Sustainable Water Programme of Action Stakeholder Reference Group

Report from the Water Allocation and Use Workshop held at the Ministry for the Environment on 25 June 2004

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Contents

1 Purpose of the Report

This report summarises the views of the Stakeholder Reference Group on water allocation and use in New Zealand, and the potential approaches for improving our current allocation system. The views were identified at a workshop held at the Ministry for the Environment on 25 June 2004.

The role of the Reference Group was to provide feedback on potential policy options for improving the management of fresh water. The content of this report informed the Water Programme of Action Issues and Options discussion document which was developed by the Ministry for the Environment and the Ministry of Agriculture and Forestry in December 2004. A list of members of the Group is contained in Appendix 1 of this report.

2 The Problem Definition

The Group was asked to comment on the following problem definition for water allocation and use:

> *Current water allocation and use systems are not adequate to deal with increasing demands for water and still sustain the important natural, cultural, amenity and economic values of our water resource systems.*

There was general agreement across the Group that the definition did not capture the problem in its entirety. The following changes were suggested to the definition:

> *Current water allocation and use systems and their governance are not adequate to deal with increasing demands for a scarce supply of water in certain regions and still sustain the important natural, cultural, amenity and economic values of our water resource systems.*
>
> *Current water allocation and use systems are limited in their ability to deal equitably and efficiently with competing social, economic, environmental and cultural demands for water – an increasingly scarce resource.*
>
> *Water allocation and use systems are not adequate to deal with needs for water and still sustain the important natural, cultural, amenity and economic values of our water resource systems.*

The view that opportunities for an efficient and effective allocation system exist in the current system was reflected by some of the Group, however, failure to implement and govern the Resource Management Act framework effectively is regarded by the Group as a key component of the problem. The existing system needs enhancement to enable allocation where water resources are fully committed.

Additional comments were made on the need to reflect area and temporal issues in the problem definition. Some members of the Group raised the view that indirect regulation of water by councils control of land use change should cease. It was also suggested that the need for certainty should be captured in the definition.

3 Contributing Factors to the Problem

A list of contributing factors identified by the water allocation project team was presented to the Group for comment. In some cases the Group's comments suggested the definition of these factors should be amended.

a) Limited strategic planning

The issue of certainty was seen as important both for instream flows and for extractive use rights to water.

A number of factors were regarded by various members of the Group as contributing to the lack of certainty:

- inadequate strategic planning (leading especially to an inability to consider cumulative effects of water allocation)
- a lack of outcome-focused plans
- a lack of clear and time-bound objectives
- the lengthy process for developing plans
- the variety of definitions employed to define rights to use
- the lack of adequate mechanisms to deal with conflict between users in situations of water scarcity.

It was acknowledged by some members of the Group that strategic planning does not involve "picking winners" or giving priority for the allocation of water above and beyond water which is already allocated to specific uses.

Governance of the overall water allocation system was raised as a key problem. Lack of plan implementation and politically motivated decision making were also raised as contributing issues. Poor and slow performance of the present governance system in its conflict resolution function was widely regarded as a key factor. The need for clear parameters for the allocation of surface and ground water at the national level was also raised.

b) Evolving knowledge about instream flows

This was thought to be an issue for water resources in general, and not just instream flows. The uncertainty of science, the uncertainty in naturally variable catchments, debate over minimum flow methodologies, and a lack of catchment specific knowledge were regarded by the Group as contributing factors to the difficulty in defining and setting flow levels.

The need for a system which allows for changes in the environment was regarded as important. The current allocation system was thought to provide poor flexibility and adaptability to change. The tension between allowing for flexibility but at the same time providing certainty was acknowledged. While certainty of minimum instream flows was regarded as important, the need for the rest of the allocation system to allow for changes in both the physical and economic environment was regarded as important.

c) Limited scope for evaluation of where water would be most valued

Scope for evaluation was thought to be present in the current system although the Group did not identify a need for regional councils to evaluate proposed economic uses of water. The Group agreed that there is a need to explicitly determine the environmental requirements for water.
Currently a lack of incentive to understand and apportion water uses until allocation limits have been reached was thought to be a problem. The need to optimise the value from available water rather than maximise water availability was raised. This is because in situations where water is scarce it is not possible to maximise use for all values; it is more desirable to seek to achieve the greatest overall benefit to society. Optimised allocation can however, be inequitable or uneconomic for existing users who may have invested significant resources into water related infrastructure. Uncertainty over future resource allocation would likely lead to a reduction in investment in infrastructure in a region.

A lack of consensus on the priority values for water was also raised as a problem although the view was raised that this problem becomes a simpler economic allocation problem if the in-stream requirements can be agreed first.

