Hawke's Bay Regional Land and Water Symposium 2011 Event Report

December 2011
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HBRC Plan No. 4296

Council thanks

On behalf of the region we would like to thank all the participants for their ongoing commitment to collaboration on solutions to sustainable land and water management in Hawke's Bay.

The Hawke's Bay Land and Water Management Strategy is just the start of the journey and there are many challenges still ahead of us. These will involve all of us in finding ways to overcome the challenges and skirt around the barriers as we work towards achieving the objectives in the Strategy together.

We think events like this symposium will be a good way of engaging and updating the community on progress on the Strategy and we will continue to hold them at least annually.

Fenton Wilson
Chairman
Hawke's Bay Regional Council

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1. Purpose of this report

This report provides a record of the main discussion points of the Hawke's Bay Regional Land and Water Symposium held in Napier on 30 November 2011. The event was hosted by the Hawke's Bay Regional Council.

The purpose of this report is to:

- report back to the participants of the symposium the main points
- inform interested parties about the event's outcomes
- add to the transparency of Council in their reporting
- document input gathered on the Land and Water Management Strategy.

2. Why was the symposium held?

The Hawke's Bay Land and Water Management Strategy was developed by a stakeholder group selected from a list of people nominated by participants at the 2010 symposium. The Hawke's Bay Regional Council (HBRC) hosted the 2011 symposium to formally launch the Strategy.

The purpose of the meeting was to:

- continue to develop a shared understanding of the region's current and emerging land and water issues
- discuss how the Strategy was developed – who was involved; how decisions were made; and how the group learned from each other along the way
- develop an understanding of where the Strategy sits in Council's planning framework and how it will impact future decisions
- discuss and critique the content of the Strategy – what people liked, what they thought was missing and where they thought more attention was needed
- update the community on the Ruataniwha Water Storage feasibility study
- begin to develop ideas for a Regional Biodiversity Strategy.

3. Who participated in the symposium?

A wide range of people and perspectives helped make the symposium a successful event. Approximately 125 participants, including HBRC staff, came to the event representing around 35 different organisations. A full list of participants is included in Appendix 2.

All participants were sent a copy of the Land and Water Management Strategy with the invite and were encouraged to read it prior to the symposium.

4. What information was presented?

The speakers at the event and the subjects covered are listed in the agenda contained in Appendix 1.

The following section provides some highlights of the presentations; the full presentations can be viewed on the HBRC website.

5. The Land and Water Management Strategy – Context and content

Helen Codlin, Group Manager Strategic Development provided an outline of the Strategy development process and a high level overview of its content.

Key Points included:

- The 2010 symposium on water quantity was an important "springboard" for the collaborative process that's led to the Strategy under discussion.
- Participants at the 2010 symposium acknowledged the future for Hawke's Bay's environment, people and businesses could be bleak or rosy. What scenario becomes reality is heavily dependent on the journey we take from now. The Strategy presents a collaboratively developed direction of travel.
- The high level of consensus among participants on key issues and next steps was highlighted in a "clicker" survey at the close of the 2010 event. It is worth recapping some of the results:
  - the importance of a "clean, green image" for future economic growth (95% of respondents agreed)
  - storage is needed to access water when we need it (85% of respondents agreed)
  - we'll be worse off in the long run unless we act differently, probably requiring tradeoffs and new business costs (92% of respondents agreed)
  - there are barriers to achieving consensus on water management (70% of respondents agreed), but…
  - working together collaboratively is the only way to move solutions forward (95% respondents agreed).

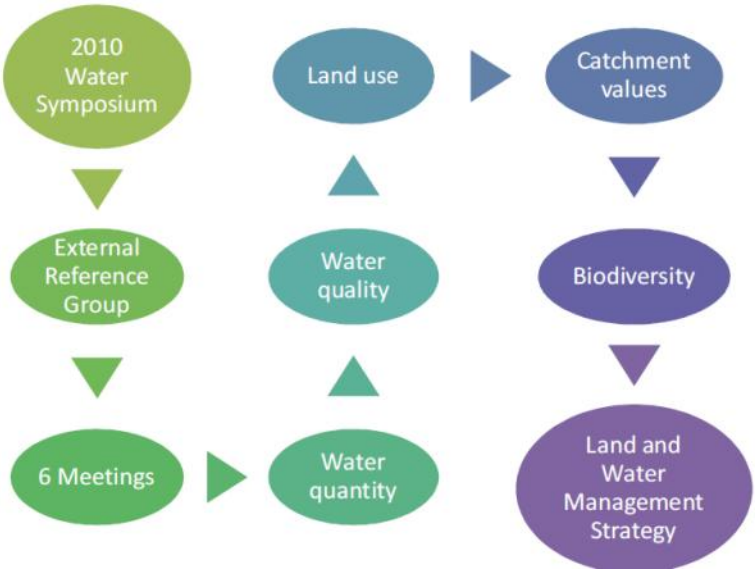
- Dr Morgan Williams' challenge and encouragement to collaborate on building our collective future was "you can do it". So far we can respond "we can and we have".
- The Land and Water Management Strategy is the result of this intensive collaboration over the last year. Helen acknowledged and thanked all those who have been involved, investing substantial time and effort.

- The national context for the Strategy's development and implementation is important. The National Policy Statement for Freshwater Management (NPSFM) recognises the need to:

  - improve integrated management of water allocation, water quality and land activity, including the cumulative effects across catchments
  - set water quantity and water quality limits and time bound targets (where exceeded) to ensure water is managed in an integrated and sustainable way, while providing for economic growth within these limits
  - ensure that tangata whenua values and interests are identified and reflected in the management of fresh water through their effective involvement in water and land management.

  Further direction on NPSFM implementation will be provided in 2012 when the Land and Water Forum (LAWF national collaborative working party appointed to advise Government) reports back on governance and process issues in March and on tools and methods in September.

- The External Reference Group that has developed the Strategy was established with the help of nominations collected at the 2010 symposium. The Strategy contains the vision, guiding principles, objectives, policies, possible actions and monitoring and review processes for the management of the region's land and water resources. Encouraged by the Reference Group, land use and water quality were added alongside water quantity. It was quickly recognised that these interrelated issues cannot be considered separately.



