



Loddon Highlands  
Water Supply Protection Area

# Groundwater user survey report

Final

Date: 20<sup>th</sup> November 2011  
Document Number: 3272528

## Document History and Distribution

### Version(s)

<b>Version</b>	<b>Date</b>	<b>Author(s)</b>	<b>Notes</b>
Draft A	14/09/2011	Faye Williamson	
Draft B	18/10/2011	Bob Knowles	Review by B Cossens, Review by S Cowan
Final	20/11/2011	Bob Knowles	

### Distribution

<b>Version</b>	<b>Date</b>	<b>Recipient(s)</b>	<b>Notes</b>
Draft B	28/10/2011	Loddon Highlands WSPA consultative committee	Released to committee for comments
Final	20/11/2011	G-MW webpage	

## Table of Contents

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	AIM.....	1
1.2	BACKGROUND .....	1
<b>2</b>	<b>METHODOLOGY.....</b>	<b>2</b>
<b>3</b>	<b>RESULTS AND DISCUSSION.....</b>	<b>3</b>
3.1	RESPONSE TO SURVEY .....	3
3.2	MONITORING .....	4
3.3	GROUNDWATER RESOURCES .....	4
3.3.1	<i>Access to groundwater</i> .....	5
3.3.2	<i>Groundwater interference</i> .....	5
3.3.3	<i>Springs</i> .....	6
3.4	DOMESTIC AND STOCK SUPPLY.....	6
3.5	GROUNDWATER QUALITY .....	7
3.6	IMPACT OF PREVIOUS MANAGEMENT .....	7
3.7	BOUNDARY .....	8
3.8	FUTURE MANAGEMENT.....	9
3.8.1	<i>Permanent trade</i> .....	9
3.8.2	<i>Carryover</i> .....	9
3.9	MAIN ISSUES AND EXPECTATIONS OF NEW MANAGEMENT PLAN.....	10
3.10	COMMUNICATION OF PLAN UPDATES .....	11
3.11	GENERAL COMMENTS .....	11
<b>4</b>	<b>CONCLUSIONS.....</b>	<b>13</b>
<b>5</b>	<b>RECOMMENDATIONS.....</b>	<b>14</b>
	<b>APPENDIX A .....</b>	<b>15</b>

---

# 1 Introduction

The Loddon Highlands Water Supply Protection Area (WSPA) was declared in June 2010, following a review of the former Spring Hill WSPA groundwater management plan.

A consultative committee was appointed by the Minister for Water in September 2010 to draft a groundwater management plan for the area.

The consultative committee developed a communications strategy aimed at engaging the relevant stakeholders in the plan.

The communications strategy was developed to best inform groundwater users in the area on the progress of the development of the groundwater management plan and to facilitate opportunities for groundwater users in the Loddon Highlands WSPA to provide input to the draft plan.

A part of the communications strategy was to undertake a survey of all groundwater licence holders within the Loddon Highlands WSPA.

This report documents the outcomes from the survey which will provide valuable community input and assist the consultative committee in the development of the draft plan.

## 1.1 Aim

The aim of the survey was to:

- engage groundwater licence holders in the Loddon Highlands WSPA;
- gauge issues and concerns with previous and current management arrangements, and;
- to gather information which would inform how management can be improved under a new groundwater management plan.

This report is not intended to respond to groundwater users concerns or provide answers to issues raised. Rather, it is intended to summarise groundwater user perceptions of previous, current and future management for the Loddon Highlands WSPA.

## 1.2 Background

The Loddon Highlands WSPA incorporates the former Spring Hill and Upper Loddon WSPAs, as well as some previously unincorporated area.

The former Spring Hill WSPA was declared in 1999 and had a groundwater management plan approved for the area in 2002. The Spring Hill plan established management zones for transfer of water and prohibited new entitlements. A monitoring and metering program was established to assist with reporting requirements

A review of the management plan found that the then Spring Hill WSPA should be extended.

The Upper Loddon WSPA was declared in 2001 however a groundwater management plan was not developed.

---

## 2 Methodology

The groundwater user survey was posted to all groundwater licence holders in the Loddon Highlands WSPA (160), following a public meeting that was held in Clunes on the 4<sup>th</sup> August 2011.

Along with the user survey, notes from the public meeting were posted to all licence holders to ensure survey respondents were kept informed about the development of the draft management plan.

The consultative committee agreed that the user survey should be distributed after the community had an opportunity to be presented with information describing the current technical understanding of the groundwater system.