The Group proposed that any determinations it could reach for allocating water should be given weight in decision making related to water allocation.

d) First in, first served system (First in Time, First Right)

The current “first in,, first served” system was regarded as problematic when allocation limits were met (although this is disputed by some water users), but this was not thought to be the case where water is plentiful. The issue was raised whether an alternative system would result in the picking of “winners and losers”, a scenario with potential for inequity, and unlikely to explicitly account for the comparative social and economic benefits associated with different water uses. The need for national determination of the system of allocation in order to maximise the transparency of any allocation decisions was raised.

e) Little use of transfer and reallocation

Problems with changing use to the highest value once all water has been allocated are a current problem in some regions. Regulatory methods currently used are inadequate and regional councils have been reluctant to adopt the transfer mechanisms provided in the Resource Management Act. The need for further development of these mechanisms along with greater government direction for regional councils on their use was raised, so that available water can move to its highest and best use over time, and thereby deliver improved economic returns for the country.

f) No incentives for technical efficiency

The comment was made that the current system of water allocation has lead, in some instances, to perverse incentives which inhibit efficiency of use, for example 'use it or lose it' basis for retention of rights to water. One view is that present policies encouraging or requiring increased efficiency of use are often targeted at users of water for irrigation, so they are of little value or relevance to other water users. In addition, the lack of transferability and/or resource rentals means that water use rights are unpriced except where rights to water affect land prices. This results in a reduction of incentives for technical efficiency in water use.

g) Opportunities for representation of Maori interests restricted

The view was raised that the RMA provides opportunities for Maori to participate in allocation processes although Maori are often underrepresented on regional councils. Council practice in incorporating Maori interests varies considerably. The Group indicated that there is a need to hear from Maori about their views on their participation in the current allocation process.

h) Limited organisational capacity, experience and skills

No comments were made on this contributing factor however, the issues raised under *a) Limited strategic planning* about lack of plan implementation and a lack of specific outcome focused plans are related to this factor. The lack of water expertise of regional councillors was also identified under the section 4 Potential Approaches.

i) Additional contributing factors raised by the Group

- Poorly defined boundaries of ownership and rights to allocate were raised as additional factors to the overall problem. The physical boundaries for allocation were also thought to be poorly defined across and within catchments, and between land and water.
- The role of education was regarded as important in gaining acceptance that fresh water is a finite resource.
- Externalities are not adequately addressed in the current system.
- The point at which the management of water resources starts from in the hydrological cycle. The view was expressed again in relation to this point that the allocation capacity of councils should not extend to the regulation of revegetation of catchment land where the catchment land would be naturally vegetated. A view was expressed that the physical boundaries for allocation were too broadly interpreted by regional councils.
- The lack of constructive communication between stakeholders in some areas.

4 Potential Approaches

a) Strengthen protection of instream values

The need to define instream values was raised and the need to recognise the differences between water bodies. Technical information should be used to establish the values however, instream values should also reflect the values and priorities at the national, regional and local community levels. A standard approach such as setting default regimes (for example, based on a five year minimum flow), could be taken where information is poor or incomplete, or a set of acceptable methodologies for establishing environmental baselines could be developed to provide certainty for regional authorities and resource consent applicants. The need to explore the potential for developing a National Policy Statement and a National Environmental Standard was raised.

The need to secure instream values, while as far as possible avoiding the reduction of out-of-stream values, was raised. Instream needs should include those relating to ground water and surface water. There was recognition that all values should be considered when making decisions, along with the cumulative effects of proposals.

b) Improve Maori participation and engagement

Understanding the barriers to engagement with Maori was regarded as important, as well as improving awareness of the need to engage with Maori. Some of the Group regarded the current mechanisms for engagement under the Resource Management Act as adequate; however, the need to improve the quality of the engagement was raised.

c) Strengthen water planning processes

The need for a system to allow for decisions to be made more quickly and more transparently was raised, as well as mechanisms for monitoring decision-making processes. Decision makers who understand water issues and are accountable for their decisions were also thought to be needed. The option of an independent national body similar to the Electricity Commission or the former National Water and Soil Conservation Authority, with oversight of water management was raised, along with modifying governance to incorporate water expertise (a similar approach to the former catchment and regional water boards). The three-year political cycle was seen as inappropriate for rapid and apolitical decision making. A "water commission" would need to be independent from central government agencies and local government politicians. Another option suggested was for central government to develop a review function of regional council performance similar to the Education Review Office.

A central review agency was considered to be unnecessary by some water users, provided regional authorities are adequately resourced, their decision making is transparent and subject to appeal, and greater direction is provided by central government.