Journey to the Strategy

- The Strategy targets four areas which are essential to improving land and water management. Each section has an over-arching objective:

Planning and Governance	Sustainable Land Use	Sustainable Water Use	Information and Communication
Objective: Government agencies, land owners, mana whenua and stakeholders work together towards the unified goal of sustainable land and water management	Objective: The future viability and resilience of Hawke's Bay's land and landscapes is enhanced and water quality is improved through appropriate land management and land use practices	Objective: Long term prosperity of the region is enhanced through sustainable and efficient water use while maintaining and/or improving overall quality of freshwater ecosystems for agreed management objectives	Objective: Relevant and timely resource information is collected and communicated in a transparent manner to all interested parties

- The Strategy seeks to steer the Hawke's Bay region towards a positive long-term future for land and water resource management that benefits our environment, people and businesses. Who better to give us a vision of what this future might look like than two of our "future leaders"…

Members of HBRC's Youth Environment Council, **Anna Michels** of Napier Girls High School and **Stephanie Coleman** of Taradale High School narrated 'Our picture of the Future in 2050', which was an adaptation of the story contained in HBRC's Strategic Plan (p.6 and 7). The story that Anna and Stephanie read out can be found in Appendix 3. Anna and Stephanie also urged that although we may have different interests and it can be hard to work together, "this stuff is so important, get over it".

Next **Graham Sevicke-Jones, HBRC Science Manager** gave an overview of Hawke's Bay's land and water resources with a particular focus on land and water quality.

Key points:

- Understanding connections is essential for sustainable management, whether it's spatial (land-water-oceans), issues (water quality, quantity, land, biodiversity) or relationships between environment, people and businesses.

- Notable Hawke's Bay environmental issues include: increasing nutrients; erosion; loss of functioning landscapes; poor bacteriological water quality; and loss of riverine habitat.
- We are fortunate in having an increasing number of scientific tools that can assist the development of more sustainable resource management, but there are always improvements to be made.
- A small proportion of land in Hawke's Bay has the physical characteristics (assuming good management) to support a wide range of potential land uses. Such land is largely limited to the Heretaunga and Ruataniwha plains. The Heretaunga Plains already has a diverse mosaic of intensive land uses and the Ruataniwha has the potential for further intensification. Much of our hill country has limited sustainable use options. At present, a significant amount of this land is being used beyond its land use capability. This is dramatically demonstrated by the hill country erosion from the April 2011 storm events.
- We should avoid oversimplifying our perception of the Hawke's Bay environment. For example, the Land Environment New Zealand (LENZ) classification identifies 138 environment types. The Freshwater Environments NZ classification indicates similar diversity.
- Cumulative nutrient impacts on water quality are a recognised national and regional issue. Nitrogen consumption has climbed dramatically in the last 2 decades, but has recently levelled. Phosphorus consumption fluctuates and has recently fallen.
- Despite perceptions, dairy is still a limited land use within Hawke's Bay and largely limited to "pockets". Analysis of land use change in the Tukituki catchment (2000-2011) shows the biggest shift is from sheep or beef to combined sheep and beef, which is the dominating catchment land use.
- Regional loss of wetlands has been substantial since the pre-European era, highlighting the importance of retaining what are left or restoring/creating wetland resources.
- Nutrient (nitrogen and phosphorus) and E.coli levels and trends in our rivers provide a mixed water quality picture. There are certainly issues to be addressed, particularly in relation to "hotspots" including the Tukituki River and the upper Mohaka. However, the picture is not all bleak, with a number monitoring sites showing good compliance with guidelines and/or significant decreasing trends.

- The Tukituki catchment, with its complex physical characteristics, multiple community values and potential for significant land use intensification and economic growth if secure water is made available, makes it a prime catchment for integrated, strategic management of land, water allocation, water quality and biodiversity, through a collaborative approach. It is a useful catchment we can use to "road test" the Land and Water Management Strategy today.

6. The Reference Group Perspectives

Four members of the Reference Group shared their thoughts on the process and the content of the Strategy.

Dale Moffatt works for Te Taiwhenua o Heretaunga. She saw her primary role as ensuring a Maori perspective runs through the whole Strategy. The bottom-line is that every policy and possible action had to be mauri-enhancing. Maori need and want to be involved in the process from the start through to implementation, monitoring and review. The Strategy process enables this. Importantly, those sections of the community who have not had the chance to contribute yet will get to do so through the actions and implementation. The Council's role has been one of technical advisor, not directive.

Dale is happy with the initial Strategy, which is the result of self-interested stakeholders moving towards a common vision for Hawke's Bay water and land management. It isn't perfect, but it's a good start. Obviously the "devil is in the detail" of implementing the policies and actions. She looks forward to contributing to this process.

Hugh Ritchie is a Central Hawke's Bay farmer, is involved with the LandWISE on-farm research group and is assisting the national debate around land and water management through the Land and Water Forum (LAWF). Hugh pointed out that over the last decade there's been an increasingly confrontational approach to resource management planning, resulting in Environment Court actions, wasted money and time, even though we share many similar values. The External Reference Group's involvement with the Strategy from the outset represents a new model of working, also seen in the LAWF, that "front loads" the planning process to enable stakeholders to work collaboratively through the issues in an early and ongoing manner. By listening to each other and building consensus, we can arrive at better outcomes and hopefully avoid protracted "fighting of corners" later on. Hugh feels it's important that we learn lessons from other regions' experiences and don't put people in a "nothing to lose" situation, which inevitably results in conflict.

The NPSFM requires limits to be set and everyone will need to contribute to establishing, meeting and maintaining these, particularly those with agricultural interests. It's all about managing land within sustainable limits set by the community, with science informing not leading.

We will need to adjust the Strategy if we don't get things right from the outset (unlikely), taking care that any changes to the Strategy are collectively agreed to avoid parties feeling their efforts are being undermined (compare Hurunui). Those involved in the ongoing process of implementation and

review must work out how they can best represent their communities effectively, assist an open, transparent process and own and champion outcomes.

Peter McIntosh is Regional Manager of Fish and Game Hawke's Bay. After what Pete describes as "an awkward first date" the collaborative group process has been positive and given representatives a better understanding of each other's points-of-view. It's been a challenging process, particularly as water quality and land were subsequently added to the brief alongside water quantity allocation. This more integrated approach is the right one - the environment does not need to be in conflict with a vibrant, growing regional economy, but we need healthy rivers.

It's important to recognise the Strategy is only the start, not the finish. There are a few "holes" in it, for example biodiversity, but there are also positive actions set out, such as riparian fencing and planting and wetland protection and enhancement. Regional Councillors now need to incorporate the Strategy into Council's Long Term Plan to drive implementation.

Andy Pearce's interests are many including Director, Bank of New Zealand; Chairman, Regional Water Management Committee, Environment Canterbury; and Deputy Chairman, Energy Efficiency and Conservation Authority. Andy acknowledged that the Strategy is not perfect, but is a "pretty good outcome from a one year process", noting that Environment Canterbury has been developing its water strategy since 2002 and in some respects the Hawke's Bay community is now further ahead. The decision to move to a more holistic brief, including water quality and land, gives us a broad-based strategy, developed and agreed by a broad-based Group.

