

BASINPULSE

Community Well-being and Water Reform Headline Report - July 2010





Basin Pulse is a specialist community engagement service provided by Inovact Consulting Pty Ltd.

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About Basin Pulse

The Murray-Darling Basin is undergoing far reaching, long-term change. Drought, changing imperatives for water use, volatile international markets, new industries and economic opportunities and emerging social trends are pulling people in the Basin in a multitude of directions.

Leaders in government, industry, business and the community are grappling with the challenges of transformational change in the Basin. There is an imperative to develop a dialogue with the people whose lives will be impacted by new policies, decisions and services.

Securing people's attention and participation is crucial to successful change. If the people who are affected by reforms believe in the need for change and are actively involved then success is more likely to follow.

However, at Inovact Consulting we have observed that influential organisations often struggle to connect with people and develop relationships strong enough to enlist support and build commitment for change. New approaches are needed.

The Basin Pulse initiative was designed to be part of the solution for communities, industries and governments as they strive to adapt and reshape the Basin's long term future.

Basin Pulse exists to bridge the divide between people and decision makers. Our mission is to enable connections to occur and to promote understanding and mutually beneficial engagement and dialogue.

As an independent initiative we serve no vested interest.

Our interest is that people are connected with decision makers, that useful information is exchanged and that understanding and a conversation culture is built over time. We believe that this is the pathway to the type of transformational change needed to benefit the community, environment and industries in the Basin over the long term.

We live and work in the Basin and are passionate about its future. We seek to be part of transitioning the Basin to a more sustainable and prosperous future. We encourage people across the Basin and decision makers to join us in developing processes of positive change.

Brian Ramsay

Managing Director

Inovact Consulting Pty Ltd

Summary

This first Basin Pulse report provides a snapshot of views held by the two million people who call the Murray-Darling Basin home.

The report is based on a telephone survey conducted in June 2010. The survey involved a representative sample of 476 people aged 18 years and over who live in the Murray-Darling Basin.

The report is designed to provide organisations and individuals who are seeking to communicate with people in the Basin with the information they need to develop more effective communication strategies and to foster a productive dialogue.

Basin communities value their social and physical environment

People in communities across the Basin value their local social and natural environments. They like the sense of community and the peaceful, natural environment. They don't like the sense of isolation that comes with living outside the major Australian cities and the associated lack of services, amenities and entertainment. Neither do they like the extremes of variability in the climate.

People are positively oriented to the future, with most perceiving that the outlook is for improvements in well-being over the next five years.

Alongside water management, economic development is the issue that most concerns Basin residents – both from the need for more development perspective (25% of concerns) and the risks associated with over-development (16 % of concerns).

Communities are ready for change

A major finding of the first Basin Pulse report is that the Basin communities are ready for changes

in water management. They perceive a lack of water and water management as the issue of most concern and they have a sense of urgency for change. 50% believe that changes to water allocations should already be underway and a further 24% said it should happen without further delay. These findings confirm that the settings for decision-makers to move forward with water reform are ideal. Conversely, any extensive delays in acting on water reform may be received negatively by the Basin community.

Basin communities support the fundamental driver of water reforms

Basin Pulse has revealed a rich and compelling picture of community views on water reforms and the trade-offs between economic and environmental water use. The report shows that the community is well aware of the need for change to water allocations at the basin-wide and local levels to ensure that more water is available to the environment. 80% agreement with the need for change is representative of strong, community-wide support.

People believe that governments and especially the Federal Government have responsibility alongside the community as a whole for making the required changes to water management. They understand that making these changes will not be easy. In fact, people are divided on whether the required changes are likely to be implemented at all.

This view reflects an appreciation of the complexity involved and the incremental pace of change over the past 20 years.

People are concerned about the economic impacts of water reform

People across the Basin place highest priority on water for human use and water for economic use. Most people (68 per cent) believe that if less water is available to farms, then their region will be worse off. At the same time, 70 per cent of people expect that more water for the environment will benefit their local area.

These results illustrate a complex but realistic perspective amongst the community on the costs and benefits of water reform. It will take careful and sophisticated engagement by all groups involved in water reform to maintain this consensus and build momentum over the course of change implementation, particularly at the local level where changes will be felt most directly.

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The Murray Darling Basin¹

The Murray-Darling Basin (Figure 1) is Australia's largest connected river system. It covers 1,059,000 square kilometres or 14% of the Australian landmass.

Bounded by the Great Dividing Range in the east, the landmass includes large parts of southern Queensland, most of western New South Wales, all of the Australian Capital Territory, northern Victoria and the South Australian riverland.



Figure 1: The Murray-Darling Basin

The Basin Community

The Murray-Darling Basin is home to over 2 million Australians or around 10% of the Australian population.

While the Basin has a lower population density than Australia as a whole, two-fifths of Basin residents live in large urban centres.

Canberra is the largest urban centre in the Basin with nearly 20% of the population. Other large population centres include cities such as Toowoomba, Bendigo, Albury-Wodonga,

Shepparton, Tamworth, Orange, Dubbo, Mildura and Bathurst.

Average incomes are lower in the Basin compared to the rest of Australia, as are rates of educational attainment.

The Basin Economy

Government (including health and education) is the largest industry in the Basin by employment. Retail and wholesale trade is also an important source of employment and economic activity.

Agriculture is a vital component of the Basin economy. Major industries include beef, sheep, grains and dairy.

The Basin is also the major irrigation region in Australia with an estimated 83% of water use in the Basin being devoted to irrigated agriculture. Important irrigated industries include grapes, cotton, apples and pears, citrus and rice.

There are also substantial mining developments within the Basin. Coal seam gas is an emerging industry in the Queensland Basin and Broken Hill in the far-west has previously been one of Australia's most important mining centres.

The Basin Environment

The Basin is defined by its rivers. Twenty-three important river valleys lie within the Basin. The natural environment features internationally listed wetlands and some of Australia's most endangered ecological communities.