Central government was also thought to have the roles of setting the policy framework for regional councils to implement, and ensuring that water rights are defined in a consistent and certain way. It was considered by some of the Group that while regional councils should be involved in planning for environmental baselines, councils should not be involved in allocation above the baselines.

d) Set allocation limits

There was agreement amongst the Group that central government should provide direction for setting allocation limits at local levels and that allocation limits must be set in conjunction with environmental bottom lines. The potential for trigger levels to be set to allow for graduated rationing down to bottom lines was raised. Setting criteria for dealing with emergency situations such as national or regional electricity shortages was also suggested.

e) Modify first in, first served

Some of the Group thought that the current system is satisfactory if there is an abundance of fresh water or even when water is fully allocated. The Group agreed that there is potential to use a market approach above instream flow baselines. Baselines should be established by regulatory means, however there was some difference of opinion as to the extent of regulatory intervention needed to constrain a market approach above environmental baselines. The point of difference turned on whether once in-stream flow baselines have been set, there is a further need to provide for social rights outside of a market-based allocation process. The majority view was that such measures (for example, regulation) may not be needed if the in-stream flow baseline and market allocation solution is effective.

Difficult transition issues such as the problem of windfall gains and losses for existing rights holders were also raised when moving to a market-based approach. Windfall gains are less likely for existing users whose use of water (water rights) is already incorporated into the prices of assets such as land. Existing users, who may have a reasonable expectation of continuing use, would consider any loss of access as a loss. But windfall gains or losses could also occur for other groups. However, existing rights have fixed terms and, in many cases, review provisions. It is expected that in general, the needed transition could occur without loss of existing legal rights provided reasonable transition times are allowed.

f) Introduce measures to improve efficiency of use

An effective means of improving efficiency of use is market-based pricing of water. This approach allows existing inefficient users to invest in efficiency funded on-selling water that they no longer require. Education on the efficient use of water was raised as an important tool for achieving efficiency of use. Encouraging best practice to improve efficiency was preferred to regulation.

g) Establish a resource rental

The Group thought a resource rental had potential for improving water allocation, however concern was raised about increased taxation, fiscal gains to the government (and thus losses for users) and the use of the income. It was suggested that it would be important to ensure that the income was used to address externalities or to remediate the adverse effects of poor resource use in the past. Differential rentals could also be established related to the amount of water available, for example, higher rentals during water shortages.

A water market was raised as an alternative by some of the Group which would signal time of water scarcity, and negate the need for a resource rental as a price signal. Resource rentals could also distort investment signals, to the detriment of dynamic or long-term efficiency. One view raised was that a resource rental would increase the compliance costs faced by water and resource users for arguably very little benefit.

h) Enhance transferability of water permits

Transfer of permits was thought to be one of the market approaches that could be used for the allocation of the water that is available once environmental bottom-lines have been established. Greater flexibility could be achieved by allowing subletting or on-selling the excess of water. Given that most regional councils have not made use of existing transferability provisions, study is needed to find the reasons for this. Some enhancement of the statutory provisions together with stronger government direction to use them may be required.

i) Increase/strengthen certainty of rights

There was agreement amongst the Group that clarification and strengthening of instream and out-of-stream rights was needed. This included recognising and respecting existing water infrastructure. Weakening or lack of recognition of existing infrastructure and/or rights was thought by some of the Group to have adverse impacts on the dynamic or long-term efficiency in water intensive infrastructure industries.

j) Additional approaches

Some of the Group decided that a set of principles or decision-making criteria was needed to underpin a water allocation system. The principles/criteria raised were:

- flexibility
- transparency
- economic efficiency
- equitable access
- social equity (not fully supported by the Group)
- precautionary approach (including reversibility and adaptability to environmental change)
- sustainable development
- continuous environmental improvement
- certainty (note tension with other principles)
- co-operation between users.

5 Where We Want to Get To and the Mix of Policy Tools

There was agreement across the Group that environmental baselines (including ecological and social considerations) should be determined first before identifying priorities for allocation and/or the volume of water available for allocation for commercial use. The suggestion for a sustainability assessment process to be incorporated into an allocation process was made. The allocation system should bring national and local interests together in a single process.

Developing a flexible system to deal with change was also raised as important. The use of transferability would enhance flexibility. The existing Resource Management Act requirement for a review of plans after 10 years was regarded as appropriate.

The need to recognise existing rights (including instream rights such as water conservation orders and social rights) was raised, and to provide certainty by defining rights that can be transferred, and by developing a clear and transparent framework for transfer.

The mix of instruments needed for an effective allocation system included regulatory instruments to protect instream values by establishing environmental baselines for flow, water quality and ecosystem health; and market instruments to achieve efficient allocation above the environmental baselines. There was general agreement amongst the Group that market instruments could provide greater flexibility for an allocation system. The transitional problems when moving to a market-based approach were recognised but thought to be addressable. There was also a question raised on how a marked-based approach could provide for equity and reversibility. One solution raised was to provide for reversibility and future change in the design, and to clarify the equity issues the community wants to see reflected in the system.

Education was raised as an integral part of any mix of policy instruments. The need for funding for science and monitoring the effectiveness of a system was also mentioned.