Andy gave his view on how the document matches up against three key questions:

1. *Is the Strategy clear about what we want to achieve?* In general "yes" but there is more to come, including biodiversity. It's fully supported by the Reference Group. Andy's score: 8 out of 10.

2. *Does the Strategy have action steps?* "Yes" in the form of 'possible actions'. It doesn't address everything, but gives a good sense of agreed actions to be implemented to achieve its objectives. Andy's score: 8 out of 10.

3. *Can we measure progress and will we know whether we get there?* Targets and monitoring will need some more work, but the document is stronger than it was in earlier drafts. Andy's score: 6 out of 10.

7. Feedback on the Strategy

At their tables, participants were asked to comment on their overall impressions of the Strategy, what was good, what was missing and what needs more attention. One representative from each table shared their colleagues' comments. Key themes that emerged are summarised below.

Overall impressions

The Strategy is generally considered a pretty good start. It's been produced efficiently over a single year through a collaborative process that has built trust, confidence and relationships between stakeholders on the Reference Group. Importantly, it sets an agreed direction of travel for the region and deals with water and land issues in an integrated manner.

While it's a good start, there's also a lot of work ahead and we must maintain momentum. It's not perfect and is weak in some important areas; the lack of a strategic approach to biodiversity being a main issue raised. It's also light on the implementation phase, which will be essential to its effectiveness. We need to make sure it links effectively with other documents (it's a high-level strategy, not a detailed plan), and be clearer about our responsibilities, priorities, funding resources and timeframes. We need to consider how future engagement can ensure inclusiveness, how we can maintain momentum and how we can ensure real results.

What's good?

The range of land and water management issues and their interconnectedness was thought to be thorough and almost complete. The Strategy seeks to integrate land and water management with a "mountains to sea" approach which was applauded. Future land use is addressed and land management and use issues are recognised. It provides water users with more confidence of a secure future water resource informed by good science.

The structure of the document is straight forward and what it hopes to achieve is clear with specific objectives, policies and actions.

The Strategy development process was considered efficient and, being based on collaboration and consensus, was considered a positive starting point. It helped to build relationships, develop trust and to understand each other's, often opposing, views. Significant involvement of mana whenua from the outset was seen as a firm basis for moving forward positively.

What's missing? What needs attention?

Participants considered these questions separately, but the overlap in feedback means the issues raised are better discussed together.

- **Contextual analysis.** While a lean format is desirable, addition of contextual analysis of constraints (e.g. property rights, future demand for water etc.) should be considered. This would assist understanding of the reasoning underpinning the Strategy. Analysis of economic implications of changing resource use was also raised.
- **National Policy Statement for Freshwater Management.** Clearer links with the NPSFM requirements could be useful including limits and targets for water quantity and quality and integrated management of freshwater (and ecosystems), land use and development in whole catchments (including coastal environment).
- **Biodiversity and ecosystem services.** The late addition of biodiversity is a major weakness in what should be an integrated, holistic strategy. There is strong support for the development of a biodiversity strategy as a priority to avoid a continued "piecemeal" approach. A first step is to improve understanding of the region's biodiversity and to promote the contribution of ecosystem services to our collective values.

- **Water quality and Land.** The document is not considered "environmental" enough by some participants. It may not give enough confidence that misuse of land and potential adverse impacts of land use intensification on water quality will be adequately addressed. Further attention should be given to the land management and use and water quality components. "Matching land use to water", use of land within its Land Use Capability (LUC) classification, the importance of river corridors, and the impact of fine sediment transport into estuarine and near shore environments were among the issues raised.
- **Implementation Phase.** There is a lack of clarity and detail on essential "phase 2" implementation. This is a key area to address to provide confidence that the Strategy can deliver (including the NPSFM). Implementation issues include the points listed below.
- **Targets, performance monitoring and indicators.** These need to be developed and included so we are clear where we're heading, how far we've got and whether we're successful or not. Timeframes for action must be clear and realistic. Catchment-based standards/limits/targets should be developed.
- **Responsiveness.** Can the Strategy be adapted fast enough to respond to new issues and keep up with land use change / intensification?
- **Use of regulation.** Some participants considered the Strategy light in this area.
- **Responsibilities.** Institutional responsibilities need to be clearer along with coordination between agencies.
- **Priorities.** We need to be clear about priorities and how we determine them.
- **Linkages.** We need to consider how this non-statutory Strategy links to and will be effectively implemented by other plans, including Long Term Plan programmes and funding and Regional and District Plan Changes. This includes how to deal with mis-matches in plan timeframes and how to speed up RMA plan adoption processes. Flood control plans should be integrated with the Strategy as appropriate.

- **Communication and engagement.** There needs to be an effective communication and engagement strategy to assist:
  - wider community input (especially the "ordinary" Hawke's Bay people and mana whenua) and "socialising" of the Strategy's objectives, policies and actions
  - effective sharing of ideas, information and practical research
  - maintaining/increasing the momentum for delivery by all responsible parties
  - facilitating broader behaviour change in communities (e.g. through "champions")
  - transparency and accountability of reporting.

- **Supporting knowledge and transfer.** There must be ongoing reviews of the underpinning science to ensure the Strategy has a sound basis. We also need to improve understanding of production systems, biodiversity, ecosystem services, ways land use intensification can be compatible with sustainable development, use of new technologies, water allocation vs. use, and the demand for future water.
- **Funding.** The challenge of funding implementation needs consideration. Issues raised include the delivery of extensive afforestation and riparian fencing/planting.
- **External Reference Group.** Consideration should be given to the form and resourcing of the group to ensure its continued effectiveness.

8. Tukituki Case Study

The Tukituki River Catchment was used as a case study to:

- demonstrate the application of the Strategy to the land and water management issues in that catchment
- provide the audience with an overview of the initiatives being undertaken in that catchment, specifically the Ruataniwha Water Storage project.

The presentation can be found here.

Values and Issues

Helen Codlin set the scene by referring the audience to the values that have been identified in the Land and Water Management Strategy for the Tukituki catchment. The dominant values recognised were cultural; life supporting capacity of rivers, lakes and wetlands; existing and potential economic development; recreation; and native and trout fisheries. These values evolved from a wide range of values identified at the 2010 Symposium.

The key issues facing the Tukituki catchment are that water quality does not meet community expectations; water is over-allocated in some areas; minimum flows do not maintain sufficient habitat health; irrigation demand exceeds supply; and the discharges from the oxidation ponds at Waipukurau and Waipawa are a significant contributor of contaminants to the river.

