

# FRUSTRATION, CONFUSION AND UNCERTAINTY - QUALITATIVE RESPONSES FROM NAMOI VALLEY IRRIGATORS

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## Abstract

The Namoi Valley, of Northern New South Wales, has a problem with over-allocation of entitlements. This paper reports on a survey to determine the concerns of groundwater licence holders in the Namoi Valley, in relation to the development of the Water Sharing Plans (WSP). The development of these plans, designed in part to address the over allocation problem, provides an example of a consultation process that is open to criticism. The survey demonstrated that negative concerns can escalate when implementation of an already controversial policy is delayed.

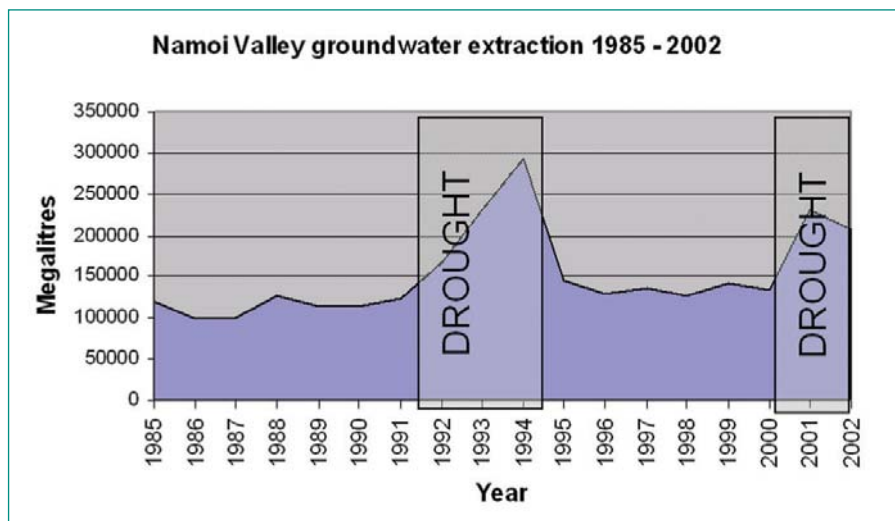
## Introduction

The Namoi groundwater resource is now the most intensively developed in NSW and extractions from the resource constitute 40% of the total groundwater extractions in that state (Ivkovic, Letcher & Croke 2004).

Concern was raised when it was recognised that as a result of the drought years of 1992-3 to 1994-5 the annual aquifer extraction, had increased to almost double the annual average aquifer recharge, (See Figure 1), (NGMC 2001).

## Why Were Entitlements Over-allocated?

The over-allocation appears to have been caused by at least four interrelated factors: 1) there was a lack of scientific research quantifying the available recharge; 2) the relevant State Government department responsible for developing the dams on the Namoi River actively sought to encourage the use of water up until the 1970s (Carter, Crean & Young 2000; Hamstead 2004); 3) while concerns were raised by some irrigators from the early eighties regarding the potential for over extraction it was thought that the resource could be "mined" for a period of time, and then recharge would occur when wet years returned (Namoi groundwater management committee 2001); and 4) water, at least initially, was not highly valued. This meant that some of the licences granted remained inactive. The department mistakenly believed that this was going to be a



**Figure 1.** The effect of Drought on groundwater extractions (Graph adapted from Namoi Groundwater Taskforce Final report with additional data provide by Department of Natural Resources).

permanent situation; and appear to have allowed an under-use factor of up to 30% in their planning rather than issuing new licences concurrently with the withdrawal of unused licences. (Haisman 2003)

Irrigators warned of the potential for unsustainable use of the resource to occur as early as 1983. Hamparsum (2003) explains "...once the success of one irrigator was acknowledged, a lot of other irrigators were encouraged by government to also develop." They were given engineering advice, as well as grants to sink bores and low-interest loans to develop the water.