A copy of the survey (Appendix 1) was also available at the public meeting in an attempt to gain input from domestic and stock users who do not hold a groundwater licence. The public meeting was advertised in the Ballarat Courier and the Maryborough Advertiser.

The survey questions were structured to gauge opinions about the effectiveness of previous and current management arrangements and what groundwater licence holders expected from a new management plan.

The questions targeted:

- monitoring
- groundwater resources
- groundwater quality
- management boundaries
- groundwater dependent ecosystems and assets
- transfers
- carryover
- main issues and expectations of a new plan
- communication

---

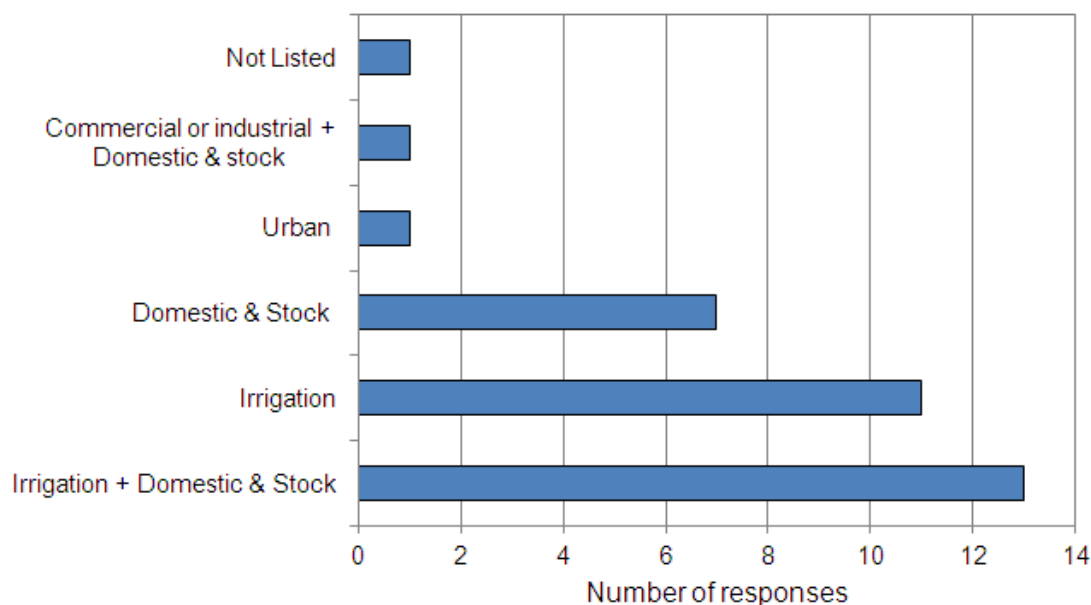
### 3 Results and discussion

#### 3.1 Response to survey

A total of 34 responses were received; 7 domestic and stock, 1 urban and 24 irrigation users, 1 Industrial or commercial and only 1 who didn't state their user type (figure 1). It should be noted that 4 of the responses were from members of the Loddon Highlands WSPA consultative committee.

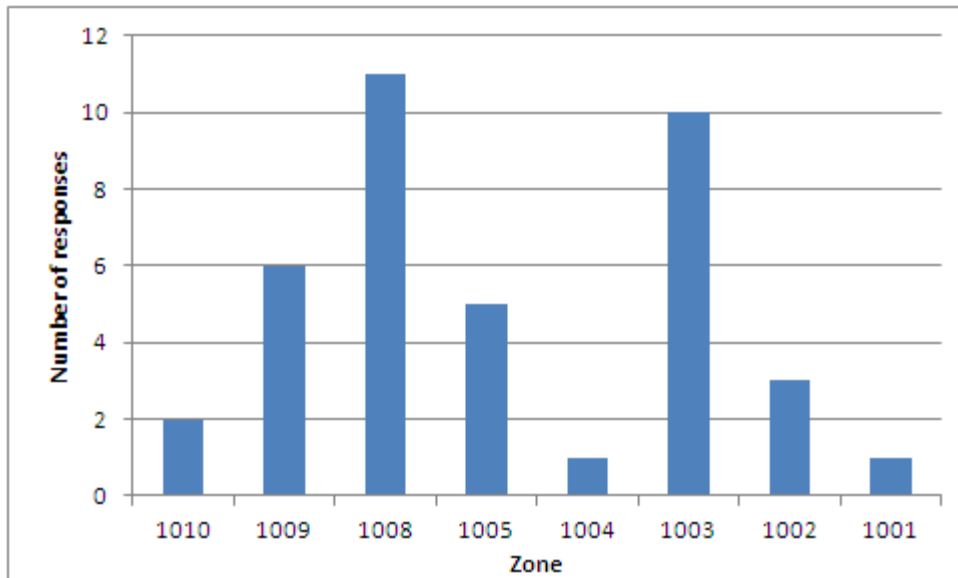
The response received is considered reasonable and reflects the level of ongoing community interest in the management of groundwater resources in the area.

