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**COMMUNITY PERSPECTIVES OF  
RIPARIAN MANAGEMENT:**

**A case study in Marlborough**

by

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# COMMUNITY PERSPECTIVES OF RIPARIAN MANAGEMENT- A case study in Marlborough

by

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## ABSTRACT

This paper considers the results from a Marlborough based multi-phased research programme that includes information gleaned from interviews, local council "issues and options" discussion papers and community "focus" groups. These phases contribute to an action research methodology that allows for the sequential refining of the research focus. Discussions in the community show an unexpected breadth of awareness of "river landscapes", centering on issues of river and water quality maintenance, the role of guardianship, the problems of access and, to a lesser extent, the economic consequences of riparian retirement. At a deeper level, however, there is conflict between the "authorities" and community - a "them and us" attitude that is working to impede community change. The results have implications for the notion of "private property", the role of organizations in generating effective community based riparian restoration and, more generally, the implementation of the Resource Management Act (RMA).

## 1. INTRODUCTION

New Zealand's natural areas are an irreplaceable treasure, a taonga, to be handed unspoilt from one generation to another. This has been recognised by both Maori and Pakeha. Simpson (1994) reports that after Governor Hobson signed the Treaty of Waitangi in 1840 - equivalent to a "constitution" for New Zealand - he received instruction from Queen Victoria that the shorelines and riverbanks were to remain in public ownership so that access to water and the material resources it generated, would always be available to the people. This led to the notion of the "Queen's Chain", a twenty-two yard access strip, which many New Zealanders believe is along all waterways. However, as Simpson points out, despite early legislation that upheld Queen Victoria's proclamation, we have inherited a "mismanagement of our waterways" and in far too many cases the "Queen's Chain" has been lost. Our river landscapes have been stripped and incorporated into farming, urban and industrial developments. There have been huge losses of coastal area, banks and farmland due to erosion. Water quality has been further reduced by sediment and nutrient run-off, and flood control, water supply and disposal of waste water have placed increasing demands upon our streams, rivers and coast.

Healthy water margins (or riparian areas (See Fig. 1 )), those with a strong vegetation cover and root mass, serve many **ecologically** important functions (See Box 1). As natural "green" corridors they are areas of species diversity and succession. They provide a

habitat for plants and animals both on land and in water, contribute to improved water quality and reduce the erosion of natural banks and farmland. The community values of riparian areas are less well understood, but include the enhancement of aesthetic, recreational and wilderness experience, and also a more specific opportunity to contribute to New Zealand's "Clean Green Image". For Maori people the riparian areas also retain the cultural and spiritual connections with early Maori settlement, mahinga kai, provision of traditional foods and materials (e.g., flax) and tauranga waka (canoe landing sites). For Maori, water possesses its own mauri, or life force, so it is important that water resources are protected from abuse.

In recognition of the importance of riparian areas and their poor condition in the New Zealand landscape (particularly on the lowlands) and the need for soundly based management there have been two independent moves: one legislative and the other advocacy based.

The legislation, in the form of the Resource Management Act (RMA), has identified riparian margins as areas of national importance and sought to protect them. The RMA (1991) provides for "The preservation of the natural character of.. wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development" (section 6). There is also provision under the Act (section 230) to set aside Esplanade Reserves (the "Queen's Chain" along the bank of any river, lake, etc.) upon subdivision to contribute:

- (i) to the protection of conservation values (e.g., water quality and aquatic habitats (section 229)) from the adverse effects of land activities and
- (ii) to enable public access and recreational use when compatible with conservation values.

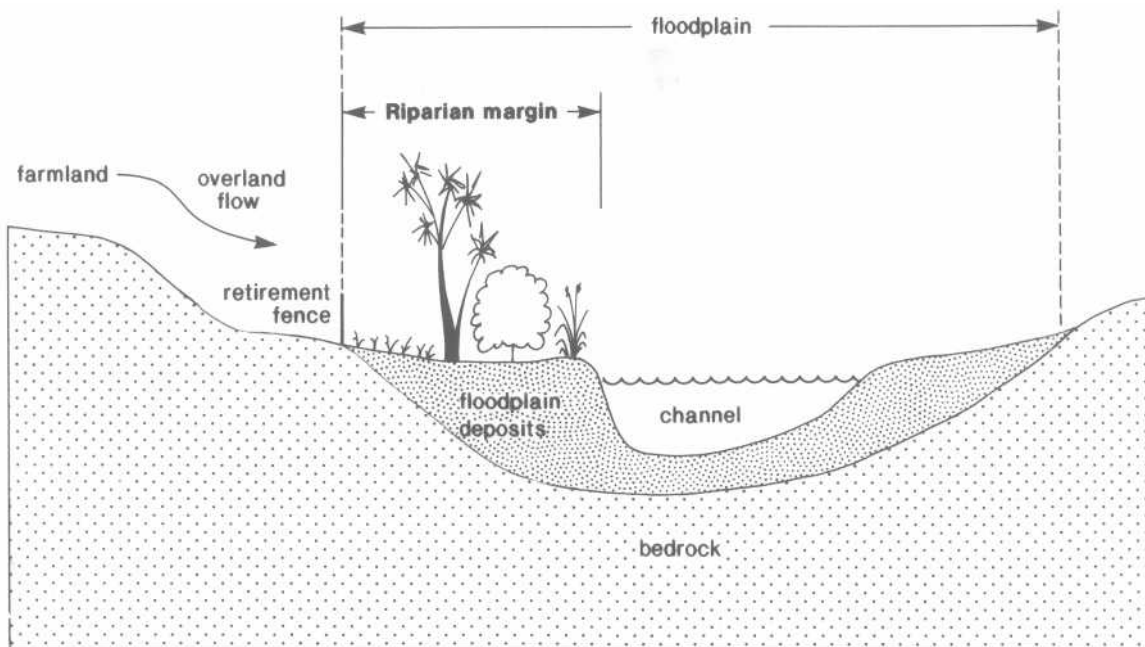
Landowners were compensated for their property taken for reserves only with the amendment to the RMA in 1993.

At the same time, natural scientists have been making considerable strides in the preparation of riparian management guidelines for the NZ context (Smith & Collier, 1994). An important issue for the researchers though has been the increasing gap between the scientific knowledge of riparian issues and the "putting into practice" of this information. What was required for this information to be more widely disseminated and acted upon by the wider community? What values did the community place on their river landscapes and what could be expected of them with regard to management?

The present work, to answer some of these questions, was initiated between the periods of the initial and amended RMA. The research objectives were to:

- (i) identify community perspectives of river landscapes; and through this process
- (ii) provide guidelines on how these perspectives should be acknowledged if riparian restoration is to proceed effectively.

