.0	0.0	0.0	0.0	0.0	81.6	0.0	86.8	468
28105	2032	119.4	177.8	0.0	0.0	0.0	0.0	0.0	79.9	0.0	83.5	461
28835	2034	117.9	177.5	0.0	0.0	0.0	0.0	0.0	78.6	0.0	80.7	455
29565	2036	116.9	177.2	0.0	0.0	0.0	0.0	0.0	77.6	0.0	78.3	450
30295	2038	116.1	177.1	0.0	0.0	0.0	0.0	0.0	76.8	0.0	76.4	446
31025	2040	115.5	176.9	0.0	0.0	0.0	0.0	0.0	76.2	0.0	74.7	443
31755	2042	115.1	176.8	0.0	0.0	0.0	0.0	0.0	75.6	0.0	73.2	441
32485	2044	114.6	176.7	0.0	0.0	0.0	0.0	0.0	75.1	0.0	71.9	438
33215	2046	114.3	176.6	0.0	0.0	0.0	0.0	0.0	74.7	0.0	70.8	436
33945	2048	114.0	176.6	0.0	0.0	0.0	0.0	0.0	74.3	0.0	69.8	435
34675	2050	113.8	176.5	0.0	0.0	0.0	0.0	0.0	74.0	0.0	68.9	433
35405	2052	113.5	176.4	0.0	0.0	0.0	0.0	0.0	73.7	0.0	68.1	432
36135	2054	113.3	176.4	0.0	0.0	0.0	0.0	0.0	73.4	0.0	67.5	431
36865	2056	113.2	176.4	0.0	0.0	0.0	0.0	0.0	73.2	0.0	66.9	430
37595	2058	113.0	176.3	0.0	0.0	0.0	0.0	0.0	73.0	0.0	66.5	429
38325	2060	112.9	176.3	0.0	0.0	0.0	0.0	0.0	72.8	0.0	66.1	428
39055	2062	112.7	176.3	0.0	0.0	0.0	0.0	0.0	72.6	0.0	65.7	427
39785	2064	112.6	176.2	0.0	0.0	0.0	0.0	0.0	72.5	0.0	65.4	427
40515	2066	112.5	176.2	0.0	0.0	0.0	0.0	0.0	72.4	0.0	65.1	426
41245	2068	112.4	176.2	0.0	0.0	0.0	0.0	0.0	72.3	0.0	64.9	426
41975	2070	112.4	176.2	0.0	0.0	0.0	0.0	0.0	72.2	0.0	64.6	425
42705	2072	112.3	176.2	0.0	0.0	0.0	0.0	0.0	72.1	0.0	64.4	425
43435	2074	112.2	176.1	0.0	0.0	0.0	0.0	0.0	72.0	0.0	64.3	425
44165	2076	112.2	176.1	0.0	0.0	0.0	0.0	0.0	71.9	0.0	64.2	424
44895	2078	112.1	176.1	0.0	0.0	0.0	0.0	0.0	71.9	0.0	64.0	424
45625	2080	112.1	176.1	0.0	0.0	0.0	0.0	0.0	71.8	0.0	63.9	424
46355	2082	112.1	176.1	0.0	0.0	0.0	0.0	0.0	71.8	0.0	63.9	424
47085	2084	112.0	176.1	0.0	0.0	0.0	0.0	0.0	71.7	0.0	63.8	424
47815	2086	112.0	176.1	0.0	0.0	0.0	0.0	0.0	71.7	0.0	63.7	424
48545	2088	112.0	176.1	0.0	0.0	0.0	0.0	0.0	71.7	0.0	63.7	423
49275	2090	112.0	176.1	0.0	0.0	0.0	0.0	0.0	71.6	0.0	63.6	423
50005	2092	112.0	176.1	0.0	0.0	0.0	0.0	0.0	71.6	0.0	63.6	423
50735	2094	112.0	176.1	0.0	0.0	0.0	0.0	0.0	71.6	0.0	63.6	423
51465	2096	111.9	176.1	0.0	0.0	0.0	0.0	0.0	71.6	0.0	63.5	423
52195	2098	111.9	176.1	0.0	0.0	0.0	0.0	0.0	71.6	0.0	63.5	423
52925	2100	111.9	176.1	0.0	0.0	0.0	0.0	0.0	71.6	0.0	63.5	423
53655	2102	111.9	176.1	0.0	0.0	0.0	0.0	0.0	71.6	0.0	63.5	423
54385	2104	111.9	176.1	0.0	0.0	0.0	0.0	0.0	71.6	0.0	63.5	423
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

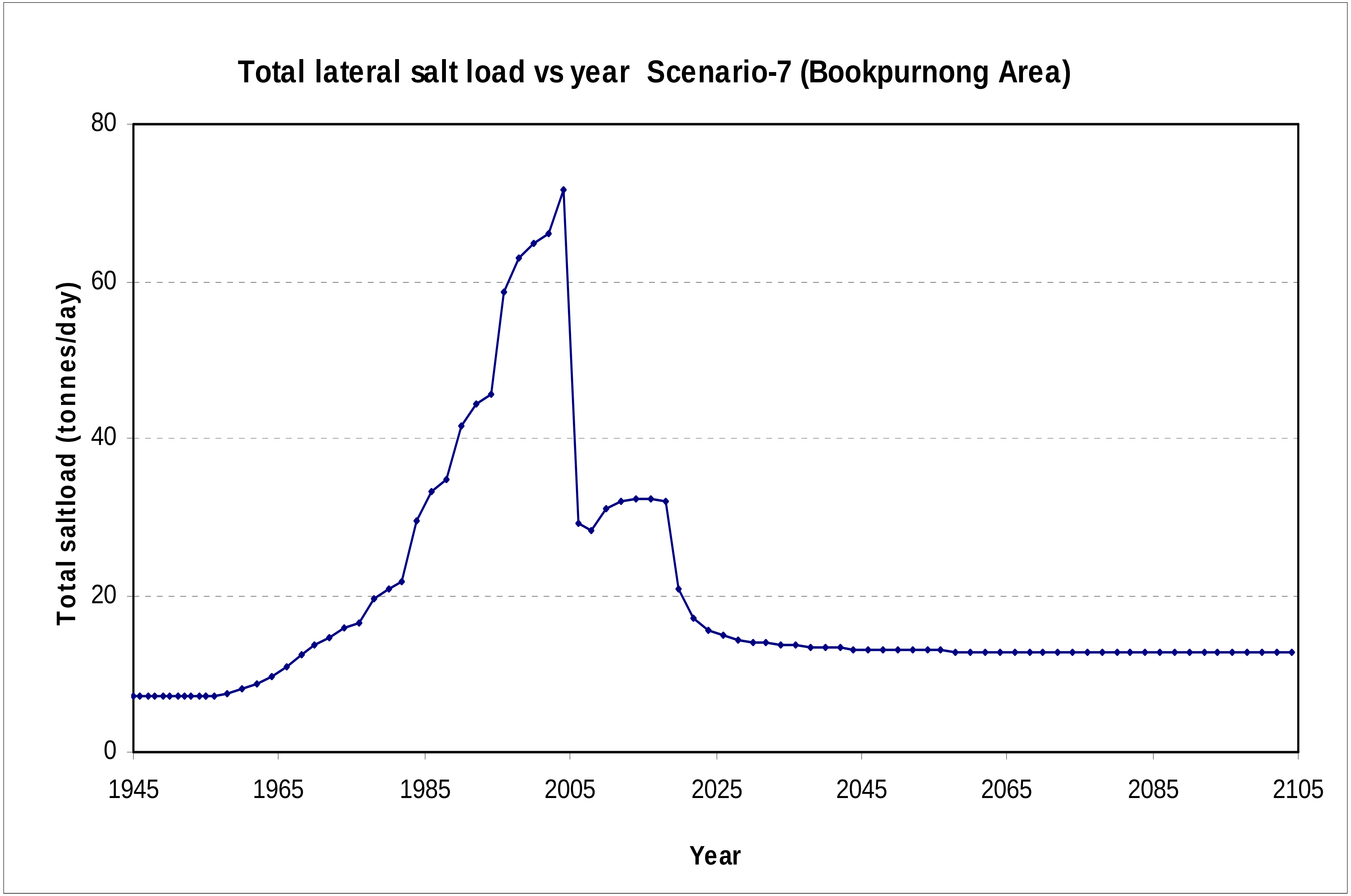
Appendix B-7-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-7 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1946	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1947	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1948	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1949	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1950	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1951	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1952	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1953	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1954	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
30	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
365	1956	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
1095	1958	0.0	2.6	0.0	0.0	0.9	0.0	0.4	2.1	0.0	1.4	7
1825	1960	0.0	2.7	0.0	0.0	0.9	0.0	0.5	2.2	0.0	1.7	8
2555	1962	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.3	0.0	2.2	9
3285	1964	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.5	0.0	2.9	10
4015	1966	0.0	2.7	0.0	0.0	1.1	0.0	0.6	2.7	0.0	3.8	11
4745	1968	0.0	2.8	0.0	0.0	1.1	0.0	0.6	3.0	0.0	4.8	12
5475	1970	0.0	2.8	0.0	0.0	1.2	0.0	0.6	3.2	0.0	5.7	14
6205	1972	0.0	2.8	0.0	0.0	1.2	0.0	0.7	3.5	0.0	6.4	15
6935	1974	0.0	2.9	0.0	0.0	1.3	0.0	0.7	3.7	0.0	7.1	16
7665	1976	0.0	2.9	0.0	0.0	1.4	0.0	0.7	4.0	0.0	7.7	17
8395	1978	0.0	3.2	0.0	0.0	1.9	0.0	1.3	4.9	0.0	8.2	19
9125	1980	0.0	3.3	0.0	0.0	2.2	0.0	1.4	5.3	0.0	8.6	21
9855	1982	0.0	3.4	0.0	0.0	2.3	0.0	1.5	5.6	0.0	8.9	22
10585	1984	0.8	4.5	0.0	0.0	3.8	0.1	2.5	8.1	0.0	9.7	29
11315	1986	1.5	4.9	0.0	0.0	4.5	0.1	2.9	8.9	0.0	10.2	33
12045	1988	2.0	5.0	0.0	0.0	4.7	0.1	3.0	9.4	0.0	10.6	35
12775	1990	3.4	5.8	0.0	0.0	5.7	0.1	3.7	11.2	0.2	11.3	41
13505	1992	4.0	6.1	0.0	0.0	6.1	0.2	3.9	11.9	0.2	11.8	44
14235	1994	4.4	6.2	0.0	0.0	6.2	0.2	4.0	12.2	0.3	12.1	48
14965	1996	6.9	7.6	0.0	0.1	8.0	0.2	5.6	16.1	1.2	12.9	59
15695	1998	8.1	8.0	0.0	0.1	8.6	0.2	5.9	17.1	1.4	13.4	63
16425	2000	8.7	8.2	0.0	0.1	8.8	0.3	6.0	17.5	1.5	13.7	65
17155	2002	10.2	8.6	0.0	0.1	8.7	0.2	5.5	17.5	1.1	14.1	68
17885	2004	12.8	9.6	0.0	0.2	9.1	0.2	5.3	18.7	1.1	14.9	72
18615	2006	8.9	7.8	0.0	0.0	0.3	0.0	0.0	5.9	0.0	6.3	29
19345	2008	8.6	7.7	0.0	0.0	0.1	0.0	0.0	5.9	0.0	6.0	28
20075	2010	9.6	8.3	0.0	0.0	0.4	0.0	0.0	6.7	0.0	6.1	31
20805	2012	10.0	8.4	0.0	0.0	0.5	0.0	0.0	6.9	0.0	6.1	32
21535	2014	10.2	8.4	0.0	0.0	0.6	0.0	0.0	7.0	0.0	6.0	32
22265	2016	10.2	8.5	0.0	0.0	0.6	0.0	0.0	7.0	0.0	5.9	32

Appendix B-7-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-7 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	10.3	8.5	0.0	0.0	0.6	0.0	0.0	7.0	0.0	5.7	32
23725	2020	6.2	6.2	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.4	21
24455	2022	4.8	5.7	0.0	0.0	0.0	0.0	0.0	3.1	0.0	3.6	17
25185	2024	4.2	5.5	0.0	0.0	0.0	0.0	0.0	2.8	0.0	3.2	18
25915	2026	3.9	5.4	0.0	0.0	0.0	0.0	0.0	2.6	0.0	2.9	15
26645	2028	3.7	5.4	0.0	0.0	0.0	0.0	0.0	2.5	0.0	2.7	14
27375	2030	3.6	5.3	0.0	0.0	0.0	0.0	0.0	2.4	0.0	2.6	14
28105	2032	3.6	5.3	0.0	0.0	0.0	0.0	0.0	2.4	0.0	2.5	14
28835	2034	3.5	5.3	0.0	0.0	0.0	0.0	0.0	2.4	0.0	2.4	14
29565	2036	3.5	5.3	0.0	0.0	0.0	0.0	0.0	2.3	0.0	2.4	14
30295	2038	3.5	5.3	0.0	0.0	0.0	0.0	0.0	2.3	0.0	2.3	13
31025	2040	3.5	5.3	0.0	0.0	0.0	0.0	0.0	2.3	0.0	2.2	13
31755	2042	3.5	5.3	0.0	0.0	0.0	0.0	0.0	2.3	0.0	2.2	13
32485	2044	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.3	0.0	2.2	13
33215	2046	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.1	13
33945	2048	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.1	13
34675	2050	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.1	13
35405	2052	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.0	13
36135	2054	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.0	13
36865	2056	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.0	13
37595	2058	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.0	13
38325	2060	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.0	13
39055	2062	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.0	13
39785	2064	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.0	13
40515	2066	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.0	13
41245	2068	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
41975	2070	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
42705	2072	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
43435	2074	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
44165	2076	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
44895	2078	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
45625	2080	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
46355	2082	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
47085	2084	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
47815	2086	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	1.9	13
48545	2088	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	13
49275	2090	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	13
50005	2092	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	13
50735	2094	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	13
51465	2096	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	13
52195	2098	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	13
52925	2100	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	13
53655	2102	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	13
54385	2104	3.4	5.3	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	13
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

Appendix B-7-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-7 (Bookpurnong Area)



Appendix B-7-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-7 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upwards (m^3/day)
30	1955	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
365	1956	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
1095	1958	0.0	18.9	18.5	2.3	8.7	2.3	7.8	8.0	9.5	8.1	84
1825	1960	0.0	19.1	18.8	2.4	9.3	2.7	9.2	8.7	9.9	10.6	91
2555	1962	0.0	19.4	19.1	2.5	9.9	3.0	10.5	9.5	10.4	13.0	97
3285	1964	0.0	19.7	19.3	2.6	10.5	3.4	11.8	10.4	10.9	15.5	104
4015	1966	0.0	20.0	19.6	2.7	11.1	3.7	13.1	11.4	11.3	17.9	111
4745	1968	0.0	20.3	19.8	2.8	11.6	3.9	14.0	12.3	11.7	19.6	116
5475	1970	0.0	20.6	20.0	2.9	12.1	4.2	14.9	13.1	12.1	21.3	121
6205	1972	0.0	20.8	20.2	3.0	12.5	4.4	15.8	14.0	12.5	22.8	126
6935	1974	0.0	21.1	20.4	3.0	12.8	4.5	16.5	14.7	12.9	24.0	130
7665	1976	0.0	21.3	20.5	3.1	13.1	4.7	17.1	15.3	13.2	24.8	133
8395	1978	0.0	22.4	20.8	3.2	14.1	4.9	18.5	16.8	14.2	25.8	141
9125	1980	0.0	22.9	21.0	3.3	14.6	5.1	19.2	17.6	14.6	26.6	145
9855	1982	0.0	23.2	21.2	3.3	14.9	5.2	19.8	18.2	14.8	27.2	148
10585	1984	0.1	26.4	21.8	3.6	17.1	5.7	22.6	21.5	16.8	28.8	164
11315	1986	0.5	27.6	22.2	3.7	18.0	6.0	23.7	22.9	17.4	29.8	172
12045	1988	0.9	28.1	22.4	3.8	18.4	6.1	24.4	23.6	17.8	30.5	176
12775	1990	2.3	30.3	22.8	4.0	19.9	6.5	26.3	26.0	19.0	31.8	189
13505	1992	3.1	31.0	23.1	4.1	20.5	6.6	27.1	27.0	19.5	32.6	195
14235	1994	3.6	31.4	23.2	4.1	20.8	6.7	27.5	27.5	19.8	32.9	197
14965	1996	6.6	34.8	23.9	4.4	23.1	7.2	30.6	31.5	21.8	34.3	218
15695	1998	8.0	35.9	24.2	4.5	23.8	7.4	31.5	32.7	22.4	35.0	226
16425	2000	8.8	36.3	24.4	4.6	24.2	7.5	32.0	33.3	22.7	35.3	229
17155	2002	10.3	37.2	24.5	4.6	24.2	7.6	31.8	33.7	22.9	35.9	233
17885	2004	12.9	39.1	24.9	4.8	24.9	7.7	32.2	35.1	23.6	36.6	242
18615	2006	10.3	35.4	24.2	4.1	19.6	7.1	27.9	30.7	39.6	32.9	232
19345	2008	10.1	35.1	24.1	4.0	19.2	7.0	27.5	30.6	39.7	32.3	230
20075	2010	11.4	36.4	24.3	4.1	19.9	7.1	28.1	31.7	40.0	32.4	235
20805	2012	11.9	36.7	24.4	4.1	20.1	7.1	28.3	32.0	40.0	32.2	237
21535	2014	12.2	36.8	24.4	4.1	20.1	7.1	28.3	32.1	40.0	32.0	237
22265	2016	12.3	36.9	24.4	4.1	20.1	7.1	28.2	32.0	40.0	31.8	237
22995	2018	12.3	36.9	24.4	4.1	20.1	7.0	28.1	32.0	40.0	31.5	236
23725	2020	7.3	31.6	23.4	3.7	17.1	6.4	24.8	27.1	38.6	29.4	209
24455	2022	5.5	30.1	23.1	3.6	16.0	6.1	23.5	25.4	38.3	28.3	200
25185	2024	4.6	29.5	22.9	3.5	15.5	6.0	22.8	24.5	38.1	27.6	195
25915	2026	4.2	29.2	22.7	3.5	15.3	5.9	22.4	24.1	37.9	27.2	192
26645	2028	4.0	29.0	22.7	3.4	15.1	5.9	22.2	23.8	37.8	26.9	191

Appendix B-7-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-7 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upward (m^3/day)
27375	2030	3.8	28.9	22.6	3.4	15.0	5.8	22.0	23.5	37.7	26.6	189
28105	2032	3.7	28.8	22.6	3.4	14.9	5.8	21.8	23.4	37.7	26.4	188
28835	2034	3.6	28.8	22.6	3.4	14.8	5.8	21.7	23.3	37.6	26.2	188
29565	2036	3.6	28.7	22.5	3.4	14.8	5.7	21.6	23.2	37.6	26.1	187
30295	2038	3.5	28.7	22.5	3.4	14.7	5.7	21.5	23.1	37.5	25.9	187
31025	2040	3.5	28.7	22.5	3.4	14.7	5.7	21.5	23.0	37.5	25.8	186
31755	2042	3.5	28.6	22.5	3.4	14.7	5.7	21.4	22.9	37.5	25.7	186
32485	2044	3.5	28.6	22.5	3.4	14.6	5.7	21.4	22.9	37.5	25.7	186
33215	2046	3.4	28.6	22.5	3.4	14.6	5.7	21.3	22.8	37.4	25.6	185
33945	2048	3.4	28.6	22.5	3.4	14.6	5.7	21.3	22.8	37.4	25.5	185
34675	2050	3.4	28.6	22.4	3.3	14.6	5.6	21.2	22.8	37.4	25.5	185
35405	2052	3.4	28.6	22.4	3.3	14.6	5.6	21.2	22.7	37.4	25.4	185
36135	2054	3.4	28.6	22.4	3.3	14.6	5.6	21.2	22.7	37.4	25.4	185
36865	2056	3.4	28.6	22.4	3.3	14.5	5.6	21.2	22.7	37.4	25.3	184
37595	2058	3.4	28.5	22.4	3.3	14.5	5.6	21.1	22.7	37.4	25.3	184
38325	2060	3.4	28.5	22.4	3.3	14.5	5.6	21.1	22.6	37.4	25.3	184
39055	2062	3.3	28.5	22.4	3.3	14.5	5.6	21.1	22.6	37.4	25.2	184
39785	2064	3.3	28.5	22.4	3.3	14.5	5.6	21.1	22.6	37.3	25.2	184
40515	2066	3.3	28.5	22.4	3.3	14.5	5.6	21.1	22.6	37.3	25.2	184
41245	2068	3.3	28.5	22.4	3.3	14.5	5.6	21.1	22.6	37.3	25.2	184
41975	2070	3.3	28.5	22.4	3.3	14.5	5.6	21.1	22.6	37.3	25.2	184
42705	2072	3.3	28.5	22.4	3.3	14.5	5.6	21.1	22.6	37.3	25.1	184
43435	2074	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.6	37.3	25.1	184
44165	2076	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.6	37.3	25.1	184
44895	2078	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.6	37.3	25.1	184
45625	2080	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
46355	2082	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
47085	2084	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
47815	2086	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
48545	2088	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
49275	2090	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
50005	2092	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
50735	2094	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
51465	2096	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
52195	2098	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
52925	2100	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
53655	2102	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
54385	2104	3.3	28.5	22.4	3.3	14.5	5.6	21.0	22.5	37.3	25.1	184
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

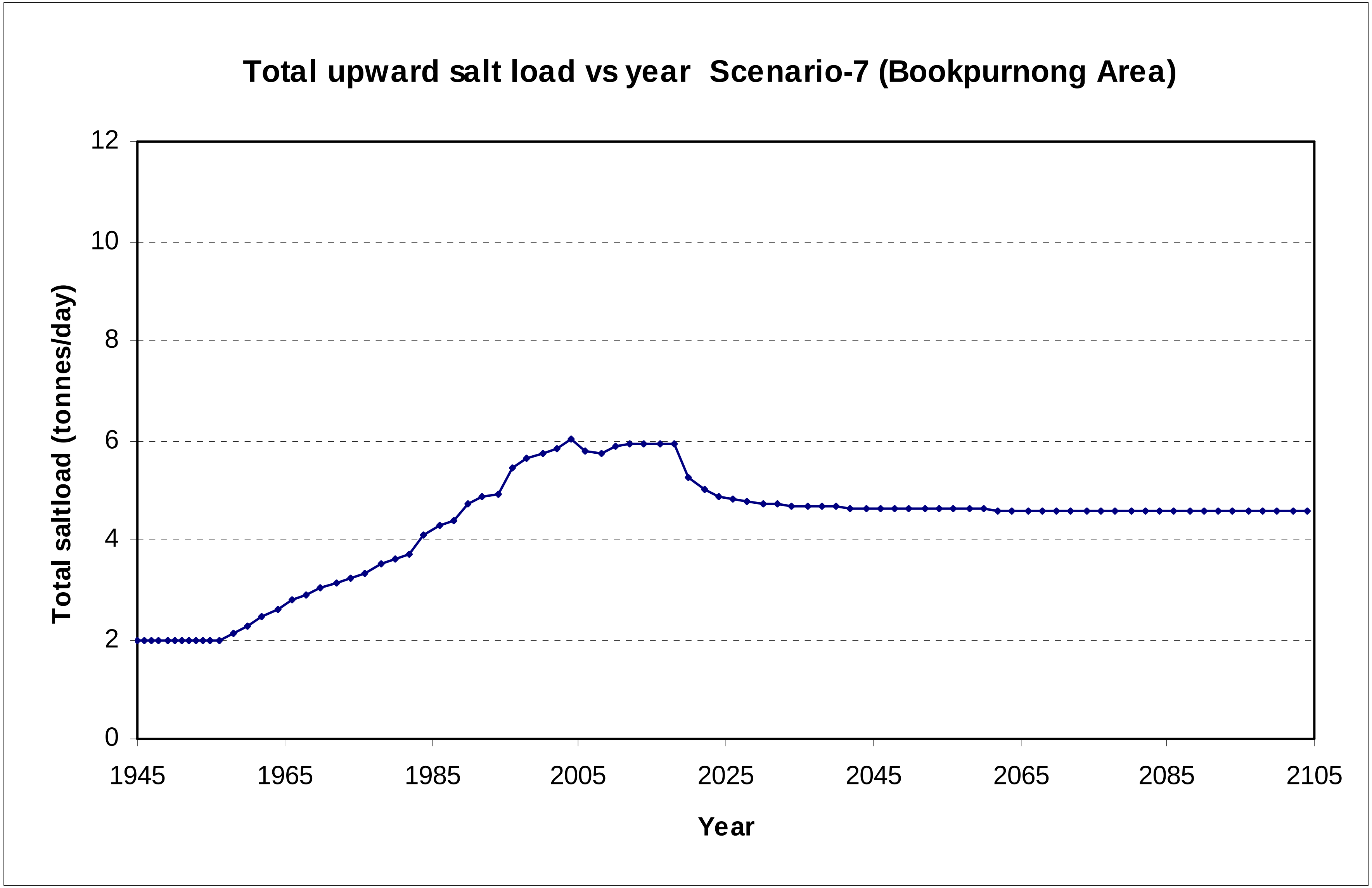
Appendix B-7-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-7 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1946	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1947	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1948	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1949	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1950	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1951	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1952	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1953	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1954	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
30	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
365	1956	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1095	1958	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1825	1960	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.3	2
2555	1962	0.0	0.5	0.5	0.1	0.2	0.1	0.3	0.2	0.3	0.3	2
3285	1964	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4015	1966	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4745	1968	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
5475	1970	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
6205	1972	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.6	3
6935	1974	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
7665	1976	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
8395	1978	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.6	4
9125	1980	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.7	4
9855	1982	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.5	0.4	0.7	4
10585	1984	0.0	0.7	0.5	0.1	0.4	0.1	0.6	0.5	0.4	0.7	4
11315	1986	0.0	0.7	0.6	0.1	0.4	0.1	0.6	0.6	0.4	0.7	4
12045	1988	0.0	0.7	0.6	0.1	0.5	0.2	0.6	0.6	0.4	0.8	4
12775	1990	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.6	0.5	0.8	5
13505	1992	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14235	1994	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14965	1996	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	5
15695	1998	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
16425	2000	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17155	2002	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17885	2004	0.3	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
18615	2006	0.3	0.9	0.6	0.1	0.5	0.2	0.7	0.8	1.0	0.8	6
19345	2008	0.3	0.9	0.6	0.1	0.5	0.2	0.7	0.8	1.0	0.8	6
20075	2010	0.3	0.9	0.6	0.1	0.5	0.2	0.7	0.8	1.0	0.8	6
20805	2012	0.3	0.9	0.6	0.1	0.5	0.2	0.7	0.8	1.0	0.8	6
21535	2014	0.3	0.9	0.6	0.1	0.5	0.2	0.7	0.8	1.0	0.8	6
22265	2016	0.3	0.9	0.6	0.1	0.5	0.2	0.7	0.8	1.0	0.8	6