It should be noted that groundwater levels have increased significantly in the past 12 months in response to high recharge rainfall events. In addition, groundwater use in 2010/11 season was the lowest on record. These factors are likely to have impacted on the level of interest in groundwater management and thus the number of surveys returned.



**Figure 1 Number of responses to survey by use type**

Those affected by low groundwater levels during the recent drought may have a greater interest in groundwater resource management and may be more likely to complete the survey. In this case, Figure 2 demonstrates that over half of the responses to the survey came from the Ascot and Forest Hill Zones, which have been impacted by lower groundwater levels and more stringent management in the past. This may bias some responses.



**Figure 2 Number of survey responses by zone**

## 3.2 Monitoring

### Monitoring by Groundwater user

A total of 59% of respondents do not monitor their own groundwater levels. Some of the survey respondents that do monitor water levels explicitly indicated that they do not keep records. It is assumed that those that did not comment do not keep monitoring records.

There were two respondents that do monitor their levels and keep records. One was an urban water authority who provides Goulburn-Murray Water with an annual monitoring report and the other was a Forest Hill Zone domestic and stock user who also keeps a record of rainfall data. The data has already been made available to G-MW.

One respondent specified they were unsure if they monitored their bore. The respondent however explained that while they do monitor the air line gauge in their bore, they have little confidence in the actual data and only use the relative change in the gauge pressure as a guide.

### Monitoring by the State

Almost 70% of respondents believed there was sufficient monitoring of groundwater levels in their area. It should be noted that 44 new monitoring bores were installed in the Loddon Highlands WSPA in 2008/09 under the State Observation Bore Network Refurbishment Program, which may have influenced this survey response.

Concerns over reporting of groundwater level data back to landholders was one of the main reasons for respondents indicating that monitoring is not sufficient. Some believed that monitoring could be increased in 'hotspot' areas.

Overall, the results suggest that groundwater users do not know how groundwater levels are responding in their bores and they are satisfied with the level of monitoring undertaken by the State. However, they would like better communication on how groundwater levels are tracking.

## 3.3 Groundwater resources

Groundwater users were questioned about the following to assess the status of groundwater resources in their area:

- 
- access to groundwater;
  - pumping interference from nearby bores;
  - the presence of local springs; and
  - alternative supply for domestic and stock.

### 3.3.1 Access to groundwater

There were 20 respondents to the questions regarding access to groundwater. A total of 65% of respondents indicated that groundwater levels may fall by more than 10 m before access is impacted (i.e.; limits on the amount of water that can be extracted, while 30% indicated a 5 to 10 m drop would impact access.

However 90% of respondents indicated that groundwater levels would have to fall by more than 10 m before they could no longer access groundwater.

This suggests that groundwater levels could fall by 5 to 10 metres before some groundwater users were adversely impacted.

### 3.3.2 Groundwater interference

Of the 34 responses, only 24% believe they have experienced interference from a neighbouring bore in the past. Of these, four were from Forest Hill, two from Ascot, one from Blampied and one from Waubra.

Only a limited number of respondents were able to approximate the distance of the bore they believed to be causing the interference to their bores.

Fifty-nine percent of respondents indicated that they had not experienced interference from neighbouring bores.

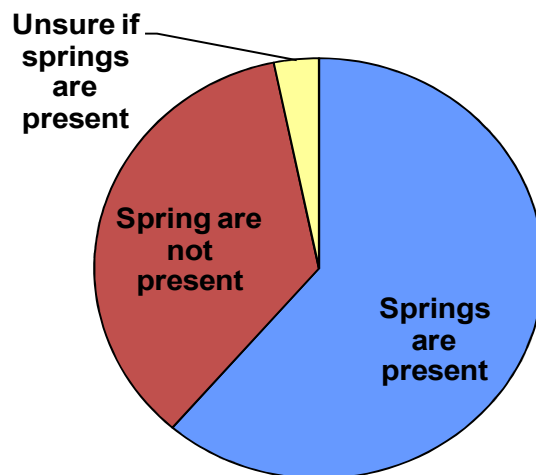
The 18% of respondents who were unsure if interference from neighbouring bores had occurred suggested:

- It was difficult to determine if interference was from neighbouring bores or the result of prolonged drought and declining groundwater levels; and
- It is difficult to determine interference due to the nature of fractured basalt aquifers.