The importance of out-of-stream storage of winter flood flows as a tool for managing water allocation in water short areas with the least adverse environmental effect was also identified.

6 Key Components of an Effective and Efficient Water Allocation System

Nine key components or factors for an effective and efficient water allocation system have been distilled from the ideas raised at the workshop. The components reflect the major themes which appeared to have general agreement from the Group.

1 Establish environmental bottom lines using science

Environmental baselines should be established as a matter of priority and with default formulas and national standards as an interim measure, before transferability is introduced and before the quantity of water available for allocation is identified. This could be achieved by establishing minimum flow regimes and standards for water quality and ecosystem health for all surface water bodies, and allocation limits and water quality standards for ground water.

2 Protect existing instream and out-of stream rights

Existing instream and out-of stream rights within the current allocation system including customer investment, should be recognised and protected in a modified regime. The value of existing investment in water infrastructure also needs to be protected. Existing investment in infrastructure and land use activities would lose value if existing rights were not protected.

3 Provide greater certainty of rights and greater certainty within the allocation process

Clearly defined water rights that are consistent across the country were regarded as a key factor for an effective water management allocation process. Some believe that the allocation framework should not extend to controlling the interception of rain water before it enters water bodies. Certainty of allocation and planning processes could be improved by developing a National Policy Statement for fresh water and/or setting National Environmental Standards, however new legislation may produce the greatest certainty without impacting on other important objectives. Certainty could also be improved by establishing a national body independent of the Ministry for the Environment to provide a policy framework and/or oversight of water management. Establishing allocation limits for water bodies within a nationally determined framework could provide improved certainty for all water users.

4 Provide greater flexibility

Greater flexibility of allocation could be achieved by using market instruments. The issues of tradeable permits, establishing water markets, and resource rentals were considered by the Group. The benefit of flexibility should be sought in a policy context which can also resolve the associated issues of addressing externalities, social equity, transitioning to a new system and reversibility. Government direction and support is likely to be needed to ensure the uptake of market instruments by regional councils.

5 Strengthen governance

Improved governance of the existing system or a modified system is regarded by the Group as essential for achieving an efficient and effective system. A national framework should include an independent monitoring and review component to identify failures of implementation of the framework at the national, regional and local levels, and to identify outcomes from environmental, social or economic perspectives. The monitoring and review function should be funded and administered by central government.

6 Improve decision making

Regional decision-makers need to have sufficient knowledge of water issues, and be guided by the principles of transparency, equity and efficiency, and the principles contained in the Resource Management Act.

7 Identify barriers to Maori engagement

The current water allocation system provides opportunities for Maori to participate, however the barriers to effective use of these opportunities need to be identified and considered.

8 Increase education

The fact that water is a finite resource needs to be recognised by all interests in fresh water. This can be achieved by providing education on the efficiency of use, the value of freshwater ecosystems and means of protecting them, and the sharing of best practice. Greater co-operation between users can facilitate the sharing of knowledge.

9 The role of local government (or the Local Government Act) in the water programme of action

The Group sought clarification on the role of local government and the weight to be afforded that sector relative to the Stakeholder Reference Group.

Overall, the Group was impressed with the degree of consensus that it developed around its recommended approach to water allocation issues, and would welcome the opportunity to contribute further to the more detailed design of policy.

Appendix 1: List of Members of the Water Programme of Action Stakeholder Reference Group at 25 June 2004

Member	Organisation/occupation
Paul White	Hydrological Society
Brian Cameron	Farmer
Julie McLeod	NZ Rafting Association
Raewyn Moss	Meridian Energy
Tim Stewart	Meridian Energy
Hilton Furness	Fertiliser Industry
Bryce Johnston	NZ Fish and Game Council
Neil Deans	Nelson/Marlborough Fish and Game Council
Cath Wallace	ECO
Jo Mackay	ECO
Bob Englebrecht	NZ Irrigation Association
Guy Salmon	Ecologic Foundation
Don Young	Farmer
Jennifer Wattie	Contact Energy
Bruce Thorrold	Dexcel
Peter Whitehouse	Business New Zealand
Don Ross	Landcare Trust
Fiona Young	Federated Farmers
Shane Lodge	Fonterra
Jon Harding	Limnological Society
Ken Sims	NZ Freshwater Anglers Association
Mercedes Lentz	Sustainable Business Council
Annabel Davies	Water Care Services Ltd
Sally Van der Zijpp	NZ Wine Growers
Geoff Keey	NZ Royal Forest and Bird Protection Society
Paul Morgan	Federation of Maori Authorities
Ken Robertson	NZ Vegetable and Potato Growers Association
Murray Parrish	NZ Forest Owners Association
Dugald Rutherford	Farm Forestry Association
Stephen Jacobi	NZ Forest Industries Council