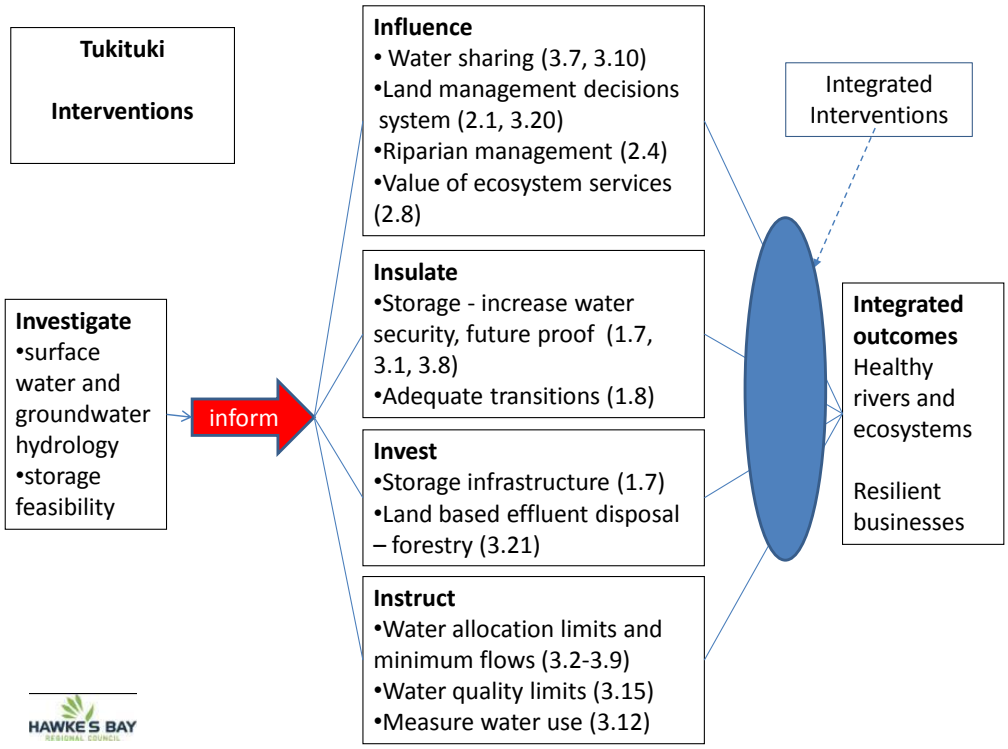
The challenge is to provide for all of these values via an agreeable long term solution which results in:

- Improved water quality…**and**

- Improved aquatic habitat health… **and**
- Improved water security for existing users… **and**
- Making water available at acceptable water security for future development… **and**
- Reducing the environmental footprint of land management (both irrigated and non-irrigated)

Interventions

Using an HBRC model which describes the broad types of interventions (or strategies) that can be used to develop an integrated solution (that is interventions which 'influence', 'insulate', 'invest', or 'instruct'), Helen identified all the relevant policies in the Strategy which apply to the Tukituki catchment and categorised them based on these types of interventions. These are shown in the following diagram.



Helen noted that there are a range of interventions that will be required to provide an integrated solution to the Tukituki issues and highlighted that the upcoming changes to the Regional Resource Management Plan to incorporate a review of allocation limits, minimum flows and water quality limits is only part of the solution.

Plan changes

Helen then explained the process the Council is undertaking to adapt the Regional Policy Statement and the Regional Resource Management Plan. She noted that the time frame for the formal part of the process, once the proposed changes have been notified for submissions, can be lengthy and expensive; so it is better that there is a high level of engagement with stakeholders prior to notification. The aim of engaging with stakeholders early is so that there is a good level of understanding of the range of interventions or strategies that are critical to achieving the desired

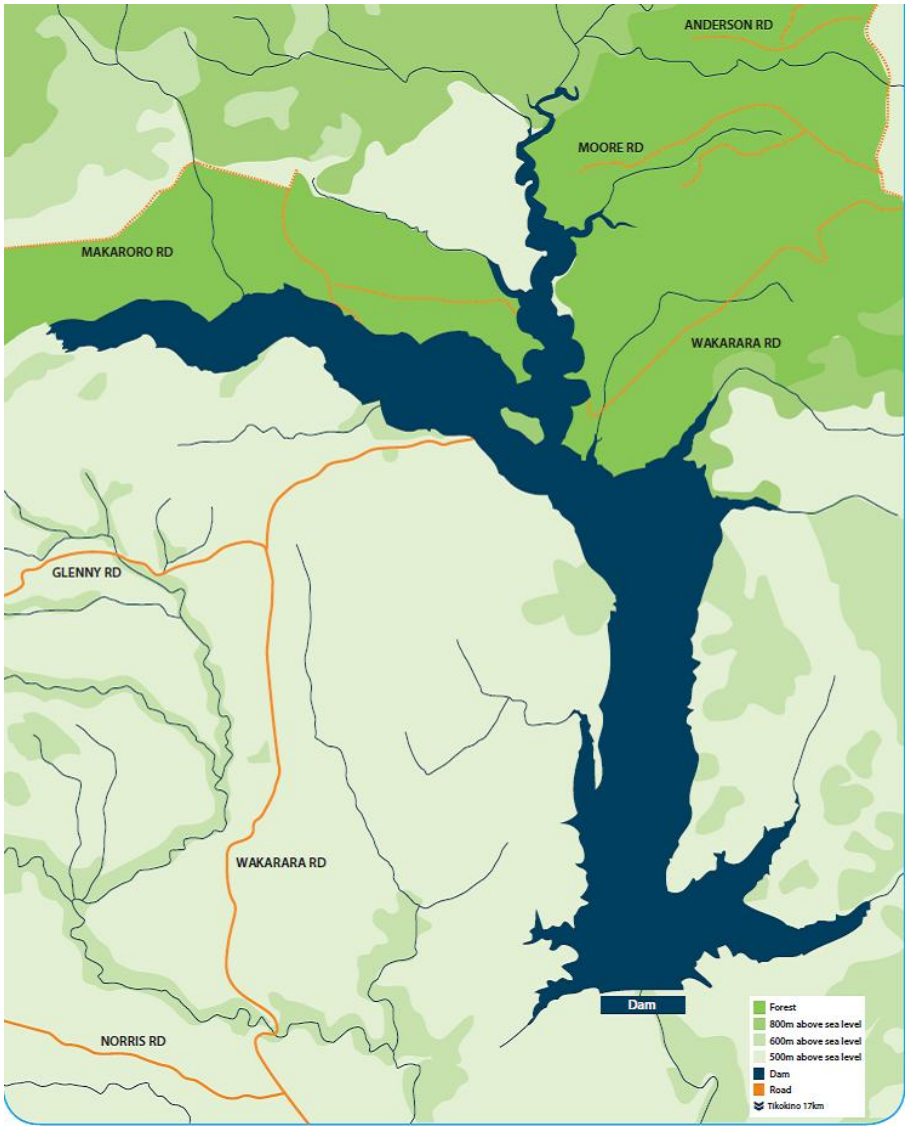
environmental, economic, social and cultural outcomes and therefore an understanding of how any proposed changes to the plans and policies fit into the integrated solution.