Appendix B-7-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-7 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	0.3	0.9	0.6	0.1	0.5	0.2	0.7	0.8	1.0	0.8	6
23725	2020	0.2	0.8	0.6	0.1	0.4	0.2	0.6	0.7	1.0	0.7	5
24455	2022	0.1	0.8	0.6	0.1	0.4	0.2	0.6	0.6	1.0	0.7	5
25185	2024	0.1	0.7	0.6	0.1	0.4	0.2	0.6	0.6	1.0	0.7	5
25915	2026	0.1	0.7	0.6	0.1	0.4	0.1	0.6	0.6	0.9	0.7	5
26645	2028	0.1	0.7	0.6	0.1	0.4	0.1	0.6	0.6	0.9	0.7	5
27375	2030	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.7	5
28105	2032	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.7	5
28835	2034	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.7	5
29565	2036	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.7	5
30295	2038	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
31025	2040	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
31755	2042	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
32485	2044	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
33215	2046	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
33945	2048	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
34675	2050	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
35405	2052	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
36135	2054	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
36865	2056	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
37595	2058	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
38325	2060	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
39055	2062	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
39785	2064	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
40515	2066	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
41245	2068	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
41975	2070	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
42705	2072	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
43435	2074	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
44165	2076	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
44895	2078	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
45625	2080	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
46355	2082	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
47085	2084	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
47815	2086	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
48545	2088	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
49275	2090	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
50005	2092	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
50735	2094	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
51465	2096	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
52195	2098	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
52925	2100	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
53655	2102	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
54385	2104	0.1	0.7	0.6	0.1	0.4	0.1	0.5	0.6	0.9	0.6	5
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

Appendix B-7-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-7 (Bookpurnong Area)

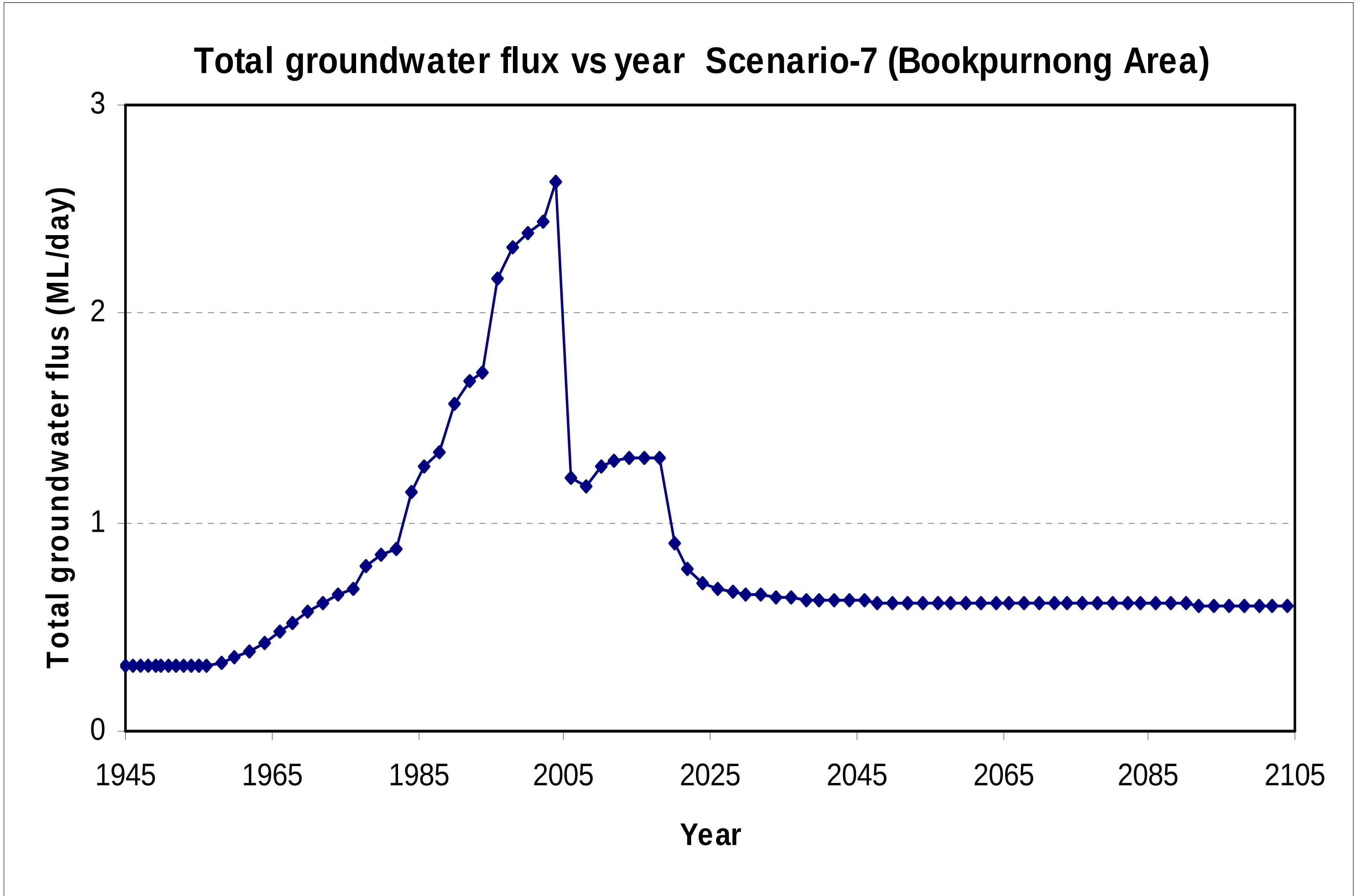


Appendix B-7-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-7 (Bookpurnong Area)

day	year	Lateral flux (m^3/day)	Upward leackage (m^3/day)	Total flux (m^3/day)
0	1945	0.241	0.079	0.320
0	1946	0.241	0.079	0.320
0	1947	0.241	0.079	0.320
0	1948	0.241	0.079	0.320
0	1949	0.241	0.079	0.320
0	1950	0.241	0.079	0.320
0	1951	0.241	0.079	0.320
0	1952	0.241	0.079	0.320
0	1953	0.241	0.079	0.320
0	1954	0.241	0.079	0.320
0	1955	0.241	0.079	0.320
30	1955	0.241	0.079	0.320
365	1956	0.241	0.079	0.320
1095	1958	0.249	0.084	0.333
1825	1960	0.265	0.091	0.356
2555	1962	0.289	0.097	0.387
3285	1964	0.323	0.104	0.427
4015	1966	0.365	0.111	0.476
4745	1968	0.408	0.116	0.525
5475	1970	0.450	0.121	0.571
6205	1972	0.488	0.126	0.614
6935	1974	0.523	0.130	0.653
7665	1976	0.553	0.133	0.686
8395	1978	0.649	0.141	0.790
9125	1980	0.694	0.145	0.839
9855	1982	0.721	0.148	0.869
10585	1984	0.982	0.164	1.147
11315	1986	1.101	0.172	1.272
12045	1988	1.160	0.176	1.336
12775	1990	1.382	0.189	1.571
13505	1992	1.476	0.195	1.671
14235	1994	1.521	0.197	1.719
14965	1996	1.953	0.218	2.171
15695	1998	2.099	0.226	2.324
16425	2000	2.160	0.229	2.389
17155	2002	2.204	0.233	2.437
17885	2004	2.393	0.242	2.634
18615	2006	0.976	0.232	1.208
19345	2008	0.940	0.230	1.170
20075	2010	1.034	0.235	1.270
20805	2012	1.064	0.237	1.301
21535	2014	1.072	0.237	1.309
22265	2016	1.072	0.237	1.309

day	year	Lateral flux (m^3/day)	Upward leackage (m^3/day)	Total flux (m^3/day)
22995	2018	1.069	0.236	1.306
23725	2020	0.691	0.209	0.901
24455	2022	0.571	0.200	0.771
25185	2024	0.521	0.195	0.716
25915	2026	0.495	0.192	0.687
26645	2028	0.479	0.191	0.669
27375	2030	0.468	0.189	0.658
28105	2032	0.461	0.188	0.649
28835	2034	0.455	0.188	0.642
29565	2036	0.450	0.187	0.637
30295	2038	0.446	0.187	0.633
31025	2040	0.443	0.186	0.630
31755	2042	0.441	0.186	0.627
32485	2044	0.438	0.186	0.624
33215	2046	0.436	0.185	0.622
33945	2048	0.435	0.185	0.620
34675	2050	0.433	0.185	0.618
35405	2052	0.432	0.185	0.616
36135	2054	0.431	0.185	0.615
36865	2056	0.430	0.184	0.614
37595	2058	0.429	0.184	0.613
38325	2060	0.428	0.184	0.612
39055	2062	0.427	0.184	0.611
39785	2064	0.427	0.184	0.611
40515	2066	0.426	0.184	0.610
41245	2068	0.426	0.184	0.610
41975	2070	0.425	0.184	0.609
42705	2072	0.425	0.184	0.609
43435	2074	0.425	0.184	0.608
44165	2076	0.424	0.184	0.608
44895	2078	0.424	0.184	0.608
45625	2080	0.424	0.184	0.608
46355	2082	0.424	0.184	0.607
47085	2084	0.424	0.184	0.607
47815	2086	0.424	0.184	0.607
48545	2088	0.423	0.184	0.607
49275	2090	0.423	0.184	0.607
50005	2092	0.423	0.184	0.607
50735	2094	0.423	0.184	0.607
51465	2096	0.423	0.184	0.607
52195	2098	0.423	0.184	0.607
52925	2100	0.423	0.184	0.607
53655	2102	0.423	0.184	0.607
54385	2104	0.423	0.184	0.607

Appendix B-7-6a Predicted total groundwater flux (ML/day) in Scenario-7 (Bookpurnong Area)

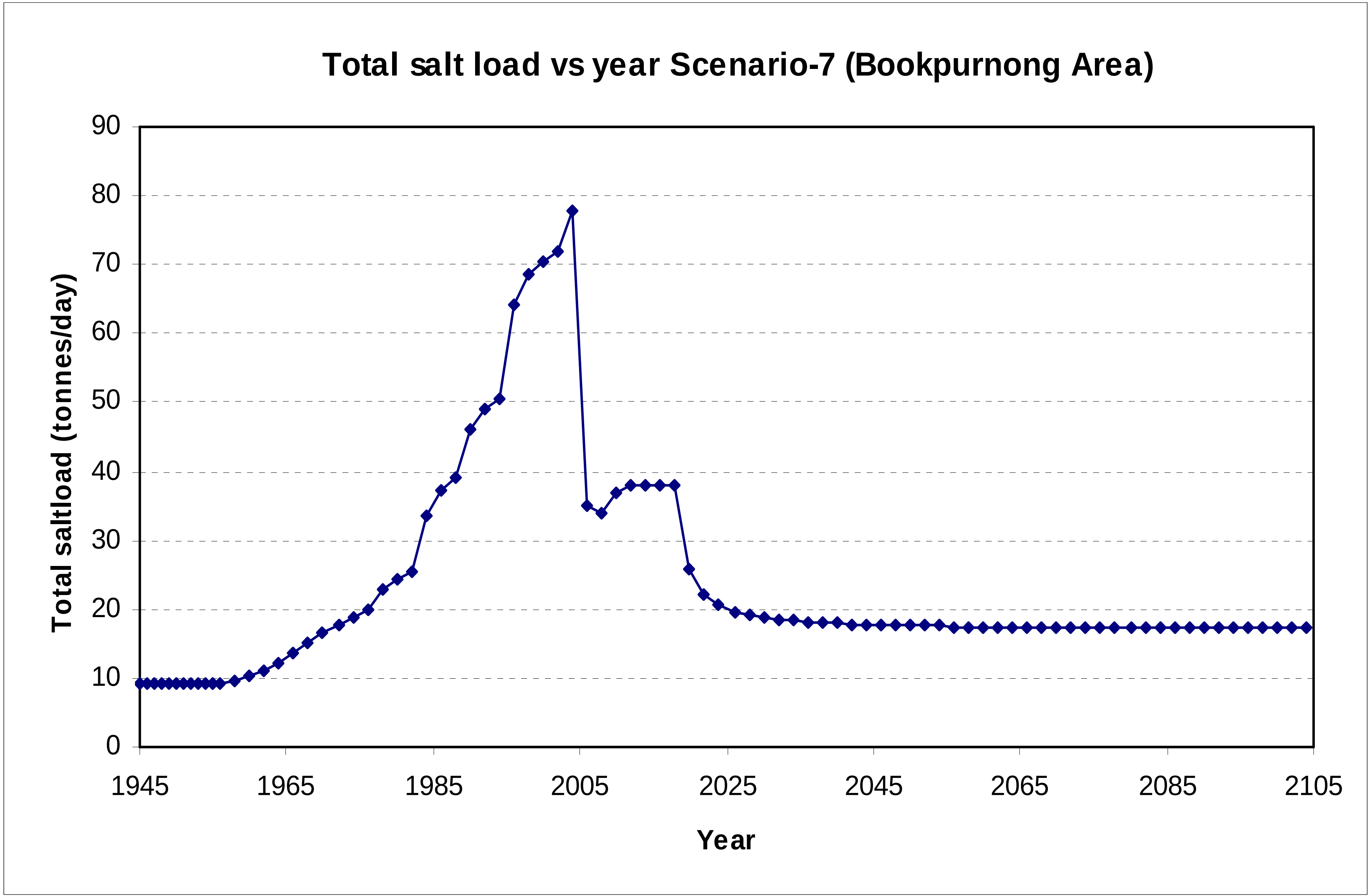


Appendix B-7-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-7 (Bookpurnong Area)

day	year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Total Saltload (tonnes/day)
0	1945	7.24	1.98	9.21
0	1946	7.24	1.98	9.21
0	1947	7.24	1.98	9.21
0	1948	7.24	1.98	9.21
0	1949	7.24	1.98	9.21
0	1950	7.24	1.98	9.21
0	1951	7.24	1.98	9.21
0	1952	7.24	1.98	9.21
0	1953	7.24	1.98	9.21
0	1954	7.24	1.98	9.21
0	1955	7.24	1.98	9.21
30	1955	7.24	1.98	9.21
365	1956	7.24	1.98	9.21
1095	1958	7.46	2.10	9.56
1825	1960	7.96	2.27	10.22
2555	1962	8.68	2.43	11.11
3285	1964	9.68	2.61	12.29
4015	1966	10.94	2.77	13.72
4745	1968	12.25	2.90	15.15
5475	1970	13.50	3.03	16.53
6205	1972	14.65	3.15	17.80
6935	1974	15.69	3.25	18.94
7665	1976	16.58	3.33	19.91
8395	1978	19.47	3.52	22.99
9125	1980	20.82	3.62	24.44
9855	1982	21.64	3.70	25.34
10585	1984	29.46	4.11	33.57
11315	1986	33.02	4.29	37.32
12045	1988	34.80	4.40	39.19
12775	1990	41.47	4.72	46.19
13505	1992	44.28	4.87	49.15
14235	1994	45.64	4.94	50.58
14965	1996	58.58	5.45	64.04
15695	1998	62.96	5.64	68.60
16425	2000	64.80	5.73	70.53
17155	2002	66.12	5.82	71.94
17885	2004	71.78	6.04	77.82
18615	2006	29.28	5.79	35.07
19345	2008	28.20	5.74	33.94
20075	2010	31.03	5.89	36.91
20805	2012	31.93	5.92	37.85
21535	2014	32.16	5.93	38.09
22265	2016	32.17	5.92	38.09

day	year	Lateral Saltload (tonnes/day)	Upward Saltload (tonnes/day)	Total Saltload (tonnes/day)
22995	2018	32.08	5.91	37.99
23725	2020	20.74	5.24	25.98
24455	2022	17.14	4.99	22.14
25185	2024	15.62	4.88	20.49
25915	2026	14.84	4.81	19.65
26645	2028	14.36	4.77	19.13
27375	2030	14.04	4.73	18.78
28105	2032	13.82	4.71	18.53
28835	2034	13.64	4.69	18.34
29565	2036	13.50	4.68	18.18
30295	2038	13.39	4.67	18.06
31025	2040	13.30	4.66	17.95
31755	2042	13.22	4.65	17.87
32485	2044	13.15	4.64	17.79
33215	2046	13.09	4.63	17.72
33945	2048	13.04	4.63	17.67
34675	2050	12.99	4.62	17.61
35405	2052	12.95	4.62	17.57
36135	2054	12.92	4.61	17.53
36865	2056	12.89	4.61	17.50
37595	2058	12.86	4.61	17.47
38325	2060	12.84	4.60	17.45
39055	2062	12.82	4.60	17.42
39785	2064	12.80	4.60	17.40
40515	2066	12.79	4.60	17.38
41245	2068	12.77	4.60	17.37
41975	2070	12.76	4.59	17.35
42705	2072	12.75	4.59	17.34
43435	2074	12.74	4.59	17.33
44165	2076	12.73	4.59	17.32
44895	2078	12.72	4.59	17.32
45625	2080	12.72	4.59	17.31
46355	2082	12.71	4.59	17.30
47085	2084	12.71	4.59	17.30
47815	2086	12.71	4.59	17.29
48545	2088	12.70	4.59	17.29
49275	2090	12.70	4.59	17.29
50005	2092	12.70	4.59	17.28
50735	2094	12.70	4.59	17.28
51465	2096	12.69	4.59	17.28
52195	2098	12.69	4.59	17.28
52925	2100	12.69	4.59	17.28
53655	2102	12.69	4.59	17.28
54385	2104	12.69	4.59	17.28

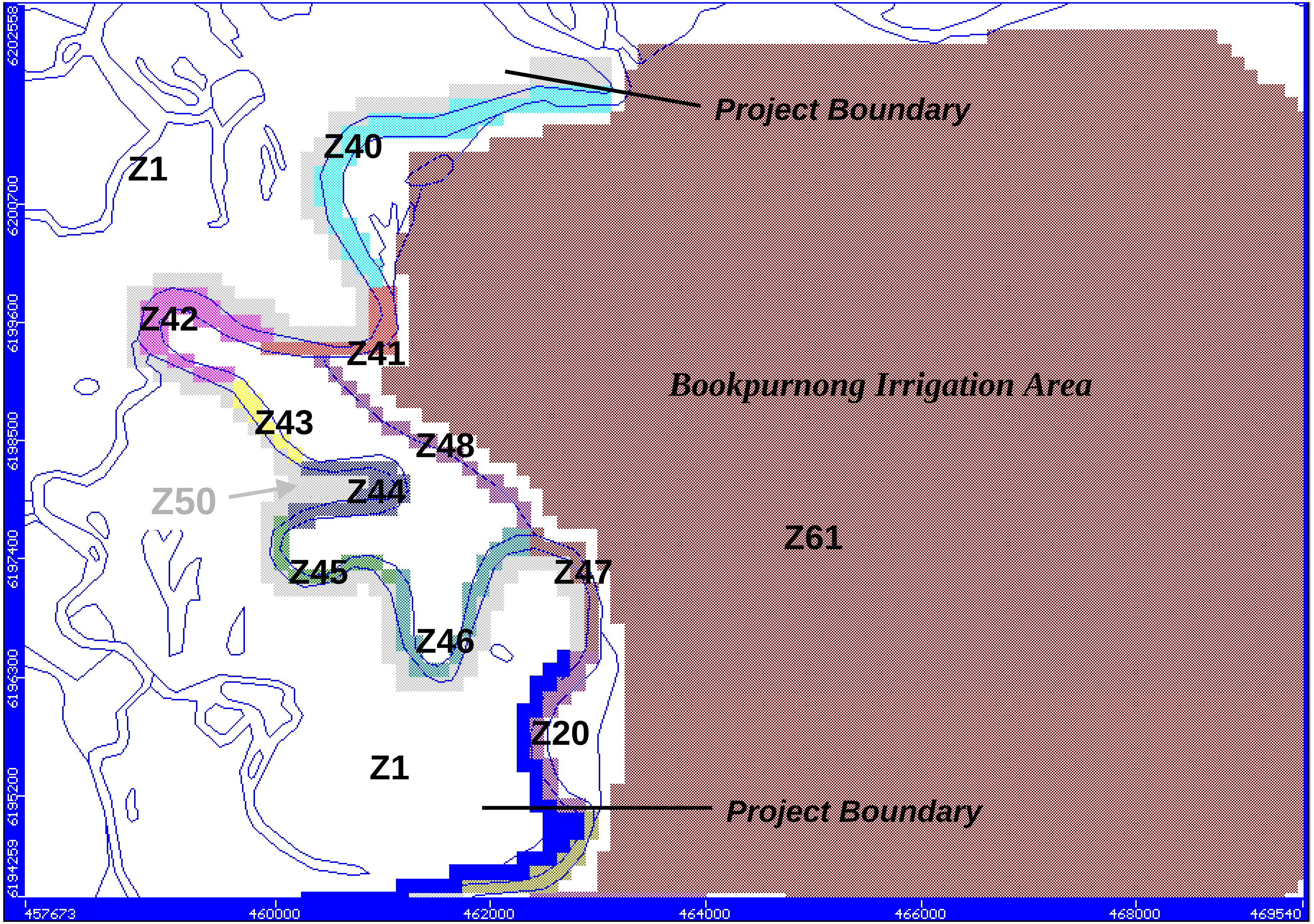
Appendix B-7-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-7 (Bookpurnong Area)



Appendix B-7-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-7 (Bookpurnong Area)

B-8 Groundwater flux and salt load entering the River Murray Scenario-8 (Bookpurnong Area)

- Flow budget zones (Bookpurnong Area).
- Predicted lateral groundwater flux (m^3/day).
- Predicted lateral salt load (tonnes/day).
- Predicted upward groundwater flux (m^3/day).
- Predicted upward salt load (tonnes/day).
- Predicted total groundwater flux (ML/day).
- Predicted total salt load (tonnes/day).
- Borehole locations and pumping rates.