The development of agriculture, urban centres and other industries has significantly changed the natural environment of the Basin. A recent review of the health of the Basin's river systems identified that only the Paroo in the north-west of the Basin was identified as being in good health.

Reading the Pulse of the Basin

This report provides a snapshot of the issues of concern to the two million people who call the Basin home. It is designed to provide organisations and individuals who are seeking to communicate with people in the Basin with the information they need to develop more effective communication and engagement strategies.

The report is based on a telephone survey involving 476 people aged 18 years and over who live in the Murray-Darling Basin. These people are a representative sample of the wider population. The characteristics of the sample including age, gender, household income and education levels are consistent with authoritative statistics collected by the Australian Bureau of statistics. Additional information on the characteristics of the sample is provided in the report Appendix.

While the Basin can be understood as whole population, the sheer geographic size of the region means that important differences in communities, environments and economies exist and these need to be understood.

Figure 2 shows the distribution of the survey sample within 7 Basin regions. These regions are defined by the boundaries of major water catchments.

The findings paint a strong picture of the common and varying perspectives held by people in the Basin in June 2010. In this initial pulse reading, the survey questions focussed on understanding people’s broad perspectives on the place that they

live and the issues they are facing as a community. The survey also explored

As well as broader perspectives on well-being, the survey draws out the population’s orientation to changes in water management.

in some depth the current views of people in the Basin on the issue that binds the Basin together – water. The greatest change confronting the Basin as a community is transitioning water allocations and management to long term sustainable levels. The survey draws out the population’s orientation to this process of change and their willingness to support and participate in it.

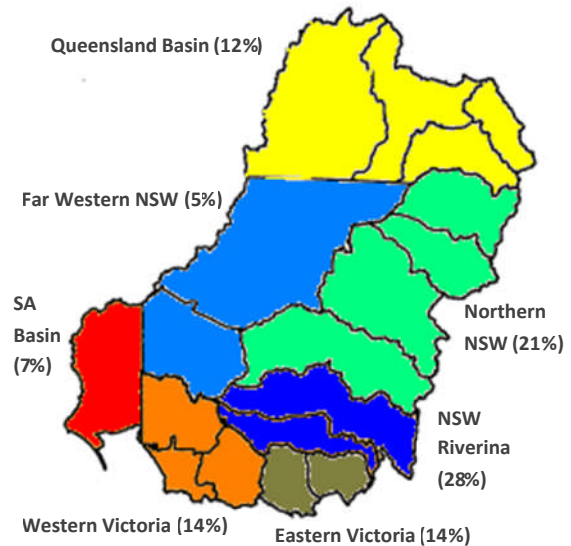


Figure 2: Regional Distribution of the Representative Survey Sample (Base n=476)

The discussion in the report draws on the survey findings, both quantitative and qualitative, as well as other pieces of publicly available information to help interpret the meaning of the findings for organisations seeking to communicate with, engage and influence the Basin population.

This is the first report of a regular series that will track changing perspectives over time, providing real time information to decision makers and communicators.

As well as reporting at this headline level, we envisage that future reports will examine in-depth

issues related to key basin industries and the state of play for the different regions and major population centres in the Basin. For more information on future Pulse Reports go to www.basinpulse.com.au or contact the Basin Pulse team directly.

Using and Interpreting the Insights in this Report

It is important for the reader to take the results and discussion included in this report in the context that they are provided and intended. To the extent we can through the first report, the findings have been presented in a way aimed at helping readers to maximise the value of insights.

The survey statistics presented throughout the report that underpin the discussion are robust. They were collected using proven market and social research techniques and a formal, professional, accredited Computer Assisted Telephone Interview methodology. Basin Pulse utilises accredited Australian Market and Social Research Society facilities for its research work.

Selected views are included in the text of the report. These views are the genuine views, scribed verbatim from interview discussions by the interviewer. The selected views are provided to enrich the reader's understanding of perspectives and to convey the broader meaning of the findings of the survey beyond the replay of a statistic.

In producing this report the Basin Pulse team have chosen not to be overly conservative in identifying potential implications from survey results. Our aim is to stimulate your thinking about what these results may mean and represent.

We recognise that others may have alternative interpretations or perspectives and encourage dialogue. If you have different perspectives, views or questions we would love to hear them via email, telephone call or on our website.

We hope that each reader will think about the underlying information, our interpretation and their situation to identify what this means for you in your role as a member of the community, or as communicator, decision maker or analyst for Basin issues. It will be slightly different for each of you.

Communication,, debate and dialogue are fundamental to developing rich relationships and making good decisions. The issues and perspectives described in the report are not fixed and cannot be definitively understood regardless of the method used or the money invested. They change and evolve over time and are subject to constant shifts in information and influence.

The aim of this report is to help organisations engage effectively with the Basin community as a group. The Basin Pulse team trust that you will find the report useful and we look forward to further engagement with you and the Basin community as the major processes of economic, social and environmental change unfold.

Insights

Entry points for discussion and debate

Understanding people’s views on their well-being and the future

People typically engage in discussions about issues, contemplate the future and evaluate proposals for change from the perspective of their personal situation and the things that underpin their personal well-being.

Alongside personal considerations, people also engage in wider debates on the basis of their perceptions of the community’s situation, its well-being and what they believe is valuable for the group as a whole.

The Murray-Darling Basin spans a significant diversity of communities and more than two million individual perspectives. Acknowledging this, but also recognising that there is also significant common ground, Basin Pulse sets out to provide a snapshot of the issues that are top of mind for the community as a group.

This section provides insights into what it is that people value most about living in their local area, the things they value the least and their orientation towards the future.

Personal well-being in the Basin is clearly underpinned by the status of the social and natural environment.

Foundations of well-being for the Basin

The results of the study identify common sources of well-being for people in the Basin. In gathering this information people were asked ‘what is the best thing about living in your local area’.

