Guildford Grammar Foreshore Management Plan





Swan River Trust Report No. 2 1991



GUILDFORD GRAMMAR FORESHORE MANAGEMENT PLAN

A plan prepared by Greg Davis in consultation with Guildford Grammar.

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FOREWORD

The Swan River is one of this State's most precious assets. The people of Western Australia and visitors from around the world appreciate its natural qualities.

There are growing pressures on the river and its foreshores and in recognition of these pressures the State Government passed the Swan River Trust Act in 1988. This Act allows the Swan River Trust to enter into agreements with landowners to help protect their riverside boundaries and to enhance the quality of the river.



I congratulate Guildford Grammar, one of Perth's most historic schools, for being the first landowner to enter such an agreement. This Management Plan will provide a basis for the care of their riverside boundary and will be used as an example of what can be ahcieved with co-operation between State Government agencies and private landowners.

BOB PEARCE MLA MINISTER FOR THE ENVIRONMENT

The Swan River Trust is very pleased to be associated with the work Guildford Grammar has agreed to undertake on their riverside boundary. The Trust believes that this work will serve as an example to other landowners of property abutting the Swan River and hopes that this is only the first of many such cooperative undertakings. Guildford Grammar School has a proud history and this project will further add to its reputation as one of the State's leading schools.



JF HOWSON OBE CHAIRMAN - SWAN RIVER TRUST

1. Background

Guildford Grammar is one of Perth's oldest schools. Established in 1896, part of the old school is vested in the National Trust. The current site was developed in 1900. One thousand one hundred and thirty students, of which three hundred and eighty are boarders, currently attend the school.

The campus includes a great deal of low lying land abutting the Swan River. It is part of this land which comprises a narrow strip (approximately 20 m in width) immediately adjacent the river bank and running the length of the property, which is the subject of this management plan.



2. Introduction

i) Recommendation 57 of the Swan River Management Strategy requires the identification and monitoring of areas of the river at risk from erosion and implement a long term erosion control program.

Some of the measures recommended are:

- Foreshore stabilization with native vegetation
- Tree planting adjacent to the river
- Adoption and implementation of local government bylaws to prevent livestock from damaging the river banks and vegetation.
- ii) Section 11 of the Swan River Trust Act (1988) provides for the Trust to enter into agreements with private land owners "for the control or management of that land as if it were part of the management area".

The Swan River Trust and Guildford Grammar have entered into an agreement in accordance with Section 11 of the Swan River Trust Act, whereby funds for foreshore restoration are provided by the Trust. The School and other organisations, including Men of the Trees, will undertake the works.

The banks of the Swan River are subject to varying pressures which may result in loss of foreshore vegetation causing subsequent erosion. Guildford Grammar has a long tradition of running stock, (most recently horses), on their river flats paddocks. They contribute to the control of various species of weeds. However, the stock and people in boats pulling up on the banks, have caused some loss of foreshore vegetation. In particular, damage and subsequent loss of fringing sedges, greatly increases in the rate of bank regression. This in turn exposes native trees, growing to the rear of the sedges, to environmentally unfavourable conditions.

The school has undertaken numerous tree planting programs which are to be commended. One aspect of these plantings will be to establish copses away from the river bank, thus reducing the need for the horses to seek shade on the banks.

3. Aim of the Management Plan

The main aim of this Management Plan is to revegetate, with native species, those parts of the banks which have become degraded.

To achieve this, shade must be provided away from the river banks in those paddocks which provide no alternative shelter for the horses. Because good shade trees take many years to grow, it will be some time before this aim can be reached.



4. Management Strategy

It is recommended that a program of planting copses away from the river bank to provide shade for horses should be undertaken during the 1991 growing season. In 1990 approximately twelve hundred seedlings were planted on the river bank by Men of the Trees. The species used were Eucalyptus rudis, Melaleuca raphiophylla and Casuarina obesa. School staff prepared the area by:

- application of a non-bioaccumulating herbicide
- soil loosening
- construction of electric fencing to exclude stock, preventing trampling and opportunistic grazing of seedlings.
 Approximately half the school's river frontage was fenced off and planted (as shown on the attached map).

Signs will be deployed to warn people away from the fencing. All funds were provided by the Swan River Trust.

The following recommendations should negate the need for horses to access the banks by 1995.

i) Maintain weed control, as required, in area planted during 1990. Continue to exclude stock.

- ii) Establish further shade areas within the paddocks. Quick growing species (not necessarily endemic) as selected by the school are recommended. Planting to commence during the 1991 season.
- iii) As alternative shade areas become available, recommence fencing and revegetating remainder of unprotected river bank. Plant only endemic species on the bank. The main species used should be *Melaleuca cuticularis*, *Melaleuca raphiophylla*, *Casuarina obesa* and *Eucalyptus rudis*.
- iv) Transplant sedges (*Juncus kraussii*) to areas of the bank where erosion, caused by boat waves and landings are evident. Provide initial protection for sedges by the deployment of battering boards to deflect boat wash.
- v) The Swan River Trust to continue to provide funds and advice for implementation of the plan while the school and/or other interest groups carry out the works.