Irrigators clearly blame the State Government for undertaking, or allowing these actions which lead to over-allocation, but this could be a convenient oversimplification. The department, when under pressure from landowners wanting access to licences, would have found it hard to resist without credible scientific information to defend their position. It is also likely that the existing licence holders were reluctant to challenge the further issuance of licences when this could lead to accusations of greed from applicants and involve a public process.

## The Impact of the Over-allocation

The total yearly licensed groundwater entitlement of the Namoi Valley is 471,823 ML which is over double the estimated sustainable yield (ESY) of 212,625 ML. Considering the valley as a whole, the average use since more stringent monitoring was introduced in 1985 is below the ESY, but this ignores the unsustainable extraction within some zones, and does not recognise the problem that could be caused by the activation of inactive licences (Carter, Crean & Young 2000), (NGWC NGMC 2001), (2001). Farmers have activated inactive licences as a counter to drought, which becomes all the more significant because of the generally larger demand for water at that time (Figure 1).

## Water Sharing Plans to Fix an Over-allocation Problem

The WSP are a product of a process that began with the Council of Australian Governments (COAG) meeting of 1994. The COAG agreement required that water rights be unbundled from property rights so that they could be freely traded and acknowledged the legitimate right to water

for the environment (COAG 2004). To allow this to happen the over-allocation issue needed to be fixed.

The WSP set the rules, for a specified period of time, for the sharing of water between the environment and the various users, such as irrigators, stock and domestic and town supplies (NGMC 2001).

## Delays to the WSP

The WSP for the Namoi groundwater sources were initially expected to be implemented from July 2003. So that they might be adjusted to better fit with COAG's National Water Initiative, the Minister deferred the introduction of the plans; initially for six months but then for another six months for the same reason (COAG 2003; Knowles 2003). In June of 2004 the plans were again deferred (to July 2005) to allow them to be reworked to allow a greater emphasis on history of use in accordance with COAG policy (COAG 2004). They were deferred again in June 2005 (to July 2006) to allow the structural adjustment package associated with the plan to be implemented concurrently (Table 1).

## History of Extraction vs Across the Board

Integral with the development of the WSP was defining the method of entitlement reduction. The two options under consideration were History of Extraction (HOE) or Across-the-Board (ATB). HOE weighted the reductions to take into account past usage and favoured the active user while ATB required an equal reduction from all licence holders regardless of past usage, and favoured the inactive or low user. Active users argued that HOE maintained economic activity within the community and reduced the effect of stranded assets. Low users argued that because they had been frugal and responsible with the water HOE would unfairly disadvantage them. Inactive users expressed concern that cuts based on HOE would unfairly affect their property values. The Namoi Groundwater Management Committee was unable to arrive at a consensus decision on the method of entitlement reduction. Licence holders had already agreed to voluntary ATB cuts of 10–35% in 1996–97, but the cuts to achieve sustainability were going to be much more severe.

Licence holders in general did not favour HOE (Nancarrow, McCredin & Syme 1998) but active irrigators did have a

**Table 1.** Chronology of the Water Sharing Plan development.

Feb 1994	COAG initiates water reform
1996/97	"Voluntary" cuts of 10-35%
Mar 2001	Water sharing plan work begins
Dec 2001	Draft water sharing plan released for comment
Dec 2002	Water sharing plan Gazetted
June 2003	Plan deferred to Jan 2004
Aug 2003	COAG develops National Water Initiative
Oct 2003	Plan deferred to July 2004
June 2004	Plan deferred to July 2005
July 2005	Plan deferred to July 2006

justifiable expectation based on statements from departmental staff (eg. Kailitzis, O'keefe O'Keefe & McDonald 2000) that the State Government would favour HOE as the preferred option (Carter, Crean & Young 2000; Namoi groundwater management committee GMC 2001), however this was not to be the case, as ATB was chosen in August 2001.

In November 2003 it was announced that the method of reduction would be re-examined (Hamstead 2004). The WSP continued to describe the cuts as ATB until amendments were made to the Water Management Act on 7th December 2005. The second reading speech summarises the change,

There was concern over the across-the-board approach to reducing entitlements in these over allocated aquifers ... The method has now been refined and will take into account the past water use of licence holders when determining their entitlement reductions. (NSW Government 2005).

