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**Northern Adelaide and
Barossa Catchment Water
Management Board**

Securing our Water Future

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Managing Groundwater in the Northern Adelaide Plains

A Review of the Plan

This information is provided to licence holders and other interested stakeholders in the Northern Adelaide Plains as part of the development of a new plan to manage groundwater in the region.

REVIEW OF GROUNDWATER MANAGEMENT IN THE NORTHERN ADELAIDE PLAINS

The volume of groundwater that can be allocated for use in the Northern Adelaide Plains is controlled through licences, which are issued by the Department for Water, Land and Biodiversity Conservation (DWLBC). Water licences can be transferred or traded in some instances.

The 'rules' to issue licences and to decide on the transfer of a licence and/or water allocation are outlined in the water allocation plan. A new licence is only issued when an allocation becomes available through a transfer.

The Board is required (under the Water Resource Act) to review this plan every five years.

Process for the Review

In late 2003 the Board reviewed the current water allocation plan for the Northern Adelaide Plains.

The review included consultation with the local community through a series of small group meetings, and one-on-one meetings with growers.

Growers were asked to identify what they thought the strengths and weaknesses of the current plan

were, and what they saw as the opportunities and threats for the future management of the groundwater resource.

Outcome of the Review

The review recommended that a new plan to manage groundwater in the Northern Adelaide Plains be developed.

The Catchment Board has started the process to develop a new plan. A joint committee of the Catchment Board and the Virginia Horticulture Centre is guiding the process.

The review also raised a number of issues in relation to the groundwater resources of the Northern Adelaide Plains.

This information sheet summarises the issues that were raised, and outlines the actions that are being taken to address those issues. Some of these issues will be addressed by the new plan, and some are being addressed through other projects and programs.

The issues raised have been broadly grouped under the following headings:

- ◆ Water availability and water quality
- ◆ Water allocation and use
- ◆ Water transfers
- ◆ Imported water (Reclaimed water)
- ◆ Monitoring of the resource
- ◆ Other issues





KEY ISSUES RAISED - AND HOW THEY ARE BEING ADDRESSED

Growers in the Northern Adelaide Plains raised a number of concerns about the groundwater resources in the area.

These concerns are being addressed in a wide range of ways, by a number of groups working across the Northern Adelaide Plains.

The following sections provide a summary of the issues raised, and outline some of the actions that are either planned or underway that will address that issue.

Water Availability and Water Quality

1 Growers want to better understand the current state of the groundwater resource, including if water levels are declining.

- The Catchment Board is reviewing the long and short-term trends in water level and salinity in the Northern Adelaide Plains.
- This information is being reviewed with a range of other information such as rainfall and water use.
- The information will be used to assess the state of the groundwater resource and identify if there are any declines in water level.
- Once the information is available it will be provided to all growers in the region through fact sheets and presentations at meetings.

2 Growers are concerned about the potential impacts of the Penrice water extraction on the T1 aquifer.

- The Catchment Board is reviewing the current state of groundwater in the Northern Adelaide Plains.
- This review will include an assessment on the state of the T1 aquifer and any potential impacts of Penrice extractions.
- Once the information is available it will be provided to all growers in the region through fact sheets and presentations at meetings.

3 Some growers have noticed an increase in water salinity. There is a need to understand the salinity trends as well as water level trends.

- The Catchment Board is reviewing the long and short-term trends in water level and salinity in the Northern Adelaide Plains.
- This information will help to identify if groundwater salinity is increasing, and where it may be increasing.
- Once the information is available it will be provided to all growers in the region through fact sheets and presentations at meetings.

4 Leaky wells are a major concern for growers.

- The Catchment Board has been involved in a project to identify and repair or replace leaky wells for a number of years. Eighty-five bores were repaired or replaced in stage 1 of the project.
- The Board, in association with the Virginia Horticulture Centre has recently received further grant funding to provide assistance to growers to fix leaky wells.
- Growers who think they may have a leaky well can contact the Board to find out what assistance may be available to them.

Water Allocation and Use

1 Growers want clarification on the penalties and costs associated with over use of the resource.

The state government sets penalties. In the 2003-2004 financial year, the following penalties for over use applied:

- Use of 100% - 110% of allocation; 32 ¢/KL
- Use of 110% and over; \$1.07/KL

2 Growers do not understand the reasons for previous allocation decisions, and are nervous about the security of their allocation.

- The Catchment Board has started the process of developing a new water allocation plan for the Northern Adelaide Plains.
- A joint committee of the Catchment Board and the Virginia Horticulture Centre is guiding the development of the plan.



- ◆ The committee has commissioned a hydrogeologist to assess the sustainable level of groundwater extraction for the Northern Adelaide Plains.
- ◆ Once there is a technical understanding of sustainable extraction levels, the committee will provide the community with this information.
- ◆ If the current level of extraction is not sustainable, the committee will work with the community to develop solutions and to ensure the resource is available for use into the future.

3 Growers would like a rollover or a credit scheme that allows unused allocations from one year to be carried over to the next year.