In responding to this question people commonly identified characteristics of the social environment in the Basin (Figure 3). The most important positive attribute of local areas in the Basin (21% of respondents) were a ‘quiet, peaceful place to live’ and that ‘small towns that are not busy’. A sense of community and friendliness in their local area was cited by many others (16% of respondents) as being the best attribute of their locality.

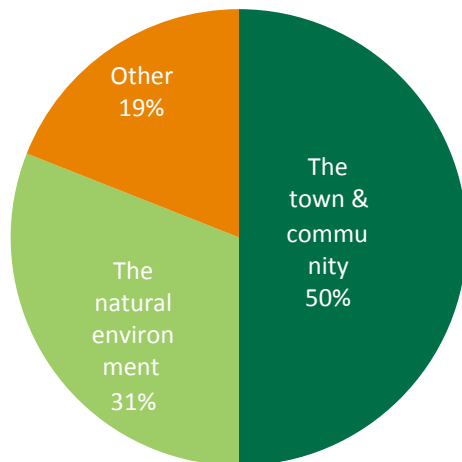


Figure 3: Best Things about Living in the Area
Base n=476 (responses in percentages, %)

The following quotes from respondents capture a sense of this perspective:

- “We really love the small community vibe, knowing a majority of the locals, that volunteer work is common, it’s the small

town relaxedness that is great about this area.”

- “I love the town and the people, it’s a relaxed community environment and people are really easy going.”

The other common attribute cited by a large number of respondents related to the local, physical environment of the Basin. This included:

- the rural or country landscape (10%)
- the environment, parks and scenery (10%)
- the climate, weather and seasons (8%), and
- fresh, clean air (3%).

The following quotes from respondents capture a sense of this perspective:

- “I love the environment and the beauty of the land. We are living in the country and it is a very pretty place.”
- “We love the space and that it is a nice quiet area.”
- “It’s the country, biodiversity, trees, natural waterways and creeks, the parrots and magpies”

Taken together, these results show that characteristics of the current social and natural environment are highly valued by people in the Basin and closely associated with their sense of well-being.

To draw contrasts and broaden the understanding of well-being in the Basin, people were also asked ‘what is the worst thing about living your local area’.

The responses (Figure 4) to this question were clustered around two characteristics of the Basin and its communities:

- the isolation of much of the Basin from major Australian cities and the associated lack of amenities and entertainment options, and
- climatic variability.

The following quotes from respondents capture a sense of these perspectives:

- “it’s a bit isolated, a lot of my friends live a long way away and there is not a lot of chances to meet new people”
- “I really don’t like having to travel so far to access proper services”
- “the effects of the drought are very common in this area”
- “I don’t like the dust and the hot weather”

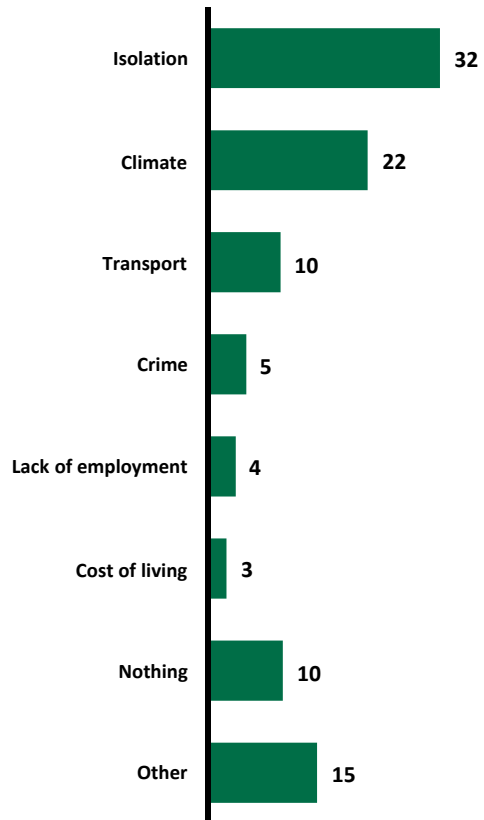


Figure 4: Worst Things about Living in the Area
Base n=476 (responses in percentages, %)

Future orientation

Willingness to engage actively in change and attitudes to the costs and benefits of potential changes are filtered through a person’s existing perspective on the future. The way in which

people perceive the future can guide their initial reactions and willingness to consider possible positive futures.

Nearly half of the Basin population is positively orientated and expecting positive change. Only one-quarter are negative about the future.

To gauge people’s orientation to the future, the survey asked residents whether, in five years’ time, they believed that the area where they live will be a better or worse place to

live.

The results (Figure 5) showed that Basin residents are more likely to be positive and confident about the future for their local area. Some 46 per cent of people expect the future will be somewhat or much better, while 24 per cent expect the future to be somewhat worse or much worse.

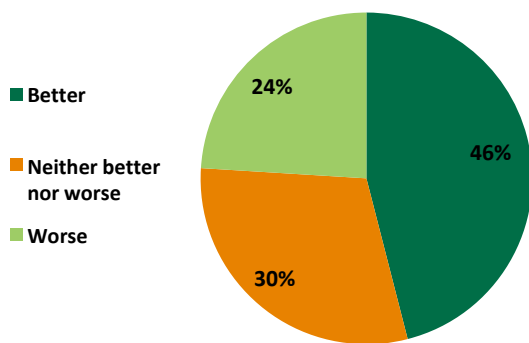


Figure 5: Expectations for the Future
Base n=476 (responses in percentages, %)

A significant group of 30 per cent of people expect the outlook to be largely unchanged for their local area.

While the outlook is similar across the regions of the Basin, age groups and genders, South

Australians and Western Victorians are notably more pessimistic than other areas.

Issues of concern

Extending the exploration of well-being, the survey asked people to identify top-of-mind issues and identified how these might be better understood and engaged with.

Water availability and management and economic development are the issues of most urgent concern for people in the Basin.

The study explored the issues that people perceive will have the most impact on the well-being of themselves and their local area over the next five

years. People were asked to identify several issues in order of importance. This question was posed before any mention was made of water reform.