Ruataniwha water storage (RWS) feasibility study

One of the main interventions for improving water quality and providing a high level of water security is storing water. Pre-feasibility studies and feasibility studies into water storage for the Ruataniwha Plains was initiated in 2009 funded by HBRC's investment portfolio and MAF's Sustainable Farming Fund. The pre-feasibility study looked at up to 20 off-river storage sites with subsequent studies narrowing down suitable options to one storage site on a tributary of the Waipawa River (the Makaroro River).

The Ruataniwha Water Storage (RWS) feasibility study is due for completion in June 2012. At that point HBRC will decide whether to proceed or not. The proposal includes:

- a storage dam capable of holding 90 million m³ and a dam height of 77m
- hydro potential: 6.5MW
- a distribution system which provides "Pressure to farm gate"
- Current estimated costs are in the order of $170m (+/-20%).
- Possible construction in 2016 subject to obtaining the necessary consents.



Proposed Ruataniwha water storage site

The potential wins, challenges, opportunities and costs associated with the RWS project were then highlighted, including the costs of not having water storage available.

The wins:

- Assuming all irrigation is met from storage, rivers would return to natural summer flows and therefore a healthier state.
- Dam is large enough to supply irrigation water to whole of Ruataniwha Plains and more.
- Potentially multi-purpose – hydro electricity generation, recreation.
- A much more reliable water supply - future proofed.
- Better business investment certainty.
- Relieves the pressure to keep minimum flows at current levels.
- Relieves the pressure to increase allocation limits.
- Environmental and economic win/win.

The challenges:

- Land use intensification and water quality
- Cultural concerns
- Engineering viability
- Sediment management
- Scheme affordability
- Cost optimisation

The opportunities:

- Riparian management to reduce phosphorus
- Enhanced biodiversity outcomes
- Improved farming systems, not just irrigated farming systems

The costs:

- Largest regional infrastructure since the Port development and flood control schemes
- Requires private and public funding (central government, regional government)
- Irrigators pay directly – in return for long term supply, annual water security, reduced pumping and infrastructure costs
- Public good funding - for improved river systems, unlocking NZ's economic potential

The costs of no storage:

- Individuals / groups protect own interests
- Long, difficult and costly plan process – litigious
- Tradeoffs –environmental, economic and cultural (lose /lose)
- Clawback of allocation likely to be over a longer time than a shorter time
- Stagnant or receding local economy
- Individual farming businesses uneconomic with reduced water allocation

It was noted that $800,000 is being spent on environmental related studies as part of the feasibility study.

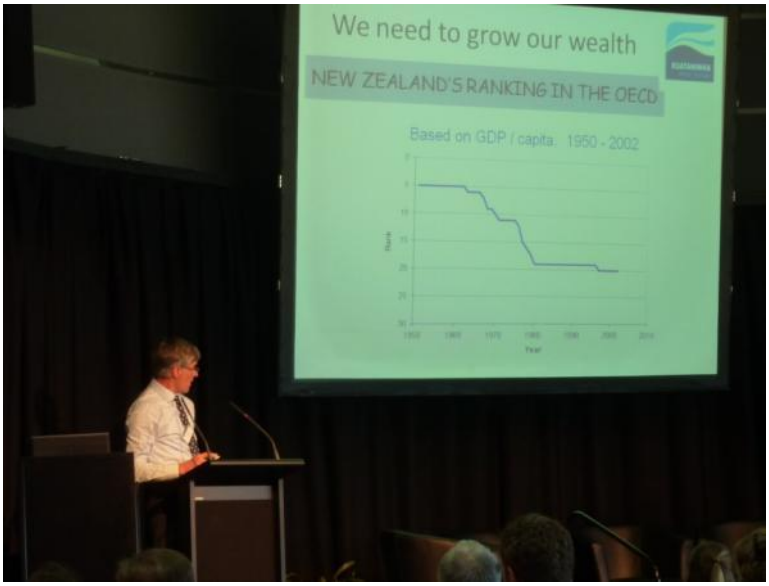
Ruataniwha water storage (RWS) – stakeholder engagement

Debbie Hewitt, Chair of the Ruataniwha Stakeholders Group (RSG) outlined who the stakeholders are and how they had been engaged through the process to date. The RSG was established to assist in identifying the values associated with water to the community; to enable open and frank discussion between people from different sectors; and to search for opportunities and solutions to meet the social, cultural and environmental issues in the Ruataniwha Plains. Debbie shared some stories about the group's dynamics and how the relationships are developing. The hard discussions, she thought, are still to come.

The RSG includes representatives from:

- Department of Conservation
- Fish and Game
- Forest and Bird Society
- Local body representatives
- CHBDC
- HBRC
- Potentially affected landowner representatives
- Recreational users representative
- Tamatea Taiwhenua
- Tukituki interested and affected parties
- Water User Group representatives

Sam Robinson, Chair of the Ruataniwha Leadership Group (RLG) spoke about the implications of the storage project for irrigators. Sam is alarmed by New Zealand's sliding position among OECD countries and is adamant that as a nation we need to grow our wealth. This is best achieved through regional initiatives which are brave and innovative. It is essential that any developments are not progressed at the expense of the environment. Sam, a farmer himself, insisted that most New Zealand farmers are environmentally conscious and that it is in their interests to be. Globally, expectations around the environment are increasing, fresh water is becoming scarce, and energy costs are increasing. Hence, being at the forefront of quality safe food production is a good place to be.



Sam noted that the key issues which the RLG has identified to do with the RWS scheme are: how to charge irrigators for water; the need to attract high value enterprises; will there be enough water stored; and how much the community should pay for any subsequent environmental improvements. Further challenges identified by the RLG are: obtaining consent; loss of momentum; capital cost; funding the infrastructure; migrating existing users to RWS water; and farmer uptake.

The RWS scheme will provide **benefits for irrigators** in the form of more reliable water with less uncertainty, longer consents and very low ongoing energy costs. **Benefits for the environment** will be the restoration of natural summer flows and new recreational opportunities. The **economy will benefit** through: new employment opportunities; added value beyond the farm gate; more diversity of enterprises thus reducing the risk of having all our eggs in one, or a limited number of baskets.