**Figure 1. The riparian area<sup>1</sup>**



**Box 1. Ecological values of riparian areas**

Natural well-vegetated areas alongside rivers and streams can help to:

- \* maintain water quality and clarity by reducing sediment and nutrient run-off from land
- \* reduce flood peaks by increasing water retention times and evapotranspiration rates (but not to the point that streams become seasonally dry)
- \* maintain low water temperatures by providing shade
- \* influence energy dynamics by affecting light quality and inputs of terrestrial organic matter
- \* provide habitat for aquatic invertebrates and fish (e.g., in the form of cover in leaf accumulations and woody debris), and for terrestrial plants and animals
- \* provide breeding areas for native birds (e.g., blue duck) and fish (e.g., whitebait)
- \* provide suitable corridors for the dispersal of native plants and animals and serve as areas of high species diversity
- \* increase soil stability and minimise stream bank erosion

<sup>1</sup>Adapted from Taranaki Regional Council Discussion Document (1992)

## 2. APPROACH

### 2.1 A focus on one region: Marlborough

The Marlborough district was selected as the location for a case study. It was anticipated that, by concentrating efforts on one "pilot" region, a clearer picture would emerge than if the same efforts were spread across all regions. The Marlborough region was an appropriate study area as:

- (i) it has a wide and representative range of riparian zones, including rural flat country, rural high country with both dry north facing and wet, south facing slopes, and extensive urban zones;
- (ii) DOC had already done some ground work on riparian management in this region<sup>2</sup>; and
- (iii) the Marlborough District Council (MDC) who had recently become a unitary authority and taken over the functions of the Regional Council were also very interested in doing work on this problem in the form of an "Issues and Options" paper (where community input is requested on the various options to deal with each problematic issue the Council faces, e.g., maintaining water quality). They had also carried out a survey on the extent of riparian areas within the region and were able to make this information available to DOC<sup>3</sup>.

### 2.2 Methodological issues

A qualitative, three-phase, action-research process was used to identify community perspectives on riparian management<sup>4</sup>. A first phase of interviews was designed to gain

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<sup>2</sup>See Simpson (1990)

<sup>3</sup>The RMA places the duty to avoid, remedy, or mitigate any adverse effects of activities on the environment (including riparian areas) on Local Authorities, like MDC, who have to demonstrate that benefits are likely to occur, and to consider alternatives and costs before adopting any objective, policy or rule (such as the provision of Esplanade Reserves) that would restrict human activities within riparian areas.

<sup>4</sup>The concept of action-research has its origins in the work of social psychologist Kurt Lewin (1946) but has since been further developed by numerous researchers (see, among others, Carr & Kemmis (1986), Kemmis & McTaggart (1988), Argyris & Schon (1991), and Checkland (1992)). It is a method which has the dual aims of action and research: action to bring about change in some community, organization or programme and research to increase understanding on the part of the researcher or client, or both. In a cyclic nature, action is followed by reflection, then followed by further action. Most conventional research methods gain their rigour by control, standardization, objectivity, and the use of numerical and statistical procedures. But, in action research, standardization defeats the purpose. The "virtue" of action research is its **responsiveness** - in this case to the community, their concerns and what they pose as problems to be addressed. With each new phase of the research, evidence is sought that confirms or challenges the interpretations being made. The researcher may start off with quite fuzzy ideas about what is going on for the community but as they participate more and more in the research process and more and more evidence is obtained, the researcher gets closer to the "guts" of the situation and idiosyncratic information can be discarded. As in many numerical procedures, repeated cycles allow the researcher to converge on the appropriate conclusions (based on Dick, 1991).



information on community views and simultaneously provide input into the Issues and Options paper to be developed by the MDC. The second phase sought information from the public via the Issues and Options paper and a third phase presented a synthesis of the results from phases one and two to workshop "focus groups". These were attended by people who had expressed an interest in earlier phases and were intended to establish community strategies for dealing with riparian decline and restoration. The three phases are detailed below.

### **2.3 The methodology in practice**

The **first** phase of the research involved 26 interviews carried out in the Marlborough region. 20 interviews (involving a total of 30 people) were carried out using a **random** sampling of rate payers from the rates register for 5 river/creek areas in the region (See Fig. 2). These included:

- (i) Fairhall River, which flows through north facing rural slopes and dries out during some months of the year;
- (ii) Onamalutu River, which runs through wetter south facing slopes with remnant kahikatea forest;
- (iii) the Opawa Loop, an urban river loop backed by quarter acre residential sections, which is closed (through engineering) to the main river fresh;
- (iv) Spring Creek, a fresh water spring renowned as a trout fishery, which flows through an intensively farmed rural area and a residential community; and
- (v) Gibson's Creek, an irrigation "ditch" which diverts water from the Waihopai River to artificially recharge the Wairau aquifer at Renwick.

Further interviews were carried out with key individuals within the community as well as with staff from the MDC and the DOC. In all, over 40 people participated in this phase of the project<sup>5</sup>.

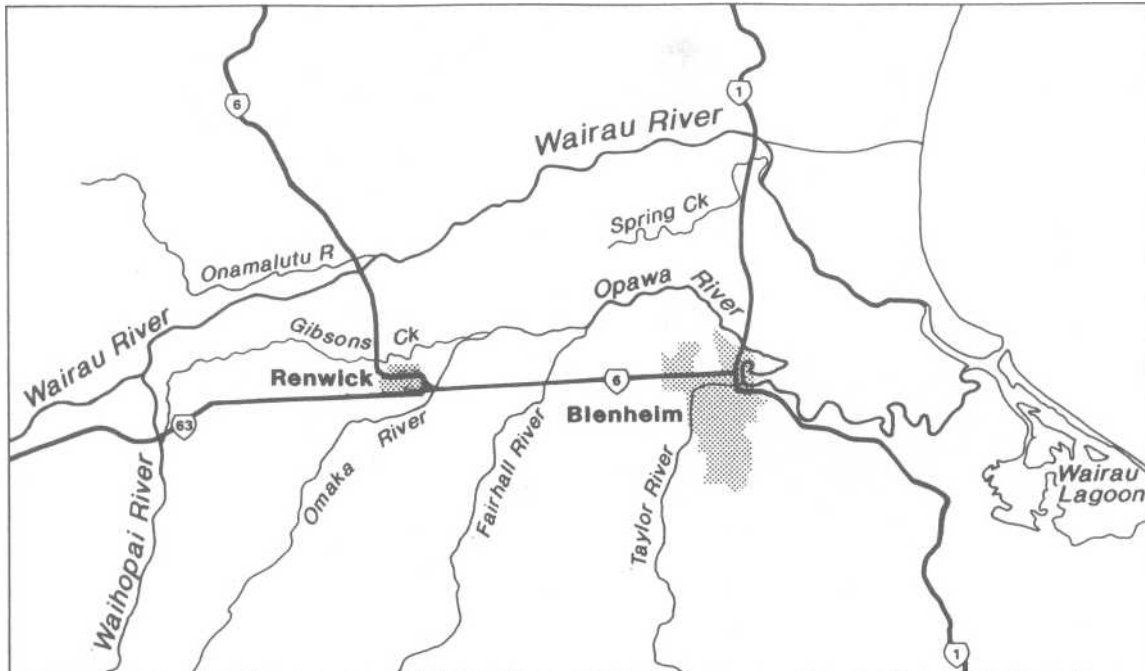
Throughout the interviews, the words "river landscape" and "river margins" were used in preference to the word "riparian" to ensure community understanding<sup>6</sup>. Interviews were arranged by phone and, to accommodate community needs, were carried out

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<sup>5</sup>Community residents included a cross-section of the community in terms of age (20's to 60's) and land-ownership (from those owning a quarter acre section to those owning farms). Key individuals were identified by MDC as community leaders; MDC staff included engineers and planners and DOC staff included conservancy staff from the Nelson-Marlborough region. No one contacted declined an interview.

<sup>6</sup>Most of the community do not know the meaning of the term "riparian" and it would have been disempowering for lay people for the author to have insisted on using the word in an interview situation.

**Figure 2. Region in which the study was based.**



primarily in the evening and in the homes of those interviewed<sup>7</sup>. An interview schedule (see Appendix 1) was developed to guide the interview process, however, it is an important feature of action-research methodology that later interviews (in Phase 1) differ from earlier interviews in the questions asked. The reason is that information gleaned in the earlier interviews is discussed and tested for agreement in later interviews.