Lack of water is clearly the dominant issue of concern to Basin communities. When asked about the top 3 issues that impact upon the well-being of the local area over the next 5 years, 34% mentioned water management. This was a significantly higher rate of response than for any other issue mentioned by respondents.

Economic development was the other main area of concern that for concern responses with approximately 45% of people identifying an aspect of economic development (overdevelopment, need for more development, mining) as an issue of significant concern. Within this issue, perspectives are divided between people who are concerned about over-development and those who want greater economic development to occur.

On balance, a larger proportion of the Basin community identified the need for further development of their local area as a key concern (25%) than those who identified the potential for overdevelopment as an issue (16%).

Examination of development issues by region and other demographics shows that:

- Young people (18-24) identified population increase and over-development as issues of concern more than other groups. Nearly one-third of younger respondents raising this concern.
- This younger group was also less concerned about young people leaving the area and a lack of jobs than older cohorts with only 4% raising this issue compared to 20% in older cohorts.
- Mining is significantly more likely to be an area of concern for Queensland Basin residents compared to other Basin residents. 20% of Queensland respondents identified mining issues specifically and 10% in Northern NSW as an issue of concern. This is in addition to the proportion of these populations who were concerned about overdevelopment.
- Some residents who mentioned mining were concerned about any potential for reduced mining activity (e.g. through introduction of new taxes) while others were concerned about the impact of current developments on their well-being (e.g. new gas pipes in the QLD Basin).

Further Basin Pulse surveys and qualitative research will examine in more detail the characteristics of these opposing groups in the Basin who are involved in and concerned about changes arising from economic development.

Water Reform – perceptions and attitudes

Water is the issue that binds and defines the Basin. The region is a single, large, interlinked water catchment that is home to 10% of Australia's population and produces one third of Australia's food supply. The Australian Bureau of Statistics estimates that over half of all water use in Australia occurs in the Basin with over 80% of that water being used by agriculture.

94% of people in the Basin agree that water management is an important issue for themselves and their community

Current and future use of water in the Basin is the most significant issue for the Basin population and for many of the decision making bodies who influence the Basin's economy and communities. Two major changes are occurring in the Basin's water use. Firstly, the region is emerging from a period of sustained drought. This impacts on the immediate availability of water in the region. Secondly, how water is distributed is currently under discussion as governments engage in a complex water reform process to establish sustainable water use and management for the long term. The Basin is at the centre of one of the most profound reform processes currently underway in Australia.

Water reform is a complex change process that is fundamentally about striking a balance between economic and non-economic use of water resources. It inevitably involves difficult decisions

and trade-offs that create impacts at the individual and enterprise level.

Now is a crucial time in the longer term water reform process. It is a period where the Basin community as a whole will be under the greatest pressure to accept and engage in challenging processes of change and transition. A draft 'Basin Plan' to be released by the Murray Darling Basin Authority in 2010 will signal the start of efforts to return the basin to sustainable water allocation s, rebalancing the interests of governments, industries and communities for the longer term.

Given the currency and importance of the issue to the community, the initial Basin Pulse survey sought to explore broader perspectives on changes to water management, the need for reform and expectations of the costs and benefits involved in the reform process for the Basin economy and the natural environment.

People in the Basin recognise that water management and reform is fundamental to their community and personal well-being. People overwhelmingly agree that it is a top priority.

Concern about water management is evident across the community.

Residents were significantly more likely to identify water issues without prompting (39%). Of the 39% that mentioned water as an issue, two thirds (65%) said it was the issue that needs most urgent action.

This response rose to 94% when people were prompted to identify their level of concern in relation to water management and the well-being of their local area. Within this result, 56% of people described water management as extremely important – a top priority relative to other major

issues and a further 38% consider water management is very important alongside other major issues.

Significantly, concern about water reform crosses boundaries and is not restricted to particular regions of the Basin, ages or industries. This finding is regardless of water being potentially more important in an objective sense to some local economies and communities than others.

Analysis of survey results reveals that Victorians are significantly more likely to identify water as a top priority than people in NSW, with over 70% of Victorians rating the issue as a top priority. In all regions and states half or more of the population identified the issue of water as a top priority.

Sources of concern about water management

Environmental issues are the dominant driver of concern for only a small portion of the community.

People’s concerns about water management are closely related to the key benefits that water provides to individuals and communities.

These include water

for life’s essentials such as drinking and washing, water for economic uses such as irrigation and water to maintain a functional, healthy environment.

Basin Pulse sought an understanding of the issues and their relative prioritisation by asking people to identify the underlying reason for water being an issue for them personally. This was undertaken at two points in the survey:

1. after 34% of respondents (without prompting) identified water as an important issue in response to the question ‘what are the three most important issues to impact on

the well-being of your area over the next five years’, and

2. after remaining respondents were asked ‘how important is water management to the well-being of your local area’.

The results (Figure 6) confirmed that human needs, economic needs and environmental needs are the most important motivators of concern about water management for people in the Basin. However the hierarchy of needs (identified by the proportion of people who cite each need as their main source of concern) differed in prompted and unprompted results.

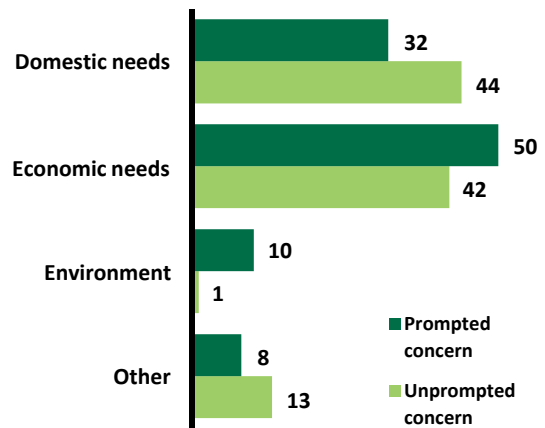


Figure 6: Reasons for concern
Base n=476 (responses in percentages, %)

The unprompted responses suggested that human needs for domestic and economic needs are equally important drivers of concern. Aesthetics and environment were ranked very low relative to human and economic use.