Appendix B-8-1 Flow budget zones in model Layer-1 (Bookpurnong Area)

day	year	Z1 to Z40 (m^3/day)	Z1 to Z41 (m^3/day)	Z1 to Z42 (m^3/day)	Z1 to Z43 (m^3/day)	Z1 to Z44 (m^3/day)	Z1 to Z45 (m^3/day)	Z1 to Z46 (m^3/day)	Z1 to Z47 (m^3/day)	Seepage Z48 Drain (m^3/day)	Z1 to Z20 (m^3/day)	Total Lateral (m^3/day)
30	1955	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
365	1956	0.0	87.6	0.0	0.0	27.6	0.0	14.3	69.2	0.0	42.5	241
1095	1958	0.0	87.9	0.0	0.0	28.4	0.0	14.8	70.6	0.0	47.1	249
1825	1960	0.0	88.5	0.0	0.0	29.9	0.0	15.6	73.7	0.0	57.6	265
2555	1962	0.0	89.3	0.0	0.0	31.7	0.0	16.6	78.3	0.0	73.4	289
3285	1964	0.0	90.2	0.0	0.0	33.7	0.0	17.8	84.1	0.0	97.0	323
4015	1966	0.0	91.2	0.0	0.0	35.8	0.0	19.0	91.2	0.0	127.6	365
4745	1968	0.0	92.2	0.0	0.0	37.7	0.0	20.2	99.1	0.0	159.1	408
5475	1970	0.0	93.2	0.0	0.0	39.7	0.0	21.4	107.5	0.0	188.4	450
6205	1972	0.0	94.2	0.0	0.0	41.6	0.0	22.5	116.1	0.0	214.2	488
6935	1974	0.0	95.2	0.0	0.0	43.4	0.0	23.7	124.2	0.0	236.6	523
7665	1976	0.0	96.1	0.0	0.0	45.0	0.0	24.7	131.8	0.0	255.1	553
8395	1978	0.0	106.0	0.0	0.0	64.6	0.0	41.8	164.5	0.0	272.2	649
9125	1980	0.0	110.5	0.0	0.0	73.3	0.2	46.9	177.3	0.0	285.8	694
9855	1982	0.0	112.6	0.0	0.0	76.8	0.3	49.1	185.4	0.0	297.1	721
10585	1984	25.5	149.8	0.0	0.0	128.1	2.1	84.8	269.0	0.0	321.8	982
11315	1986	51.0	162.3	0.0	0.0	148.7	3.0	96.0	297.9	0.9	340.9	1101
12045	1988	65.1	167.1	0.0	0.0	156.1	3.4	100.1	312.2	1.3	354.5	1160
12775	1990	111.8	195.0	0.0	0.2	190.4	4.5	123.6	374.6	5.4	376.9	1382
13505	1992	134.3	203.6	0.0	0.5	203.3	5.1	131.3	396.6	8.1	393.3	1476
14235	1994	145.9	207.0	0.0	0.7	208.1	5.3	134.3	407.6	9.2	403.5	1521
14965	1996	230.8	253.0	0.0	1.7	268.2	7.4	185.5	536.4	39.2	430.6	1953
15695	1998	271.6	267.0	0.0	2.5	288.2	8.3	197.5	570.5	46.1	446.9	2099
16425	2000	291.1	272.1	0.0	2.9	294.9	8.6	201.7	585.0	48.5	455.5	2160
17155	2002	341.1	287.3	0.0	3.4	290.8	8.1	184.6	588.2	39.4	471.5	2214
17885	2004	438.9	328.0	0.0	6.2	325.3	9.0	200.8	663.5	52.1	500.5	2524
18615	2006	20.66	112.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	133
19345	2008	18.77	112.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	131
20075	2010	23.07	113.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137
20805	2012	24.13	113.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	138
21535	2014	24.55	113.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	138
22265	2016	66.60	120.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	187
22995	2018	78.16	121.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	200
23725	2020	62.39	117.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	180
24455	2022	62.06	117.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	179
25185	2024	76.48	119.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	196
25915	2026	82.11	119.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	202
26645	2028	85.04	119.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	205

Appendix B-8-2a Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-8 (Bookpurnong Area)

day	year	Z1 to Z40 (m³/day)	Z1 to Z41 (m³/day)	Z1 to Z42 (m³/day)	Z1 to Z43 (m³/day)	Z1 to Z44 (m³/day)	Z1 to Z45 (m³/day)	Z1 to Z46 (m³/day)	Z1 to Z47 (m³/day)	Seepage Z48 Drain (m³/day)	Z1 to Z20 (m³/day)	Total Lateral (m³/day)
27375	2030	87.87	119.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	208
28105	2032	90.41	120.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	211
28835	2034	92.94	120.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	213
29565	2036	94.97	120.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	215
30295	2038	96.33	120.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	217
31025	2040	97.95	120.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	219
31755	2042	99.33	120.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220
32485	2044	100.24	120.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	221
33215	2046	100.86	120.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	222
33945	2048	101.30	120.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	222
34675	2050	101.63	120.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	223
35405	2052	101.90	120.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	223
36135	2054	102.01	120.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	223
36865	2056	102.11	120.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	223
37595	2058	102.30	120.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	223
38325	2060	102.46	120.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	223
39055	2062	102.60	120.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
39785	2064	102.72	120.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
40515	2066	102.84	121.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
41245	2068	102.94	121.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
41975	2070	103.04	121.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
42705	2072	103.13	121.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
43435	2074	103.21	121.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
44165	2076	103.29	121.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
44895	2078	103.36	121.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
45625	2080	103.42	121.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	224
46355	2082	103.49	121.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
47085	2084	103.55	121.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
47815	2086	103.60	121.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
48545	2088	103.65	121.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
49275	2090	103.70	121.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
50005	2092	103.75	121.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
50735	2094	103.79	121.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
51465	2096	103.84	121.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
52195	2098	103.88	121.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
52925	2100	103.91	121.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
53655	2102	103.95	121.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
54385	2104	103.98	121.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	225
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

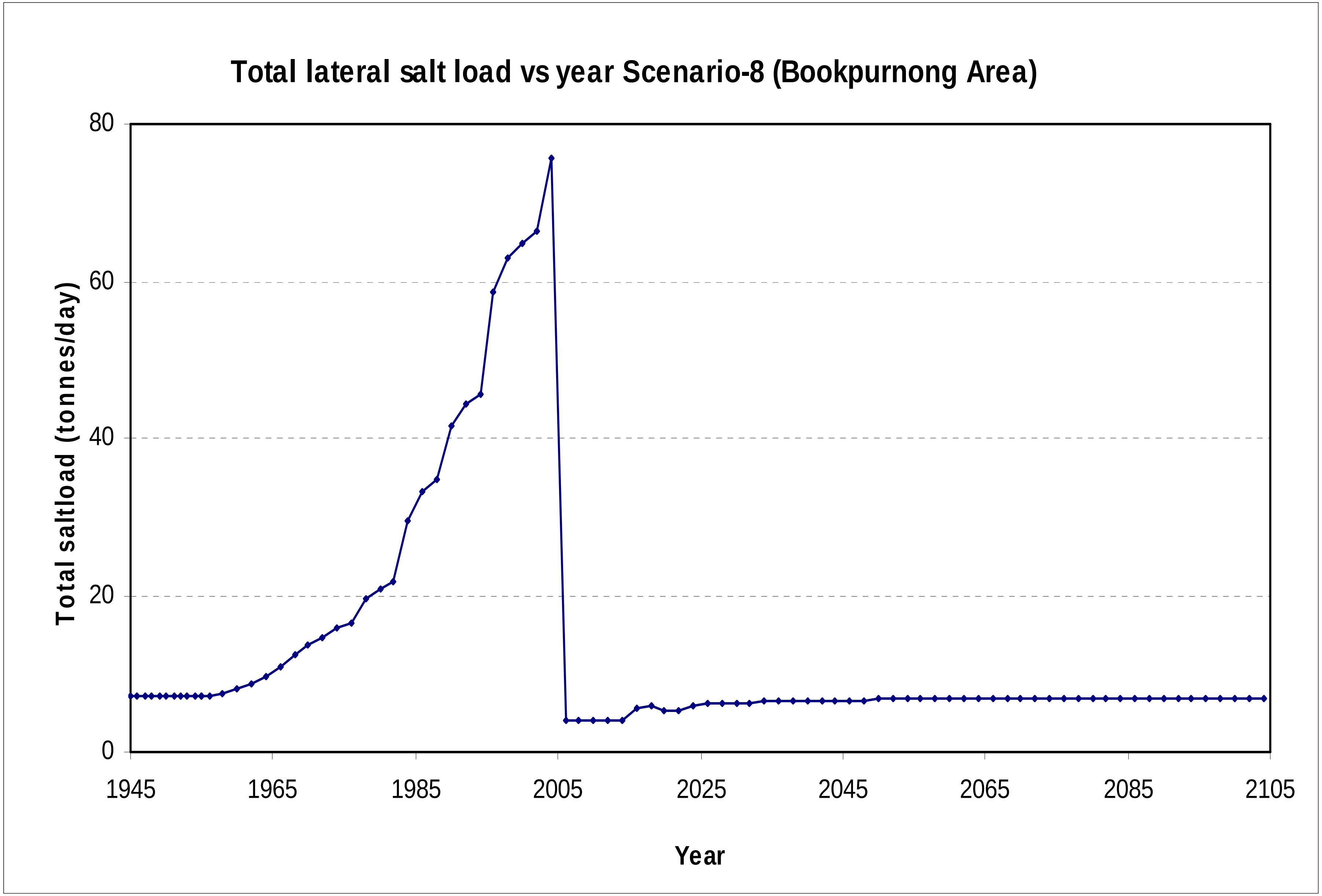
Appendix B-8-2b Predicted lateral groundwater flux (m^3/day) from flow budget zones in Scenario-8 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1946	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1947	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1948	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1949	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1950	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1951	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1952	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1953	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1954	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
0	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
30	1955	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
365	1956	0.0	2.6	0.0	0.0	0.8	0.0	0.4	2.1	0.0	1.3	7
1095	1958	0.0	2.6	0.0	0.0	0.9	0.0	0.4	2.1	0.0	1.4	7
1825	1960	0.0	2.7	0.0	0.0	0.9	0.0	0.5	2.2	0.0	1.7	8
2555	1962	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.3	0.0	2.2	9
3285	1964	0.0	2.7	0.0	0.0	1.0	0.0	0.5	2.5	0.0	2.9	10
4015	1966	0.0	2.7	0.0	0.0	1.1	0.0	0.6	2.7	0.0	3.8	11
4745	1968	0.0	2.8	0.0	0.0	1.1	0.0	0.6	3.0	0.0	4.8	12
5475	1970	0.0	2.8	0.0	0.0	1.2	0.0	0.6	3.2	0.0	5.7	14
6205	1972	0.0	2.8	0.0	0.0	1.2	0.0	0.7	3.5	0.0	6.4	15
6935	1974	0.0	2.9	0.0	0.0	1.3	0.0	0.7	3.7	0.0	7.1	16
7665	1976	0.0	2.9	0.0	0.0	1.4	0.0	0.7	4.0	0.0	7.7	17
8395	1978	0.0	3.2	0.0	0.0	1.9	0.0	1.3	4.9	0.0	8.2	19
9125	1980	0.0	3.3	0.0	0.0	2.2	0.0	1.4	5.3	0.0	8.6	21
9855	1982	0.0	3.4	0.0	0.0	2.3	0.0	1.5	5.6	0.0	8.9	22
10585	1984	0.8	4.5	0.0	0.0	3.8	0.1	2.5	8.1	0.0	9.7	29
11315	1986	1.5	4.9	0.0	0.0	4.5	0.1	2.9	8.9	0.0	10.2	33
12045	1988	2.0	5.0	0.0	0.0	4.7	0.1	3.0	9.4	0.0	10.6	35
12775	1990	3.4	5.8	0.0	0.0	5.7	0.1	3.7	11.2	0.2	11.3	41
13505	1992	4.0	6.1	0.0	0.0	6.1	0.2	3.9	11.9	0.2	11.8	44
14235	1994	4.4	6.2	0.0	0.0	6.2	0.2	4.0	12.2	0.3	12.1	48
14965	1996	6.9	7.6	0.0	0.1	8.0	0.2	5.6	16.1	1.2	12.9	59
15695	1998	8.1	8.0	0.0	0.1	8.6	0.2	5.9	17.1	1.4	13.4	63
16425	2000	8.7	8.2	0.0	0.1	8.8	0.3	6.0	17.5	1.5	13.7	65
17155	2002	10.2	8.6	0.0	0.1	8.7	0.2	5.5	17.6	1.2	14.1	68
17885	2004	13.2	9.8	0.0	0.2	9.8	0.3	6.0	19.9	1.6	15.0	78
18615	2006	0.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
19345	2008	0.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
20075	2010	0.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
20805	2012	0.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
21535	2014	0.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
22265	2016	2.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6

Appendix B-8-3a Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-8 (Bookpurnong Area)

day	year	Z1 to Z40 (tonnes/day)	Z1 to Z41 (tonnes/day)	Z1 to Z42 (tonnes/day)	Z1 to Z43 (tonnes/day)	Z1 to Z44 (tonnes/day)	Z1 to Z45 (tonnes/day)	Z1 to Z46 (tonnes/day)	Z1 to Z47 (tonnes/day)	Z1 to Z48 (tonnes/day)	Z1 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	2.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
23725	2020	1.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
24455	2022	1.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
25185	2024	2.3	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
25915	2026	2.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
26645	2028	2.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
27375	2030	2.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
28105	2032	2.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
28835	2034	2.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
29565	2036	2.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
30295	2038	2.9	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
31025	2040	2.9	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
31755	2042	3.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
32485	2044	3.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
33215	2046	3.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
33945	2048	3.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
34675	2050	3.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
35405	2052	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
36135	2054	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
36865	2056	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
37595	2058	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
38325	2060	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
39055	2062	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
39785	2064	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
40515	2066	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
41245	2068	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
41975	2070	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
42705	2072	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
43435	2074	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
44165	2076	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
44895	2078	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
45625	2080	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
46355	2082	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
47085	2084	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
47815	2086	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
48545	2088	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
49275	2090	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
50005	2092	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
50735	2094	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
51465	2096	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
52195	2098	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
52925	2100	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
53655	2102	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
54385	2104	3.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
TDS	mg/L	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	

Appendix B-8-3b Predicted lateral salt load (tonnes/day) from flow budget zones in Scenario-8 (Bookpurnong Area)



Appendix B-8-3c Graph of predicted total lateral salt load (tonnes/day) entering the River Murray in Scenario-8 (Bookpurnong Area)

day	year	Z2 to Z40 (m³/day)	Z2 to Z41 (m³/day)	Z2 to Z42 (m³/day)	Z2 to Z43 (m³/day)	Z2 to Z44 (m³/day)	Z2 to Z45 (m³/day)	Z2 to Z46 (m³/day)	Z2 to Z47 (m³/day)	Z2 to Z48 (m³/day)	Z2 to Z20 (m³/day)	Total Upwards (m³/day)
30	1955	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
365	1956	0.0	18.7	18.3	2.2	8.2	2.0	6.8	7.5	9.1	6.2	79
1095	1958	0.0	18.9	18.5	2.3	8.7	2.3	7.8	8.0	9.5	8.1	84
1825	1960	0.0	19.1	18.8	2.4	9.3	2.7	9.2	8.7	9.9	10.6	91
2555	1962	0.0	19.4	19.1	2.5	9.9	3.0	10.5	9.5	10.4	13.0	97
3285	1964	0.0	19.7	19.3	2.6	10.5	3.4	11.8	10.4	10.9	15.5	104
4015	1966	0.0	20.0	19.6	2.7	11.1	3.7	13.1	11.4	11.3	17.9	111
4745	1968	0.0	20.3	19.8	2.8	11.6	3.9	14.0	12.3	11.7	19.6	116
5475	1970	0.0	20.6	20.0	2.9	12.1	4.2	14.9	13.1	12.1	21.3	121
6205	1972	0.0	20.8	20.2	3.0	12.5	4.4	15.8	14.0	12.5	22.8	126
6935	1974	0.0	21.1	20.4	3.0	12.8	4.5	16.5	14.7	12.9	24.0	130
7665	1976	0.0	21.3	20.5	3.1	13.1	4.7	17.1	15.3	13.2	24.8	133
8395	1978	0.0	22.4	20.8	3.2	14.1	4.9	18.5	16.8	14.2	25.8	141
9125	1980	0.0	22.9	21.0	3.3	14.6	5.1	19.2	17.6	14.6	26.6	145
9855	1982	0.0	23.2	21.2	3.3	14.9	5.2	19.8	18.2	14.8	27.2	148
10585	1984	0.1	26.4	21.8	3.6	17.1	5.7	22.6	21.5	16.8	28.8	164
11315	1986	0.5	27.6	22.2	3.7	18.0	6.0	23.7	22.9	17.4	29.8	172
12045	1988	0.9	28.1	22.4	3.8	18.4	6.1	24.4	23.6	17.8	30.5	176
12775	1990	2.3	30.3	22.8	4.0	19.9	6.5	26.3	26.0	19.0	31.8	189
13505	1992	3.1	31.0	23.1	4.1	20.5	6.6	27.1	27.0	19.5	32.6	195
14235	1994	3.6	31.4	23.2	4.1	20.8	6.7	27.5	27.5	19.8	32.9	197
14965	1996	6.6	34.8	23.9	4.4	23.1	7.2	30.6	31.5	21.8	34.3	218
15695	1998	8.0	35.9	24.2	4.5	23.8	7.4	31.5	32.7	22.4	35.0	226
16425	2000	8.8	36.3	24.4	4.6	24.2	7.5	32.0	33.3	22.7	35.3	229
17155	2002	10.4	37.2	24.6	4.6	24.3	7.6	31.9	33.8	22.9	35.9	233
17885	2004	13.5	39.9	25.1	4.8	25.7	7.9	33.3	36.2	24.2	36.9	248
18615	2006	3.77	25.72	23.49	3.78	16.88	6.62	25.56	25.33	41.19	26.49	199
19345	2008	3.48	25.45	23.38	3.74	16.64	6.51	25.15	25.03	40.80	25.88	196
20075	2010	4.14	26.16	23.55	3.80	17.05	6.59	25.64	25.93	41.92	25.99	201
20805	2012	4.35	26.30	23.59	3.81	17.13	6.60	25.72	26.13	42.15	25.89	202
21535	2014	4.43	26.35	23.60	3.81	17.14	6.60	25.70	26.16	42.22	25.74	202
22265	2016	9.55	30.77	24.87	4.26	20.08	7.40	29.71	32.05	49.07	28.58	236
22995	2018	11.17	31.72	25.30	4.41	20.93	7.68	31.03	33.76	50.66	29.68	246
23725	2020	10.50	29.81	25.09	4.31	20.04	7.58	30.12	31.73	47.65	29.63	236
24455	2022	10.81	29.83	25.20	4.35	20.20	7.67	30.46	32.02	47.71	30.11	238
25185	2024	13.06	31.33	25.79	4.55	21.45	8.07	32.38	34.54	50.21	31.68	253
25915	2026	14.18	31.88	26.09	4.66	22.02	8.29	33.33	35.66	51.17	32.58	260
26645	2028	14.82	32.18	26.27	4.72	22.35	8.42	33.89	36.29	51.68	33.16	264

Appendix B-8-4a Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-8 (Bookpurnong Area)

day	year	Z2 to Z40 (m^3/day)	Z2 to Z41 (m^3/day)	Z2 to Z42 (m^3/day)	Z2 to Z43 (m^3/day)	Z2 to Z44 (m^3/day)	Z2 to Z45 (m^3/day)	Z2 to Z46 (m^3/day)	Z2 to Z47 (m^3/day)	Z2 to Z48 (m^3/day)	Z2 to Z20 (m^3/day)	Total Upwards (m^3/day)
27375	2030	15.68	32.57	26.53	4.80	22.84	8.62	34.75	37.23	52.41	34.07	269
28105	2032	16.33	32.85	26.72	4.87	23.18	8.76	35.34	37.88	52.91	34.71	274
28835	2034	17.04	33.17	26.93	4.94	23.57	8.92	36.03	38.62	53.47	35.46	278
29565	2036	17.56	33.40	27.08	4.99	23.85	9.04	36.52	39.16	53.88	36.01	281
30295	2038	17.92	33.56	27.19	5.03	24.05	9.12	36.88	39.53	54.15	36.42	284
31025	2040	18.37	33.76	27.33	5.07	24.30	9.22	37.30	39.95	54.51	36.86	287
31755	2042	18.72	33.91	27.43	5.11	24.49	9.30	37.63	40.29	54.77	37.21	289
32485	2044	18.96	34.01	27.50	5.13	24.62	9.36	37.87	40.53	54.95	37.49	290
33215	2046	19.13	34.09	27.56	5.15	24.73	9.41	38.05	40.71	55.09	37.72	292
33945	2048	19.26	34.15	27.61	5.17	24.81	9.45	38.21	40.86	55.19	37.91	293
34675	2050	19.37	34.20	27.65	5.18	24.87	9.48	38.33	40.97	55.28	38.07	293
35405	2052	19.46	34.24	27.68	5.19	24.93	9.50	38.44	41.07	55.34	38.21	294
36135	2054	19.49	34.26	27.69	5.19	24.96	9.52	38.49	41.12	55.38	38.27	294
36865	2056	19.53	34.27	27.71	5.20	24.98	9.53	38.53	41.16	55.40	38.33	295
37595	2058	19.59	34.30	27.73	5.21	25.03	9.55	38.62	41.23	55.46	38.44	295
38325	2060	19.65	34.33	27.75	5.21	25.07	9.57	38.69	41.30	55.50	38.54	296
39055	2062	19.70	34.35	27.77	5.22	25.10	9.58	38.76	41.36	55.54	38.62	296
39785	2064	19.75	34.37	27.79	5.23	25.14	9.60	38.82	41.41	55.58	38.70	296
40515	2066	19.79	34.39	27.81	5.23	25.17	9.62	38.88	41.46	55.62	38.78	297
41245	2068	19.83	34.41	27.83	5.24	25.19	9.63	38.93	41.51	55.65	38.85	297
41975	2070	19.87	34.43	27.84	5.24	25.22	9.64	38.98	41.55	55.68	38.91	297
42705	2072	19.90	34.44	27.85	5.25	25.24	9.65	39.02	41.59	55.71	38.97	298
43435	2074	19.93	34.46	27.87	5.25	25.26	9.66	39.06	41.62	55.73	39.02	298
44165	2076	19.96	34.47	27.88	5.26	25.28	9.67	39.10	41.66	55.75	39.07	298
44895	2078	19.99	34.49	27.89	5.26	25.30	9.68	39.14	41.69	55.78	39.12	298
45625	2080	20.02	34.50	27.90	5.26	25.32	9.69	39.17	41.72	55.80	39.16	299
46355	2082	20.04	34.51	27.91	5.27	25.34	9.70	39.20	41.74	55.82	39.20	299
47085	2084	20.07	34.52	27.92	5.27	25.36	9.71	39.23	41.77	55.83	39.24	299
47815	2086	20.09	34.53	27.93	5.27	25.37	9.71	39.26	41.79	55.85	39.27	299
48545	2088	20.11	34.54	27.94	5.27	25.38	9.72	39.28	41.82	55.87	39.31	299
49275	2090	20.13	34.55	27.95	5.28	25.40	9.73	39.31	41.84	55.88	39.34	299
50005	2092	20.15	34.56	27.95	5.28	25.41	9.73	39.33	41.86	55.90	39.37	300
50735	2094	20.16	34.56	27.96	5.28	25.42	9.74	39.35	41.88	55.91	39.40	300
51465	2096	20.18	34.57	27.97	5.28	25.43	9.74	39.38	41.89	55.92	39.42	300
52195	2098	20.20	34.58	27.97	5.29	25.44	9.75	39.40	41.91	55.94	39.45	300
52925	2100	20.21	34.58	27.98	5.29	25.46	9.76	39.41	41.93	55.95	39.47	300
53655	2102	20.23	34.59	27.99	5.29	25.47	9.76	39.43	41.94	55.96	39.50	300
54385	2104	20.24	34.60	27.99	5.29	25.47	9.76	39.45	41.96	55.97	39.52	300
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