The RLG's vision for the Ruataniwha Plains associated with the extra water available is a mosaic of different crops and operations. "Hawke's Bay could become the food bowl of Asia". With strong support and leadership from HBRC combined with significant Crown support, if the region's people have the courage to do it, it is the right thing for the economy and the environment.

9. Multiple Objectives and Challenges

There are multiple objectives and challenges identified with the Tukituki catchment as follows:

Multiple objectives

Healthy ecosystems • Functioning habitats • Water quality • Biodiversity	**Resilient businesses** • Secure water • Investment certainty • Sustainable land management
Social Wellbeing • Lifestyle and community • Amenity and recreation • Employment	**Cultural values** • Restoration of Mauri • Protection of waahi tapu • Mahinga kai

Multiple challenges

Planning processes • Length of time • Litigation • Delivery on results	**Rural water infrastructure** • Funding • Farmer uptake
Self interest • Haves and have nots	**Reducing environmental footprint of farming systems** • Farming decisions • Productivity vs profitability

Participants were asked to select one of the objectives or challenges for their table and to discuss possible ways for meeting or tackling them. Some issues were not covered. This section summarises

the comments received for those objectives/challenges which were reported back to the group. Overall, there was recognition of the complexity of the challenges that need to be addressed.

Cultural values / Planning process

One table noted that cultural values cut across all of the objectives listed including social, environmental and economic values. This table felt that the early consideration of mauri, waahi tapu and mahinga kai in preparation of the Tukituki plan change with the right people will reduce the length of the process, reduce litigation and achieve a more culturally acceptable result. The inclusion of a cultural value assessment, which is currently being completed by Heretaunga and Tamatea Taiwhenua, was considered prudent, as a thriving Maori community is critical to the success and stability of Hawke's Bay and cultural considerations are foremost within any plan change process.

Another table reported back that by taking into account both aquatic and terrestrial biodiversity early in the planning process, the length of the process ought to be reduced, litigation minimised and a more integrated and durable result achieved.

Self interest (water storage scheme)

One table thought that access to the Ruataniwha aquifer should be retained for those farmers on the fringe of the catchment where it would be uneconomic to access the RWS scheme. It was suggested that groundwater could be released for production on land that would otherwise be considered uneconomic.

Regarding the financial difficulties for farmers to access the stored water, it was suggested that Council could consider buying out existing users or phase in increased costs over a period of time. The table questioned whether the Council has a duty to 'cushion' the financial impacts where farmers can't afford the scheme or whether a subsidy should be given to join.

In areas where farmers are taking water from the aquifer or river outside of the scheme, there was concern raised that water takes may be affected due to the need to protect environmental goals. In such areas possible solutions suggested were on-farm storage and more effective runoff management.

Another table considered it important to build future capacity now to allow for higher intensive use in the future. The flow-on regional benefits from the scheme through increased production, employment, and business and population growth were noted. However it was also stated that it is essential that the rights and needs of those that have no voice i.e. fish, birds, swimmers, ecosystems and future generations, are taken into account. Social and environmental impact assessments are a significant component of the current work being undertaken by the RWS group.

Reducing environmental footprint of farming systems

One table felt that the drivers influencing management decisions should be better understood, particularly economic drivers as they underpin many day to day operational decisions which have environmental consequences.

Concerns were raised that there is a "use it or lose it" attitude with regard to water use. Suggested solutions included global consents where water user groups manage their allocation as needed.

Incentives (such as longer consents) would be necessary to move water users towards shared allocations.

A number of tables expressed concern that with water storage and more irrigation there is likely to be more nutrient runoff and leaching to surface water and groundwater. Investment in research and education to establish maximum outputs for minimum inputs was considered necessary for successful management of stock and crop intensification. It was also noted by one table that information about the environmental footprint of different farming practices be made available. Examples suggested for reducing nutrient runoff included the use of herd homes and the exclusion of all stock from rivers and streams as per the Dairying and Clean Stream Accord. The difficulty and cost of fencing all water courses and to initiate a programme of riparian planting was acknowledged.

It was also noted that farm plans and alternative investment options would only be successful if they were well understood and would require a high degree of self motivation to look outside the square.

It was noted by a couple of tables that value should be placed on biodiversity and ecosystem services when modelling economic gains and that these should be incorporated into resource management decisions.

NB: The issue of hydraulic fracturing in the Central Hawke's Bay District was raised, in particular where the water for drilling will be sourced and whether there will be any risk to the environment through groundwater or soil contamination. However, the proposed site for exploratory drilling is not in the Tukituki catchment and no further comments were received.

Rural water infrastructure

One table highlighted the concerns of farmers that irrigation security is declining which is a real threat to the viability of many Hawke's Bay businesses. It was stated that providing a high level of certainty to farmers regarding water supply will enable innovation, development, and forward planning for economic growth and environmental sustainability. Water storage was seen as potentially a very good option to alleviate water shortages but a number of concerns were raised. As well as funding issues, low farmer uptake and environmental problems, other concerns included potential increases in irrigation costs, and conflict between storage water and flows required for Central Hawke's Bay oxidation pond discharges.

It was noted from one table that efficiency measures and an accreditation system could be implemented on farms as part of the transition to stored water. Standards could be set for water quality including nutrient loading on farms and the subsequent nutrient loss from farms to waterways. It was suggested that a Green Hawke's Bay brand based on an accreditation system could be established for those opting into the RWS scheme to highlight that goods were being produced using sustainable practices. This would encourage a market for high value regional products sourced from accredited farms showcasing industry best practice.

This table also suggested that a pricing mechanism/demand management strategy could include different entry costs for people already irrigating compared with new entrants.

It was agreed that there will need to be incentives to transfer to a water storage scheme including improved profitability. However, it was noted that currently water supply cannot always be assured

and water restrictions are common in summer. Storage, it was stated, would provide the potential for much improved security of supply as well as increased opportunities to expand irrigation into dry land. Incentives to encourage irrigators onto community storage mentioned were increasing the length of consents, providing a predictable supply, a reduction in power consumption, rewards offered for early adoption of the scheme, and access to stored water with no transition costs.

It was stated by one table that, if necessary, regulation could enforce the uptake of the scheme as current consents expire. They also felt that it may be possible to give the same allocation from scheme as currently allocated by consent. This table suggested that to alleviate some of the cost burden, the cost spread could be multi-generational or there could be different cost incentives e.g. those who benefit most pay more. Others were not comfortable with the concept of charging for water.

Most tables agreed that open and frank communication between stakeholders would be vital to the success the scheme.