However this relative prioritisation changed when the wider group were prompted to identify their level of concern by the interviewer. In these prompted responses, economic use of water (predominantly agricultural) emerged as the most common concern amongst the wider population. The level of environmental concern also rose by a factor of ten.

Views on Current Processes of Change

Water management is recognised as a shared responsibility by some of the Basin community but most people in the Basin who are concerned about water management look to governments, particularly the Federal Government, for solutions to their concerns.

People in the Basin are not satisfied with the pace and effectiveness of reform. They are looking to the Federal Government for action but remain divided on whether action will occur.

Basin Pulse found that one third (34%) of people who identified water as a key issue of concern identified the Federal government as being primarily responsible for action to deal with the issue. The whole community at 24 per cent was the next most common response, suggesting that a significant group of people recognise that resolving water issues is a shared responsibility. State and local governments were ranked much lower at 18 and 13 per cent respectively despite their more direct responsibilities for water management.

People overwhelmingly see water management as an issue that government of some variety should take responsibility for and act on. They don't recognise the institutional allocation of responsibility between governments in assigning responsibility for changes in water policy.

Basin Pulse also identified that people who are worried about water issues are not satisfied with the scope or pace of reforms to date.

When asked if the responsible party they identified is already taking action on the most

important issue for the local area, those who said yes were asked about the effectiveness of the action (Figure 7).

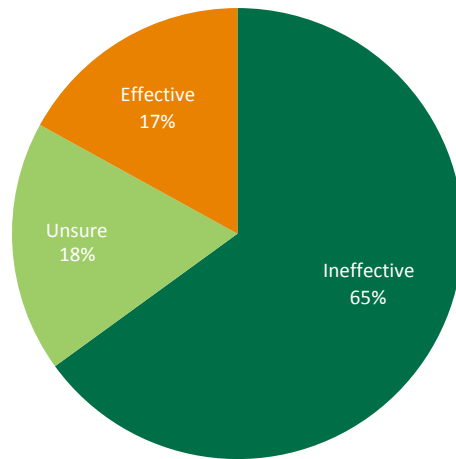


Figure 7: Views on the effectiveness of current actions

Base n=122 (responses in percentages, %)

The response suggests that most people who see water as the most urgent issue for their local area (65%) consider that the action being taken was not effective enough. Only 20% thought the action being taken was effective and a large group (19%) were unsure. The people who are most concerned about water reform are yet to be convinced that current activities will resolve their concerns.

Is the wider community expecting change?

Amongst the broader community is a mixture of pessimism and optimism about the prospects for change in water management over the next five years. Basin Pulse identified that the community is divided in their views on the likelihood of significant change being implemented in the next five years (Figure 8) in water management. This perspective can be contrasted to the generally positive feelings about the future expressed by respondents.

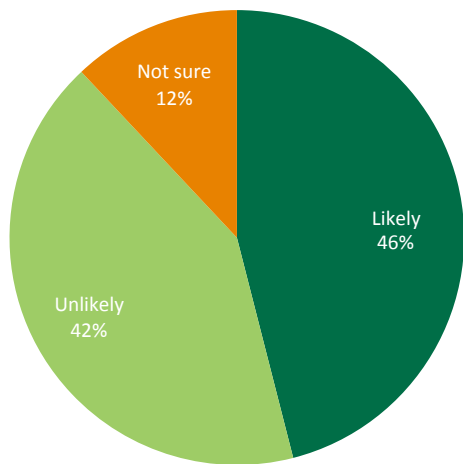


Figure 8: Expectations of Change
Base n=476 (responses in percentages, %)

Perspectives on water allocation trade-offs

The key challenge in water management across the Basin is to achieve a sustainable balance between economic use and environmental access to water resources. Substantial scientific studies have identified that over allocation of water resources is the fundamental issue that must be addressed by water reform. The new Basin Plan being developed by the Murray Darling Basin Authority will include Sustainable Diversion Limits to direct more water to the environment in the future.

The Basin Community as a group will experience directly the costs and benefits of this transition. While decision-makers are investing substantial resources to objectively understand the nature of these costs and benefits, it is also important to understand the perspectives of people who will experience them. If there are significant differences in people’s perspectives and the conclusions of the policy analysis, it makes the implementation process more challenging, and emphasises the importance of effective communication and engagement.

To examine this issue, the Basin Pulse survey asked people separately about economic and environmental issues and their personal and regional view on the costs and benefits of changes to water allocation.

Perceptions on the need for change in allocations

A majority of people in the Basin recognise a need to implement water reforms and allocate more water to the environment.

Basin Pulse identified strong agreement in the Basin on the need for change in water allocations to ensure that enough water is made available to the

environment. When this question was posed in relation to the Basin as a whole, 80% of respondents agreed that change was needed with 56% (a clear majority of the community) agreeing that it needs to change greatly (Figure 9).

However, when people were asked about change in their local area the strength of agreement on the need for change was notably reduced (Figure 9). The number of people who agreed that water allocation needed to change greatly was almost halved (from 56% to 30%) and a substantial increase in the proportion of people who disagreed that water allocation needed to change (from 7% to 30%) also occurred.

However, despite these changes, a strong majority (63%) agree that water management in their local area needs to change to ensure that enough water is made available to the environment (Figure 9).

Thus, both at the basin-wide and local level, there is clear recognition by the majority of people for the need to implement water reforms and allocate more water to the environment. These results are generally consistent across employment status,

education, income, industry, state and genders with some important nuances.