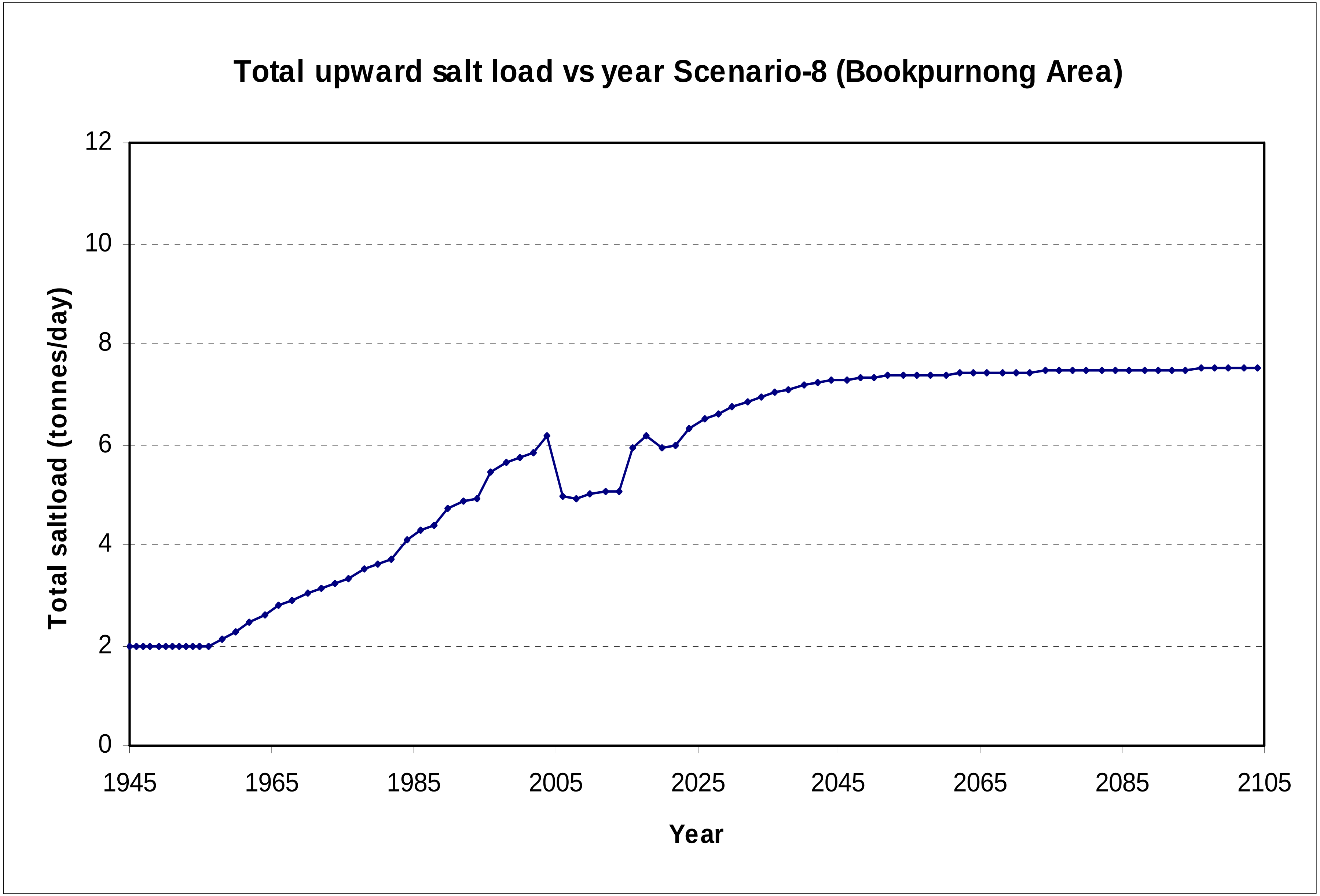
Appendix B-8-4b Predicted upward groundwater flux (m^3/day) from flow budget zones in Scenario-8 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
0	1945	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1946	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1947	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1948	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1949	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1950	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1951	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1952	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1953	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1954	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
0	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
30	1955	0.0	0.5	0.5	0.1	0.2	0.0	0.2	0.2	0.2	0.2	2
365	1956	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1095	1958	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.2	2
1825	1960	0.0	0.5	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.3	2
2555	1962	0.0	0.5	0.5	0.1	0.2	0.1	0.3	0.2	0.3	0.3	2
3285	1964	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4015	1966	0.0	0.5	0.5	0.1	0.3	0.1	0.3	0.3	0.3	0.4	3
4745	1968	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
5475	1970	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.5	3
6205	1972	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.3	0.3	0.6	3
6935	1974	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
7665	1976	0.0	0.5	0.5	0.1	0.3	0.1	0.4	0.4	0.3	0.6	3
8395	1978	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.6	4
9125	1980	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.4	0.4	0.7	4
9855	1982	0.0	0.6	0.5	0.1	0.4	0.1	0.5	0.5	0.4	0.7	4
10585	1984	0.0	0.7	0.5	0.1	0.4	0.1	0.6	0.5	0.4	0.7	4
11315	1986	0.0	0.7	0.6	0.1	0.4	0.1	0.6	0.6	0.4	0.7	4
12045	1988	0.0	0.7	0.6	0.1	0.5	0.2	0.6	0.6	0.4	0.8	4
12775	1990	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.6	0.5	0.8	5
13505	1992	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14235	1994	0.1	0.8	0.6	0.1	0.5	0.2	0.7	0.7	0.5	0.8	5
14965	1996	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.5	0.9	5
15695	1998	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
16425	2000	0.2	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17155	2002	0.3	0.9	0.6	0.1	0.6	0.2	0.8	0.8	0.6	0.9	6
17885	2004	0.3	1.0	0.6	0.1	0.6	0.2	0.8	0.9	0.6	0.9	6
18615	2006	0.1	0.6	0.6	0.1	0.4	0.2	0.6	0.6	1.0	0.7	5
19345	2008	0.1	0.6	0.6	0.1	0.4	0.2	0.6	0.6	1.0	0.6	5
20075	2010	0.1	0.7	0.6	0.1	0.4	0.2	0.6	0.6	1.0	0.6	5
20805	2012	0.1	0.7	0.6	0.1	0.4	0.2	0.6	0.7	1.1	0.6	5
21535	2014	0.1	0.7	0.6	0.1	0.4	0.2	0.6	0.7	1.1	0.6	5
22265	2016	0.2	0.8	0.6	0.1	0.5	0.2	0.7	0.8	1.2	0.7	6

Appendix B-8-5a Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-8 (Bookpurnong Area)

day	year	Z2 to Z40 (tonnes/day)	Z2 to Z41 (tonnes/day)	Z2 to Z42 (tonnes/day)	Z2 to Z43 (tonnes/day)	Z2 to Z44 (tonnes/day)	Z2 to Z45 (tonnes/day)	Z2 to Z46 (tonnes/day)	Z2 to Z47 (tonnes/day)	Z2 to Z48 (tonnes/day)	Z2 to Z20 (tonnes/day)	Total Lateral (tonnes/day)
22995	2018	0.3	0.8	0.6	0.1	0.5	0.2	0.8	0.8	1.3	0.7	6
23725	2020	0.3	0.7	0.6	0.1	0.5	0.2	0.8	0.8	1.2	0.7	6
24455	2022	0.3	0.7	0.6	0.1	0.5	0.2	0.8	0.8	1.2	0.8	6
25185	2024	0.3	0.8	0.6	0.1	0.5	0.2	0.8	0.9	1.3	0.8	6
25915	2026	0.4	0.8	0.7	0.1	0.6	0.2	0.8	0.9	1.3	0.8	6
26645	2028	0.4	0.8	0.7	0.1	0.6	0.2	0.8	0.9	1.3	0.8	7
27375	2030	0.4	0.8	0.7	0.1	0.6	0.2	0.9	0.9	1.3	0.9	7
28105	2032	0.4	0.8	0.7	0.1	0.6	0.2	0.9	0.9	1.3	0.9	7
28835	2034	0.4	0.8	0.7	0.1	0.6	0.2	0.9	1.0	1.3	0.9	7
29565	2036	0.4	0.8	0.7	0.1	0.6	0.2	0.9	1.0	1.3	0.9	7
30295	2038	0.4	0.8	0.7	0.1	0.6	0.2	0.9	1.0	1.4	0.9	7
31025	2040	0.5	0.8	0.7	0.1	0.6	0.2	0.9	1.0	1.4	0.9	7
31755	2042	0.5	0.8	0.7	0.1	0.6	0.2	0.9	1.0	1.4	0.9	7
32485	2044	0.5	0.9	0.7	0.1	0.6	0.2	0.9	1.0	1.4	0.9	7
33215	2046	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	0.9	7
33945	2048	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	0.9	7
34675	2050	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
35405	2052	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
36135	2054	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
36865	2056	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
37595	2058	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
38325	2060	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
39055	2062	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
39785	2064	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
40515	2066	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
41245	2068	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
41975	2070	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
42705	2072	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
43435	2074	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
44165	2076	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
44895	2078	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
45625	2080	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
46355	2082	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
47085	2084	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
47815	2086	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
48545	2088	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
49275	2090	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
50005	2092	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
50735	2094	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
51465	2096	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
52195	2098	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	7
52925	2100	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	8
53655	2102	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	8
54385	2104	0.5	0.9	0.7	0.1	0.6	0.2	1.0	1.0	1.4	1.0	8
TDS	mg/L	25000	25000	25000	25000	25000	25000	25000	25000	25000	25000	

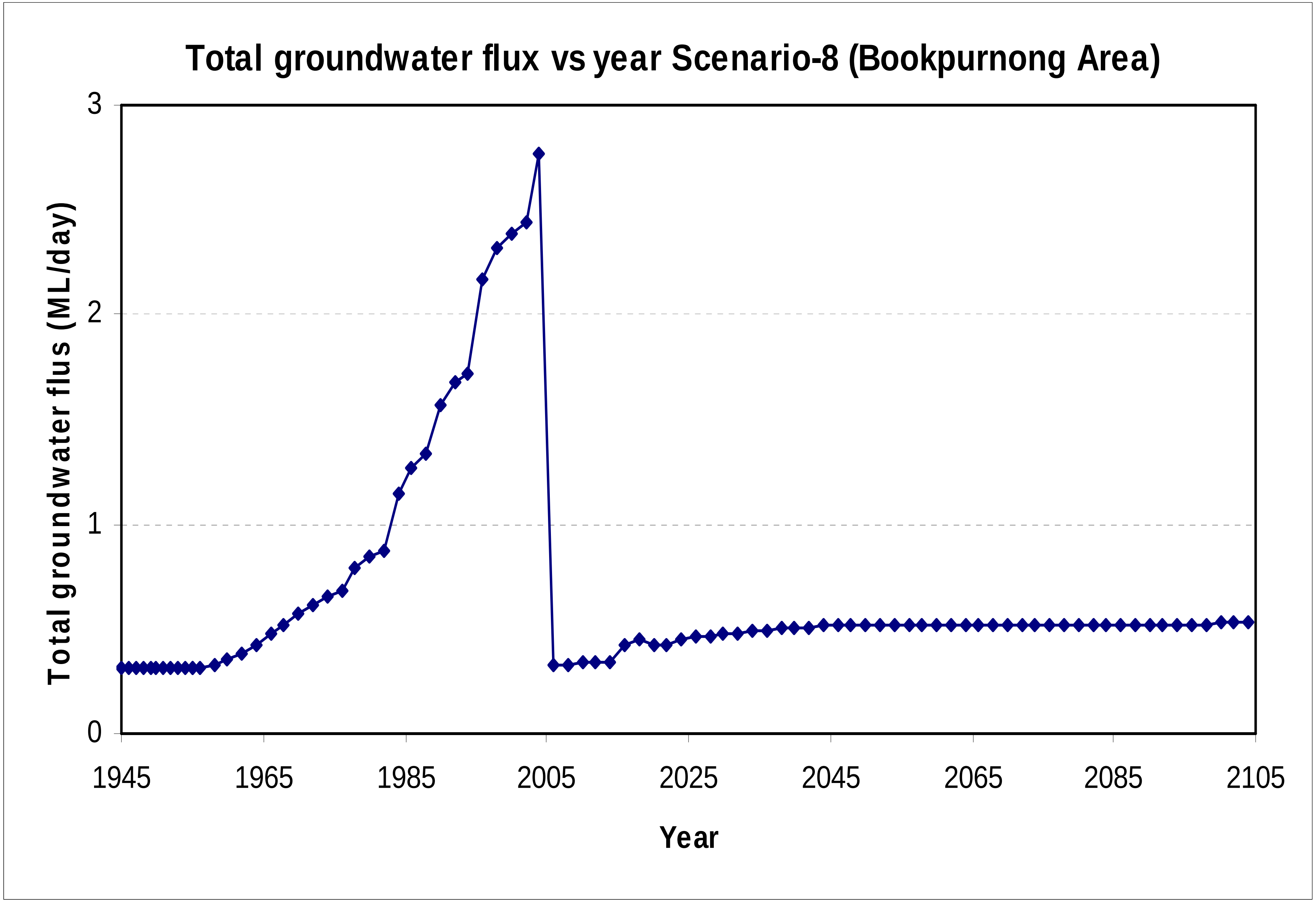
Appendix B-8-5b Predicted upward salt load (tonnes/day) from flow budget zones in Scenario-8 (Bookpurnong Area)



Appendix B-8-5c Graph of predicted total upward salt load (tonnes/day) entering the River Murray in Scenario-8 (Bookpurnong Area)

day	year	Lateral flux (m^3/day)	Upward leakage (m^3/day)	Total flux (m^3/day)
0	1945	0.241	0.079	0.320
0	1946	0.241	0.079	0.320
0	1947	0.241	0.079	0.320
0	1948	0.241	0.079	0.320
0	1949	0.241	0.079	0.320
0	1950	0.241	0.079	0.320
0	1951	0.241	0.079	0.320
0	1952	0.241	0.079	0.320
0	1953	0.241	0.079	0.320
0	1954	0.241	0.079	0.320
0	1955	0.241	0.079	0.320
30	1955	0.241	0.079	0.320
365	1956	0.241	0.079	0.320
1095	1958	0.249	0.084	0.333
1825	1960	0.265	0.091	0.356
2555	1962	0.289	0.097	0.387
3285	1964	0.323	0.104	0.427
4015	1966	0.365	0.111	0.476
4745	1968	0.408	0.116	0.525
5475	1970	0.450	0.121	0.571
6205	1972	0.488	0.126	0.614
6935	1974	0.523	0.130	0.653
7665	1976	0.553	0.133	0.686
8395	1978	0.649	0.141	0.790
9125	1980	0.694	0.145	0.839
9855	1982	0.721	0.148	0.869
10585	1984	0.982	0.164	1.147
11315	1986	1.101	0.172	1.272
12045	1988	1.160	0.176	1.336
12775	1990	1.382	0.189	1.571
13505	1992	1.476	0.195	1.671
14235	1994	1.521	0.197	1.719
14965	1996	1.953	0.218	2.171
15695	1998	2.099	0.226	2.324
16425	2000	2.160	0.229	2.389
17155	2002	2.214	0.233	2.448
17885	2004	2.524	0.248	2.772
18615	2006	0.133	0.199	0.332
19345	2008	0.131	0.196	0.327
20075	2010	0.137	0.201	0.337
20805	2012	0.138	0.202	0.339
21535	2014	0.138	0.202	0.340
22265	2016	0.187	0.236	0.424
22995	2018	0.200	0.246	0.446
23725	2020	0.180	0.236	0.416
24455	2022	0.179	0.238	0.418
25185	2024	0.196	0.253	0.449
25915	2026	0.202	0.260	0.462
26645	2028	0.205	0.264	0.469
27375	2030	0.208	0.269	0.477
28105	2032	0.211	0.274	0.484
28835	2034	0.213	0.278	0.491
29565	2036	0.215	0.281	0.497
30295	2038	0.217	0.284	0.501
31025	2040	0.219	0.287	0.505
31755	2042	0.220	0.289	0.509
32485	2044	0.221	0.290	0.511
33215	2046	0.222	0.292	0.513
33945	2048	0.222	0.293	0.515
34675	2050	0.223	0.293	0.516
35405	2052	0.223	0.294	0.517
36135	2054	0.223	0.294	0.517
36865	2056	0.223	0.295	0.518
37595	2058	0.223	0.295	0.518
38325	2060	0.223	0.296	0.519
39055	2062	0.224	0.296	0.520
39785	2064	0.224	0.296	0.520
40515	2066	0.224	0.297	0.521
41245	2068	0.224	0.297	0.521
41975	2070	0.224	0.297	0.521
42705	2072	0.224	0.298	0.522
43435	2074	0.224	0.298	0.522
44165	2076	0.224	0.298	0.522
44895	2078	0.224	0.298	0.523
45625	2080	0.224	0.299	0.523
46355	2082	0.225	0.299	0.523
47085	2084	0.225	0.299	0.524
47815	2086	0.225	0.299	0.524
48545	2088	0.225	0.299	0.524
49275	2090	0.225	0.299	0.524
50005	2092	0.225	0.300	0.524
50735	2094	0.225	0.300	0.525
51465	2096	0.225	0.300	0.525
52195	2098	0.225	0.300	0.525
52925	2100	0.225	0.300	0.525
53655	2102	0.225	0.300	0.525
54385	2104	0.225	0.300	0.525

Appendix B-8-6a Predicted total groundwater flux (ML/day) in Scenario-8 (Bookpurnong Area)

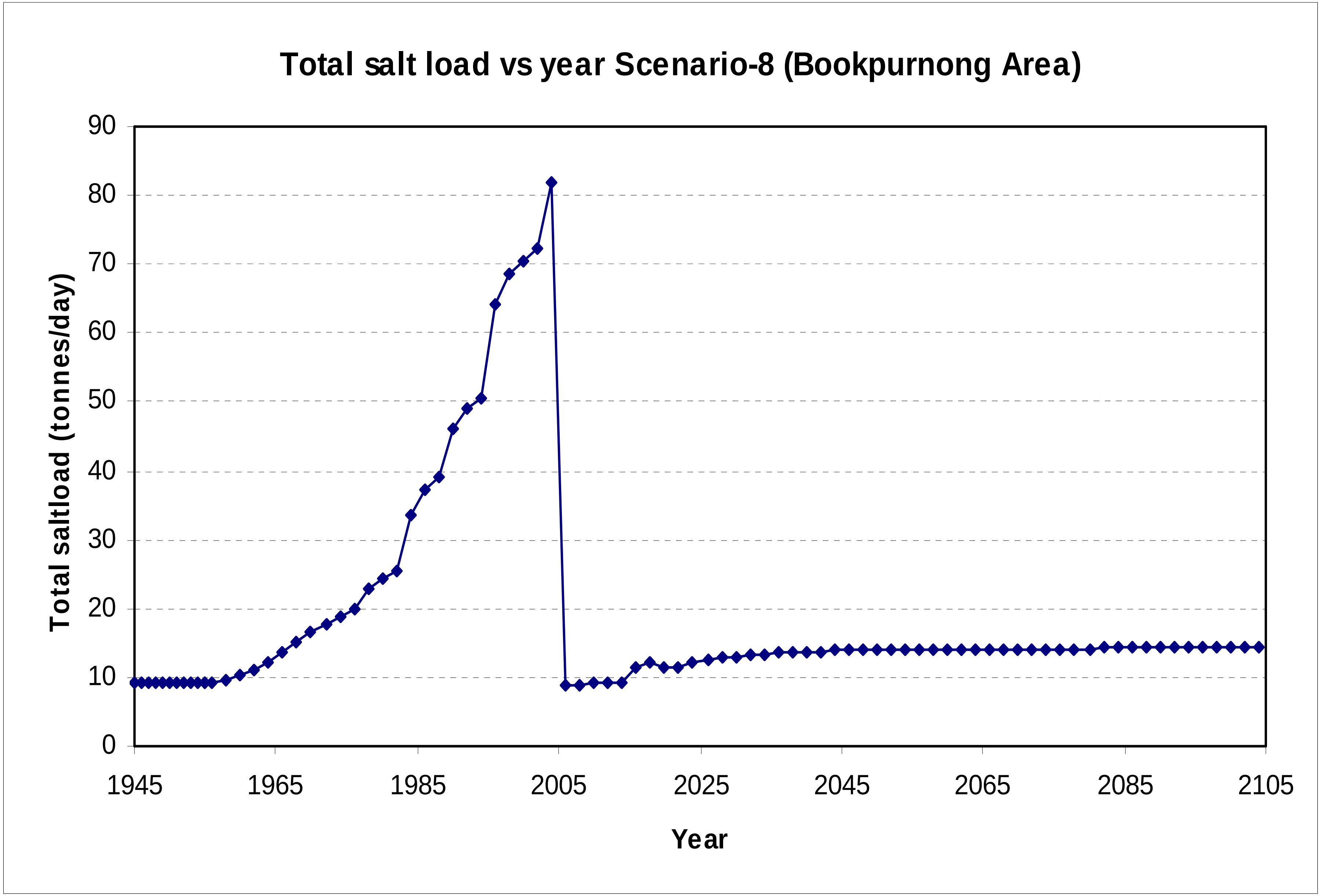


Appendix B-8-6b Graph of predicted total groundwater flux (ML/day) entering the River Murray in Scenario-8 (Bookpurnong Area)

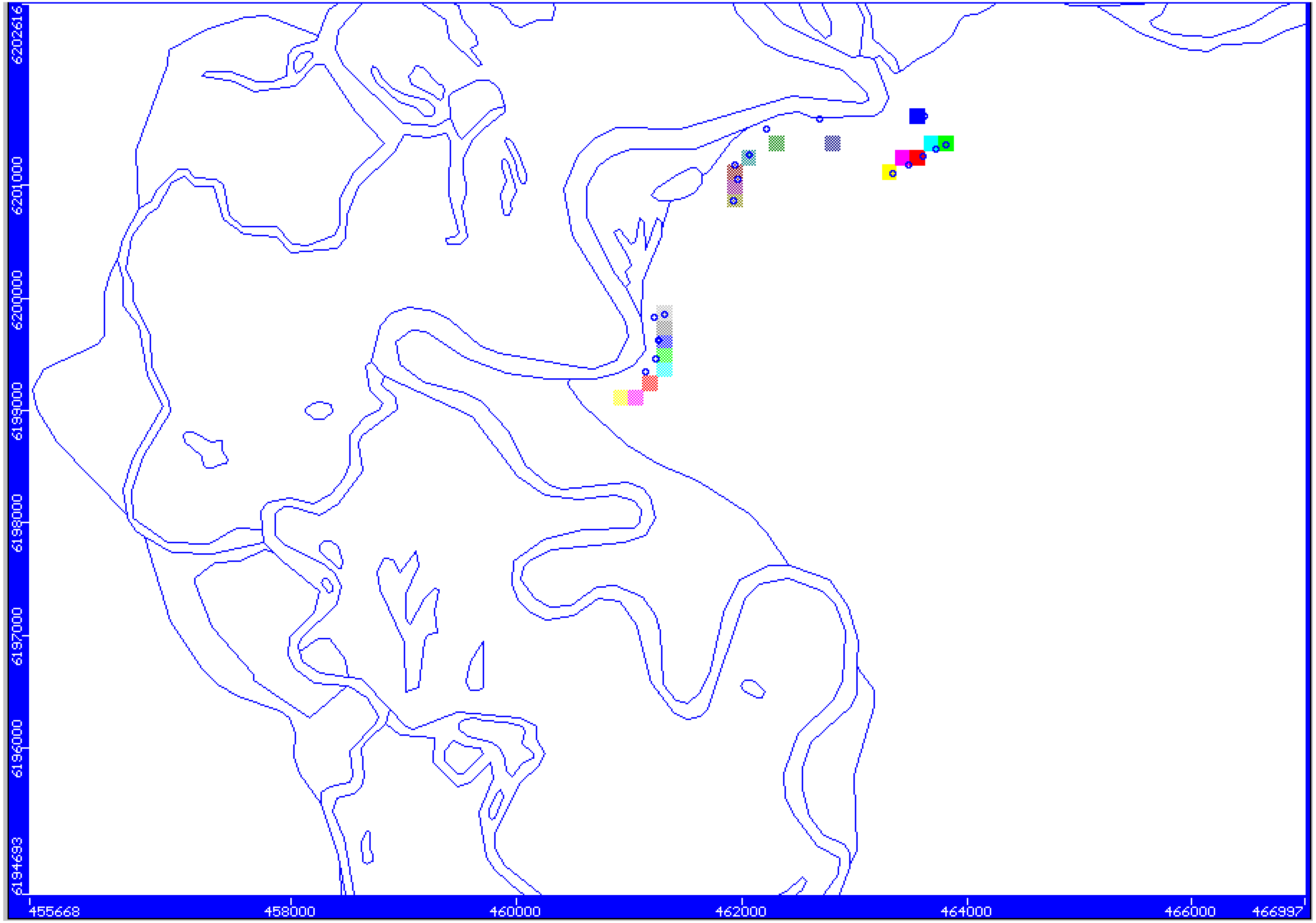
day	year	Lateral Salt load (tonnes/day)	Upward Salt load (tonnes/day)	Total Salt load (tonnes/day)
0	1945	7.24	1.98	9.21
0	1946	7.24	1.98	9.21
0	1947	7.24	1.98	9.21
0	1948	7.24	1.98	9.21
0	1949	7.24	1.98	9.21
0	1950	7.24	1.98	9.21
0	1951	7.24	1.98	9.21
0	1952	7.24	1.98	9.21
0	1953	7.24	1.98	9.21
0	1954	7.24	1.98	9.21
0	1955	7.24	1.98	9.21
30	1955	7.24	1.98	9.21
365	1956	7.24	1.98	9.21
1095	1958	7.46	2.10	9.56
1825	1960	7.56	2.27	10.22
2555	1962	8.68	2.43	11.11
3285	1964	9.68	2.61	12.29
4015	1966	10.94	2.77	13.72
4745	1968	12.25	2.90	15.15
5475	1970	13.50	3.03	16.53
6205	1972	14.65	3.15	17.80
6935	1974	15.69	3.25	18.94
7665	1976	16.58	3.33	19.91
8395	1978	19.47	3.52	22.99
9125	1980	20.82	3.62	24.44
9855	1982	21.64	3.70	25.34
10585	1984	29.46	4.11	33.57
11315	1986	33.02	4.29	37.32
12045	1988	34.80	4.40	39.19
12775	1990	41.47	4.72	46.19
13505	1992	44.28	4.87	49.15
14235	1994	45.64	4.94	50.58
14965	1996	58.58	5.45	64.04
15695	1998	62.96	5.64	68.60
16425	2000	64.80	5.73	70.53
17155	2002	66.43	5.83	72.26
17885	2004	75.73	6.19	81.91
18615	2006	4.00	4.97	8.97
19345	2008	3.93	4.90	8.84
20075	2010	4.10	5.02	9.12
20805	2012	4.13	5.04	9.18
21535	2014	4.15	5.04	9.19
22265	2016	5.62	5.91	11.53

day	year	Lateral Salt load (tonnes/day)	Upward Salt load (tonnes/day)	Total Salt load (tonnes/day)
22995	2018	6.00	6.16	12.16
23725	2020	5.39	5.91	11.30
24455	2022	5.38	5.96	11.34
25185	2024	5.87	6.33	12.19
25915	2026	6.05	6.50	12.55
26645	2028	6.14	6.59	12.74
27375	2030	6.23	6.74	12.97
28105	2032	6.32	6.84	13.15
28835	2034	6.40	6.95	13.35
29565	2036	6.46	7.04	13.50
30295	2038	6.51	7.10	13.60
31025	2040	6.56	7.17	13.73
31755	2042	6.60	7.22	13.82
32485	2044	6.63	7.26	13.89
33215	2046	6.65	7.29	13.94
33945	2048	6.67	7.31	13.98
34675	2050	6.68	7.33	14.01
35405	2052	6.68	7.35	14.04
36135	2054	6.69	7.36	14.05
36865	2056	6.69	7.37	14.06
37595	2058	6.70	7.38	14.08
38325	2060	6.70	7.39	14.09
39055	2062	6.71	7.40	14.11
39785	2064	6.71	7.41	14.12
40515	2066	6.72	7.42	14.13
41245	2068	6.72	7.43	14.14
41975	2070	6.72	7.43	14.16
42705	2072	6.72	7.44	14.16
43435	2074	6.73	7.45	14.17
44165	2076	6.73	7.45	14.18
44895	2078	6.73	7.46	14.19
45625	2080	6.73	7.46	14.20
46355	2082	6.74	7.47	14.20
47085	2084	6.74	7.47	14.21
47815	2086	6.74	7.48	14.22
48545	2088	6.74	7.48	14.22
49275	2090	6.74	7.48	14.23
50005	2092	6.74	7.49	14.23
50735	2094	6.75	7.49	14.24
51465	2096	6.75	7.49	14.24
52195	2098	6.75	7.50	14.25
52925	2100	6.75	7.50	14.25
53655	2102	6.75	7.50	14.25
54385	2104	6.75	7.51	14.26