This suggests that groundwater interference is not of great concern, but may need to be managed in areas of intensive development of groundwater resources.

---

### 3.3.3 Springs



**Figure 3 Groundwater users response indicating springs or permanent wet areas on their property**

Of the 61% of respondents who indicated they had springs or wet areas on their property, 5 (14%) respondents suggested that they ceased running or dried up during the recent drought, however were flowing again now.

One respondent from the Mollonghip zone acknowledged that in dry periods, the springs on their property cease flowing when their bore is operating.

Over half of the 19 respondents who indicated they had springs on their property were from the Spring Hill area, however there were users from Ascot, Waubra, Timor, and Ullina who indicated they had springs on their property.

Thirty-five percent of respondents said there were no springs or permanent wet areas present and only 1 respondent was unsure. Of the 11 respondents that indicated they did not have springs on their property, 6 were from Ascot, 4 from the Spring Hill area and 1 from Maryborough.

This suggests that spring activity is probably greatest in the Spring Hill area and that many continued to flow during the drought.

### 3.4 Domestic and stock supply

Of the 26 survey respondents that use groundwater for domestic and stock requirements, 81% indicated that they have an alternative supply of water.

Many indicated that supply dams failed during the recent drought and relied on groundwater for domestic and stock purposes, however 20% indicated that groundwater was their only source of domestic and stock supply.

Of the 5 users that do not have an alternative supply, 3 were from Ascot, 1 from Blampied and 1 from Waubra.

The amount of domestic and stock bores on a property ranged from 1 to 13 bores with 1 and 2 stock and domestic bores being the most common.

This indicates a high reliance on domestic and stock groundwater supply, particularly during dry periods.

---

### 3.5 Groundwater quality

Three-quarters of the respondents did not have concerns about groundwater quality in their area with many commenting that their water quality was very good with little change over time. One irrigator mentioned that their basalt bore produces good quality drinking water.

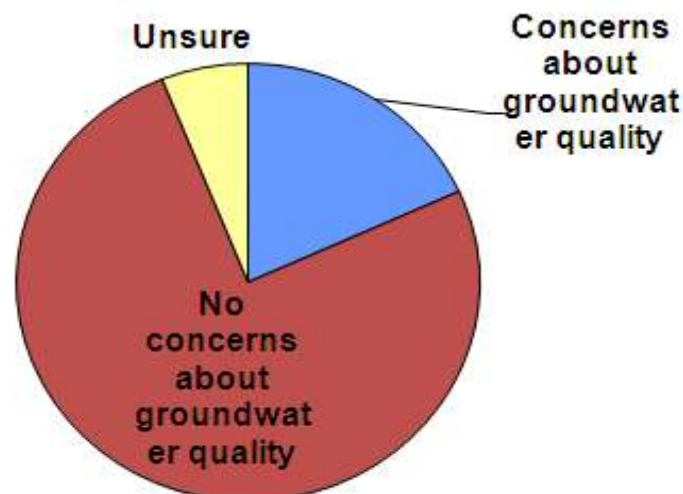
Those that did have a concern about groundwater quality had issues with the:

- suitability for potable supplies, urban use and domestic and stock supply; and
- potential for contaminants such as pesticide residues or iron.

One respondent from the Forest Hill area indicated that their groundwater is often heavily contaminated with salts making it difficult to use on pasture or potatoes. Follow up analysis of the results from the G-MW annual salinity mail out program indicate that their salinity levels were well under 640 ppm which is within the salt tolerances for irrigated crops such as potatoes.

Of the two respondents who were unsure if they had any concerns, one noted that they had not received their results from the salinity mail out program.

This suggests that while there is interest in groundwater quality, there is little concern.



**Figure 4 Survey responses to concerns with groundwater quality in their area**

### 3.6 Impact of previous management

Groundwater users surveyed were questioned about the impact previous management had on their livelihoods.