Community residents, on the whole, had a lot to say about river landscapes, although some were slow to give vent to their thoughts and feelings. The author was greeted with a variety of responses from shy, "I don't know why you've contacted me ...I don't know a thing" type of responses to reluctant, slightly suspicious "What's a government agent doing here" to overwhelming, non-stop "This is what I think..." monologues. And such were the needs for some to talk about rivers, that one person spoke for almost fifteen minutes before asking "And what exactly have you been engaged for?".

The second phase of the research, which was to be the development of a riparian "Issues and Options" paper with MDC, did not go ahead quite as planned. The MDC decided to present the community with more general "Issues and Options" papers that covered many aspects of public policy rather than specific papers covering individual issues. Riparian management was dealt with indirectly through sections on (i) natural and historic values, and (ii) forestry and farming issues including topics of water quality, buffer zones and threats to riparian vegetation so that submissions could be examined for statements

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<sup>7</sup>Over the phone people were told that the author worked for DOC and was also working in collaboration with the MDC and both were interested in understanding more about what the community thought of their river landscapes.

relevant to riparian issues. Submissions received by the MDC indicated similar concerns to those raised in the interviews<sup>8</sup>.

The **third** phase involved meeting with two "focus" groups, one held in Spring Creek and another in Renwick, a central location for residents of the Fairhall River, Gibson's Creek and Onamalutu catchment areas. Twenty five community residents, as well as MDC and DOC staff attended the "focus" groups, with the latter providing a small slide show depicting the various features of riparian zones. The slide show and a large cadastral map (indicating the extent of esplanade reserves and other "protected" riparian zones) proved particularly successful in depicting the fragmentation of potential "green" corridors and thereby drawing residents into discussion.

The information to be discussed in the "focus" groups was, however, not greeted as expected. It had been anticipated that the sequential process of discussing results of the earlier phases with the groups, would enable a refining of the research focus. With this intent the results from the earlier phases were summarized, ready to present to the "focus" groups. However, those attending the "focus" groups had other ideas. Within the Spring Creek community, in particular, those residents who had said they would attend decided it was important enough to invite their friends so that a far greater crowd than anticipated attended the "focus" group (18 residents compared with the expected 8). Again, and as in the interview situation, people's needs to talk about their land and their river were far greater than their need to listen, with the result that territory covered in the interviews was again covered in the "focus" groups<sup>9</sup>.

The results of all phases are therefore reported together because the information received from the interviews and submissions was reiterated in the "focus groups". What occurred was not so much a sequential refinement of the community perspectives, but an emphatic statement of the main issues.

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<sup>8</sup>While 133 submissions had been received by the MDC on the management of the Marlborough Sounds at the time of giving this paper, further submissions were still to be received relating to inland Marlborough.

<sup>9</sup>This meant that the community remained "stuck" in the action phase of the research - keener to express their needs than listen and reflect on the results that had been gleaned from the earlier interviews. This could be considered a failing of the action-research methodology but, in fact, it is entirely appropriate given that "new" residents had been invited along to the "focus" group. Of far more relevance is that the interest generated at Spring Creek was such that the residents have since formed an active Spring Creek Association and have held several meetings with agencies such as the MDC to discuss the management of Spring Creek and its margins. They reported having thought about the issues raised and having discussed the issues amongst themselves. That is, they have independently reflected on the problems of river landscape management and then followed through on certain strategies (a further phase of action) mirroring the action-reflection process.

### 3. COMMUNITY AWARENESS OF RIVER LANDSCAPES

#### 3.1 Perspectives of the authorities

An important issue for concerned DOC staff<sup>10</sup> was the increasing gap between the knowledge of riparian issues (particularly that knowledge generated within research agencies in New Zealand and overseas) and the "putting into practice" of this information. Staff wanted to know:

- (i) What was required for this information to be more widely disseminated and acted upon by the greater community? and
- (ii) What values do the community really place on their river landscapes and what can be expected of the community with regard to the restoration of river landscapes?<sup>11</sup>

Implicitly, riparian management and restoration is acknowledged by DOC as partly a social problem. In a climate of the "lean" organization, DOC is increasingly aware that for riparian restoration to occur, community resources needed to be harnessed to help meet the objective. This is also particularly important given that much of the affected riparian land is not managed, owned or regulated by DOC, but by the Regional Council, the District Council or private owners. At the same time though, that greater credence is given to the need to involve communities in riparian work, there is also a prevailing "them and us" attitude within the Department that is characterised by a sense of proprietorship over conservation and a belief that the community is ignorant and the primary cause of riparian problems.

Type of comment: If we manage the land it has the best chance of being restored... If we don't get this piece of land as reserve now it will be lost to conservation. The farmers have caused the problem so they should pay to fix it.

MDC staff concerns, on the other hand, were more disparate. One of the problems was perceived to be the "ad hoc-ness" with which the "community" allocated responsibility of river landscapes to various authorities depending on the problem. Environmental issues had traditionally been with DOC, flood control with the Council, and so on. They felt someone needed to take a broader perspective, but there was concern as to whether a territorial authority could do this. It was all very well, they felt, to say that the District Council was to function like the Regional Council, but the environment was not its primary function. Sewerage, roading and water supply were just as important as river control when competing for the rate-payer's dollars. It would be good to have one organization to "run the lot" but the organization needed to be constituted so it could work through these conflicts and establish overall priorities. For instance, it was queried whether DOC's need for natural river margins was "idealistic".

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<sup>10</sup>DOC staff included members of the Nelson-Marlborough Conservancy and members of the Riparian Working Group (from the Conservation Sciences Centre and DOC Head Office in Wellington).

<sup>11</sup>Note that the results of Smith (1993) on the perceived riverine problems in NZ also indicate that "...insufficient effort has been invested translating scientific findings into practical guidelines, and in disseminating this technical information." (p.31)

Type of Comment: DOC has a single purpose - conservation. There is no way we can wear that. There is always conflict between parties wanting access, protection and recreation. Ecological values are just one more aspect of river margins! How many do you (DOC) want? ...need? If nobody sees them do we need them then? What is possible where? Is a scientific purpose equivalent to a practical purpose?<sup>12</sup>

Council concerns were compounded by the implementation of the Resource Management Act (RMA) whereby esplanade reserves were created upon sub-division without compensation to the land-owner (Section 189, 190) for the protection of conservation values, public access and recreation. Not only was it impossible in some areas to say whether you were on river-bed, private, or DOC owned land, it was also creating a fragmented series of reserve areas that the Council did not have the resources to maintain or develop<sup>13</sup>.

There was also concern as to whether river margins should best be under public or private ownership. With public ownership it would be easier to achieve some tasks, e.g. to have the Council clear willows from river banks to reduce flooding (blocked by some residents). On the other hand, there would also be the temptation for the Council to view such land in profit making terms with "Gee, we can lease it out!" or, "Gee, we can sell the gravel!" It was felt that this may happen more under a District Council than a Regional Council<sup>14</sup>.

Ideally, it was thought, Marlborough people needed to make Marlborough decisions. The purpose of river margins needed to be clarified so that the public understood the issues and then the Council could develop a clear management plan in consultation with an informed community.

### **3.2 Perspectives of the residents**

One of the most important aspects to be learnt from the community related to the general level of awareness regarding river landscapes and their management. Residents had noticed the changes in the environment and were also documenting the changes:

Type of comment: Right up the Wairau was all planted. North bank and all that. And the Catchment Board... sent their people in and they ripped out all the willows and everything that was growing, they cleared it. Because I think it probably had something to do with the flooding...