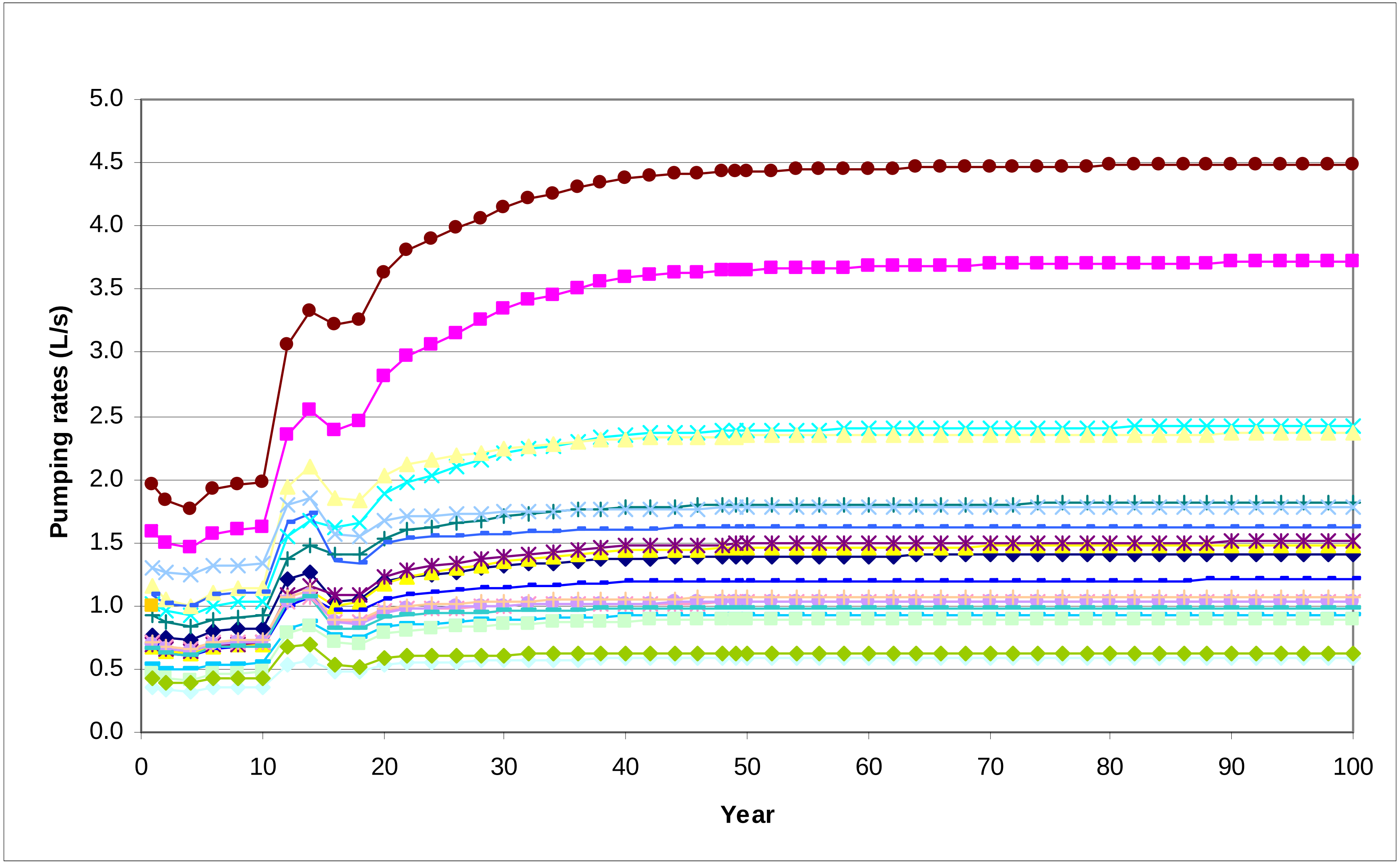
Appendix B-8-7a Predicted total salt load (tonnes/day) entering the River Murray in Scenario-8 (Bookpurnong Area)



Appendix B-8-7b Graph of predicted total salt load (tonnes/day) entering the River Murray in Scenario-8 (Bookpurnong Area)



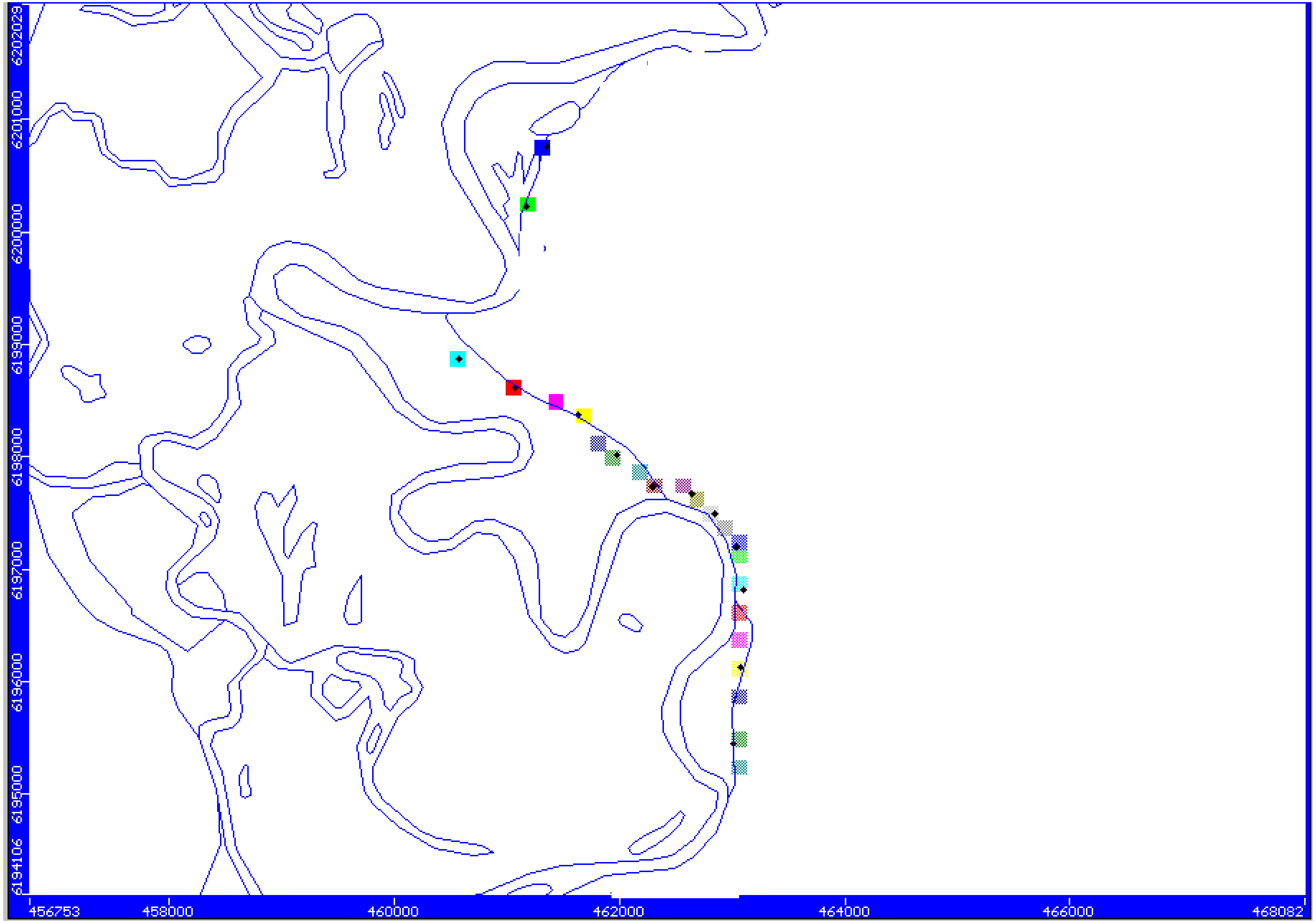
Appendix B-8-8a Potential locations of highland SIS production wells Scenario-8 (Bookpurnong Area)



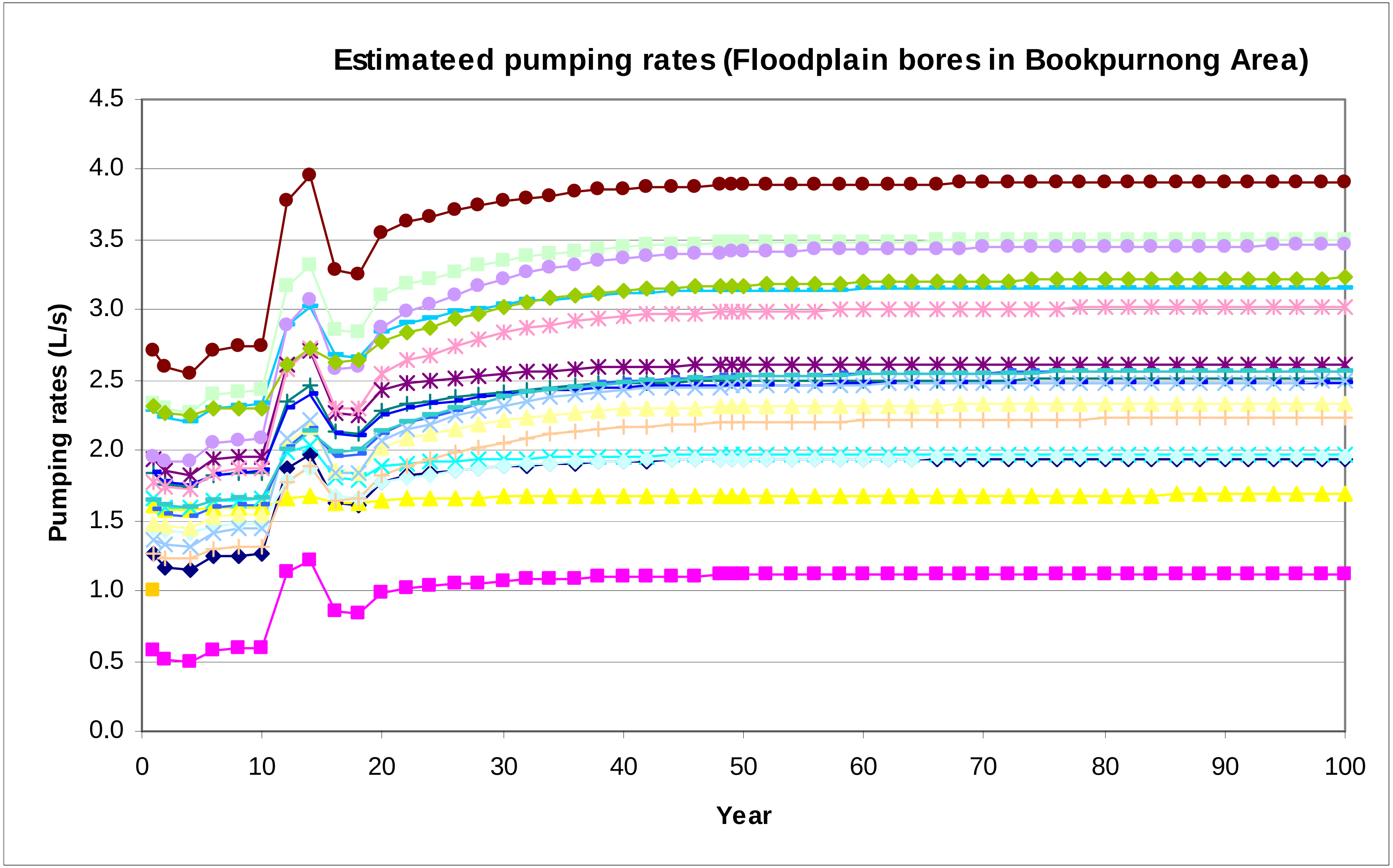
Appendix B-8-8b Graph of predicted range of pumping rates from highland SIS production wells Scenario-8 (Bookpurnong Area)

Time (day)	Time (year)	Pumping rates (L/s) HLB0	Pumping rates (L/s) HLB1	Pumping rates (L/s) HLB2	Pumping rates (L/s) HLB3	Pumping rates (L/s) HLB4	Pumping rates (L/s) HLB5	Pumping rates (L/s) HLB6	Pumping rates (L/s) HLB7	Pumping rates (L/s) HLB8	Pumping rates (L/s) HLB9	Pumping rates (L/s) HLB10	Pumping rates (L/s) HLB11	Pumping rates (L/s) HLB12	Pumping rates (L/s) HLB13	Pumping rates (L/s) HLB14	Pumping rates (L/s) HLB15	Pumping rates (L/s) HLB16	Pumping rates (L/s) HLB17	Pumping rates (L/s) HLB18	Pumping rates (L/s) HLB19	Total (L/s)
365	1	0.77	1.58	0.67	1.01	0.69	1.56	0.93	0.67	0.54	0.35	0.47	1.16	1.30	0.70	0.69	0.71	1.08	0.66	0.42	0.13	16.50
730	2	0.74	1.49	0.64	0.96	0.65	1.53	0.87	0.63	0.51	0.33	0.43	1.05	1.26	0.67	0.66	0.68	1.02	0.62	0.39	0.12	15.55
1460	4	0.73	1.46	0.63	0.93	0.63	1.77	0.84	0.61	0.49	0.33	0.42	1.00	1.24	0.65	0.64	0.65	0.99	0.61	0.39	0.12	15.14
2190	6	0.80	1.57	0.68	1.00	0.69	1.52	0.90	0.66	0.53	0.35	0.46	1.11	1.31	0.71	0.70	0.72	1.09	0.67	0.43	0.13	16.43
2920	8	0.81	1.60	0.69	1.02	0.70	1.56	0.91	0.67	0.54	0.36	0.47	1.14	1.32	0.72	0.71	0.72	1.10	0.68	0.43	0.13	16.68
3650	10	0.81	1.62	0.70	1.03	0.71	1.58	0.92	0.67	0.54	0.36	0.47	1.15	1.33	0.72	0.71	0.73	1.10	0.68	0.43	0.13	16.78
4380	12	1.22	2.35	1.05	1.54	1.08	3.05	1.37	1.00	0.82	0.53	0.78	1.93	1.79	1.03	1.03	1.07	1.66	1.03	0.68	0.18	25.21
5110	14	1.26	2.54	1.13	1.68	1.16	3.33	1.48	1.07	0.87	0.56	0.83	2.10	1.85	1.07	1.08	1.12	1.73	1.07	0.70	0.18	26.83
5840	16	1.03	2.38	1.00	1.62	1.08	3.22	1.40	0.97	0.76	0.48	0.71	1.85	1.56	0.88	0.87	0.90	1.36	0.83	0.53	0.15	23.57
6570	18	1.05	2.46	1.03	1.66	1.09	3.25	1.40	0.96	0.75	0.48	0.70	1.83	1.55	0.87	0.86	0.89	1.34	0.81	0.52	0.15	23.65
7300	20	1.18	2.81	1.17	1.88	1.23	3.63	1.54	1.05	0.83	0.53	0.79	2.04	1.67	0.95	0.95	0.98	1.49	0.91	0.59	0.16	26.38
8030	22	1.22	2.97	1.23	1.98	1.28	3.80	1.60	1.09	0.85	0.54	0.81	2.11	1.70	0.97	0.97	1.00	1.53	0.93	0.60	0.16	27.33
8760	24	1.25	3.06	1.26	2.03	1.31	3.89	1.62	1.10	0.86	0.55	0.82	2.15	1.71	0.98	0.98	1.01	1.54	0.94	0.60	0.16	27.83
9490	26	1.27	3.16	1.29	2.09	1.34	3.98	1.65	1.12	0.87	0.56	0.83	2.18	1.72	0.99	0.99	1.02	1.55	0.94	0.61	0.17	28.32
10220	28	1.29	3.25	1.32	2.15	1.37	4.06	1.68	1.13	0.88	0.56	0.84	2.21	1.73	0.99	0.99	1.03	1.56	0.95	0.61	0.17	28.77
10950	30	1.31	3.34	1.35	2.20	1.39	4.15	1.70	1.14	0.89	0.57	0.85	2.24	1.74	1.00	1.00	1.03	1.57	0.96	0.61	0.17	29.22
11680	32	1.33	3.41	1.37	2.24	1.41	4.21	1.72	1.16	0.90	0.57	0.86	2.26	1.75	1.01	1.01	1.04	1.58	0.96	0.62	0.17	29.58
12410	34	1.34	3.46	1.39	2.27	1.43	4.25	1.74	1.16	0.90	0.57	0.86	2.28	1.75	1.01	1.01	1.04	1.59	0.96	0.62	0.17	29.81
13140	36	1.35	3.51	1.41	2.30	1.45	4.31	1.75	1.17	0.91	0.58	0.87	2.29	1.76	1.01	1.02	1.05	1.60	0.97	0.62	0.17	30.09
13870	38	1.36	3.55	1.42	2.33	1.46	4.35	1.77	1.18	0.91	0.58	0.88	2.31	1.76	1.02	1.02	1.05	1.60	0.97	0.62	0.17	30.33
14600	40	1.37	3.59	1.43	2.35	1.47	4.38	1.78	1.18	0.92	0.58	0.88	2.32	1.77	1.02	1.02	1.06	1.61	0.97	0.62	0.17	30.48
15330	42	1.38	3.61	1.44	2.36	1.47	4.40	1.78	1.19	0.92	0.58	0.88	2.33	1.77	1.02	1.02	1.06	1.61	0.97	0.62	0.17	30.59
16060	44	1.38	3.63	1.45	2.37	1.48	4.41	1.79	1.19	0.92	0.58	0.88	2.33	1.77	1.02	1.02	1.06	1.61	0.98	0.62	0.17	30.66
16790	46	1.38	3.64	1.45	2.37	1.48	4.42	1.79	1.19	0.92	0.58	0.88	2.34	1.77	1.02	1.03	1.06	1.61	0.98	0.62	0.17	30.72
17520	48	1.39	3.65	1.45	2.38	1.48	4.43	1.79	1.19	0.92	0.58	0.88	2.34	1.77	1.02	1.03	1.06	1.61	0.98	0.62	0.17	30.76
17885	49	1.39	3.65	1.45	2.38	1.49	4.43	1.79	1.19	0.92	0.59	0.89	2.34	1.77	1.02	1.03	1.06	1.61	0.98	0.63	0.17	30.78
18250	50	1.39	3.65	1.45	2.38	1.49	4.43	1.79	1.19	0.92	0.59	0.89	2.34	1.77	1.02	1.03	1.06	1.61	0.98	0.63	0.17	30.80
18980	52	1.39	3.66	1.45	2.39	1.49	4.44	1.80	1.19	0.92	0.59	0.89	2.34	1.77	1.02	1.03	1.06	1.62	0.98	0.63	0.17	30.82
19710	54	1.39	3.67	1.45	2.39	1.49	4.44	1.80	1.19	0.92	0.59	0.89	2.34	1.77	1.02	1.03	1.06	1.62	0.98	0.63	0.17	30.85
20440	56	1.39	3.67	1.45	2.39	1.49	4.45	1.80	1.20	0.93	0.59	0.89	2.35	1.77	1.02	1.03	1.06	1.62	0.98	0.63	0.17	30.87
21170	58	1.39	3.67	1.45	2.39	1.49	4.45	1.80	1.20	0.93	0.59	0.89	2.35	1.77	1.03	1.03	1.06	1.62	0.98	0.63	0.17	30.89
21900	60	1.40	3.68	1.45	2.40	1.49	4.45	1.80	1.20	0.93	0.59	0.89	2.35	1.77	1.03	1.03	1.06	1.62	0.98	0.63	0.17	30.91
22630	62	1.40	3.68	1.45	2.40	1.50	4.45	1.80	1.20	0.93	0.59	0.89	2.35	1.77	1.03	1.03	1.06	1.62	0.98	0.63	0.17	30.93
23360	64	1.40	3.68	1.47	2.40	1.50	4.45	1.80	1.20	0.93	0.59	0.89	2.35	1.77	1.03	1.03	1.06	1.62	0.98	0.63	0.17	30.95
24090	66	1.40	3.69	1.47	2.40	1.50	4.45	1.80	1.20	0.93	0.59	0.89	2.35	1.77	1.03	1.03	1.06	1.62	0.98	0.63	0.17	30.96
24820	68	1.40	3.69	1.47	2.40	1.50	4.45	1.80	1.20	0.93	0.59	0.89	2.35	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	30.97
25550	70	1.40	3.69	1.47	2.41	1.50	4.47	1.81	1.20	0.93	0.59	0.89	2.35	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	30.99
26280	72	1.40	3.70	1.47	2.41	1.50	4.47	1.81	1.20	0.93	0.59	0.89	2.35	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	31.00
27010	74	1.40	3.70	1.47	2.41	1.50	4.47	1.81	1.20	0.93	0.59	0.89	2.35	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	31.01
27740	76	1.40	3.70	1.47	2.41	1.50	4.47	1.81	1.20	0.93	0.59	0.89	2.35	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	31.02
28470	78	1.40	3.70	1.47	2.41	1.50	4.47	1.81	1.20	0.93	0.59	0.89	2.35	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	31.03
29200	80	1.40	3.70	1.47	2.41	1.50	4.48	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	31.04
29930	82	1.40	3.71	1.47	2.41	1.50	4.48	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	31.05
30660	84	1.40	3.71	1.47	2.41	1.50	4.48	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	31.05
31390	86	1.40	3.71	1.47	2.41	1.50	4.48	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.06	1.62	0.98	0.63	0.17	31.06
32120	88	1.40	3.71	1.47	2.41	1.50	4.48	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.07	1.62	0.98	0.63	0.17	31.07
32850	90	1.40	3.71	1.47	2.42	1.50	4.48	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.07	1.62	0.98	0.63	0.17	31.07
33580	92	1.40	3.71	1.47	2.42	1.50	4.48	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.07	1.62	0.98	0.63	0.17	31.08
34310	94	1.40	3.71	1.48	2.42	1.50	4.48	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.07	1.62	0.98	0.63	0.17	31.09
35040	96	1.40	3.71	1.48	2.42	1.50	4.49	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.07	1.62	0.98	0.63	0.17	31.09
35770	98	1.41	3.72	1.48	2.42	1.50	4.49	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.07	1.62	0.98	0.63	0.17	31.10
36500	100	1.41	3.72	1.48	2.42	1.51	4.49	1.81	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.07	1.62	0.98	0.63	0.17	31.10
54385	149	1.41	3.73	1.48	2.43	1.51	4.50	1.82	1.20	0.93	0.59	0.89	2.36	1.78	1.03	1.03	1.07	1.62	0.98	0.63	0.17	31.18