Many (58%) of participants indicated that previous groundwater management had impacted on their livelihood. The comments included:

- restrictions impact those with smaller entitlements more significantly resulting in less production;
- unable to increase entitlement, or get permanent trade as the majority of licences in the Loddon Highlands WSPA are smaller in volume;

- restrictions under the former Spring Hill plan impacted production; and
- the costs of intensive management fees impact on budget especially those with both groundwater and surface water licences.

The remaining 42% of respondents indicated that previous management had not impacted on their livelihood. However the majority of those who indicated such are either from zones that have not experienced restrictions in the past or stock and domestic users, including licensed dairy shed water.

This suggests that the new groundwater management plan should consider permanent trade and flexible restriction options that reduces uncertainty for groundwater licence holders.

### 3.7 Boundary

A map of the Loddon Highlands WSPA with the interim management rule zones was provided as an attachment to the survey.

Forty one percent of respondents indicated that the boundary was appropriate, while equally 41% were unsure.

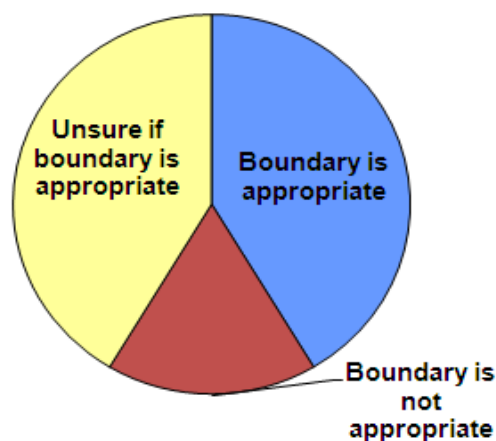
Only 17% (5 users) suggested the boundary was not appropriate. Comments on why the Loddon Highlands WSPA boundary was inappropriate included:

- is too big and should be broken into smaller WSPAs;
- why was the former unincorporated area included;
- it extends too far south; and
- should be aligned with the surface water boundary in the south

Other comments suggested there is a need for a large buffer zone to be established in the south to manage users close to the boundary.

There were several comments on the interim management rule trading zones suggesting the 1005 zone is too disjointed, while others questioned the need for new zones. One comment suggested that the whole area should just be one zone to make trading more available.

This suggests that there is some uncertainty around the boundary and the community require more information.



**Figure 5 Survey responses to the appropriateness of the Loddon Highlands WSPA boundary**

---

### 3.8 Future management

#### 3.8.1 Permanent trade

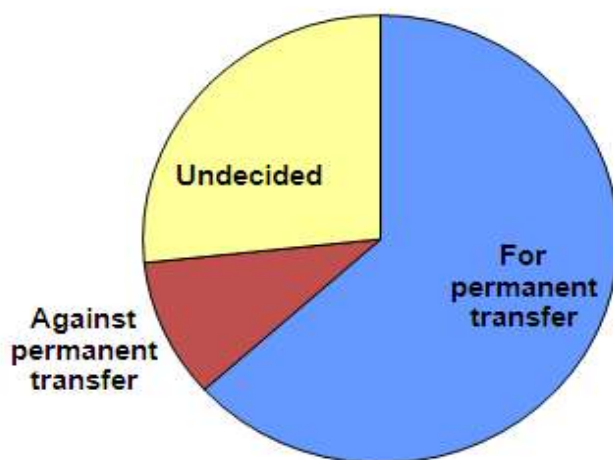
Sixty-three percent of respondents were in favour of including permanent transfer of groundwater entitlement in the new groundwater management plan, however provided comments that included:

- should not be available to non land holders or non licence holders or for urban supply;
- the impacts need to be fully understood first; and
- there should not be long distance transfers e.g. Maryborough to Forest Hill.

Those who were opposed to permanent transfer of entitlement did not provide a reason as to why they held that opinion, making it difficult to address their concerns.

A quarter of respondents were undecided. Those who were unsure about permanent transfers of groundwater entitlements indicated that they believed the consultative committee would make the best decision in everyone's interest. Some felt that if they were provided with some information and data on permanent transfers then they would be able to make an informed decision.

This suggests that while there is support for permanent trading, there is some apprehension in the community because of unknown impacts. This indicates that more information needs to be provided to the community on the impacts of trading and how applications are assessed.