- ◆ As part of the development of a new water allocation plan, all the 'rules' for the allocation and transfer of water will be reviewed.
- ◆ Plans in other regions do include credit schemes.
- ◆ For example, in Tintinara/Coonalpyn (in the Upper South East) growers are able to carry over part of their unused allocation to the next year.
- ◆ It may be possible to include a credit scheme in the new plan.
- ◆ Options for a carryover scheme will be discussed with the community during the consultation to develop a new plan.

Water Transfers

1 Some growers have been unable to expand operations because they can't get enough water, and can't transfer water into areas of high local water use.

- ◆ As part of the development of a new water allocation plan, all the 'rules' for the allocation and transfer of water will be reviewed.
- ◆ This will include reviewing the existing transfer rules.
- ◆ Options for transfers will be discussed with the community during the consultation to develop a new plan.

2 Under the current rules, it is difficult to amalgamate some licences.

- ◆ Amalgamations of licences are addressed as transfers in the licencing system.

- ◆ As mentioned above transfer rules will be reviewed during the development of a new plan.

3 Licence holders fear temporary transfers, in case this amount of water is taken from them in the future.

- ◆ As part of the development of a new water allocation plan, all the 'rules' for the allocation and transfer of water will be reviewed.
- ◆ It is likely that options for temporary transfers will continue to be supported in a new plan, provided the transfer does not impact on the groundwater resource.

4 The ability to temporarily transfer water is essential

- ◆ As part of the development of a new water allocation plan, all the 'rules' for the allocation and transfer of water will be reviewed.
- ◆ The ability to temporarily transfer will continue, provided the transfer does not impact on the groundwater resource.

5 It is often difficult to obtain small volumes of water on transfer.

- ◆ Availability of water for transfer (including small volumes) is a supply and demand issue.
- ◆ As mentioned previously, a new plan will review the 'rules' for water transfers.

6 The application process for a transfer is too complicated and takes too long

- ◆ The Department of Water, Land and Biodiversity Conservation (DWLBC) manage the application process for the transfer of water allocations.
- ◆ The Catchment Board is working with the DWLBC to improve the administrative processes, which should shorten the time taken to process applications.
- ◆ The new plan should more clearly describe the rules for allocations and transfers, which should also simplify and speed up the application process.

Imported Water (Reclaimed Water)

1 A number of growers fear selling their groundwater allocations and becoming solely reliant on reclaimed water.



- ◆ The quantity and quality of Reclaimed water available for use in the Northern Adelaide Plains is confirmed in various licences and contract agreements.

- ◆ It is an individual business decision for growers, where they chose to source water.

② Growers would like feedback on whether the use of Reclaimed water has improved the condition of the groundwater resource.

- ◆ The Catchment Board is reviewing the current state of groundwater in the Northern Adelaide Plains.
- ◆ This review will include as assessment of how the use of Reclaimed water has changed groundwater use and the state of the groundwater resource.
- ◆ Once the information is available it will be provided to all growers in the region through fact sheets and presentations at meetings.

Monitoring

① Growers felt that they were not provided with enough feedback on groundwater trends from monitoring results.

- ◆ In the past limited information has been provided to growers.
- ◆ Last year the Catchment Board in association with the DWLBC produced a brochure that summarised the findings of groundwater monitoring in the Northern Adelaide Plains.
- ◆ This brochure was mailed to all licenced water users with their levy notices.
- ◆ Regular information updates will be provided to growers in the future.

Other Issues

A number of issues were raised during the consultation that cannot be addressed through the plan. Other projects are addressing these issues.

① Growers are concerned about poor drainage and waterlogging in some areas.

- ◆ The Virginia Horticulture Centre has recently received funding from the National Landcare Program for a three-year land and water management project.
- ◆ An important part of this project is to find better ways to manage drainage on the Northern Adelaide Plains.

- ◆ The project is in the early stages, and further information will be provided to the community as it becomes available

② Some growers feel that there haven't been enough investigations into the potential capture and use of stormwater, and that there are opportunities for better use of stormwater.

- ◆ There are likely to be opportunities for better use of stormwater in the Northern Adelaide Plains.
- ◆ Further investigations are required.
- ◆ The Land and Water Management Project managed by the Virginia Horticulture Centre, is likely to investigate stormwater management as part of drainage management.
- ◆ There are also a number of Aquifer, Storage and Recovery (ASR) projects operating in the Northern Adelaide Plains, that capture stormwater and store it underground for later use.
- ◆ Salisbury Council manages many of these ASR projects.
- ◆ The Board continues to work with local government on the improved management of stormwater.

③ Some growers have concern over the quality of the Reclaimed Water.

- ◆ The Reclaimed treatment plant is required to produce water of a particular quality. For example TDS must be below 1,500 mg/L.
- ◆ The plan cannot control this issue.

④ Growers are concerned that the "take or pay" clause in reclaimed water agreements will result in water being taken and not used (to avoid penalty costs) resulting in waterlogging.

- ◆ Clauses in the reclaimed water contract cannot be managed through the plan.
- ◆ Contract clauses need to be negotiated with the water supplier.

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