10. Biodiversity Workshop

The symposium ended with a workshop of interested members of the audience to scope out the Biodiversity Strategy that is referenced as a policy and action in the Land and Water Management Strategy. Over 50 people participated in the workshop facilitated by Ngati Kahungunu Iwi Incorporated's Dr Adele Whyte.

To assist with initial scoping of the Biodiversity Strategy (with further investigation and refinement to follow), five key focus questions were put to participants:

1. What is biodiversity?
2. Why is biodiversity important?
3. Where do landscape values and ecosystem services fit?
4. Who should be involved in managing biodiversity?
5. What are the priorities for biodiversity management in Hawke's Bay?

Comments included:

- Biodiversity is fundamental to the natural heritage and unique character of Hawke's Bay.
- Biodiversity is life and provides resilience for the future.
- Biodiversity enhances mauri. We need mauri monitoring.
- Biodiversity is critical to manage the balance of populations of species.
- Increasing biodiversity increases the health of ecosystems and provides a more sustainable base for the future.
- Biodiversity management should be integrated into all regional plans.
- Biodiversity is an indicator of human health and economic wellbeing. If biodiversity is declining, the region must be struggling.
- Landscapes provide the environment for the survival of species.
- If biodiversity management is coordinated and coherent, it will return dividends.

- We need to plant edges of ecosystems, develop corridors and build biomass.
- Biodiversity enhances farm productivity (bacteria, fungi, insects etc).
- The problems of biodiversity imbalance can be irreversible (e.g. possums).
- Priority in Hawke's Bay (and rest of New Zealand) is maintenance and restoration of lowland terrestrial ecosystems, retirement of steep land and restoration of indigenous vegetation cover.
- In Hawke's Bay, biodiversity management will mostly be on private land.
- We need to monitor what we've got, establish baselines and improve or benchmark against that.
- See the New Zealand biodiversity strategy
- Needs to be a "mountains to sea" approach.
- Everyone needs to be involved.
- We need a regular forum for regular people to attend to discuss the issues

Below is a 'wordle' image showing words that were captured in whiteboard notes of the discussion. The larger the word, the more times it was raised.

There was general acceptance among the workshop participants that biodiversity related to all living things and their habitats. Ecosystems of all scales (macro and micro) were relevant. Remarks frequently referred to integrated systems "from mountains to sea". Resilience was considered an important attribute when considering biodiversity. An interesting discussion point was where exotic plants and animals fit within a definition or scope for a Hawke's Bay Biodiversity Strategy.

A number of people provided their names and email details so council staff could inform / involve them as further consideration is given to the development of a Biodiversity Strategy.

11. Where to next?

Helen Codlin advised that the implementation of the Land and Water Management Strategy requires the development of annual action plans, monitoring reports and the establishment of a Reference Group to maintain the engagement with the community.

HBRC will maintain a webpage for the Hawke's Bay Land and Water Management Strategy as a primary means of keeping the wider community informed of progress.

This event will be held annually in November/December.

Appendix 1 - Regional Water Symposium Agenda

9:30 – 9:50 Registration / Coffee

9:50 – 10.00 Karakia

10.00 – 10:20 Welcome and introductions, meeting outline and objectives

Morning Session

10:20 – 10:35 **The Strategy - Context and Content** - Where have we come from, how did we get here, what's in it?

- *Helen Codlin, Group Manager Strategic Development, HBRC*

10:35 – 10:55 **Hawke's Bay Land and Water Resources** – What have we got?

- *Graham Sevicke-Jones, Manager, Environmental Science, HBRC*

10:55 – 11:05 Questions and Answers

11:05 – 11:50 **Panel of Reference Group** – Their thoughts on the process and content of the Strategy, the good, the bad and the ugly

11:50 – 12:30 **Table discussion and Report back** – What do you think? What are your goods, bads and uglies. What needs more attention? (20mins / 20mins)

12:30 – 1:15 *Lunch*

Afternoon Session – Tukituki Case Study

1:15 – 1:45 Setting the scene (issues), outlining the responses and what's involved

- HBRC
- Ruataniwha Leadership and Stakeholder Group

1:45 – 2:10 Questions and Answers

2:10 – 3.10 Table discussion and Report back –matching issues, solutions and outcomes (30mins / 30 mins)

3:10 – 3:15 Closing comments

3:15 – 3:30 Afternoon tea

Biodiversity Workshop

3:30 – 4:30 Biodiversity workshop (for those available to attend): brainstorm issues, approach and scope of a biodiversity strategy

Appendix 2 - Participant List

Ivan	Angland	Heinz-Wattie Ltd
Marei	Apatu	HBRC Maori Committee
Sharleen	Baird	Forest & Bird
Paul	Barrett	HBRC Staff
Nikola	Bass	Heinz-Wattie Ltd
Esther-Amy	Bate	HBRC Staff
Lloyd	Beech	Strategy External Reference Group
Tom	Belford	BayBuzz
Mark	Bellingham	Forest & Bird
Monique	Benson	HBRC Staff
Dan	Bloomer	Center for Land and Water
Kelly	Burkett	HBRC Staff
Mike	Butcher	Pipfruit NZ
Annette	Carey	Ministry of Agriculture & Forestry
Awhina	Carleson	Whakatu
Sally	Chandler	HBRC Staff
Brett	Chapman	Hastings District Council
Corey	Charlton	Hawke's Bay Today
Diane	Charteris	Baywatch HB
John	Cheyne	Hawke's Bay Fish & Game
Christine	Cheyne	Massey University
Grenville	Christie	Forest & Bird
Mark	Clews	Hastings District Council
Helen	Codlin	HBRC Staff
Stephanie	Coleman	Student - Taradale High School
Ru	Collin	Horticulture NZ
Mike	Connor	Ngaruroro Irrigators water user group
Bruce	Corbett	Strategy External Reference Group
Larissa	Coubrough	HBRC Staff
Richard	Dakins	Ruataniwha Water Users Group
Kevin	Davidson	Plantation Dairies
Alan	Dick	HBRC Councillor