**Figure 6 Groundwater user's opinion on introducing permanent trade into the Loddon Highlands WSPA**

#### 3.8.2 Carryover

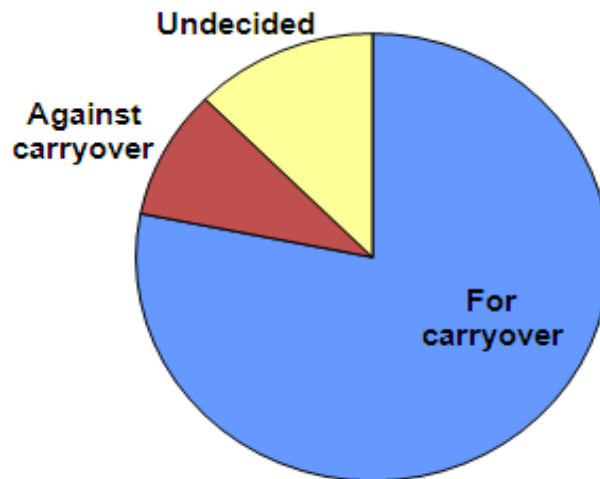
Almost 80% of respondents indicated that they were in favour of having carryover in the new management plan. Those in favour noted:

- carryover was a good tool to manage their own risk;
- licence holders pay a lot of money and should have the flexibility to use unused water the following year;
- carryover volumes should be cumulative and not lost; and

- 
- the impacts of carryover should be understood/modelled, acknowledging the risks of higher usage in dry years.

Those who were not in favour of carryover did not provide any reason as to why they held that opinion.

Four respondents indicated that they were undecided on the matter citing that they trusted the consultative committee to act in their best interest.



**Figure 7 Survey responses to introducing carryover**

### **3.9 Main issues and expectations of new management plan**

One of the aims of the user survey was to gauge what the issues and concerns are with groundwater management and what users expected from a new plan for their area.

The main issues that respondents felt were facing groundwater management in their area included:

- **Trading** – The need for permanent transfer was highlighted as an issue. Trading out of intensive areas was seen as more sustainable and it would act to protect D&S users. Permanent trade was favoured by those who felt they had small entitlements. Some felt that with the fees paid options such as permanent trade should be available.
- **Water levels and supply** – Lowering water levels and water availability was of concern. Management through a future drought period was also of concern.
- **Sustainability** – Sustainability was one of the most pressing issues amongst respondents. Issues mentioned included the protection of GDEs, security for domestic and stock users, finding a suitable trigger level, limiting interference and management of the aquifer now and into the future. There was some emphasis placed on achieving a balance between ensuring the viability of the aquifer and farming as a business.
- **Urban use** – There was some apprehension at the perceived increase in urban water demand for groundwater resources in the area.
- **Management boundaries** – Developing adequate arrangements, particularly around the southern boundary was one issue highlighted.

- 
- **Intensive management fees** – Many customers felt the fees were excessive with little to no perceived benefits. With the comments on fees came a concern of over-regulation and increased bureaucracy.
  - **Areas of intensive use** – Overuse was an issue for some respondents.

Respondents' expectations of the new groundwater management plan tended to address what they believed to be the main issues facing their area. In summary, respondents expect the new plan should:

- Increase flexibility and security for all users including domestic and stock
- Be equitable amongst users
- Improve trade options
- Maintain environmental values and the long term integrity of the aquifer
- Protect the resource whilst allowing viable businesses
- Preserve water quality
- Be based on sound technical decisions
- Consider drier times
- Have strong compliance
- Have broad consultation
- Have clear framework for how groundwater will be managed under different circumstances in the future
- Ensure that the productivity and viability of farming is not adversely affected

### 3.10 Communication of plan updates

Two thirds of respondents indicated that they would like to be kept informed on the development of the new groundwater management plan via a newsletter. Comments suggested the newsletter would allow customers to digest the information in their own time.

Twenty-three percent indicated that an ideal forum would be public meetings, however sufficient notice would be required. All respondents to public meetings also chose newsletters.

Media releases and G-MW website updates were the least popular channels of communication for the development of the groundwater plan. One suggestion was a brief phone call regarding developments of the plan.

### 3.11 General comments

Survey participants were given the opportunity to provide any additional comments. A summary of the comments included:

- **Greater notice for meetings** – customers would prefer notice of more than a week to attend public meetings
- **Double metering on bores pumping into a dam** – It can be common practice for licence holders to pump groundwater into dams to irrigate from, however are metered twice on the bore and on the dam

- 
- **Cost of licence fees** – Increasing the licence tenure was one suggestion to making the costs associated with groundwater licencing less prohibitive
  - **New entitlement** – Many smaller entitlement holders believed that there should be more entitlement allowed in the area and are in favour of permanent trade. There was some resistance towards allowing non-landholders and non-licence holders in gaining access to entitlement.