Appendix A-8-8c Predicted range of pumping rates from highland SIS production wells Scenario-8 (Bookpurnong Area)



Appendix A-8-9a Potential locations of floodplain SIS production wells Scenario-8 (Bookpurnong Area)



Appendix A-8-9b Graph of predicted range of pumping rates from floodplain SIS production wells Scenario-8 (Bookpurnong Area)

Time (day)	Time (year)	Pumping rates (L/s) FP0	Pumping rates (L/s) FP1	Pumping rates (L/s) FP2	Pumping rates (L/s) FP3	Pumping rates (L/s) FP4	Pumping rates (L/s) FP5	Pumping rates (L/s) FP6	Pumping rates (L/s) FP7	Pumping rates (L/s) FP8	Pumping rates (L/s) FP9	Pumping rates (L/s) FP10	Pumping rates (L/s) FP11	Pumping rates (L/s) FP12	Pumping rates (L/s) FP13	Pumping rates (L/s) FP14	Pumping rates (L/s) FP15	Pumping rates (L/s) FP16	Pumping rates (L/s) FP17	Pumping rates (L/s) FP18	Pumping rates (L/s) FP19	Pumping rates (L/s) FP20	Pumping rates (L/s) FP21	Pumping rates (L/s) FP22	Total (L/s)
365	1	1.26	0.57	1.62	1.66	1.54	2.71	1.84	1.84	2.28	1.46	2.33	1.48	1.35	1.77	1.56	1.26	1.58	1.64	2.31	2.01	2.05	1.90	1.55	40.40
730	2	1.17	0.51	1.58	1.60	1.56	2.59	1.76	1.78	2.23	1.43	2.29	1.45	1.33	1.74	1.53	1.24	1.55	1.61	2.27	1.57	1.59	1.82	1.43	39.30
1460	4	1.14	0.49	1.58	1.59	1.53	2.54	1.74	1.75	2.21	1.42	2.27	1.44	1.32	1.73	1.51	1.23	1.53	1.60	2.25	1.54	1.56	1.78	1.44	38.88
2190	6	1.24	0.58	1.59	1.64	1.59	2.71	1.82	1.83	2.30	1.47	2.39	1.52	1.42	1.84	2.05	1.30	1.60	1.65	2.29	1.57	1.57	1.77	1.43	40.31
2920	8	1.25	0.58	1.59	1.65	1.56	2.74	1.84	1.84	2.32	1.48	2.42	1.54	1.44	1.87	2.07	1.31	1.61	1.65	2.30	1.57	1.57	1.77	1.42	40.60
3650	10	1.26	0.59	1.59	1.65	1.56	2.75	1.84	1.85	2.32	1.48	2.42	1.55	1.46	1.87	2.08	1.32	1.62	1.65	2.30	1.57	1.56	1.76	1.41	40.65
4380	12	1.87	1.13	1.66	1.99	2.61	3.78	2.35	2.30	2.89	1.79	3.17	2.06	2.08	2.57	2.89	1.77	2.03	2.01	2.62	2.23	2.18	1.88	1.46	51.32
5110	14	1.97	1.21	1.67	2.04	2.71	3.96	2.46	2.41	3.02	1.87	3.32	2.17	2.22	2.73	3.07	1.89	2.15	2.13	2.73	2.34	2.28	1.96	1.50	53.79
5840	16	1.63	0.85	1.63	1.80	2.27	3.28	2.14	2.12	2.68	1.68	2.86	1.85	1.84	2.30	2.59	1.65	1.56	1.58	2.63	2.29	2.29	1.59	1.54	47.85
6570	18	1.62	0.84	1.63	1.79	2.24	3.25	2.12	2.11	2.66	1.67	2.84	1.84	1.83	2.30	2.59	1.65	1.57	2.00	2.65	2.31	2.32	2.02	1.55	47.80
7300	20	1.78	0.98	1.65	1.89	2.43	3.55	2.28	2.25	2.85	1.77	3.10	2.03	2.07	2.55	2.88	1.82	2.12	2.13	2.78	2.43	2.44	2.11	1.62	51.51
8030	22	1.82	1.02	1.66	1.91	2.47	3.63	2.33	2.30	2.91	1.81	3.18	2.09	2.15	2.64	2.99	1.89	2.20	2.20	2.84	2.50	2.50	2.17	1.65	52.87
8760	24	1.84	1.03	1.66	1.91	2.49	3.67	2.35	2.33	2.94	1.83	3.22	2.12	2.19	2.68	3.04	1.93	2.24	2.24	2.88	2.53	2.55	2.21	1.68	53.57
9490	26	1.85	1.04	1.66	1.92	2.51	3.71	2.38	2.35	2.98	1.85	3.27	2.16	2.24	2.75	3.11	1.98	2.29	2.29	2.93	2.59	2.62	2.28	1.73	54.53
10220	28	1.87	1.05	1.67	1.93	2.53	3.74	2.40	2.38	3.01	1.87	3.31	2.19	2.28	2.79	3.17	2.02	2.33	2.33	2.98	2.63	2.67	2.32	1.76	55.23
10950	30	1.88	1.07	1.67	1.94	2.55	3.78	2.42	2.40	3.04	1.88	3.35	2.22	2.32	2.83	3.22	2.05	2.37	2.37	3.02	2.68	2.73	2.38	1.80	55.98
11680	32	1.89	1.08	1.67	1.94	2.55	3.80	2.44	2.41	3.06	1.90	3.38	2.24	2.35	2.87	3.26	2.09	2.41	2.41	3.05	2.72	2.77	2.41	1.82	56.55
12410	34	1.90	1.08	1.67	1.95	2.57	3.82	2.45	2.42	3.08	1.91	3.40	2.25	2.37	2.89	3.29	2.11	2.43	2.43	3.08	2.74	2.80	2.44	1.84	56.94
13140	36	1.91	1.09	1.68	1.95	2.58	3.84	2.46	2.44	3.10	1.92	3.42	2.27	2.40	2.92	3.33	2.13	2.46	2.46	3.10	2.77	2.82	2.46	1.85	57.34
13870	38	1.92	1.10	1.68	1.96	2.59	3.85	2.47	2.45	3.11	1.92	3.44	2.28	2.42	2.94	3.35	2.15	2.47	2.47	3.12	2.79	2.85	2.49	1.87	57.69
14600	40	1.92	1.10	1.68	1.96	2.59	3.87	2.48	2.45	3.12	1.93	3.45	2.29	2.43	2.96	3.37	2.16	2.49	2.48	3.14	2.80	2.85	2.50	1.88	57.93
15330	42	1.93	1.10	1.68	1.96	2.60	3.87	2.48	2.46	3.12	1.93	3.46	2.30	2.44	2.97	3.38	2.17	2.50	2.50	3.15	2.82	2.88	2.52	1.90	58.12
16060	44	1.93	1.11	1.68	1.96	2.60	3.88	2.49	2.46	3.13	1.94	3.47	2.30	2.46	2.97	3.39	2.18	2.51	2.50	3.16	2.83	2.89	2.53	1.90	58.26
16790	46	1.93	1.11	1.68	1.96	2.60	3.88	2.49	2.46	3.13	1.94	3.47	2.31	2.46	2.98	3.40	2.19	2.52	2.51	3.16	2.83	2.90	2.54	1.91	58.37
17520	48	1.93	1.11	1.68	1.96	2.60	3.89	2.49	2.47	3.14	1.94	3.47	2.31	2.46	2.98	3.41	2.19	2.52	2.52	3.17	2.84	2.91	2.55	1.92	58.46
17885	49	1.93	1.11	1.68	1.97	2.61	3.89	2.49	2.47	3.14	1.94	3.48	2.31	2.46	2.99	3.41	2.19	2.52	2.52	3.17	2.85	2.92	2.55	1.92	58.51
18250	50	1.93	1.11	1.68	1.97	2.61	3.89	2.49	2.47	3.14	1.94	3.48	2.31	2.46	2.99	3.41	2.20	2.53	2.52	3.18	2.85	2.92	2.55	1.92	58.54
18980	52	1.94	1.11	1.68	1.97	2.61	3.89	2.50	2.47	3.14	1.94	3.48	2.31	2.46	2.99	3.42	2.20	2.53	2.53	3.18	2.85	2.93	2.55	1.93	58.61
19710	54	1.94	1.11	1.68	1.97	2.61	3.89	2.50	2.47	3.14	1.94	3.48	2.32	2.46	2.99	3.42	2.20	2.53	2.53	3.19	2.86	2.93	2.57	1.93	58.67
20440	56	1.94	1.11	1.68	1.97	2.61	3.89	2.50	2.47	3.14	1.94	3.48	2.32	2.47	3.00	3.42	2.21	2.54	2.53	3.19	2.86	2.94	2.58	1.94	58.73
21170	58	1.94	1.11	1.68	1.97	2.61	3.90	2.50	2.47	3.14	1.94	3.49	2.32	2.47	3.00	3.43	2.21	2.54	2.54	3.19	2.87	2.94	2.58	1.94	58.78
21900	60	1.94	1.11	1.68	1.97	2.61	3.90	2.50	2.47	3.15	1.94	3.49	2.32	2.47	3.00	3.43	2.21	2.54	2.54	3.20	2.87	2.96	2.58	1.96	58.82
22630	62	1.94	1.11	1.68	1.97	2.61	3.90	2.50	2.47	3.15	1.96	3.49	2.32	2.47	3.00	3.43	2.21	2.54	2.54	3.20	2.87	2.96	2.59	1.96	58.86
23360	64	1.94	1.11	1.68	1.97	2.61	3.90	2.50	2.48	3.15	1.96	3.49	2.32	2.47	3.00	3.44	2.21	2.55	2.54	3.20	2.88	2.96	2.59	1.96	58.90
24090	66	1.94	1.11	1.68	1.97	2.61	3.90	2.50	2.48	3.15	1.96	3.49	2.32	2.47	3.01	3.44	2.22	2.55	2.55	3.20	2.88	2.96	2.60	1.96	58.93
24820	68	1.94	1.11	1.68	1.97	2.61	3.90	2.50	2.48	3.15	1.96	3.49	2.32	2.48	3.01	3.44	2.22	2.55	2.55	3.21	2.88	2.96	2.60	1.96	58.96
25550	70	1.94	1.12	1.68	1.97	2.61	3.90	2.50	2.48	3.15	1.96	3.49	2.33	2.48	3.01	3.44	2.22	2.55	2.55	3.21	2.88	2.96	2.60	1.96	58.99
26280	72	1.94	1.12	1.68	1.97	2.61	3.90	2.50	2.48	3.15	1.96	3.49	2.33	2.48	3.01	3.44	2.22	2.55	2.55	3.21	2.89	2.97	2.60	1.96	59.02
27010	74	1.94	1.12	1.68	1.97	2.61	3.90	2.50	2.48	3.15	1.96	3.49	2.33	2.48	3.01	3.46	2.22	2.55	2.55	3.21	2.89	2.97	2.61	1.96	59.04
27740	76	1.94	1.12	1.68	1.97	2.62	3.90	2.51	2.48	3.15	1.96	3.50	2.33	2.48	3.01	3.46	2.22	2.55	2.55	3.21	2.89	2.97	2.61	1.96	59.07
28470	78	1.94	1.12	1.68	1.97	2.62	3.90	2.51	2.48	3.15	1.96	3.50	2.33	2.48	3.01	3.46	2.22	2.55	2.55	3.22	2.89	2.97	2.61	1.97	59.09
29200	80	1.94	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.15	1.96	3.50	2.33	2.48	3.01	3.46	2.23	2.55	2.55	3.22	2.89	2.98	2.61	1.97	59.11
29930	82	1.94	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.15	1.96	3.50	2.33	2.48	3.02	3.46	2.23	2.55	2.55	3.22	2.89	2.98	2.62	1.97	59.13
30660	84	1.94	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.15	1.96	3.50	2.33	2.48	3.02	3.46	2.23	2.55	2.55	3.22	2.90	2.98	2.62	1.97	59.15
31390	86	1.94	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.16	1.96	3.50	2.33	2.48	3.02	3.46	2.23	2.55	2.55	3.22	2.90	2.98	2.62	1.97	59.16
32120	88	1.94	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.16	1.96	3.50	2.33	2.49	3.02	3.46	2.23	2.55	2.55	3.22	2.90	2.98	2.62	1.97	59.18
32850	90	1.94	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.16	1.96	3.50	2.33	2.49	3.02	3.46	2.23	2.57	2.55	3.22	2.90	2.98	2.62	1.97	59.19
33580	92	1.94	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.16	1.96	3.50	2.33	2.49	3.02	3.46	2.23	2.57	2.55	3.22	2.90	2.99	2.62	1.98	59.21
34310	94	1.94	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.16	1.96	3.50	2.33	2.49	3.02	3.46	2.23	2.57	2.55	3.22	2.90	2.99	2.63	1.98	59.22
35040	96	1.95	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.16	1.96	3.50	2.33	2.49	3.02	3.46	2.23	2.57	2.57	3.23	2.90	2.99	2.63	1.98	59.24
35770	98	1.95	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.16	1.96	3.50	2.33	2.49	3.02	3.46	2.23	2.57	2.57	3.23	2.90	2.99	2.63	1.98	59.25
36500	100	1.95	1.12	1.68	1.97	2.62	3.91	2.51	2.48	3.16	1.96	3.50	2.33	2.49	3.02	3.46	2.23	2.57	2.57	3.23	2.91	2.99	2.63	1.98	59.26

Appendix A-8-9c Predicted range of pumping rates from floodplain SIS production wells Scenario-8 (Loxton Area)

13.3 APPENDIX C

Predicted salt load entering the River Murray and in river EC benefit at Morgan for all Scenarios Loxton and Bookpurnong Areas

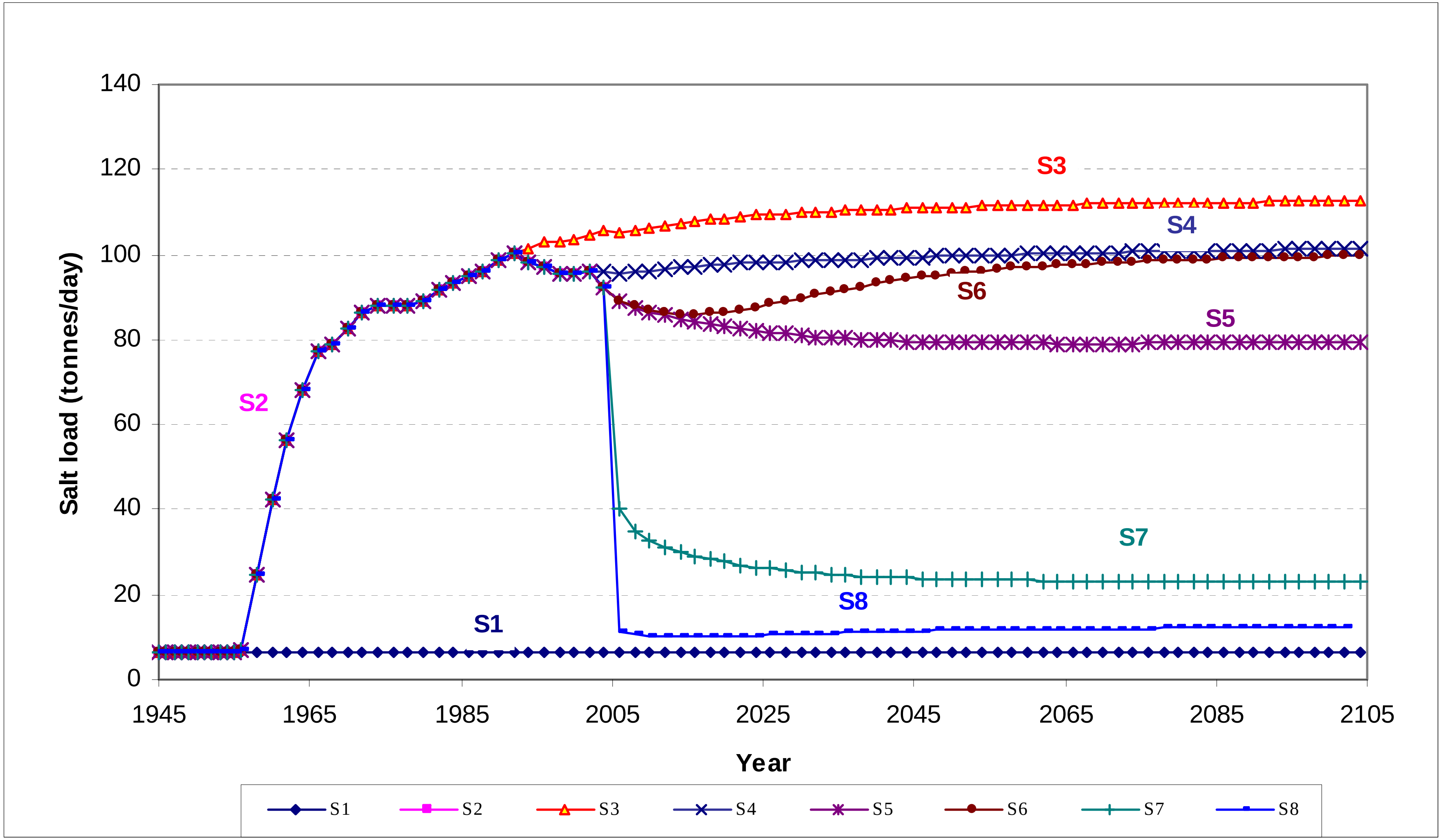
- Predicted total salt load (tonnes/day).
- Predicted annual salt load (tonnes/day).
- Predicted 30 years average salt load.
- Predicted EC benefits.

day	year	S1	S2	S3	S4	S5	S6	S7	S8
0	1945	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
0	1946	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
0	1947	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
0	1948	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
0	1949	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
0	1950	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
0	1951	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
0	1952	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
0	1953	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
0	1954	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
30	1955	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
365	1956	6.65	6.74	6.74	6.74	6.74	6.74	6.74	6.74
1095	1958	6.65	24.73	24.73	24.73	24.73	24.73	24.73	24.73
1825	1960	6.65	42.27	42.27	42.27	42.27	42.27	42.27	42.27
2555	1962	6.65	56.28	56.28	56.28	56.28	56.28	56.28	56.28
3285	1964	6.65	67.99	67.99	67.99	67.99	67.99	67.99	67.99
4015	1966	6.65	77.32	77.32	77.32	77.32	77.32	77.32	77.32
4745	1968	6.65	78.74	78.74	78.74	78.74	78.74	78.74	78.74
5475	1970	6.65	82.44	82.44	82.44	82.44	82.44	82.44	82.44
6205	1972	6.65	86.16	86.16	86.16	86.16	86.16	86.16	86.16
6935	1974	6.65	87.80	87.80	87.80	87.80	87.80	87.80	87.80
7665	1976	6.65	87.79	87.79	87.79	87.79	87.79	87.79	87.79
8395	1978	6.65	88.20	88.20	88.20	88.20	88.20	88.20	88.20
9125	1980	6.65	89.28	89.28	89.28	89.28	89.28	89.28	89.28
9855	1982	6.65	91.69	91.69	91.69	91.69	91.69	91.69	91.69
10585	1984	6.65	93.22	93.22	93.22	93.22	93.22	93.22	93.22
11315	1986	6.65	94.78	94.78	94.78	94.78	94.78	94.78	94.78
12045	1988	6.65	96.28	96.28	96.28	96.28	96.28	96.28	96.28
12775	1990	6.65	98.85	98.86	98.85	98.85	98.85	98.85	98.85
13505	1992	6.65	100.25	100.28	100.25	100.25	100.25	100.25	100.25
14235	1994	6.65	98.16	101.56	98.16	98.16	98.16	98.16	98.16
14965	1996	6.65	97.13	102.80	97.13	97.13	97.13	97.13	97.13
15695	1998	6.65	95.69	102.82	95.69	95.69	95.69	95.69	95.69
16425	2000	6.65	95.66	103.78	95.66	95.66	95.66	95.66	95.66
17155	2002	6.65	95.82	104.67	95.85	95.85	95.85	95.85	95.85
17885	2004	6.65	92.34	105.51	96.18	92.42	92.46	92.42	92.46
18615	2006	6.65		105.19	95.49	89.16	89.26	40.01	11.24
19345	2008	6.65		105.82	95.83	87.64	87.88	35.12	10.54
20075	2010	6.65		106.42	96.22	86.55	86.99	32.68	10.28
20805	2012	6.65		106.95	96.59	85.69	86.39	31.11	10.15
21535	2014	6.65		107.43	96.96	84.96	85.99	29.96	10.07
22265	2016	6.65		107.85	97.29	84.34	86.07	29.07	10.12
22995	2018	6.65		108.22	97.61	83.80	86.31	28.35	10.17

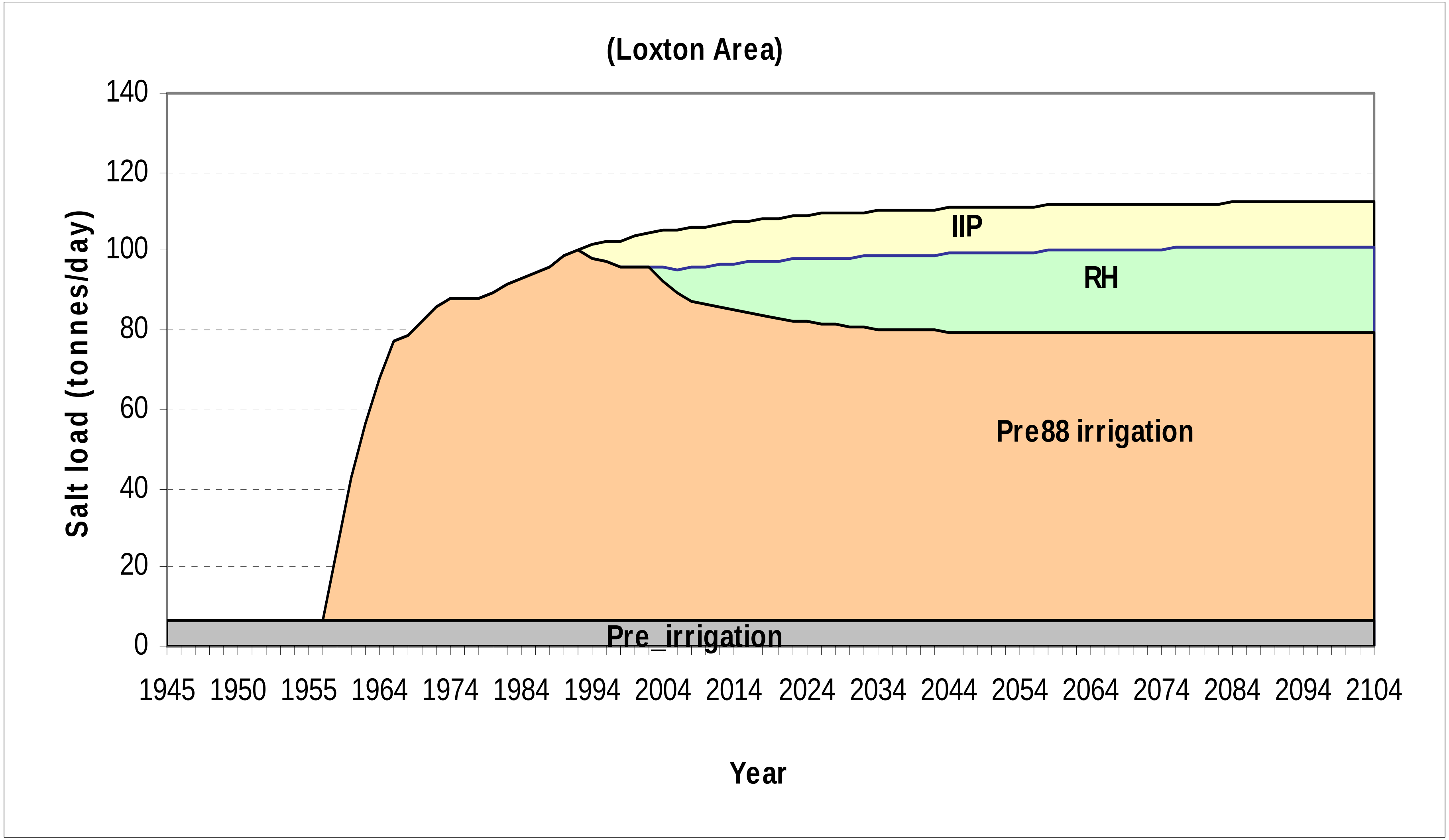
Appendix C-1-1a Predicted total salt load (tonnes/day) entering the River Murray in all Scenarios (Loxton Area)

day	year	S1	S2	S3	S4	S5	S6	S7	S8
23725	2020	6.65		108.57	97.77	83.18	86.62	27.67	10.22
24455	2022	6.65		108.88	97.90	82.61	87.02	27.05	10.29
25185	2024	6.65		109.16	98.03	82.12	87.64	26.53	10.41
25915	2026	6.65		109.41	98.17	81.69	88.31	26.08	10.51
26645	2028	6.65		109.64	98.31	81.32	88.95	25.69	10.61
27375	2030	6.65		109.84	98.45	81.00	89.70	25.36	10.73
28105	2032	6.65		110.03	98.58	80.71	90.42	25.06	10.83
28835	2034	6.65		110.20	98.71	80.46	91.16	24.81	10.95
29565	2036	6.65		110.35	98.84	80.25	91.86	24.59	11.06
30295	2038	6.65		110.50	98.96	80.06	92.51	24.39	11.15
31025	2040	6.65		110.63	99.09	79.90	93.13	24.22	11.25
31755	2042	6.65		110.76	99.20	79.76	93.71	24.07	11.33
32485	2044	6.65		110.87	99.32	79.64	94.24	23.94	11.41
33215	2046	6.65		110.98	99.43	79.53	94.72	23.83	11.49
33945	2048	6.65		111.08	99.54	79.44	95.16	23.73	11.56
34675	2050	6.65		111.18	99.64	79.37	95.56	23.64	11.62
35405	2052	6.65		111.27	99.74	79.31	95.93	23.56	11.68
36135	2054	6.65		111.35	99.84	79.25	96.26	23.49	11.71
36865	2056	6.65		111.44	99.93	79.21	96.55	23.44	11.65
37595	2058	6.65		111.51	100.02	79.18	96.83	23.38	11.69
38325	2060	6.65		111.59	100.10	79.15	97.07	23.34	11.74
39055	2062	6.65		111.66	100.18	79.13	97.30	23.30	11.79
39785	2064	6.65		111.72	100.26	79.12	97.50	23.27	11.83
40515	2066	6.65		111.78	100.34	79.11	97.69	23.24	11.87
41245	2068	6.65		111.84	100.41	79.10	97.87	23.22	11.91
41975	2070	6.65		111.90	100.48	79.10	98.03	23.20	11.95
42705	2072	6.65		111.96	100.55	79.11	98.18	23.18	11.98
43435	2074	6.65		112.01	100.62	79.11	98.31	23.17	12.01
44165	2076	6.65		112.06	100.68	79.12	98.44	23.16	12.05
44895	2078	6.65		112.11	100.74	79.14	98.56	23.15	12.08
45625	2080	6.65		112.16	100.80	79.15	98.68	23.15	12.11
46355	2082	6.65		112.20	100.85	79.17	98.78	23.15	12.13
47085	2084	6.65		112.25	100.91	79.19	98.88	23.15	12.16
47815	2086	6.65		112.29	100.96	79.20	98.98	23.15	12.19
48545	2088	6.65		112.33	101.01	79.23	99.07	23.15	12.21
49275	2090	6.65		112.37	101.06	79.25	99.15	23.15	12.24
50005	2092	6.65		112.41	101.11	79.27	99.23	23.15	12.26
50735	2094	6.65		112.45	101.15	79.30	99.31	23.16	12.28
51465	2096	6.65		112.48	101.19	79.32	99.38	23.17	12.30
52195	2098	6.65		112.52	101.24	79.35	99.45	23.17	12.32
52925	2100	6.65		112.55	101.28	79.38	99.52	23.18	12.34
53655	2102	6.65		112.58	101.31	79.40	99.58	23.19	12.36
54385	2104	6.65		112.61	101.35	79.43	99.64	23.20	12.36