The WSP were also the subject of a legal challenge by the irrigators, in the NSW Land and Environment court, from mid 2003 through until early 2005, at which time the action was withdrawn (Upper Namoi Water Users Association Inc & Ors v Minister for Natural Resources 2003). This was happening while the State and Federal Governments were politicking and jockeying for position and actually contributing to the delays.

## Research Methodology

The aim of the research was to establish the management response to the reduced water entitlements faced by the groundwater licence holders, the concerns of the irrigators and the likely response to the policy prior to the actual policy implementation.

A five-page questionnaire was developed and pre-tested on a similar group of irrigators from a neighbouring district. The questionnaire consisted of 24 questions collecting demographic and property data,

and 8 questions regarding irrigators' perceptions of the WSP.

The questionnaire was posted to 545 groundwater licence holders. The total number of responses was 261 resulting in an overall return rate of 47%, which was reduced to 24% when allowances were made for duplicate records and those choosing not to participate.

Responses were grouped into themes. While the main aim of

the survey was to explore the management response of the respondents, what respondents chose to communicate were perceptions and feelings related to the development of the WSP. The common themes uncovered were:

- Criticisms regarding the consultation process.
- Criticism of the Department
- Uncertainty resulting from not knowing the details of the final WSP

In an effort to further understand the behaviour of licence holders, they were classified into three different groups according to their history of extraction from the aquifer: 1) inactive; 2) High HOE - those with a high history of extraction, who will be facing cuts to their water usage; and 3) Low HOE - those that, although they are active irrigators, will not be required to make cuts to their water usage.

## Deteriorating Relationship with Government and Consultation Issues

State Government actions were strongly criticised by High HOE irrigators who suggest that they should "communicate and not dictate". It was suggested that authorities should "understand the impact of the decisions of office staff on practical people". Another irrigator summarises his concerns by suggesting that the government should be "getting their act together, paying for their stuff ups, replacing inefficient departmental staff, and being honest with people". One irrigator who seems to sum up the concerns of this (HOE) group responded,

Because I have participated in the so-called consultation process, and because I have seen the duplicity, bungling and political point-scoring at close range, it means the WSP, to me, is symbolic of a Public Service out of control and elected politicians without the ability to manage anything other than getting re-elected.

High HOE users also suggested that by taxing the wider community the government could have bought up all the

unused allocations and reduced the active users by a smaller amount.

Low HOE irrigators suggest that the State Government should have admitted that they made a mistake. They feel that the government was in control of licensing; therefore they were the ones who were responsible, not the landowners. They reinforce that irrigators had warned that the resource was over-allocated and that trouble would arise in the future. One irrigator suggests "...and it got to a point where there were a lot of objections, and so they changed the systems, so farmers had to go to court and appear, to object against the new guys' licences; and farmers wouldn't do it". Another Low HOE irrigator suggested that "Instead of approaching the debate with a pre-determined agenda (the government should actually have) listened to all concerned parties and attempted to get outcomes required without the inequities that will most likely be applied".

This group repeatedly criticises the department for its consultation process and their failure to take a more involved interest in what was going on at ground level. They widely believe that the department was not taking peoples' concerns into consideration. One inactive licence-holder responded, "The word 'consult' with industry is a joke". Their opinions on the department's role range from a moderate criticism that they should have listened to the people, through to a suggestion that it is driven by "bureaucracy, enviro-terrorists & political agendas".

Overall, the actions of the State Government are criticised in strong terms. All user groups suggest that more appropriate consultation with the people affected would have been useful, but the high HOE are the most critical of the government's role, understandably because of the amount of resources that they have at risk. One irrigator seems to be speaking for all the licence holders when he says,

The WSP could have been the most revolutionary change introduced into Australian farming if all stakeholders felt that they have been consulted and their ideas taken on board to produce a sustainable and workable future for rural business people. Instead the process has been continually thwarted by bureaucratic time wasting and cover-ups and also by political point scoring and tightening of the purse strings where rural communities are left to shoulder the financial and emotional cost.