Maureen	Drury	HBRC Staff
Troy	Duncan	QEII National Trust
Janine	Dunlop	HBRC Staff
Neil	Eagles	Napier Forest & Bird
Liz	Earth	Artist
John	Eriksen	Zespri
Paul	Franklin	CHB Farmer/ Strategy External Reference Group
John	Freeman	Central Hawke's Bay District Council
Sara	Gerard	Opus
Tim	Gilbertson	HBRC Councillor
Brett	Gilmore	Pan Pac Forest Products Ltd
Mike	Glazebrook	Te Tua and Washpool Stations
Neill	Gordon	Mail Newspapers
June	Graham	Baywatch HB
Neil	Grant	Department of Conservation
Phillipa	Green	HBRC Staff
Anthony	Gouder	HBRC Staff
Angela	Hair	Concordia Health / Baywatch
Vivienne	Haldane	Rural News
Nigel	Halpin	Heinz-Wattie Ltd
Jan	Hania	Department of Conservation
Xan	Harding	HB Winegrowers
Debbie	Hewitt	Ruataniwha Stakeholder Group
Heitia	Hiha	Mana Ahuriri Incorporated
Pat	Hohipa	HBRC Maori Committee - Wairoa rep
Thompson	Hokianga	Whakatu
Chris	Howell	Prospect Vineyard
Gavin	Ide	HBRC Staff
Tawhai	Johnson	Whakatu
Dan	Kaiser	Landcare Research
Terry	Kelly	Sustaining Hawke's Bay Trust
Augie	Kohu	Whakatu
Kathleen	Kozyniak	HBRC Staff
Andrew	Lamason	EAM Environmental Consultants

Charlie	Lambert	Ngati Pahauwera Development
Liz	Lambert	HBRC Staff
Scott	Lawson	HB Vegetable Growers Assn
Chris	Lester	Department of Conservation
Barry	Lynch	HBRC Staff
Jorgette	Maaka	EIT
Roger	Maaka	He Toa Takatini
Bruce	Mackay	Heinz-Wattie Ltd
Gillian	Mangin	Ministry of Agriculture & Forestry
Taylor	Materoa	Whakatu
Jenny	Mauger	HBRC Staff
Iain	Maxwell	HBRC Staff
Ewan	McGregor	HBRC Councillor
Peter	McIntosh	Hawke's Bay Fish & Game
Anna	Michels	Student - Napier Girls' High School
Malcolm	Miller	HBRC Staff
Kevin	Mitchell	Federated Farmers
Dale	Moffatt	Te Taiwhenua O Heretaunga
Andrew	Newman	HBRC CE
Emma	O'Neill	HBRC Staff
Aki	Paipper	Ngati Hori/Kohupatiki hapu
John	Palmer	
Andy	Pearce	Strategy External Reference Group
Carla	Pell	Ravensdown
James	Powrie	HBRC Staff
Piri	Prentice	Mana Ahuriri Incorporated
Rangi	Puna	Mana Ahuriri Incorporated
Susan	Rabbitte	EAM Environmental Consultants
Evelyn	Ratima	Mana Ahuriri Incorporated
Aalbert	Rebergen	Forest & Bird
Chris	Reed	HBRC Staff
Liz	Remmerswaal	HBRC Councillor
David	Renouf	Hawke's Bay Environmental Water Group
Belinda	Riley	HBRC Staff

Hugh	Ritchie	Drumpeel Land Company
Paul	Roberts	Ngati Kahungunu Iwi Incorporated
Sam	Robinson	Te Maire
Kevin	Rose	HBRC Councillor
John	Scott	Hawke's Bay Environmental Water Group
Christine	Scott	HBRC Councillor
Graham	Sevicke-Jones	HBRC Staff
Tim	Sharp	HBRC Staff
Kevin	Steel	Ministry of Agriculture & Forestry
Marie	Taylor	Countrywide Newspaper/Farmer's Weekly
Craig	Thew	Hastings District Council
Rachel	Thomas	HBRC Staff
Ngaio	Tiuku	Ngati Kahungunu Iwi Incorporated
Kevin	Trerise	Wellington Hawke's Bay Conservation Board
Adam	Uytendaal	HBRC Staff
Dianne	Vesty	HB Fruitgrowers
Eileen	von Dadelszen	HBRC Councillor
Toro	Waaka	Ngati Pahauwera Development
Richard	Waerea	Whakatu
Benita	Wakefield	HBRC Maori Committee - Tamatea Taiwhenua
Mo	Walker	Whakatu
John	Warren	
Patrick	Whitesall	HBRC Staff
Adele	Whyte	Ngati Kahungunu Iwi Incorporated
Derek	Williams	
Tamara	Williams	Ravensdown
Mark	Williams	CHBD Councillor
Deshon	Williams	Whakatu
Peter	Winder	Facilitator
Derek	Wood	Napier City Council

Appendix 3 – Our picture of the future in 2050

(edited from HBRC's Strategic Plan)

Hawke's Bay people appreciate the value of the region's natural assets. They described the natural environment that they wanted to nurture and the diversity of life that it supports. Over the years, the natural environment prospered under the people's care. The region's 'uniquely Hawke's Bay' branding became the foundation for our social, cultural and economic prosperity.

Based in community values, water allocation limits and water quality limits have been set and a strategy put in place to bring our water use within those limits. We know how much water is being used so water demand and use is managed much more proactively; the use of sophisticated monitoring of plant water requirements, and equally sophisticated irrigation systems, helps us achieve the best use of our available water across the region.

Communal water storage provided a solution to the over allocation in some areas and users now take collective responsibility for how water is managed within catchment wide consents. Other catchment groups **also** manage their own allocation of water. HBRC's role is now one of verification as catchment groups take much more collective ownership of compliance and enforcement amongst themselves.

In some catchments, the river systems flow naturally during low flow periods due to all irrigation requirements being met from storage.

The landscape is a mosaic of different land uses and farming systems, reflecting an understanding of the land's capability and the benefits we gain from it. Large areas of Class 7 erodible land have been planted in trees of mixed species and for mixed purposes; these blocks occur within profitable farming systems - in fact they enabled a return to profitable farming. Patches of Class 6e land are also in trees but most is still grazed. The trees provide shelter and stability and enable extensive grazing within the land's capability.

On the fertile river plains across Hawke's Bay, a diverse range of crops supply the food processing centre-of-excellence in Hastings and Whakatu. New processing plants in Waipukurau handle the increased production from the Ruataniwha Plains area.

Farming with precision using GPS and satellite technology, real time monitoring of soil conditions and plant growth is the norm these days. The use of minimum tillage techniques and the building up of organic soil matter has improved both soil structure and water retention.

Good infrastructure allows processing of crops close to supply, which means that exports through the Port of Napier are of high value. Urban development planning has ensured that our high class land has not been covered in housing and industrial developments.

Iwi are substantial land owners and their holdings have grown significantly since the Treaty settlements. Partnerships with other investors have enabled diversified developments on these lands while the kaitiakitanga philosophy ensures sustainable land management practices continue.

Land owners across the board share an ethic of stewardship.

Our young people are being educated locally and there is plenty of opportunity for them to work in Hawke's Bay. Throughout the community there is a feeling of empowerment and self-sufficiency. There is a thriving, creative community, many of whom are Hawke's Bay people returning home to raise their families and to start businesses.

Hawke's Bay is well connected to the rest of the world, and the world is well connected to us.