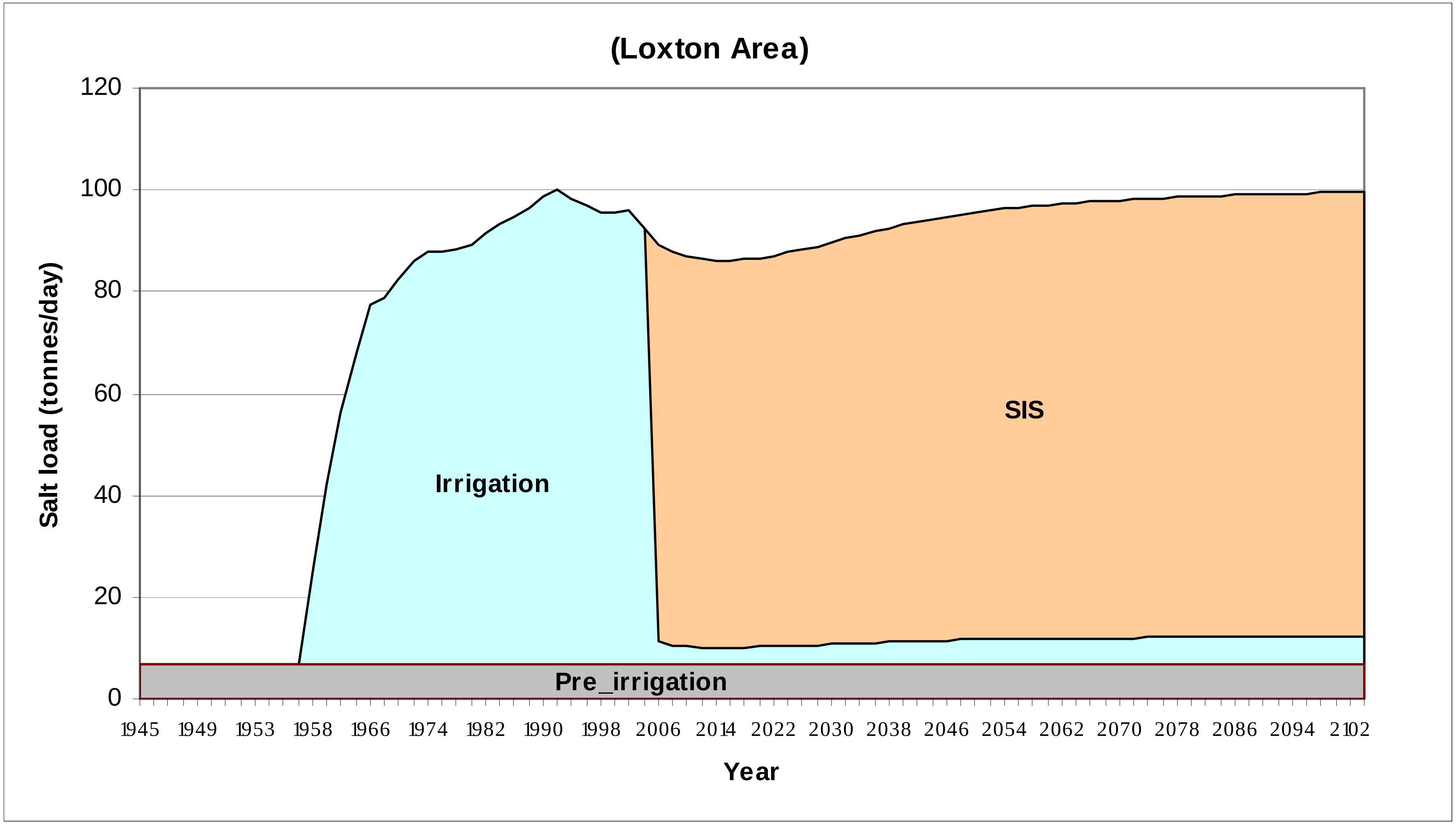
Appendix C-1-1b Predicted total salt load (tonnes/day) entering the River Murray in all Scenarios (Loxton Area)



Appendix C-1-2 Graph of predicted total salt load (tonnes/day) entering the River Murray in all Scenarios (Loxton Area)



Appendix C-1-3 Predicted salt loads entering the River Murray (Loxton Area pre88-irrigation)



Appendix C-1-4 Modelled SIS benefits (Loxton Area)

Time (Year)	Model results S3	Model results S4	Model results S5	Model results S6	Model results S7	Model results S8	30 year Average (S3)	30 year Average (S4)	30 year Average (S5)	30 year Average (S6)	30 year Average (S7)	30 year Average (S8)
2004	105.5	96.2	92.4	92.5	92.4	92.5						
2005	105.4	95.8	90.8	90.9	66.2	51.9						
2006	105.2	95.5	89.2	89.3	40.0	11.2						
2007	105.5	95.7	88.4	88.6	37.6	10.9						
2008	105.8	95.8	87.6	87.9	35.1	10.5						
2009	106.1	96.0	87.1	87.4	33.9	10.4						
2010	106.4	96.2	86.6	87.0	32.7	10.3						
2011	106.7	96.4	86.1	86.7	31.9	10.2						
2012	107.0	96.6	85.7	86.4	31.1	10.1						
2013	107.2	96.8	85.3	86.2	30.5	10.1						
2014	107.4	97.0	85.0	86.0	30.0	10.1						
2015	107.6	97.1	84.7	86.0	29.5	10.1						
2016	107.8	97.3	84.3	86.1	29.1	10.1						
2017	108.0	97.5	84.1	86.2	28.7	10.1						
2018	108.2	97.6	83.8	86.3	28.4	10.2						
2019	108.4	97.7	83.5	86.5	28.0	10.2						
2020	108.6	97.8	83.2	86.6	27.7	10.2						
2021	108.7	97.8	82.9	86.8	27.4	10.3						
2022	108.9	97.9	82.6	87.0	27.1	10.3						
2023	109.0	98.0	82.4	87.3	26.8	10.3						
2024	109.2	98.0	82.1	87.6	26.5	10.4						
2025	109.3	98.1	81.9	88.0	26.3	10.5						
2026	109.4	98.2	81.7	88.3	26.1	10.5						
2027	109.5	98.2	81.5	88.6	25.9	10.6						
2028	109.6	98.3	81.3	89.0	25.7	10.6						
2029	109.7	98.4	81.2	89.3	25.5	10.7						
2030	109.8	98.4	81.0	89.7	25.4	10.7						
2031	109.9	98.5	80.9	90.1	25.2	10.8						
2032	110.0	98.6	80.7	90.4	25.1	10.8						
2033	110.1	98.6	80.6	90.8	24.9	10.9						
2034	110.2	98.7	80.5	91.2	24.8	11.0	**108.1**	**97.4**	**84.2**	**88.1**	**32.1**	**14.4**
2035	110.3	98.8	80.4	91.5	24.7	11.0						
2036	110.4	98.8	80.2	91.9	24.6	11.1						
2037	110.4	98.9	80.2	92.2	24.5	11.1						
2038	110.5	99.0	80.1	92.5	24.4	11.2						
2039	110.6	99.0	80.0	92.8	24.3	11.2	**108.9**	**97.9**	**82.6**	**88.5**	**27.3**	**10.5**
2040	110.6	99.1	79.9	93.1	24.2	11.2						
2041	110.7	99.1	79.8	93.4	24.1	11.3						
2042	110.8	99.2	79.8	93.7	24.1	11.3						
2043	110.8	99.3	79.7	94.0	24.0	11.4						
2044	110.9	99.3	79.6	94.2	23.9	11.4	**109.5**	**98.3**	**81.6**	**89.6**	**26.0**	**10.7**

Appendix C-1-5a Predicted annual and average salt load (tonnes/day) entering the River Murray in some Scenarios (Loxton Area)

Time (Year)	Model results S3	Model results S4	Model results S5	Model results S6	Model results S7	Model results S8	30 year Average (S3)	30 year Average (S4)	30 year Average (S5)	30 year Average (S6)	30 year Average (S7)	30 year Average (S8)
2045	110.9	99.4	79.6	94.5	23.9	11.5						
2046	111.0	99.4	79.5	94.7	23.8	11.5						
2047	111.0	99.5	79.5	94.9	23.8	11.5						
2048	111.1	99.5	79.4	95.2	23.7	11.6						
2049	111.1	99.6	79.4	95.4	23.7	11.6	**110.0**	**98.7**	**80.8**	**91.0**	**25.2**	**10.9**
2050	111.2	99.6	79.4	95.6	23.6	11.6						
2051	111.2	99.7	79.3	95.7	23.6	11.7						
2052	111.3	99.7	79.3	95.9	23.6	11.7						
2053	111.3	99.8	79.3	96.1	23.5	11.7						
2054	111.4	99.8	79.3	96.3	23.5	11.7	**110.5**	**99.0**	**80.2**	**92.5**	**24.5**	**11.1**
2055	111.4	99.9	79.2	96.4	23.5	11.7						
2056	111.4	99.9	79.2	96.6	23.4	11.7						
2057	111.5	100.0	79.2	96.7	23.4	11.7						
2058	111.5	100.0	79.2	96.8	23.4	11.7						
2059	111.5	100.1	79.2	96.9	23.4	11.7	**110.8**	**99.3**	**79.8**	**93.8**	**24.1**	**11.3**
2060	111.6	100.1	79.2	97.1	23.3	11.7						
2061	111.6	100.1	79.1	97.2	23.3	11.8						
2062	111.7	100.2	79.1	97.3	23.3	11.8						
2063	111.7	100.2	79.1	97.4	23.3	11.8						
2064	111.7	100.3	79.1	97.5	23.3	11.8	**111.1**	**99.6**	**79.5**	**95.0**	**23.8**	**11.5**
2065	111.8	100.3	79.1	97.6	23.3	11.8						
2066	111.8	100.3	79.1	97.7	23.2	11.9						
2067	111.8	100.4	79.1	97.8	23.2	11.9						
2068	111.8	100.4	79.1	97.9	23.2	11.9						
2069	111.9	100.4	79.1	97.9	23.2	11.9	**111.3**	**99.8**	**79.4**	**95.9**	**23.6**	**11.6**
2070	111.9	100.5	79.1	98.0	23.2	11.9						
2071	111.9	100.5	79.1	98.1	23.2	12.0						
2072	112.0	100.6	79.1	98.2	23.2	12.0						
2073	112.0	100.6	79.1	98.2	23.2	12.0						
2074	112.0	100.6	79.1	98.3	23.2	12.0	**111.5**	**100.0**	**79.2**	**96.7**	**23.4**	**11.7**
2075	112.0	100.6	79.1	98.4	23.2	12.0						
2076	112.1	100.7	79.1	98.4	23.2	12.0						
2077	112.1	100.7	79.1	98.5	23.2	12.1						
2078	112.1	100.7	79.1	98.6	23.2	12.1						
2079	112.1	100.8	79.1	98.6	23.2	12.1	**111.7**	**100.2**	**79.2**	**97.3**	**23.3**	**11.8**
2080	112.2	100.8	79.1	98.7	23.1	12.1						
2081	112.2	100.8	79.2	98.7	23.1	12.1						
2082	112.2	100.9	79.2	98.8	23.1	12.1						
2083	112.2	100.9	79.2	98.8	23.1	12.1						
2084	112.2	100.9	79.2	98.9	23.1	12.2	**111.8**	**100.4**	**79.1**	**97.8**	**23.2**	**11.9**

Appendix C-1-5b Predicted annual and average salt load (tonnes/day) entering the River Murray in some Scenarios (Loxton Area)

Time (Year)	Model results S3	Model results S4	Model results S5	Model results S6	Model results S7	Model results S8	30 year Average (S3)	30 year Average (S4)	30 year Average (S5)	30 year Average (S6)	30 year Average (S7)	30 year Average (S8)
2085	112.3	100.9	79.2	98.9	23.1	12.2						
2086	112.3	101.0	79.2	99.0	23.1	12.2						
2087	112.3	101.0	79.2	99.0	23.1	12.2						
2088	112.3	101.0	79.2	99.1	23.1	12.2						
2089	112.4	101.0	79.2	99.1	23.1	12.2	**112.0**	**100.6**	**79.1**	**98.2**	**23.2**	**12.0**
2090	112.4	101.1	79.2	99.2	23.2	12.2						
2091	112.4	101.1	79.3	99.2	23.2	12.2						
2092	112.4	101.1	79.3	99.2	23.2	12.3						
2093	112.4	101.1	79.3	99.3	23.2	12.3						
2094	112.4	101.2	79.3	99.3	23.2	12.3	**112.1**	**100.7**	**79.2**	**98.5**	**23.2**	**12.1**
2095	112.5	101.2	79.3	99.3	23.2	12.3						
2096	112.5	101.2	79.3	99.4	23.2	12.3						
2097	112.5	101.2	79.3	99.4	23.2	12.3						
2098	112.5	101.2	79.3	99.5	23.2	12.3						
2099	112.5	101.3	79.4	99.5	23.2	12.3	**112.2**	**100.9**	**79.2**	**98.8**	**23.2**	**12.2**
2100	112.5	101.3	79.4	99.5	23.2	12.3						
2101	112.6	101.3	79.4	99.5	23.2	12.4						
2102	112.6	101.3	79.4	99.6	23.2	12.4						
2103	112.6	101.3	79.4	99.6	23.2	12.4						
2104	112.6	101.4	79.4	99.6	23.2	12.4	**112.3**	**101.0**	**79.2**	**99.1**	**23.2**	**12.2**

Appendix C-1-5c Predicted annual and average salt load (tonnes/day) entering the River Murray in some Scenarios (Loxton Area)

30 year averages (tonnes/day)-Loxton Area							
Year (start)	Year (end)	Mallee (SST)	Pre88-IIP-RH (S5-S1)	RH on Pre88 (S4-S5)	IIP on Pre88 (S3 - S4)	Post88 (S6-S5)	SIS (S6-S8)
2004	2034	6.7	77.5	13.2	10.7	3.9	73.6
2009	2039	6.7	76.0	15.3	11.0	5.8	77.9
2014	2044	6.7	74.9	16.7	11.2	8.0	78.9
2019	2049	6.7	74.2	17.9	11.4	10.2	80.1
2024	2054	6.7	73.6	18.8	11.5	12.2	81.3
2029	2059	6.7	73.2	19.5	11.5	14.0	82.5
2034	2064	6.7	72.9	20.0	11.5	15.4	83.5
2039	2069	6.7	72.7	20.4	11.5	16.6	84.3
2044	2074	6.7	72.6	20.8	11.5	17.5	85.0
2049	2079	6.7	72.5	21.1	11.5	18.2	85.5
2054	2084	6.7	72.5	21.3	11.4	18.7	85.9
2059	2089	6.7	72.5	21.4	11.4	19.1	86.2
2064	2094	6.7	72.5	21.6	11.4	19.4	86.5
2069	2099	6.7	72.6	21.7	11.3	19.6	86.7
2074	2104	6.7	72.6	21.8	11.3	19.8	86.8

Morgan in-river EC equivalent (Loxton Area)							
Year (start)	Year (end)	Mallee (SST)	Pre88-IIP-RH (S5-S1)	RH on Pre88 (S4-S5)	IIP on Pre88 (S3 - S4)	Post88 (S6-S5)	SIS (S6-S8)
2004	2034	1.5	17.1	2.9	2.4	0.9	16.2
2009	2039	1.5	16.7	3.4	2.4	1.3	17.1
2014	2044	1.5	16.5	3.7	2.5	1.8	17.4
2019	2049	1.5	16.3	3.9	2.5	2.2	17.6
2024	2054	1.5	16.2	4.1	2.5	2.7	17.9
2029	2059	1.5	16.1	4.3	2.5	3.1	18.1
2034	2064	1.5	16.0	4.4	2.5	3.4	18.4
2039	2069	1.5	16.0	4.5	2.5	3.7	18.5
2044	2074	1.5	16.0	4.6	2.5	3.8	18.7
2049	2079	1.5	16.0	4.6	2.5	4.0	18.8
2054	2084	1.5	15.9	4.7	2.5	4.1	18.9
2059	2089	1.5	15.9	4.7	2.5	4.2	19.0
2064	2094	1.5	16.0	4.7	2.5	4.3	19.0
2069	2099	1.5	16.0	4.8	2.5	4.3	19.1
2074	2104	1.5	16.0	4.8	2.5	4.4	19.1

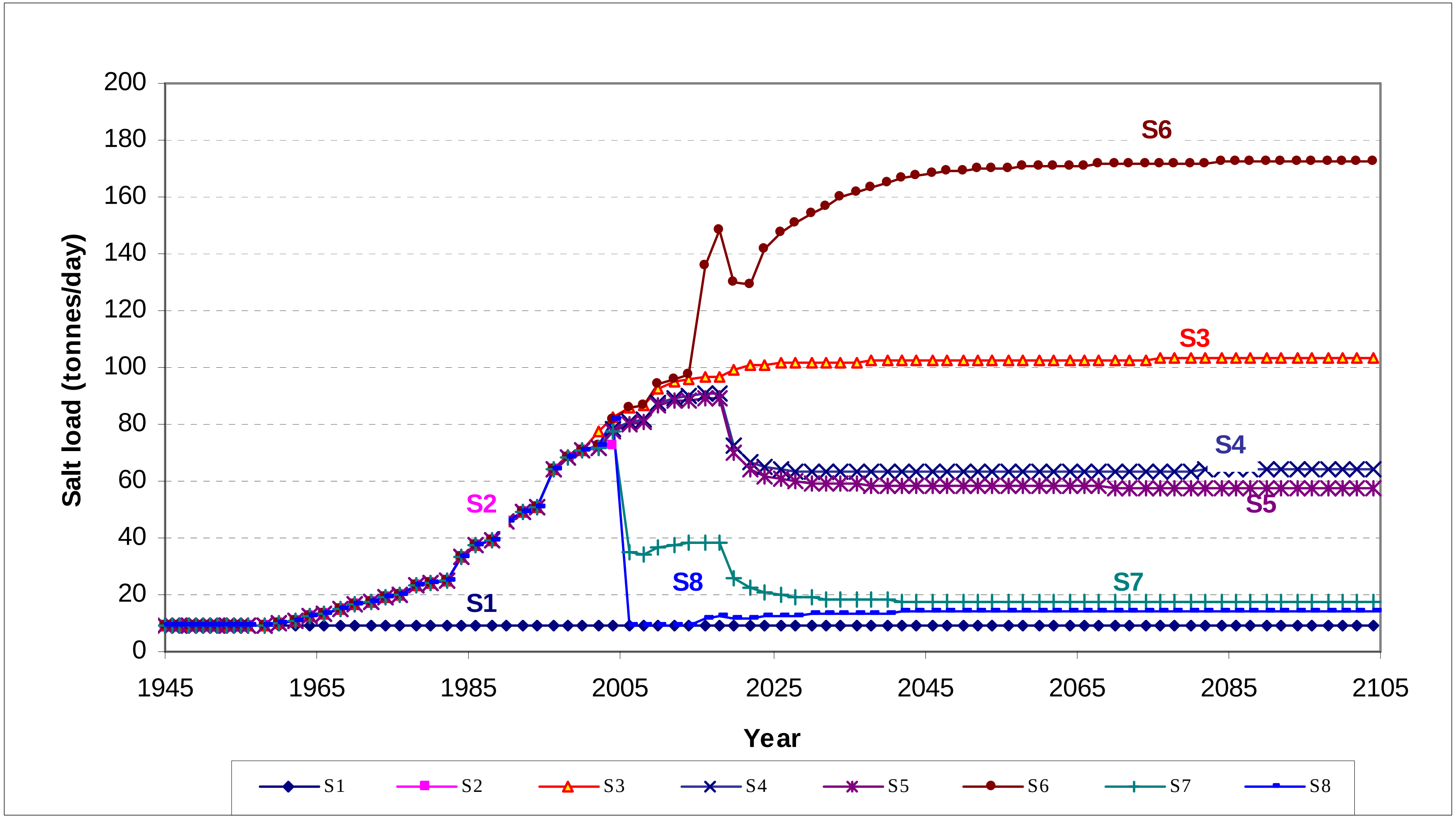
Appendix C-1-6 Predicted salt load (tonnes/day) entering the River Murray and in River EC benefit at Morgan (Loxton Area)

day	year	S1	S2	S3	S4	S5	S6	S7	S8
0	1945	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
0	1946	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
0	1947	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
0	1948	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
0	1949	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
0	1950	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
0	1951	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
0	1952	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
0	1953	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
0	1954	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
30	1955	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
365	1956	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
1095	1958	9.2	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1825	1960	9.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
2555	1962	9.2	11.1	11.1	11.1	11.1	11.1	11.1	11.1
3285	1964	9.2	12.3	12.3	12.3	12.3	12.3	12.3	12.3
4015	1966	9.2	13.7	13.7	13.7	13.7	13.7	13.7	13.7
4745	1968	9.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
5475	1970	9.2	16.5	16.5	16.5	16.5	16.5	16.5	16.5
6205	1972	9.2	17.8	17.8	17.8	17.8	17.8	17.8	17.8
6935	1974	9.2	18.9	18.9	18.9	18.9	18.9	18.9	18.9
7665	1976	9.2	19.9	19.9	19.9	19.9	19.9	19.9	19.9
8395	1978	9.2	23.0	23.0	23.0	23.0	23.0	23.0	23.0
9125	1980	9.2	24.4	24.4	24.4	24.4	24.4	24.4	24.4
9855	1982	9.2	25.3	25.3	25.3	25.3	25.3	25.3	25.3
10585	1984	9.2	33.6	33.6	33.6	33.6	33.6	33.6	33.6
11315	1986	9.2	37.3	37.3	37.3	37.3	37.3	37.3	37.3
12045	1988	9.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2
12775	1990	9.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2
13505	1992	9.2	49.1	49.1	49.1	49.1	49.1	49.1	49.1
14235	1994	9.2	50.6	50.7	50.6	50.6	50.6	50.6	50.6
14965	1996	9.2	64.0	64.3	64.0	64.0	64.0	64.0	64.0
15695	1998	9.2	68.6	69.0	68.6	68.6	68.6	68.6	68.6
16425	2000	9.2	70.5	71.2	70.5	70.5	70.5	70.5	70.5
17155	2002	9.2	71.5	77.5	71.9	71.9	72.3	71.9	72.3
17885	2004	9.2	72.8	82.9	77.9	77.8	81.9	77.8	81.9
18615	2006	9.2		85.5	80.5	80.1	85.5	35.1	9.0
19345	2008	9.2		86.9	81.7	81.0	86.9	33.9	8.8
20075	2010	9.2		92.7	87.3	86.4	93.9	36.9	9.1
20805	2012	9.2		94.8	89.3	88.0	96.2	37.9	9.2
21535	2014	9.2		95.8	90.2	88.6	97.1	38.1	9.2
22265	2016	9.2		96.4	90.7	88.8	135.9	38.1	11.5