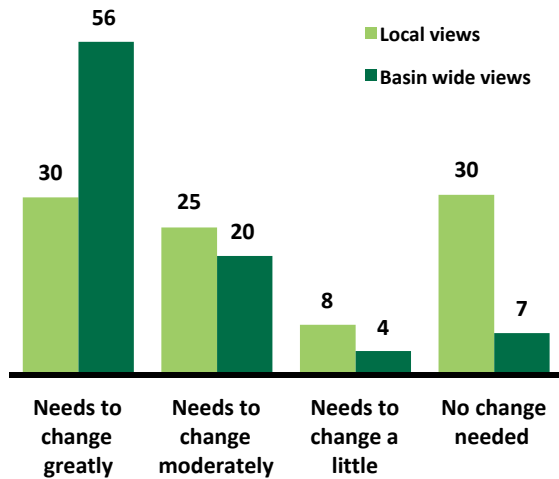


Figure 9: Need for change in water allocations
Base n=476 (responses in percentages, %)

The first nuance is related to age. The results suggest that older people (particularly 55-64 year olds) are more likely to support significant change. Younger people are in general much less certain about the magnitude of change required with fewer younger people supporting large changes and half the population of young people either unsure or supportive of minor or no change.

Regional variations are also important. Table 1 shows the proportion of the population who agree that water allocations need to change greatly in each of the large Basin regions. In particular, this reveals that Far Western NSW is the region that most strongly supports significant local change to water allocation with 59% of people in this region holding this view compared to an average of 30% in other regions.

South Australians had the greatest shift in perspective with a strong 72% agreeing that allocations need to change greatly in the Basin as a whole but only 22% agreeing

People agree that the need for this change is both urgent and local.

that great change was needed in their region.

Table 1: Regional perspectives on water allocation change

Region	Agree that water allocations need to change greatly in the Basin	Agree that water allocations need to change greatly in their local area	Difference
South Australian Basin	72%	22%	50%
NSW Riverina	60%	29%	31%
North-Eastern NSW	57%	29%	28%
Eastern Victoria	49%	23%	26%
Western Victoria	43%	28%	15%
Far Western NSW	73%	59%	14%
Queensland Basin	50%	36%	14%

Alongside this agreement that significant change is needed, there is also urgency amongst the population for that change to occur.

Basin Pulse found that people living in the Basin have an overwhelming view that the need for changes to water allocations to make more water available to the environment is urgent. Indeed, 74 per cent believe that the changes should already be underway or implemented immediately (Figure 10). Very few people (8 per cent) believe that changes can wait three years or more.

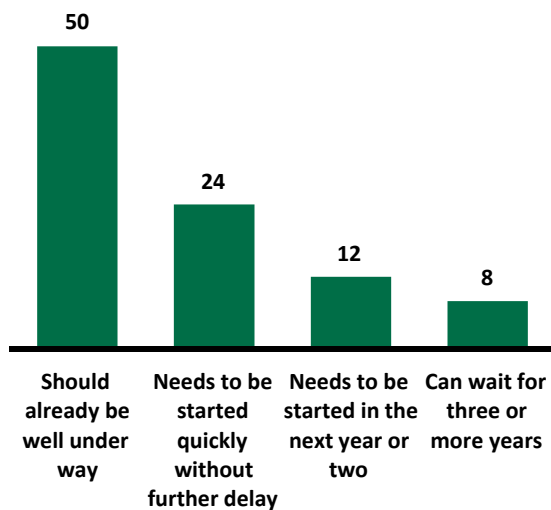


Figure 10: Urgency of changes to water management

Base n=476 (responses in percentages, %)

Perspectives on the likely economic and environmental impacts

Because people have an expectation and general support for change does not mean that they recognise the consequences of the change process. Basin Pulse sought an understanding of people’s expectation of the impacts (positive and negative) that would flow for themselves and their region from changes to water allocations.

These questions revealed a complex view of the impacts of change, demonstrating that people recognise both that there are potential costs and potential benefits from water reform.

Expectations of well-being impacts from reductions in water for economic use

The potential for economic impacts is the subject of significant public debate, with groups representing the biggest economic users of water (the agricultural industries) being most active in identifying the potential economic risks associated with allocation change.

Different industries are more directly linked to water use and the team’s hypothesis was that the greater the perception of importance of water using industries to local prosperity, the more likely the community was to perceive that water allocation changes would affect them personally or their community in a negative way.

Basin Pulse sought to understand the extent to which people linked changes in water allocation s to their personal prosperity and the prosperity of the region. Exploring this issue with respondents included:

- identification of the industry that is seen as most important to local economies
- identification of personal associations with agriculture, and
- measuring expectations of impact from reduced water for economic use on the local region and individuals.

Importance of agriculture to the Basin Community

Perspectives on the most important source of local economic prosperity were sought before the discussion of water issues

More than half of the Basin population identify agriculture as the industry that is most critical to local prosperity.

This revealed that a majority of people (55%) living in the Basin perceive that agriculture and related industries are the most important for their local economy.

Agriculture and related industries are perceived as almost four times more important than the next most important industry – government, including health and education (14 per cent). This emphatic view about agriculture’s importance as an industry to the Basin is highlighted in Figure 11.

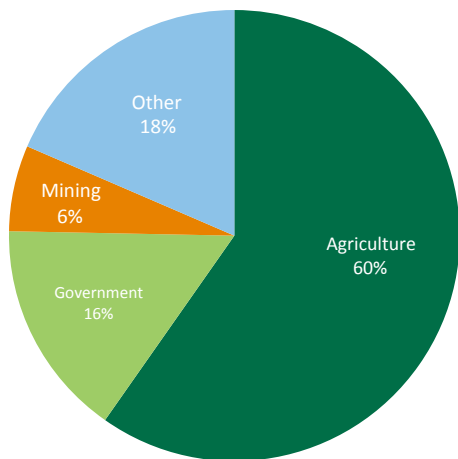


Figure 11: Key Local Industry
Base n=476 (responses in percentages, %)

To explore this further, Basin Pulse asked people if they had any family or friends involved in agriculture. This demonstrated that a majority of people (54%) of the population in the Basin had at least one direct connection to agriculture through family or friends. This confirms that agriculture is an industry that is deeply connected within Basin communities.