Figure 2. Consultation model (Bridgman & Davis 2000).

## The WSP Deferrals and Uncertainty

The tortured path taken for the development of the water sharing plan and the repeated deferrals of the implementation date are criticised by the high HOE irrigators. They suggest that it would have been an improvement if a more effective consultation process had been set up in the early stages to shorten the time frame of the whole process. They mention that after several years of battling some people were "wearied and or tuned out." Others, expressing their frustration at the four postponements to the plan, suggest that they want the government to, "get on with the plan instead of mucking about". They say that not knowing when the WSP will be finally implemented, as well as not knowing if they're eligible for structural adjustment funding, hinders long term decision making. The lack of long-term security of water also contributes to their uncertainty, along with the Departments ability to change the water allocations from year to year.

The low HOE irrigators express similar concerns to those of the high HOE irrigators; they recognise that the resource is being used unsustainably, and would prefer that the implementation of the plan and the distribution of compensation for affected irrigators occur sooner rather than later. Even so, they still feel that the WSP implementation process has created uncertainty: some blaming the perception that WSP rules can be changed at the whim of politicians.

## Discussion

Licence holder responses suggest that their main concern is with the process rather than the outcome. Up until now it is perceived as having been unfair, confusing, frustrating and responsible for a great deal of uncertainty. This criticism of the process is, in essence, a criticism of the procedural fairness. But is the main concern with the process because the outcomes have still not been experienced? Could it be that when the outcomes of the WSP are experienced, and the full economic and social effects of the reductions are felt that the considerations of the process will become less important, and be replaced with a criticism of the outcome? There could be a number of reasons for licence holders' discontent. The "fair process effect"

described by van den Bos suggests that if people only have information about their own outcomes and do not have information about the outcomes of others, their response is to examine the

fairness of the process only as it relates to themselves (Van den Bos *et al.* 1997). Those who have a more accurate idea of their expected outcomes, either because of their closeness to the process or a greater interest, if faced with a negative outcome, (and for most licence holders there will be some negative effects), would be expected to report lower fairness judgements (Leung & Li 1990). It could be that when the plan is eventually implemented the focus will shift onto the outcome rather than the process.

It seems that the consultation process associated with the development of the WSP's could have been better managed. The effects of an imperfectly conducted consultative process on the stakeholders involved are clear:

Poorly designed and inadequate measures for information, consultation and active participation in policy-making can undermine government - citizen relations. Governments may seek to inform, consult and engage citizens in order to enhance quality, credibility and legitimacy of their policy decisions...only to produce the opposite effect if citizens discover that their efforts to stay informed, provide feedback and actively participate are ignored, have no impact at all on the decisions reached or remain unaccounted for. (OECD 2001)

Perhaps an indication of the NSW Government's approach to consultation with the community was given when the original Water Management Act 2000 was amended in 2004. The section in the principal act identifying those parties needing to be consulted with, when preparing a plan, was amended to allow the Minister to carry out this consultation at his discretion (Millar 2005).

Another problem licence holders faced, which in this case has led to increasing levels of frustration was identifying and understanding the role that they were to play in the process. Bridgman and Davis (2000) describe five different types of consultation, all falling on a continuum.