---

## 4 Conclusions

Groundwater users surveyed indicated that previous groundwater management had impacted on their livelihood citing reduced allocations and restrictive trading as the main reasons. This suggests that the new groundwater management plan should consider permanent trade and flexible restriction options that reduces uncertainty for groundwater licence holders.

The majority of the users who believed they had experienced interference from a neighbouring bore were located in the Ascot and Forest Hill Zones. This distribution suggests that groundwater interference is mainly confined to the intensive groundwater development areas and this should be considered by a new management plan.

Survey respondents indicated that they believed there was sufficient monitoring of groundwater levels in their area, but would like improved communications on levels. This could be attributed to the recent completion of the State Observation Bore Network Refurbishment Program which installed an additional 44 new monitoring bores in the Loddon Highlands WSPA.

Groundwater quality is generally good across the Loddon Highlands WSPA with the majority of survey respondents indicating that they do not have any concerns with groundwater quality. Most users who indicated they had an issue with groundwater quality, commented that quality was more of an interest to them rather than a concern. This suggests that a management plan needs to monitor groundwater quality however there is no over whelming water quality concern to manage.

The majority of survey respondents indicated that groundwater levels would have to fall by greater than 10 metres before access was affected and/or groundwater would be inaccessible. This suggests that groundwater levels could fall by 5 to 10 metres before some groundwater users were impacted.

Some users commented that springs had dried up or flow had slowed during the recent drought. This suggests that while localised groundwater pumping may have an impact on springs, the dominant controlling factor on most springs is the climate.

There was a greater reliance on groundwater for domestic and stock purposes during the drought as many dams were dry.

There is some uncertainty around the boundary and zones expressed by respondents which suggests that the community require more information.

In response to future management, the majority of groundwater users indicated that carryover and permanent transfer of entitlement should be adopted by a new management plan.

Trading, sustainability, groundwater availability and operational issues such as licence costs and metering were the main issues of concern relating to groundwater management in the Loddon Highlands WSPA.

Generally most users are satisfied with being kept informed on the development of the new groundwater management plan via a newsletter; however there is moderate support for public meetings.

---

## **5 Recommendations**

It is recommended the Loddon Highlands WSPA consultative committee considers the outcomes of the groundwater user survey results as documented in this report.

---

## Appendix A

# Loddon Highlands Water Supply Protection Area Groundwater User Survey

This survey provides an opportunity for groundwater users in the Loddon Highlands Water Supply Protection Area to provide input to the development of a new groundwater management plan for the area.

A map of the Loddon Highlands WSPA is found at the end of this survey. If you have any questions, require assistance with the survey or want more information regarding the Loddon Highlands WSPA Groundwater Management Plan process please contact Bob Knowles at G-MW Tatura on (03) 5833 5437, or alternatively visit the G-MW website at [www.g-mwater.com.au/water-resources/ground-water](http://www.g-mwater.com.au/water-resources/ground-water)

### Protecting your privacy

Goulburn-Murray Water protects your privacy by collecting and handling your personal information in accordance with the requirements of the Information Privacy Act 2000. The personal information collected in this form is been collected by G-MW on behalf of the Loddon Highlands WSPA consultative committee and will only be used for the purposes of the survey. It will only be disclosed to appropriate staff in regard to the purpose for which it was provided. For further information regarding Goulburn-Murray Water's privacy statement please refer to our website at [www.g-mwater.com.au](http://www.g-mwater.com.au)

<b>Name:</b>				
<b>Address:</b>				
<b>Groundwater trading zone (see attached map):</b>				
<input type="checkbox"/> 1001	<input type="checkbox"/> 1002	<input type="checkbox"/> 1003	<input type="checkbox"/> 1004	<input type="checkbox"/>
Molongghip	Blampied	Forest Hill	Smeaton	1005
				<input type="checkbox"/> 1008
				Ascot
				<input type="checkbox"/> 1009
				Waubra
				<input type="checkbox"/> 1010
				Moolort
<b>Groundwater user type:</b>	<input type="checkbox"/> Irrigation (main enterprise) .....	<input type="checkbox"/> Domestic & Stock	<input type="checkbox"/> Commercial or Industrial	<input type="checkbox"/> Urban

Please respond to each question by placing a tick in one of the boxes and add comments where you can.