The survey also identified that personal connections to the agricultural industry make it more likely that an individual will see the industry as critical to local prosperity with 56% of people identifying a personal connection (either through their employment, family or friends) compared to only 38% of people who cite no direct connection to the industry. This is a statistically significant result that holds across the Basin community as a whole.

The only region where mining was the most important to the population as a whole was far western NSW with significantly more people identifying this industry as the most important to their region.

Expectations of impacts from reducing water available to farms and businesses

People clearly associate the availability of water with the prosperity of their local region. 68% believe that if less water was available for use by farms and business their region will be worse off (Figure 12). A total of 39% of the population believe that the community will be very much worse off from reductions in water for farms and businesses.

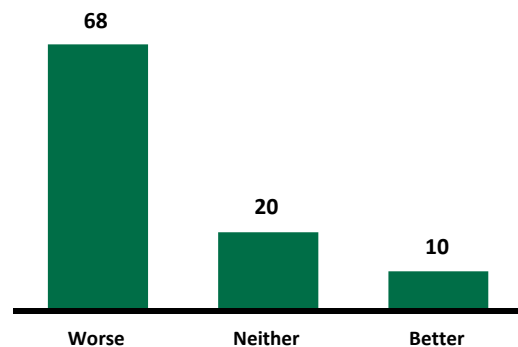


Figure 12: Impact on community well-being from a reduction in water for farms and businesses
Base n=476 (responses in percentages, %)

Within the group that expects the community to be impacted upon most seriously, people who have not completed high school are most likely to think that things will be very much worse economically for their community. People holding university degrees are significantly less likely to expect serious economic consequences for the community.

Of all the Murray-Darling Basin states, it is Victorians who are most likely to be expecting that changes will result in their community being very much worse, with significantly more Victorians expecting serious economic community impacts.

Respondents were asked separately about their expectation of the impacts that changes in water allocation will have on them personally.

A majority of the community expect to be personally worse off (54%). However, 39% expect that there will be no personal economic impact as a result of water allocation changes. Only 5% expect a personal benefit from reducing water use for farms and businesses.

Verbatim responses by people provide some insights on the ways in which people perceive that their life would be better or worse if less water were available for economic use. The most common responses suggest people fear that:

- the cost of living will rise – particularly for food and groceries, and
- they could lose their job or livelihood.

These comments from people who feel they will be worse illustrate the sources of concern:

- “Goods would increase in price. Meat would go up. Price of bread would go up”
- “The price of fruit and vegetables will go up”
- “We’re all linked in a small community, so what affects the agriculture will affect everyone”.
- “...with less farms there would be less farmer children and I’m a teacher so there would be less students”
- “We could lose our jobs. We both work in agricultural research”
- “My job is in the agricultural area and my job could be in jeopardy if water was not as available”

Expectation of Flow on Benefits from Environmental Allocations

The contrasting question to economic impacts relates to the potential environmental benefits

from changes to water allocation in the Basin. The key motivation for shifting allocations is to ensure the availability of water to maintain river health and associated ecosystem functions. The needs for these actions are defined by science and an understanding of the degradation caused by current allocation regimes and the potential benefits of changes to ecosystem health.

But to what extent do people identify the negative environmental consequences of over allocation for their local area? Do people believe that they and their region will realise benefits from the changes to water allocation they support? Basin Pulse approached these questions by first asking people about the health of their local environment before the issue of water management was raised. Then during the discussion of water management each respondent was asked directly about potential environmental benefits from water allocation change.

This approach identified that people in the Basin mostly do not see their natural environment as at risk or in poor condition. However, they do expect that allocating more water to the environment will result in benefits.

Perspectives on the state of the local environment

Basin Pulse asked people to nominate their description of the state of the natural environment in their local area. This demonstrated that most people living in the Basin believe that the local environment is in an excellent or acceptable state (Figure 13). A majority of people living in the basin describe the state of the natural environment in their local area as being acceptable (55%) with a further 16% describing it as excellent. Less than one-third of people in the Basin believe that their local natural environment is at risk or in a poor condition.

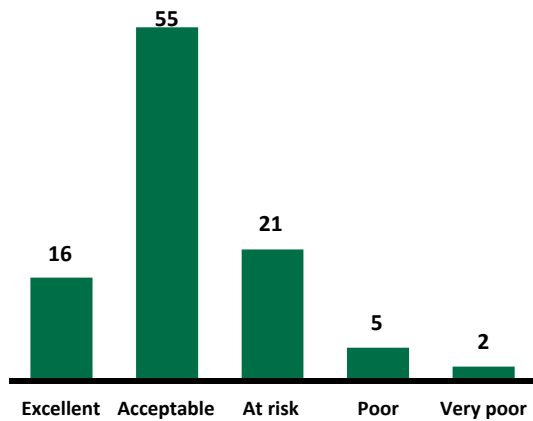


Figure 13 : State of the local environment
Base n=476 (responses in percentages, %)

Expectations of environmental benefits to the community from changes to water allocations

Views on the expected impact at the community and personal levels show that most people (70%) living in the Basin have an expectation that more water to the environment will have a positive impact for their local area (Figure 14). A majority of people expect that it will be either moderately or a great deal better. Thus, people identify the potential benefits of more water being directed to environmental use in their local area.

People are less confident about the potential for a positive impact at a personal level from increased water allocation to the environment. The group expecting no personal impact is of similar size to the group expecting personal benefit. However, nearly half (49%) of the population is expecting to personally benefit from increased water for the environment.