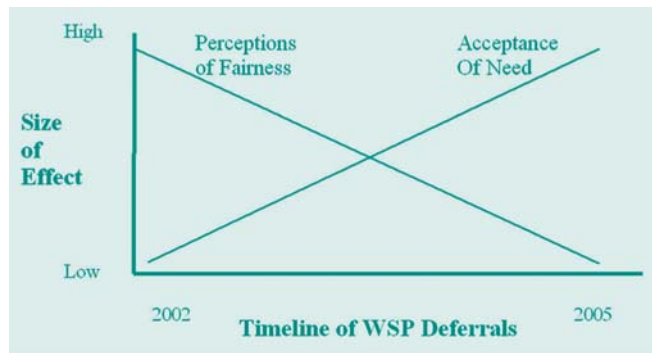
They describe "Consultation" as an "exchange, though the decision makers remain in charge of the agenda and the outcome... The goal is to improve policy, and enhance its acceptability, by taking into account the comments and interests of

those likely to be affected.” They describe “Partnership” as handing some control over shaping policy to the affected parties through things like seats on advisory boards, (which is what happened in the case of the Namoi). Because of this involvement, it is likely that the licence holders expected consultation to provide them with more control over the result and not just an ability to express an opinion. If this is the case this misplaced belief has manifested itself in the frustrations that are now being felt. Even if they were only involved at the lower level, some irrigators believe that there is no evidence in the final WSP that the minister had taken their comments into account, and that the Minister had not explained why this is.

The issue of whether the water management committees were responsible for the formulation of the plan or just for the provision of advice to the department was one of the points of claim identified by the irrigators in their court proceedings taken against the Minister for Natural Resources (Upper Namoi Water Users Association Inc & Ors v Minister for Natural Resources 2003). The Act covering the formulation of the water sharing plans, is worded in such a way that licence holders could believe that they were to prepare the draft plan rather than just simply advising on the preparation of the plan (NSW Government 2000).

Like other regions experiencing reductions in allocations, the Namoi Valley licence holders reported a strong feeling of uncertainty (Bjornlund 2004) related to water availability, and the situation that they will face after the ten year lifespan of the WSP. However, it also comes from a distrust of politicians, the government and their motives. While licence holders may be concerned that the Minister could change the plan any time during the ten-year term, under the conditions of the Act, it would trigger compensation payments to those affected. Compensation would also be payable for changes to subsequent plans if those changes were as a result of a changed government policy (NSW Government 2005).

When the licence holders are certain of the degree of their cutbacks and their eligibility for structural adjustment funding, it could be expected that their uncertainty will be eased. This uncertainty could then be replaced by a more pronounced reaction against the outcomes of the plan. Because they are currently uncertain of the outcomes they're not able to evaluate them properly,



**Figure 3.** Increasing perception of unfairness as WSP is repeatedly deferred.

they can only evaluate the process, and they have resoundingly described the process as unsatisfactory. It appears that during these years of involvement with the WSP they have become more accepting of the science behind the WSP and the need for action than they might have been when the concept of WSP's were first introduced, (Figure 3). They have, however, increasingly rejected or criticised the way of achieving it.

### Conclusions

The mail-out survey used for this research has allowed licence holders to express their opinions freely. While licence holders disagree among themselves as to the method of reduction they are strongly united in reporting that they perceive the process of the development of the Water Sharing Plans as having been unfair, confusing and frustrating. Up until now the plans, with changing methods of entitlement reduction and repeated deferrals of implementation dates have also been seen as contributing to their uncertainty, rather than reducing it. Combined, this has led to feelings of disillusionment and disaffection.

Some of their disquiet can also be attributed to a, now apparently mistaken, belief that they were to be involved with the formulation of the WSP rather than just providing an opinion. It seems that this combined with the failure to consult appropriately has further damaged an already strained relationship between licence holders and the government.

Despite serious concerns with the consultation process most licence holders are indicating a reluctant preparedness to accept the pain of the WSP, which for most is reduced access to water. It is possible that when the plans are finally implemented the dissatisfaction with the development of the plans, and with the way the consultation process was conducted, will be replaced with a criticism of the outcomes.

The findings suggest that in the future, when dealing with sensitive stakeholder groups, attention should be paid to carrying

out the consultation involved with the implementation of new policy in a way that does not create further problems. Community groups should be clearly informed of the role that they are to play and not allowed to be under any misapprehension regarding the demarcation of their responsibilities. This research has also highlighted the swamp of negative sentiment that can develop around a policy that starts with limited acceptance at the best, when implementation is delayed.

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