<b>Question 1:</b> What do you think are the main issues facing groundwater management in your area?
<b>Comments</b>

<b>Question 2:</b> Do you monitor the water level in your bore/s? If yes, could this data be made available?	Yes	No	Unsure
<b>Comments</b>			

<b>Question 3:</b> Do you believe there is sufficient groundwater level monitoring in your area?	Yes	No	Unsure
<b>Comments</b>			

<b>Question 4:</b> Have you experienced interference from a neighbouring bore? If yes, please provide details including distance to bore.	Yes	No	Unsure
<b>Comments</b>			

<b>Question 5:</b> How many metres may groundwater levels fall before it impacts on your supply i.e. limits the amount of water that you may extract? (please circle)	0-5	5-10	> 10
<b>Comments</b>			

<b>Question 6:</b> How many metres may groundwater levels fall before you can no longer access groundwater? (please circle)	0-5	5-10	> 10
<b>Comments</b>			

<b>Question 7:</b> If you use groundwater for domestic and stock purposes, do you have an alternative supply i.e. dam? How many domestic and stock bores do you use?	Yes	No	Unsure
<b>Comments</b>			

<b>Question 8:</b> Do you have any concerns about groundwater quality in your area?	Yes	No	Unsure
<b>Comments</b>			

<b>Question 9:</b> Are there springs or permanent wet areas on your property?	Yes	No	Unsure
<b>Comments</b>			

<b>Question 10:</b> Has previous groundwater management impacted your livelihood or farm production?	Yes	No	Unsure
<b>Comments</b>			

<b>Question 11:</b> Is the Loddon Highlands WSPA boundary appropriate (see attached map)? If no, how could it be changed and why?	Yes	No	Unsure
<b>Comments</b>			

<b>Question 12:</b> Should permanent transfer of groundwater entitlement be included in the new groundwater management plan?	Yes	No	Unsure
<b>Comments</b>			

<b>Question 13:</b> Should carryover of unused groundwater licence entitlement season be included in the new groundwater management plan?	Yes	No	Unsure
<b>Comments</b>			

<b>Question 14:</b> What are your expectations of a new groundwater management plan?
<b>Comments</b>

<b>Question 15:</b> How would you like to be kept informed on the development of the new groundwater management plan?			
<input type="checkbox"/> Newsletter	<input type="checkbox"/> Media release	<input type="checkbox"/> G-MW website	<input type="checkbox"/> Public meetings
<b>Other (please specify)</b>			

---

**Please add any additional comments that you would like to make here.**

**Have you kept records of groundwater levels or rainfall data in your area?**

**The Consultative Committee would appreciate you sharing this information with them. Please contact Bob Knowles from G-MW to discuss.**

The Loddon Highlands WSPA Consultative Committee thanks you for taking the time to complete this survey. Your responses are important to improving groundwater resource management and developing a new groundwater management plan for the area.

Please send completed surveys to:

Bob Knowles  
Goulburn-Murray Water  
PO Box 165  
Tatura Vic 3616



## Appendix B

Response to survey questions.

Question	Yes	No	Unsure
2. Do you monitor groundwater level in your bore/s?	13	20	1
3. Do you believe there is sufficient groundwater level monitoring in your area?	22	5	5
4. Have you experienced interference from a neighbouring bore?	8	20	6
5. How many metres may groundwater levels fall before it impacts on your supply i.e. limits the amount of water that you may extract?	0 – 5 m	5 – 10 m	>10 m
	1	6	13
6. How many metres may groundwater levels fall before you can no longer access groundwater?	0 – 5 m	5 – 10 m	>10 m
	1	1	18
7. If you use groundwater for domestic and stock purposes, do you have an alternative supply i.e. dam?	21	5	-
8. Do you have any concerns about groundwater quality in your area?	6	25	2
9. Are there springs or permanent wet areas on your property?	19	11	1
10. Has previous groundwater management impacted your livelihood or farm production?	18	13	-
11. Is the Loddon Highlands WSPA boundary appropriate (see attached map)?	12	5	12
12. Should permanent transfer of groundwater entitlement be included in the new groundwater management plan?	19	3	8
13. Should carryover of unused groundwater licence entitlement season be included in the new groundwater management plan?	25	3	4

15. How would you like to be kept informed on the development of the new groundwater management plan?	
Newsletter	30
Media Release	1
G-MW Website	3
Public Meetings	11
Other	1