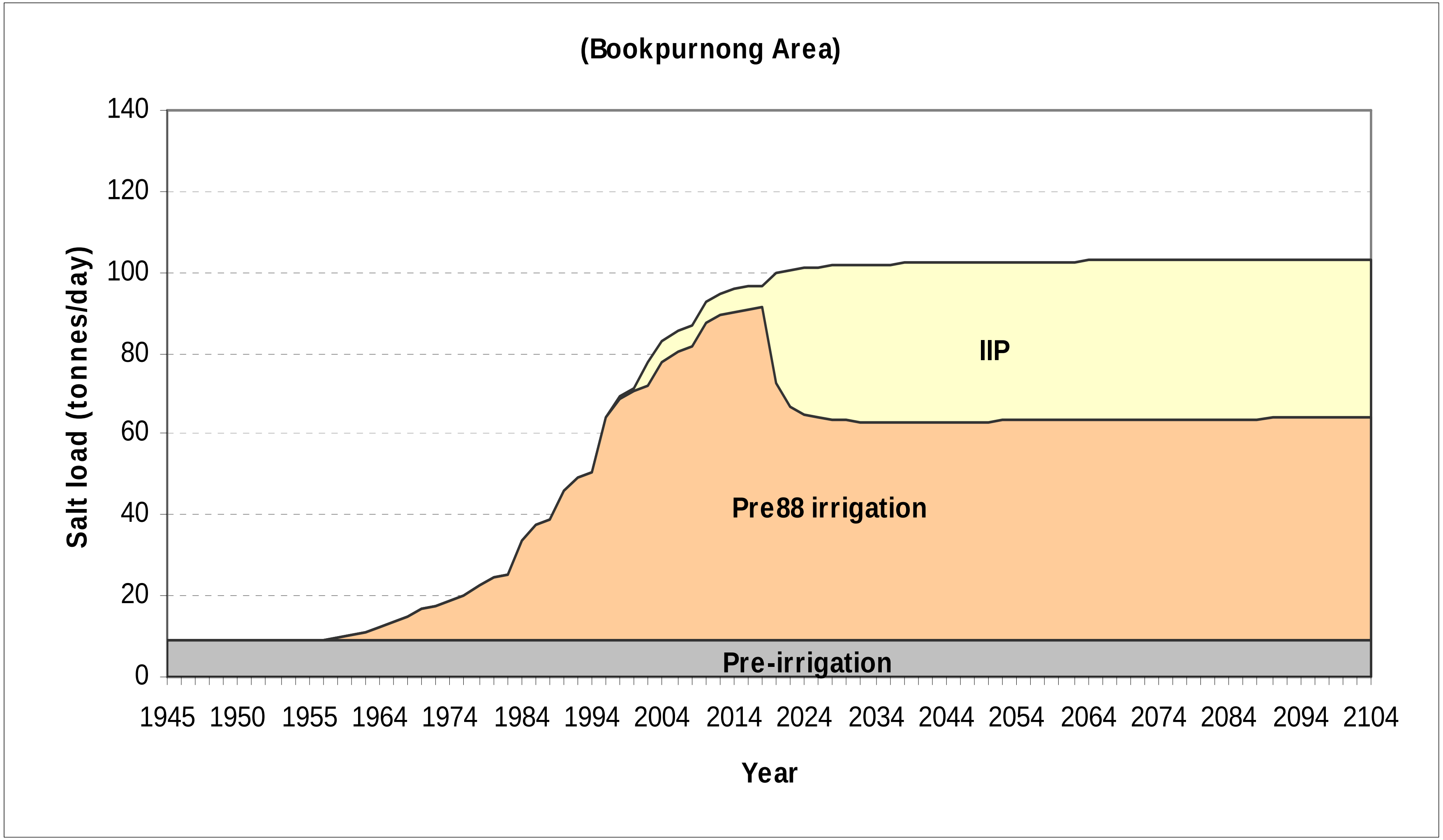
Appendix C-2-1a Predicted total salt load (tonnes/day) entering the River Murray in all Scenarios (Bookpurnong Area)

day	year	S1	S2	S3	S4	S5	S6	S7
22995	2018	9.2		96.8	91.1	88.8	148.4	38.0
23725	2020	9.2		99.6	72.6	70.1	130.1	26.0
24455	2022	9.2		100.6	67.0	64.3	129.0	22.1
25185	2024	9.2		101.0	64.9	61.9	141.7	20.5
25915	2026	9.2		101.3	64.0	60.7	147.6	19.6
26645	2028	9.2		101.5	63.5	60.0	150.8	19.1
27375	2030	9.2		101.7	63.2	59.5	154.2	18.8
28105	2032	9.2		101.8	63.1	59.2	157.0	18.5
28835	2034	9.2		101.9	63.0	59.0	159.7	18.3
29565	2036	9.2		102.0	63.0	58.8	162.0	18.2
30295	2038	9.2		102.1	63.0	58.7	163.6	18.1
31025	2040	9.2		102.2	63.0	58.5	165.1	18.0
31755	2042	9.2		102.3	63.0	58.4	166.5	17.9
32485	2044	9.2		102.3	63.1	58.4	167.5	17.8
33215	2046	9.2		102.4	63.1	58.3	168.3	17.7
33945	2048	9.2		102.4	63.2	58.2	168.9	17.7
34675	2050	9.2		102.5	63.2	58.2	169.3	17.6
35405	2052	9.2		102.5	63.2	58.1	169.7	17.6
36135	2054	9.2		102.6	63.3	58.1	170.0	17.5
36865	2056	9.2		102.6	63.3	58.1	170.3	17.5
37595	2058	9.2		102.7	63.4	58.0	170.5	17.5
38325	2060	9.2		102.7	63.4	58.0	170.7	17.4
39055	2062	9.2		102.7	63.4	58.0	170.9	17.4
39785	2064	9.2		102.8	63.5	58.0	171.1	17.4
40515	2066	9.2		102.8	63.5	57.9	171.2	17.4
41245	2068	9.2		102.8	63.5	57.9	171.4	17.4
41975	2070	9.2		102.9	63.6	57.9	171.5	17.4
42705	2072	9.2		102.9	63.6	57.9	171.6	17.3
43435	2074	9.2		102.9	63.6	57.9	171.7	17.3
44165	2076	9.2		102.9	63.7	57.9	171.8	17.3
44895	2078	9.2		103.0	63.7	57.9	171.9	17.3
45625	2080	9.2		103.0	63.7	57.9	172.0	17.3
46355	2082	9.2		103.0	63.8	57.9	172.1	17.3
47085	2084	9.2		103.0	63.8	57.9	172.1	17.3
47815	2086	9.2		103.1	63.8	57.9	172.2	17.3
48545	2088	9.2		103.1	63.8	57.9	172.3	17.3
49275	2090	9.2		103.1	63.9	57.9	172.3	17.3
50005	2092	9.2		103.1	63.9	57.9	172.4	17.3
50735	2094	9.2		103.1	63.9	57.9	172.5	17.3
51465	2096	9.2		103.2	63.9	57.9	172.5	17.3
52195	2098	9.2		103.2	63.9	57.9	172.6	17.3
52925	2100	9.2		103.2	64.0	57.9	172.6	17.3
53655	2102	9.2		103.2	64.0	57.9	172.6	17.3
54385	2104	9.2		103.2	64.0	57.9	172.7	17.3

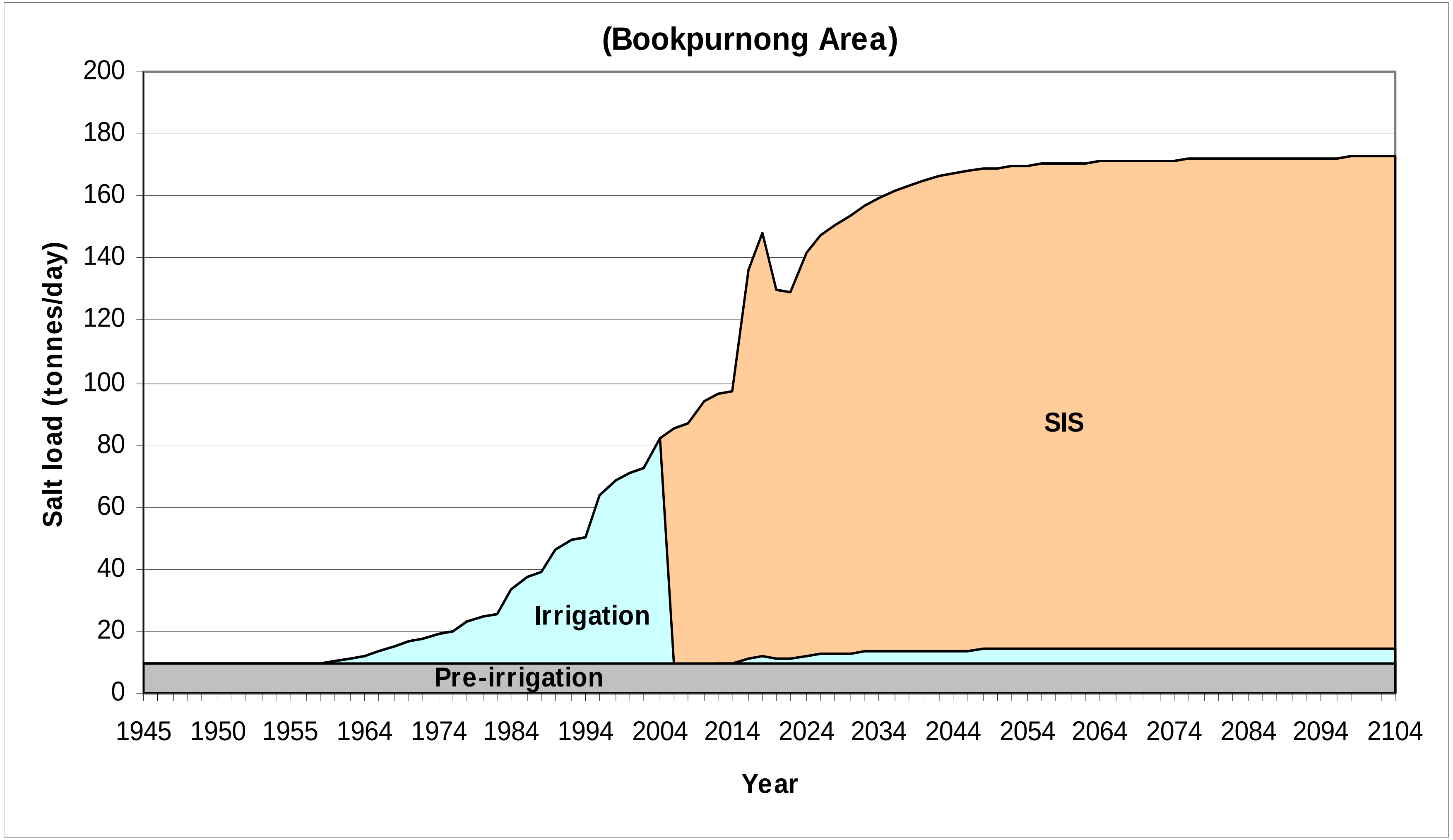
Appendix C-2-1b Predicted total salt load (tonnes/day) entering the River Murray in all Scenarios (Bookpurnong Area)



Appendix C-2-2 Graph of predicted total salt load (tonnes/day) entering the River Murray in all Scenarios (Bookpurnong Area)



Appendix C-2-3 Predicted salt loads entering the River Murray (Bookpurnong Area pre88-irrigation)



Appendix C-2-4 Modelled SIS benefits (Loxton Area)

Time	Model results S3	Model results S4	Model results S5	Model results S6	Model results S7	Model results S8	30 year Average (S3)	30 year Average (S4)	30 year Average (S5)	30 year Average (S6)	30 year Average (S7)	30 year Average (S8)
2004	82.9	77.9	77.8	81.9	77.8	81.9						
2005	84.2	79.2	79.0	83.7	56.4	45.4						
2006	85.5	80.5	80.1	85.5	35.1	9.0						
2007	86.2	81.1	80.6	86.2	34.5	8.9						
2008	86.9	81.7	81.0	86.9	33.9	8.8						
2009	89.8	84.5	83.7	90.4	35.4	9.0						
2010	92.7	87.3	86.4	93.9	36.9	9.1						
2011	93.8	88.3	87.2	95.0	37.4	9.1						
2012	94.8	89.3	88.0	96.2	37.9	9.2						
2013	95.3	89.8	88.3	96.6	38.0	9.2						
2014	95.8	90.2	88.6	97.1	38.1	9.2						
2015	96.1	90.5	88.7	116.5	38.1	10.4						
2016	96.4	90.7	88.8	135.9	38.1	11.5						
2017	96.6	90.9	88.8	142.1	38.0	11.8						
2018	96.8	91.1	88.8	148.4	38.0	12.2						
2019	98.2	81.9	79.5	139.3	32.0	11.7						
2020	99.6	72.6	70.1	130.1	26.0	11.3						
2021	100.1	69.8	67.2	129.6	24.1	11.3						
2022	100.6	67.0	64.3	129.0	22.1	11.3						
2023	100.8	66.0	63.1	135.4	21.3	11.8						
2024	101.0	64.9	61.9	141.7	20.5	12.2						
2025	101.2	64.4	61.3	144.7	20.1	12.4						
2026	101.3	64.0	60.7	147.6	19.6	12.5						
2027	101.4	63.7	60.3	149.2	19.4	12.6						
2028	101.5	63.5	60.0	150.8	19.1	12.7						
2029	101.6	63.3	59.8	152.5	19.0	12.9						
2030	101.7	63.2	59.5	154.2	18.8	13.0						
2031	101.7	63.1	59.4	155.6	18.7	13.1						
2032	101.8	63.1	59.2	157.0	18.5	13.2						
2033	101.9	63.1	59.1	158.3	18.4	13.3						
2034	101.9	63.0	59.0	159.7	18.3	13.4	**96.5**	**75.8**	**73.6**	**124.9**	**30.6**	**14.6**
2035	102.0	63.0	58.9	160.8	18.3	13.4						
2036	102.0	63.0	58.8	162.0	18.2	13.5						
2037	102.1	63.0	58.7	162.8	18.1	13.6						
2038	102.1	63.0	58.7	163.6	18.1	13.6						
2039	102.1	63.0	58.6	164.3	18.0	13.7	**99.2**	**73.0**	**70.2**	**137.4**	**25.9**	**11.8**
2040	102.2	63.0	58.5	165.1	18.0	13.7						
2041	102.2	63.0	58.5	165.8	17.9	13.8						
2042	102.3	63.0	58.4	166.5	17.9	13.8						
2043	102.3	63.1	58.4	167.0	17.8	13.9						
2044	102.3	63.1	58.4	167.5	17.8	13.9	**100.6**	**69.0**	**65.6**	**149.0**	**22.8**	**12.6**

Appendix C-2-5a Predicted annual and average salt load (tonnes/day) entering the River Murray in some Scenarios (Bookpurnong Area)

Time	Model results S3	Model results S4	Model results S5	Model results S6	Model results S7	Model results S8	30 year Average (S3)	30 year Average (S4)	30 year Average (S5)	30 year Average (S6)	30 year Average (S7)	30 year Average (S8)
2045	102.3	63.1	58.3	167.9	17.8	13.9						
2046	102.4	63.1	58.3	168.3	17.7	13.9						
2047	102.4	63.1	58.3	168.6	17.7	14.0						
2048	102.4	63.2	58.2	168.9	17.7	14.0						
2049	102.5	63.2	58.2	169.1	17.6	14.0	**101.6**	**64.6**	**60.7**	**155.6**	**19.5**	**13.1**
2050	102.5	63.2	58.2	169.3	17.6	14.0						
2051	102.5	63.2	58.2	169.5	17.6	14.0						
2052	102.5	63.2	58.1	169.7	17.6	14.0						
2053	102.6	63.3	58.1	169.8	17.6	14.0						
2054	102.6	63.3	58.1	170.0	17.5	14.0	**102.0**	**63.3**	**59.0**	**161.5**	**18.3**	**13.5**
2055	102.6	63.3	58.1	170.1	17.5	14.1						
2056	102.6	63.3	58.1	170.3	17.5	14.1						
2057	102.6	63.3	58.0	170.4	17.5	14.1						
2058	102.7	63.4	58.0	170.5	17.5	14.1						
2059	102.7	63.4	58.0	170.6	17.5	14.1	**102.3**	**63.1**	**58.5**	**165.3**	**17.9**	**13.7**
2060	102.7	63.4	58.0	170.7	17.4	14.1						
2061	102.7	63.4	58.0	170.8	17.4	14.1						
2062	102.7	63.4	58.0	170.9	17.4	14.1						
2063	102.7	63.4	58.0	171.0	17.4	14.1						
2064	102.8	63.5	58.0	171.1	17.4	14.1	**102.4**	**63.2**	**58.3**	**167.8**	**17.7**	**13.9**
2065	102.8	63.5	57.9	171.1	17.4	14.1						
2066	102.8	63.5	57.9	171.2	17.4	14.1						
2067	102.8	63.5	57.9	171.3	17.4	14.1						
2068	102.8	63.5	57.9	171.4	17.4	14.1						
2069	102.8	63.6	57.9	171.4	17.4	14.1	**102.5**	**63.3**	**58.1**	**169.4**	**17.6**	**14.0**
2070	102.9	63.6	57.9	171.5	17.4	14.2						
2071	102.9	63.6	57.9	171.5	17.3	14.2						
2072	102.9	63.6	57.9	171.6	17.3	14.2						
2073	102.9	63.6	57.9	171.7	17.3	14.2						
2074	102.9	63.6	57.9	171.7	17.3	14.2	**102.7**	**63.4**	**58.0**	**170.3**	**17.5**	**14.1**
2075	102.9	63.7	57.9	171.8	17.3	14.2						
2076	102.9	63.7	57.9	171.8	17.3	14.2						
2077	103.0	63.7	57.9	171.8	17.3	14.2						
2078	103.0	63.7	57.9	171.9	17.3	14.2						
2079	103.0	63.7	57.9	171.9	17.3	14.2	**102.7**	**63.5**	**58.0**	**170.9**	**17.4**	**14.1**
2080	103.0	63.7	57.9	172.0	17.3	14.2						
2081	103.0	63.7	57.9	172.0	17.3	14.2						
2082	103.0	63.8	57.9	172.1	17.3	14.2						
2083	103.0	63.8	57.9	172.1	17.3	14.2						
2084	103.0	63.8	57.9	172.1	17.3	14.2	**102.8**	**63.5**	**57.9**	**171.3**	**17.4**	**14.1**

Appendix C-2-5b Predicted annual and average salt load (tonnes/day) entering the River Murray in some Scenarios (Bookpurnong Area)

Time	Model results S3	Model results S4	Model results S5	Model results S6	Model results S7	Model results S8	30 year Average (S3)	30 year Average (S4)	30 year Average (S5)	30 year Average (S6)	30 year Average (S7)	30 year Average (S8)
2085	103.0	63.8	57.9	172.2	17.3	14.2						
2086	103.1	63.8	57.9	172.2	17.3	14.2						
2087	103.1	63.8	57.9	172.2	17.3	14.2						
2088	103.1	63.8	57.9	172.3	17.3	14.2						
2089	103.1	63.8	57.9	172.3	17.3	14.2	**102.9**	**63.6**	**57.9**	**171.6**	**17.3**	**14.2**
2090	103.1	63.9	57.9	172.3	17.3	14.2						
2091	103.1	63.9	57.9	172.4	17.3	14.2						
2092	103.1	63.9	57.9	172.4	17.3	14.2						
2093	103.1	63.9	57.9	172.4	17.3	14.2						
2094	103.1	63.9	57.9	172.5	17.3	14.2	**103.0**	**63.7**	**57.9**	**171.9**	**17.3**	**14.2**
2095	103.1	63.9	57.9	172.5	17.3	14.2						
2096	103.2	63.9	57.9	172.5	17.3	14.2						
2097	103.2	63.9	57.9	172.5	17.3	14.2						
2098	103.2	63.9	57.9	172.6	17.3	14.2						
2099	103.2	64.0	57.9	172.6	17.3	14.2	**103.0**	**63.8**	**57.9**	**172.1**	**17.3**	**14.2**
2100	103.2	64.0	57.9	172.6	17.3	14.3						
2101	103.2	64.0	57.9	172.6	17.3	14.3						
2102	103.2	64.0	57.9	172.6	17.3	14.3						
2103	103.2	64.0	57.9	172.7	17.3	14.3						
2104	103.2	64.0	57.9	172.7	17.3	14.3	**103.1**	**63.8**	**57.9**	**172.3**	**17.3**	**14.2**

Appendix C-2-5c Predicted annual and average salt load (tonnes/day) entering the River Murray in some Scenarios (Bookpurnong Area)

30 year averages (tonnes/day)-Bookpurnong Area						
Year (start)	Year (end)	Mallee (SST)	Pre88-IIE (S4-S1)	IIE on Pre88 (S3 - S4)	Post 88 (S6-S4)	SIS (S6-S8)
2004	2034	9.2	66.6	20.7	49.1	110.2
2009	2039	9.2	63.8	26.1	64.4	125.6
2014	2044	9.2	59.8	31.6	80.0	136.4
2019	2049	9.2	55.4	37.0	91.0	142.5
2024	2054	9.2	54.1	38.8	98.3	148.1
2029	2059	9.2	53.9	39.1	102.2	151.6
2034	2064	9.2	54.0	39.2	104.6	153.9
2039	2069	9.2	54.1	39.3	106.1	155.3
2044	2074	9.2	54.2	39.3	106.9	156.2
2049	2079	9.2	54.2	39.3	107.4	156.8
2054	2084	9.2	54.3	39.3	107.8	157.2
2059	2089	9.2	54.4	39.3	108.0	157.5
2064	2094	9.2	54.5	39.3	108.2	157.7
2069	2099	9.2	54.6	39.3	108.3	157.9
2074	2104	9.2	54.6	39.2	108.4	158.0

Morgan in-river EC equivalent (Bookpurnong Area)						
Year (start)	Year (end)	Mallee (SST)	Pre88-IIE (S4-S1)	IIE on Pre88 (S3 - S4)	Post 88 (S6-S4)	SIS (S6-S8)
2004	2034	2.0	14.6	4.5	10.8	24.3
2009	2039	2.0	14.0	5.8	14.2	27.6
2014	2044	2.0	13.2	7.0	17.6	30.0
2019	2049	2.0	12.2	8.1	20.0	31.4
2024	2054	2.0	11.9	8.5	21.6	32.6
2029	2059	2.0	11.9	8.6	22.5	33.4
2034	2064	2.0	11.9	8.6	23.0	33.9
2039	2069	2.0	11.9	8.6	23.3	34.2
2044	2074	2.0	11.9	8.6	23.5	34.4
2049	2079	2.0	11.9	8.6	23.6	34.5
2054	2084	2.0	12.0	8.6	23.7	34.6
2059	2089	2.0	12.0	8.6	23.8	34.6
2064	2094	2.0	12.0	8.6	23.8	34.7
2069	2099	2.0	12.0	8.6	23.8	34.7
2074	2104	2.0	12.0	8.6	23.9	34.8

Appendix C-2-6 Predicted salt load (tonnes/day) entering the River Murray and in River EC benefit at Morgan (Bookpurnong Area)