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<sup>12</sup>Comment from the DOC Riparian Working Group: This type of comment is indicative of the adjustment that needs to occur when a unitary authority assumes the function of a regional council. Under the RMA, the Council is in the position to take a broader perspective and sort out conflicts between, for instance, flood control and conservation values. The environment is the Council's primary function and while the community can indicate what they want, the RMA sets the Council's statutory functions.

<sup>13</sup>Council comment: This has since been substantially changed in the Resource Management Amendment Act which came into force July 1993. Such major legislative reversals and the current public debate over public access and the "Queen's Chain" (September 1993) all add to the public confusion over riparian management. Under the amended RMA the Council has to compensate landowners for all esplanade reserves created from subdivisions of more than 4 hectares. As most rural subdivision in Marlborough is 8 hectares or more the Council will in future be faced with the costs of both purchasing and maintaining future esplanade reserves.

<sup>14</sup>Smith (1993) also notes that other Local Authority staff often felt dissatisfied with the way their organization manages riparian land use.

See our river down here was all beautiful big willows hanging over and they just ripped them all out. That would have been about six years ago. I came home and they were just, poplar trees, you name it, were just all ripped out and lying there. Eventually they took them away. Everything just seemed to be so much better then.

...you would get out onto a stopbank and you would go down as far as you could go and you would run across them chainsawing and pulling it all out. I mean, and it stops the fish from coming up. Once the fish haven't got anything, it does, it stops them...

I used to drink the water, I used to swim out in the Wairau here, bike all the way out there and swim and never thought anything about drinking the water but I tell you what... I'd think twice about it today. Like the cabbage trees and all that sort of thing... you used to see them all the time and we used to get our flax off the cabbage trees and join them together and slide on them. Where are they all gone?

Yes, yes. I remember going out to Vernon (Wairau) Lagoon as a child and it was great big niggerheads there, what I call niggerheads, big tussocks and things like that, and swans nests and all that. They were all over the bloomin' thing. Now its just barren. Everything is just barren, everywhere you go is just barren. Except for the oxygen weed... which is what they spray...

So we see the devastation of the bush, what the wasps are doing, we see all sorts of things. My husband's got some brilliant photos you know, in the back blocks and that's where he's flown in the helicopter... and all you can see is millions of wasps, while you're filming, eating insects. It's not the trees. We thought it was the trees they were eating, but its not the trees, its the insects that they're attacking and just eating them by the millions...

### **Three major issues emerged from discussions with the residents. These are guardianship, water quality and access.**

In regard to the first, guardianship, the community - particularly the women in the community, were concerned about just who should take responsibility for the river landscape, the extent to which residents were taking responsibility already and how guardianship of "green" corridors could be promoted. They were concerned with the **intrinsic value** of the riparian areas, attributing value to river landscapes in their own right, caring about the non-human components of the ecosystem. With regard to water quality, residents were concerned with the **functional value** of the river, that aspect which, potentially or actually, supports or protects a human activity or property without being used directly. e.g., irrigation control. Maintenance of the functional value also included the need for flood control. With the access issue, residents were concerned with the **use value** of the river landscapes such as recreational fishing and how this use may be abused<sup>15</sup>. Residents' opinions expressed on each of these issues are detailed below.

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<sup>15</sup>See Stone (1991) and Claridge (1991) for a comparative discussion of values of wetlands.

## **4. GUARDIANSHIP: intrinsic value of the river landscape**

### **4.1 Public or private responsibility?**

This concern was pervasive throughout discussions. Residents felt that private ownership should be maintained for a variety of reasons and that private guardianship should be promoted and safeguarded by the Council. It was their responsibility and for the Council to take over would mean that they (the ordinary people) would be shirking their responsibility<sup>16</sup>.

Type of comment: Well I think it is important that the community get involved. Because if they don't get involved they are going to keep treating it the way they treat it now and chucking their rubbish bags and goodness knows what into the river... and dunking it all over the place... so you've got to get them involved to make them aware of the situation. Taking it back is not going to solve the problem because they're not involved, its your problem then, isn't it? .. if they want to buy mine back, they can buy it back. But it won't help. I know I'm repeating myself, but it shirks our responsibility

I think the land-owners should take responsibility. the Council can't afford to do these things for us.. there is no reason to believe that Council/DOC ownership would create an advantage.. as soon as people think they are dealing with Council land they don't care about it - they drop their rubbish off.. people treat the river like a rubbish dump.

I think that for me and my attitude to rivers and anything that's natural... is that everyone has responsibility for it. I think it's easier for people if Council takes responsibility for it because then over a period of time then people become unmotivated in doing it themselves, they think... well, that's Council's responsibility and they take no responsibility for themselves.. I'd like to go and tidy that over there (pointing to Council land across the river) and you could actually put another few things in... which would look nice for us and you know.. there's a good chance that people would come and take it because they'd think it was Council stuff. People don't tend to respect things that are paid for by the Council. I suppose it takes people's motivation away doesn't it, if they do too much..

### **4.2 Guardianship is occurring**

Although the need for "green" corridors - natural river margins to improve water quality and provide healthy habitats was new to residents, most were already involved in some form of guardianship.

Type of comment: There is joy and satisfaction in knowing that we look after the river. We have tidied up and started planting. We have planted 1300 trees on our three acre block. We have planted natives. We have fenced it off from the stock. Our neighbours know all the fish. When the fishermen come we pray they don't catch our fish. We enjoy them for what they are.

### **4.3 Guardianship can be promoted**

Despite the obvious interest in planting within the vicinity of the river, there were others to whom the idea of planting native trees had not occurred. They were interested

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<sup>16</sup>Note: That the Amendment to the RMA provides for esplanade reserve strips whereby the land remains in private ownership but is subject to management for riparian purposes - like a QEII Covenant.

though in understanding more and felt that care for the river landscapes could be promoted in several ways. Some thought that **education** was the answer and that people just did not know about the importance of natural river margins and what was needed to restore them.

Type of comment: I never thought of natives - I'd really like to plant that nativey stuff but where do you get them. We can't take them from the bush - that belongs to everyone.

The privately owned people. It's just a matter of letting them know what's the best thing to sort of grow there. It's just with myself it's just been trial and error. They just end up dying on me and all that sort of thing but if I'd had someone come in and said well plant ... this how you could do it-but now I know all I've done is I've gone down the river and I've bought them back and just said righto, that's it... that seems to be growing "You're doing well!" so I'll grow that..

Other residents thought that not only knowledge, but experience and true involvement, was essential. They felt that they could contribute, both with their knowledge and time, as well as learn through this method.

Type of comment: I feel that... the powers that be, the people who control the stopbanks, they should talk to the landowners, because I feel that the landowners would get more involved if they did. Instead of sitting in their office... saying oh yes we'll do this, we'll do that, and they make the decisions. I sort of feel get back to basics, get back to the people who have lived here for years, you know. they know what needs to be done. They've been here with all the floods, they see where the water swirls and what it takes and doesn't take.

There used to be a time when we really knew the Catchment Board guys - they were around and we helped out. Why don't they involve us? I think quite a few people around this area would get stuck in and help. I'd be quite happy to look after the huts on a voluntary basis. I've even offered to look after the reserve area and they are not interested.

There were also several comments to the effect that if the community was to change then the authorities also need to get their "house in order" and provide the residents with good **role models**. Authorities considered here included DOC, the Council and state owned enterprises, like NZ Rail Ltd. One resident spoke at length about the bad influence of the railways on river margins, with no efforts to rid railway-owned land of Old Man's Beard and other weeds.

I can see what they are doing to the community. They made \$40 million dollars profit last year.. but nothing is coming back into the community. Their land goes right through the centre of Blenheim..They need to be made to clean up their act!