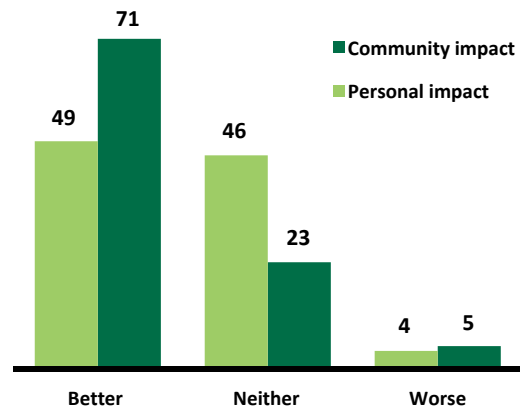


Figure 14: Benefits from increasing the allocation of water to the environment
Base n=476 (responses in percentages, %)

These results are consistent across employment status, education, income, region, state, gender and age. Verbatim responses illustrate individual perceptions of the ways in which life will be better or worse for the individual respondent. Many people identify recreational activities (especially fishing) as being a benefit that impacted personally on lifestyle. Many people also strongly associated a healthy environment with a healthy community and with personal health, confirming the strong associations identified in the earlier discussions of well-being. Comments from people that illustrate the personal impact of making more water available to the environment include:

- “When you are in a healthy environment it affects your mental health. It feels better”
- “It would make me feel better. It’d just give me a feeling that were living within a sustainable area and that we weren’t raping everything, so to speak”
- “It would affect my past times. More fishing and things like that”
- “More aesthetically pleasing – more serene”
- “Better for your lifestyle. More enjoyable place to live. More fauna and more tourists”

- “Probably just knowing that there are opportunities for me to enjoy the natural environment in its original state. It’s probably just knowing that the natural systems are being regenerated”.
- “We will still have resources available long term, not short term. So that’s better. The cotton is ruining it here. It’s taking all the water and ruining the soil.”
- “Just a healthier environment for my grandchildren and for the country”
- “The environment would be used in the correct manner”.
- “It will affect the way I feel about my environment. I want to see an improvement to the area.”

Conclusions

The first Basin Pulse report has provided a unique insight into the perspectives of people living in the many communities across the Murray-Darling Basin. It has sought to understand perceptions and attitudes from a ‘processes of change’ perspective and to build an appreciation of what it is that people most like and most want to see change.

The Basin Pulse initiative was framed on the basis that a better understanding of perspectives, priorities and the levels of urgency for change will assist decision-makers to understand the change readiness of communities and the likely responses to proposals for change they are preparing and implementing.

The information in this report can inform the strategic design of reforms alongside objective business cases. It can also support effective and responsive communications and engagement activities during consultation and implementation periods.

The findings demonstrate that attitudes to water reform are not uniform across the Basin, with subtle but important differences emerging. For example, people in lower part of the Basin tend to see the need for change to water management as being of the highest importance and urgency. They also perceive that changes to water management are not associated with their local area and instead need to occur elsewhere in the Basin.

To be successful in the engaging with the community in the context described in the report, approaches will need to consider how to tap into differences within the population to:

- Raise awareness that changes are coming.
- Stimulate informed reflection on the potential implications of change – for the

Basin, for their region and for them personally.

- Identify and satisfy expressed information needs.
- Enable contribution of views, ideas, preferences and priorities to influence the nature of the changes and how they are implemented
- Achieve buy-in to the change process and create wider momentum and support for action.
- Contribute to and participate in identifying and resolving barriers, setbacks and issues as they inevitably arise.

The strength of the results on community engagement in water reform as an issue suggests that all of these outcomes are possible if organisations actively listen, respond and engage as part of reform design and implementation.

Appendix

The Basin Pulse Survey

Overview of the Survey Approach

The Basin Pulse survey was conducted using a Computer Assisted Telephone Interview methodology.

The survey questions were divided into four sequential components:

1. Questions about well-being and issues of major concern
2. Questions about water management and reform
3. Questions about preferences for accessing information on policy and economic development processes (results not presented in report, please contact the Basin Pulse team for more information)
4. Demographic information

For more information on the survey methodology please contact the Basin Pulse team.

Profile of Respondents

476 people responded to the survey. The figures below provide a profile of selected demographics for the respondents.

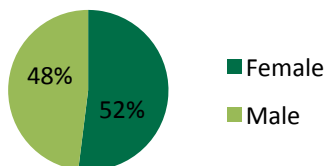


Figure 15: Gender

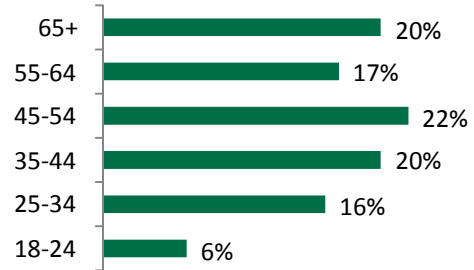


Figure 16: Age Profile

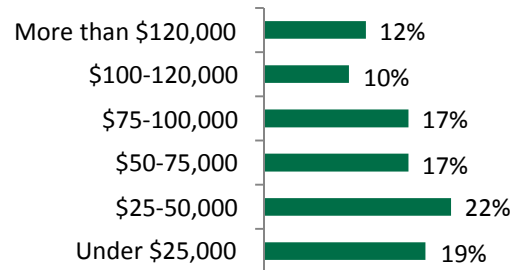


Figure 17: Household Income

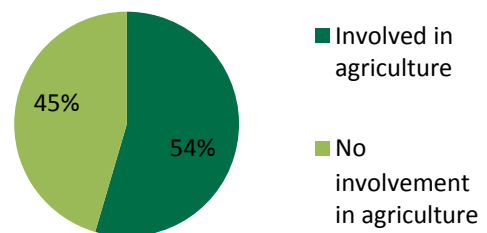


Figure 18: Involvement in agriculture

For more information on the demographics of the sample or to access raw data for further analysis, please contact the Basin Pulse team.

Additional Sources

1. The Murray-Darling Basin background section was compiled with reference to information contained in:
 - Australian Bureau of Statistics (2008) *Water and the Murray-darling Basin A Statistical Profile 2000-01 to 2005-06.*
 - Geoscience Australia, *Map of the Murray-Darling Basin.*
 - Murray-Darling Basin Commission (19 June 2008) *Media Release: Health check report finds long term ecological degradation in 23 Murray-Darling Basin valleys*

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