Similarly, there were tales of frustration as residents had tried to get help to restore their river margins, whether privately or publically owned. They needed encouragement.

Type of comment: I've tried to find someone who will take care of this esplanade reserve but no one will own up to it - I've been told that if they fix it the value of my property should increase so I should clear it up! I gave some of my land over to an esplanade reserve - it floods a lot of the time - but it has been sold and built on and the Council knows about it!

Agencies need to get their act together. Planting can be disappointing and an awful lot of hard work. There is no incentive... as soon as you do try and do something there is a 10 page legally binding



contract... no fertilizers, no sprays... a legalistic covenant to tie me up and straight jacket me... it's just not on... I never did sign it!

We'd bought this piece of land, fallen in love with it... there were pockets of native bush that had staggered on... the odd flax... beech tree, a bit of a reserve but we needed to fix it up. We fenced it all off, then DOC visited and said you're going to have to get into a management agreement with DOC... it was 5 months before we had a reply... we are treating your request under Section 54 a, b, x, y and z... then it had to go off to the Minister... that took another 3 months. And then pages in triplicate, not to use exotics, trees to be grown from own seeds, etc... bloody hell, I wanted to put in fast growing trees straight away to stop the erosion... all short term before natives get away, but all that was a "no no". There was absolutely no encouragement... others are grazing the land and making money! It's particularly bad because I know DOC's own trees just up the way came from the local nurseries... I want to be given some credibility! The whole approach is overly bureaucratic... overly paperworked... there's no appreciation, no encouragement... **They shouldn't do this when you have a dream.**

A minority felt that some **assistance in kind** would be really what they would need. There was concern that while residents may have time (particularly if unemployed or retired) they would not be in a position to buy plants. However, for some residents the idea of beginning the clean-up of the local river margins (even if they did have access to plants) was overwhelming. They needed help for a start.

Type of comment: I think if they had like... Government Nurseries and things like that, where you could go in and buy say, half a dozen plants at a cheaper rate... I don't mind... but you go down and you buy a flax bush and you spend \$7 on a flax, \$7.95 on a flax bush, one flax bush I mean, when maybe I could go and buy 10 for that same price... I think you'd find a lot of people would take advantage of it. It's not so much in the sense of trying to get something for half price but to beautify this place...

I think get them (the community) involved, moneywise I know it's going to be costly. Maybe the Council could sell cheaper trees or something to them and suggest the type of tree or plant that should be planted there. Say OK willows are out in this, but we'll plant so and so here...

In response to where the money was to come from residents indicated that, most likely, a rates increase would not be welcome, but that remuneration from the lease of Council/DOC land to farmers, etc., should be available for maintenance and restoration.

Type of comment: What I, you know, all that land was owned by Regional Council and they must be making quite a lot of money out of it all... that's all leased out to farmers, they must be making quite a substantial amount out of that and they need to put it back...

Residents were also aware that money was available, but in their perception, not always wisely spent.

Type of comment: Marlborough has always had a way of getting the things it needs because... buildings, structural things, you know... I mean if you walk around Blenheim, it's a really attractive looking town. There's always money available for things. If you're dealing, say, with the District Council, and you want to get something for people that's often a different thing altogether.

In a way, I don't think they invested their money very wisely. They did have their subsidies. They built some huge Catchment buildings... (and the Council)... I suppose they have to have new buildings.. but now, the change and everything, I think it's a bit of a white elephant. You would think that people would do the things that are so important to keep the rivers correctly organised.

While most people were against **regulation** a number felt that it was important that it be used to protect what attempts they made to take care of river margins. In particular, residents were concerned that regulations be used to ensure that:

- (i) Council working/clearing of the margins is followed by an enhancement scheme;
- (ii) people are punished if they wilfully destroy plantings; and
- (iii) the authorities comply with their own regulations.

## 5.0 WATER QUALITY functional value of the river landscape

Of all issues, those of water quality and respecting the river were paramount.

Type of comment: Now you've got yourself a good one and there's no easy solutions and that's why really I would want to know whether it is merely just a beautifying of the river banks or whether it's a total plan to try and resurrect the waterways. Waterways as in water meaning water. The banks are just to guide the water.. surely the water is the issue and surely pure water is what we want as best we could have.

Most residents were, in particular, concerned about stopping the use of sprays, the disposal of chemicals, trade waste and sewage into the river.

Type of comment: It would seem half baked if we went and we just, in your plan, you... recommend that some native fauna or bush or whatever, be planted along the banks. I think you have to go a step further back and make sure your water is clear and clean. And with all the discharges into our waterways round here, you sort of got to do it all. You can't just go and plant some flax and then still let the wees and poos go into the river... the Council has got to promote that change, because they are the people who give the consent for the practice. So, it is two things. You'd have to look at water quality before you even get started. It would seem silly to go and create a habitat for whitebait while the sewage still goes in. You see?

Your sprays, your pesticides, your super-phosphate, all your fertilizers, everything comes from farming, everything and the rest comes from the Council dumping sewage... that would have to be seriously looked at... the way we pollute our water. The trouble is it's commerce against ecology. These people are quite entitled to earn a living and they get consent to do what they do. What you may have to look at... is this... the only way to effectively manage it is by regulation.

I'd far rather see the weed cutter than the Paraquat because I think the Paraquat just takes too much... that's what they spray the weed with and it kills everything. Fish, everything... I suppose it is their best way to avoid flooding. But for the fish life, no! ...when we rang up about it, they said... well, you win some, lose some, which I suppose is true. I think that should be looked into... there's got to be another insecticide that's not so harmful to marine life and also the vegetation side of it...

Rural residents were of the opinion that there should be a limit to the grazing of sheep and cattle on river margins to protect the margins from erosion, to reduce sediment deposits into rivers and protect water from animal waste (nutrient enrichment). Those expressing greatest concern were those who were trying to look after their own river margins while neighbours were not so discerning.

Type of comment: What is the use of protecting our own river margins when someone else lets their stock loose over our property? What is the use of planting when someone else's stock will come and eat our plants and trees? Stock have been impounded but the owner has not had to pay a fine. The Council is also leasing land along rivers for grazing-they need to look at that!

You can keep the stock away with electric fences.. I think if they don't come to the party, you can say well, you know, by not doing it, they're effecting the water and they've got no right do do that-so fine them. I think it's criminal with the pollution of water.

A minority also thought that the overstocking of farms and resultant denuding of hillsides (on both the north and south banks generally) needed attention, again, to stop

erosion, the subsequent silting of rivers and gravel build up. Goat, rabbit and possum damage were also seen to contribute to the loss of ground cover and subsequent erosion.

From a completely different perspective, rural residents were also concerned about the decreasing quantity of water available with some rivers drying out with increasing frequency. Where the water table was seen to be sinking residents wanted some form of control and the reduction of water use from irrigation systems and the increasing number of small holding, "10 acre blocks".

Type of comment: ..the Wairau, yes, it is filling up and so there will be problems always with sediment. It naturally comes down. I'm no expert but I think Blenheim is an alluvial plain. It's got water tables beneath it and of course they are being effected now by all the horticulture going on in Blenheim, and the need, because it is a very dry region, to pump up water for grapes and that must be having an effect too. I don't know what the effect is, but it must be having an effect.

More and more people are needing water for irrigation. We don't have as much water as we used to.. we just can't rely on it. If the bigger farms continue to be sub-divided into 10 acre blocks then we will have more and more people sinking bores.. and less and less water. We can't just have everyone taking water or there won't be any left.

## 6. ACCESS: Use value of the river landscape

The issue of access was of over-riding concern for rural land owners. An interview could be carried out one evening with considerable time spent smoothing concerns only to find, the following evening, that a neighbour had heard the rumour.. "They are going to take our land away..". The indirect effect of implementing the RMA was that people felt very threatened that their land would be taken away from them (without any compensation<sup>17</sup>) so that any "Joe Bloggs" could have access. One small community, in a residential/rural transition area, felt, very strongly, that there was a need to control access to protect privacy and to ensure security of people and properties.

Type of comment: Our houses are too close to the river... people can just come up at any time and poke their nose into our place. Because we are so far away from our neighbours this happens and we can do little about it... it happens particularly close to the main roads and when we have an influx of holiday workers.

I've been threatened. I've gone home to realize we've had burglars in the house.. I've been followed around... It's unsafe for our children, particularly the girls. I used to let everyone on the property but now I'm a lot more careful. People just come along and take our fruit.. We've had people come up in the middle of the day and try and catch our lambs with nets! We need to be able to protect ourselves. I'd feel very concerned if just anyone could come along.

On the other hand, there was also the need to have access for recreation (especially for young people and fishers/anglers) with people feeling that it is only fair that we have access to private land and that river margins need clearing for recreational access.

Type of comment: It would be best if land-owners gave the public access. Most of NZ is owned privately.. It is not fair to exclude the public from their heritage.

In the end though, it was evident that the community thought that different policies may need to be associated with different river landscapes, for instance, the Wairau with provision for public access, and the Onamalutu with provision of riparian restoration.

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<sup>17</sup>Council comment: Note that this is no longer the case under the amended RMA. However, we need to put these comments alongside Section 6 of the RMA indicating that public access to and along rivers is a matter of national importance. Where is the balance? Public access and other ecological values may also conflict.

## 7. PRIORITY AREAS

One of the clearest priorities was mentioned in the earlier section on water quality, i.e., that of cleaning up the sewage (and the ponds) feeding into the lower Opawa and Wairau rivers. The next priority concerned the need to look after the Wairau, not only to ensure flood control but also with reference to restoring the Wairau Lagoons.

Type of comment: Well, I think we need to go, it's like anything, start at the beginning. It's no use messing around with Gibson's Creek and doing pretty little banks, or any other of the other little streams when your main problem (the Wairau) is going to come all over it and wreck it.

...the Wairau diversion. What that was designed to do was to take pressure off the river at flood time, but where the failure was, was that they never thought of putting a weir in the diversion so that the river level would be maintained right throughout the Wairau until peak times... that is why the actual base of the river is lifting... that would help flush out the river... (and) that increased water would help keep the bacterial count down there (in the lower Wairau and Lagoons).

Almost without exception those interviewed felt that in twenty years time they would welcome well planted river landscapes where this did not conflict with flood control. Women, in particular, were keen to have native trees and plants in these areas. Within Blenheim, there were several references to planting along the Taylor River and around Pollard Park, both of which are frequented by the public. People did not really understand why the Parks needed to be so bare (for flood control)<sup>18</sup>. However, there was no clear preference given for the conservation of river landscapes although the Tuamarina, the Onamalutu and the Waikakaho were mentioned.

Type of comment: I honestly feel that you would achieve your aims (of natural river margins) at the heads of rivers... like the Onamalutu. There's nothing wrong with that river until it gets on the flat... I'm not aware of any dairy farming going on but a lot of forestry. You've got to remember heaps and heaps of pines actually changes the chemical content in the soil. I'm no scientist but I would assume... when you harvest them the wash comes down (into the river). So, I think there has been a lot of lessons learnt... it's whether these local District Councils throughout New Zealand have the strength and the foresight... to start afresh... I'm into development, I think it's great, but I think we have to develop and plan a lot wiser than we have in the past. I don't know, I'm glad it's your problem. I guess you're saying it's all of our problem.

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<sup>18</sup>Note that there was a reported discrepancy in the way departments within the MDC viewed riparian vegetation in relation to flooding. Residents complained of receiving "mixed messages" from the Council indicating that they should both plant and not plant along river margins (depending on whether they were talking to the parks and recreation people or engineers). It is expected that this is the type of discrepancy that will be overcome with the development of a regional policy statement by the Council.

## 8. MECHANISMS TO ACHIEVE RIPARIAN MANAGEMENT

### 8.1 The issue of control

In an overall sense the community was not averse to the use of river margins, or riparian areas, as a buffer zone to improve water quality and habitats. Women, once understanding the problem, were particularly keen to see more native bush in their river landscapes. The community's primary concern was that the authorities would force this upon them and take their land<sup>19</sup>, not only for conservation values but also to provide the public with access. More importantly, they felt that changes that affected their lives were being implemented without them having any sense of control in the situation. This "loss of control" is very threatening for individuals and communities.

In effect, in addressing the importance of riparian areas, the RMA (1991) addressed both the **objective** of managing river margins to enhance ecological values and the **mechanism** by which this is to be done, i.e., through the use of legislation (rather than education and advocacy) to ensure that public reserves are created on sub-division.

There is no doubt that the RMA (1991) was unfair in its use of subdivision, sometimes of only one or two acres, to set aside esplanade reserves throughout substantial farm holdings, without compensation to the landowner. The Amendment to the RMA (July 1993) overcomes this injustice with the introduction of esplanade strips. The strips, while similar to reserves in working to protect conservation values will, in comparison to esplanade reserves, remain under the ownership and management of the landowner. However, it is still expected that esplanade strips will also provide the public with a right of access. While landowners still have a choice about whether they subdivide, or further develop their land, they still believe an invasion of their rights is occurring.

Under the RMA (1993) local Councils (in the development of their District Plans) are in a position to take a broader perspective and sort out conflicts between flood control, public access and conservation values. They need to decide (after consultation with their respective communities) which water systems will be set aside for what purpose and by which mechanism, but even for the Councils the legislation can cause problems. Under the amended act, an esplanade reserve is still taken by right when triggered by subdivisions of less than 4 hectares. In this case, the results of this study suggest that we can expect that community residents will opt for no development rather than lose land to a reserve area over which they have no control. This could lead to a "no-win" for riparian management. On the other hand, Councils have to compensate landowners for all esplanade reserves created from subdivisions of more than 4 hectares. In future they will be faced with the costs of both purchasing and maintaining future esplanade reserves - an unpalatable situation for many Councils already stretched to their resource limits. It is likely that they will push for esplanade reserves only in areas of more dense settlement where public access is a political obligation. Such reserves are less likely to be in the small river catchment areas of the hinterland where riparian issues are so important. Again, this could lead to a "no-win" situation for riparian management.

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<sup>19</sup> see earlier comments on RMA Amendment. This is no longer as possible.

What the broader community is questioning is the wisdom of achieving riparian management through the mechanism of legislation, particularly legislation that requires public ownership of river margins. Overall, the residential community prefers private ownership and responsibility for riparian management, with education to assist them in achieving the objective. However, they perceive "the authorities" as preferring public ownership and responsibility for riparian management using regulation to achieve the objective<sup>20</sup> (See Fig. 3). **The result is that regulatory control taken increasingly by the authorities is associated by residents with decreasing community control**<sup>21</sup>.

This does not mean that the community is against regulatory control completely - just that they want control over it. At a subtle level, it is evident that the community is differentiating between the levels of control they will accept for different situations. The results indicate that each of the value systems attributed to the river landscape is associated with a different level of acceptable regulation. Figure 4 shows that regulation may be more acceptable with respect to the river landscape's functional value, less for its intrinsic value and much less for its use value. While the community may prefer to establish their own mechanisms to achieve the objective of riparian restoration, it would seem that, in some instances, regulation may be the chosen mechanism. Individuals within a community seem more prepared to forgo a "sense of personal control" and concede control to authorities for the protection of water quality and flood control, but are less likely to do this for the establishment of "green corridors" or public access. In essence, the community is recognizing the extent to which their environment is held "in common" and that the full exercise of private property rights is now increasingly difficult as air, water and various other substances cannot be prevented from moving across properties. **To the extent that resources are seen to be held "in common" with the wider regional community, there is a wish to have some form of authority-driven regulation of resource use and abuse.**

For the local community, this approach ensures the maintenance of a quality resource. On the other hand, the imposition of open access is seen to fly in the face of this requirement. The use of the river and its banks as a recreational and food resource is seen to be a local activity that is not to be shared with the wider regional or national community. This is in part because resource use cannot be easily regulated and the resource quality for locals deteriorates. The local community do not think it appropriate for the authorities to legislate and/or regulate for open public access if they cannot at the same time ensure that the resource will not be abused - this is not just a problem for the local community to address.

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<sup>21</sup>The essence of the RMA's 1991 treatment of esplanade reserves.

<sup>21</sup>Note that the Council position may be seen to be both part of the "authorities" and of the "community". Residents tend to see the Council as part of the "authorities", but in relation to Government, the Council is likely to see itself as part of the "community". As indicated by staf, the Council perceives itself as having "no control" in the face of legislation that determines both the objectives and the mechanisms for riparian management yet delegates responsibility for these matters to Councils, i.e., they are seen to be given responsibility without power.



Figure 3. Preferences to achieve the riparian management objective.

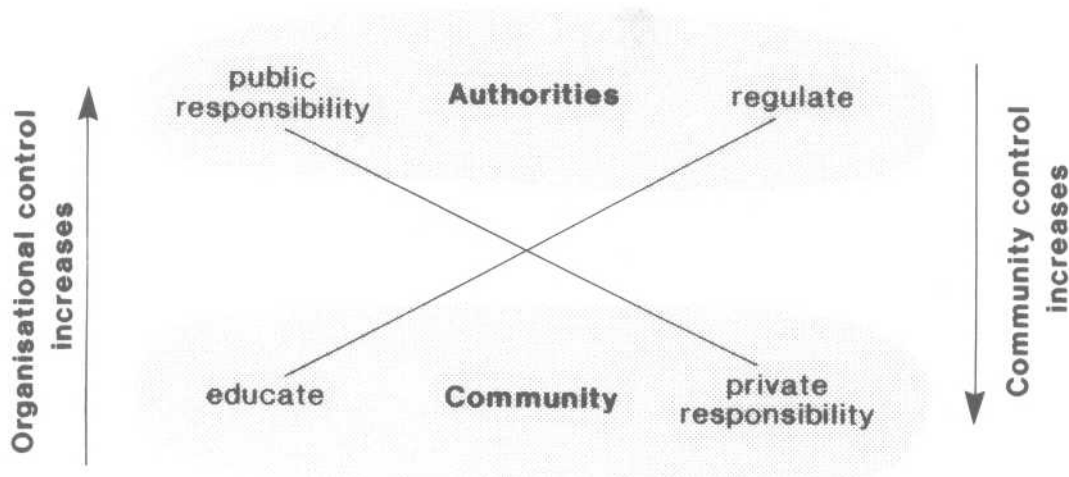
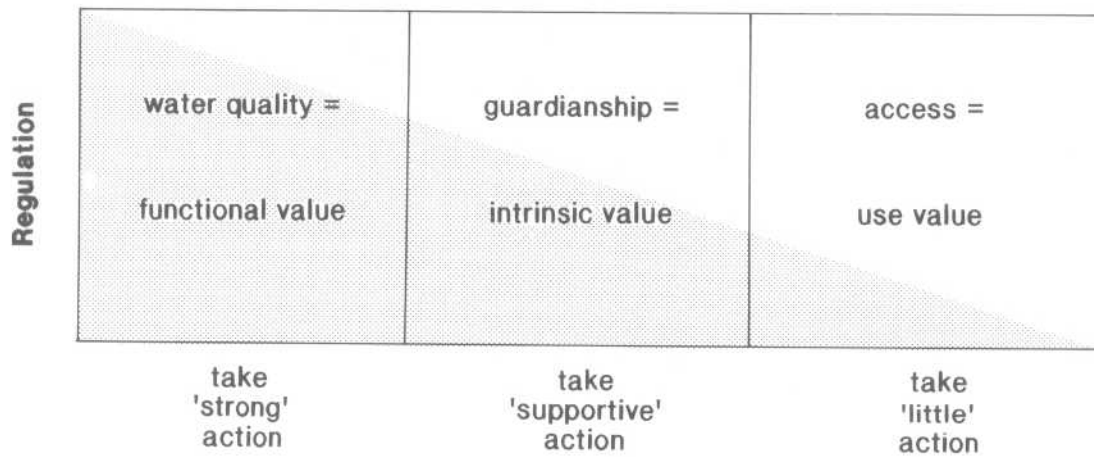


Figure 4. Accepted level of regulation for riparian zones.



The above discussion is not intended as an argument for the privatisation of property for effective riparian management, but rather for the need of local people to be involved in the management of the natural resources of "their home ground".

## **8.2 The need for community control**

The question, of course, arises as to why the community should be listened to and, in fact, given the power to determine the courses of action to be taken in the management of river landscapes. Aside from the fact that community involvement is a basic tenet of the RMA, recognition is growing that the successful management of areas of high conservation value depends on the co-operation and support of local people<sup>22</sup>. However, to harness community resources to help in the restoration of riparian areas we need residents within the community to be motivated to help.

Motivation, or the energy to initiate, maintain and persist at a task, only comes about when people have a sense of control in the situation with which they are faced<sup>23</sup>. Most land-owners expect to have control over what is to happen to "their" river margins and to this extent they will be motivated to manage them. However, when this sense of control is threatened we can expect them to respond with frustration and even anger. In the case of "loss of control" with, for instance, regulation to achieve public access, we may expect land-owners to lose motivation to be involved in riparian management. In this context, the need to work in ways that will enhance community control becomes vital.

## **8.3 Enhancing community control**

Implicitly, the community has already indicated several ways in which their sense of control could be enhanced. With regard to promoting guardianship, for instance, they have suggested education, involvement and encouragement<sup>24</sup> and the appropriate role modelling from the "authorities". Combined, these will provide the community with a number of strategies that can be undertaken to restore the conservation values of their river landscapes. In turn, this work will enhance the sense of control the community has in relation to riparian management. Authorities though, in enabling communities in this way, may improve the effectiveness of their efforts by:

- (i) working towards a structuring of tasks so that they may provide for a positive experience and sense of accomplishment, i.e., incorporating the notion of "small wins",
- (ii) working with the energy of the community considering specifically what they are motivated to do and what it is that they want to accomplish; and by

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<sup>22</sup>Wells, Brandon & Hannah (1992); Wells & Brandon (1993); Berkes (1989).

<sup>23</sup>This discussion is based on the work of Wortman & Brehm (1975) and Bandura (1977)

<sup>24</sup>See Maddock, 1991 and Gilligan & Markwell, 1991 for ideas on how this is accomplished for wetlands management.

(iii) working to improve the positive nature of their relationships with communities.

### 8.3.1 Working for "small wins"

Too often people define social problems in ways that overwhelm their ability to do anything about them<sup>25</sup>. So it could be with managers who, quite appropriately, may consider the management of river margins a daunting task. However, when the magnitude of a problem, like riparian management, is scaled upwards, often in the interest of mobilising action, the quality of thought and action declines. This occurs because the depiction of the problem as an "enormous problem", a "threat to our biodiversity" and so on, can threaten a community's sense of control and activate processes driven by frustration and helplessness. The results indicate that some residents are already aware of these processes and that some problems are indeed "too big" for them. They have, therefore, requested initial aid to restore their river margins.

The issue is that large problems need to be recast into smaller, less arousing problems so that people can identify a series of controllable and meaningful opportunities of modest size that can be worked on to produce visible results (See Box 2). So it is with the community. "Small wins" work through the construction of small problems, the resolution of which can lead to major change. To this extent the "authorities" have to work at breaking down the task of riparian management and restoration into "achievable chunks", the accomplishment of which will work to enhance community control.

### 8.3.2 "Going with the Energy"

"Going with the energy" of a community is really about utilising, or harnessing, the motivation already existing in the community for the task at hand. The results from both the interviews and "focus" groups indicate several specific areas of riparian management that interest the community. Starting with these interests, or problems, is the easiest way to ensure that change will occur and that communities maintain some degree of control.

#### **Box 2. Working for small wins**

**SMALL WINS** will help to achieve:

- \*\* COMMITMENT** : in that situations become more comprehensible and meaningful
- \*\* CONTROL** : in that individuals and communities find they can exert more influence
- \*\* REALISTIC CHALLENGE** : in that tasks are of a manageable size and success can be in sight

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<sup>25</sup> This discussion is based on the work of Weick (1986)

The interests, or issues, requiring research include:

- (i) the need to know more about what trees and plants are appropriate for what river margins (e.g., what is DOC's vision for our community's river landscape?) (see Box 3) and
- (ii) the need to consider how communities may be more effectively involved in riparian management (Box 4).

### 8.3.3 Working for a positive relationship with communities

There are several points that are worthwhile remembering when working with communities, all of which were important in this present study.

- (i) It is important to listen rather than becoming defensive when criticised. When first meeting with a community, residents may have many gripes they want "to get off their chest". The natural tendency is to defend one's position, but that can lead to people feeling they are not being listened to - and they just repeat their points more heatedly. If a defensive position is maintained by people in authority, the arguments can escalate until community residents eventually walk out of the meeting.
- (ii) The best way to educate people is to involve them. Starting the process with slides showing the results of ideal and problematic riparian management is a good introduction, but needs to be linked to a planting program on a demonstration site -the experience will provide the most effective education.
- (iii) It is not necessary to convince everyone to change. Change, particularly within rural communities occurs frequently through "word of mouth", so if a few people start using a different form of riparian management with good results, others will follow suit. This is part of "going with the energy" of the community.
- (iv) It is important to accept changes that do occur and reinforce them. Too often when one has a clear vision of what is required of riparian management one can overlook the small changes people are making that are necessary, but not obvious steps along the way. This is an important ingredient of the "small wins" approach.

**Box 3. Research needs for riparian plantings**

The community questions relating to riparian plantings came in two forms. One, people wanted to know what trees and shrubs could be planted on "their" river margins, and two, they wanted to know what plantings could be made to address the economic difficulty of riparian retirement. With regard to the latter, there was little interest in the idea put forward by the Taranaki Regional Council (1992) of joint venture agreements between landowners and interested community groups in targeting riparian restoration. There was interest, however, in what timber resources could be planted on river margins. Could, for instance, Australian blackwood be planted as a nursery crop for natives? or be felled without damaging the young natives? Could natives be selectively felled as a timber resource in later years? What natives could be used as a timber resource? and where? What timber could be planted in flood prone areas? Who would be responsible for giving/providing this information to the community - a task force from the relevant CRI's, DOC and the Council?

**Box 4. Research needs for community involvement**

The socio-economic dimension of local economies are increasingly cutting across conventional economic thinking and the assumption that there is a clear divide between the economic and social aspects of community life. There is a need to consider linking young unemployed people with the older and wiser community. What role can bartering or training play? How can Conservation Corps, Access, IHC and Task Force green be involved? What role can the Council play in this? DOC? In what way will a social investment of this sort enable Marlborough (and therefore the Council) to manage river landscapes?

## 9. CONCLUDING COMMENT

On initiating this research, DOC was aware that while there had been a tremendous research effort on the ecological nature of riparian issues, there was little evidence of the knowledge having affected the New Zealand community's treatment of river landscapes. The Department's concern was, therefore, to understand the extent to which the community (i) valued their river landscapes, and (ii) could be involved in the process of riparian restoration. In response, the research in Marlborough indicates that the community sampled in this study places a great deal of value on their river landscapes and that they are interested in being involved in the process of restoration.

However, it appears that to generate change, that is, effective community based riparian restoration, the "authorities" need to overcome the "them and us" attitude which has been accentuated, in part, by the RMA (Oct. 1991). **The residential community is implicitly asking for a partnership that will require change on both sides**<sup>26</sup>. The advocacy that occurred even within this project was enough to stimulate community interest in riparian management. Earlier discussion has also indicated just how important the enhancement of community control is in this process. Education through involvement, and encouragement in this involvement is vital, but is only half the solution. Change is also required from the "authorities" (DOC and the MDC). Imposing change on communities in regard to riparian issues in a "heavy handed" way (without consultation and involvement in the problem definition and decision making process) will undermine efforts to gain community support, substantiate community concerns about conservational fascism and work to the detriment of river landscape restoration and other conservational values.

The results of this research also indicate that it may not be appropriate to "lump" conservation values and access values together under the same binding legislation. The threat of open public access, and the perceived insecurity this brings (particularly to women), is such that opposition to this aspect of legislation will impede any progress that could be made, quite willingly by the community, in the management of river landscapes.

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<sup>26</sup>This is quite different from the results of Smith (1993) on the perceptions of managers, "Non-technical impediments to the adoption of best riparian management options need to be addressed by the regulatory authorities. The resolution of many of these issues requires a change in public attitudes." (p.2) (emphasis added by the author).

## 10. ACKNOWLEDGEMENTS

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## APPENDIX

### Interview Guideline

Now, as I mentioned over the phone, I am working for the Department of Conservation and also with the Marlborough District Council. We need to understand the communities' attitudes towards their creek and river landscapes. How important you think they are.. Who should be looking after them... and so on.

Looking after our environment, particularly the natural and physical resources has become a fundamental responsibility of the Marlborough District Council. Looking after our river landscapes is an important part of looking after our environment. Some people even say that NZ's "Green Image" will not stand up to scrutiny and the management of our river landscapes is a more specific opportunity to maintain NZ's Clean Green Image.

- \* What do you think are the significant benefits of looking after our river landscapes in Marlborough?

(If not covered ...)

Streams and rivers have many uses... flood control, water supply, disposal of drainage and storm water are all well known. But, not so well understood are the biological, recreational and cultural aspects of rivers and streams. The biologists are particularly concerned that we have river margins with a healthy vegetation cover. They say this will:

- \* minimize the erosion of natural banks, farm land and engineering structures
- \* provide a healthy habitat for plants and animals both on the land and in the water
- \* provide farm beautification and shelter and shade for stock
- \* ensure good water quality, and
- \* maintain a better looking recreational environment.

(Discuss fragmentation of "green" corridors in relation to cadastral map ...what biologists would like ... where the reserve areas are at the moment...)

- \* What do you consider are the main issues/problems to address in the development of such a scheme?

(If not included) What about

- (i) the cost of river landscape management
- (ii) reduction of landowner responsibility
- (iii) access restriction
- (iv) weeds and pests

Any comment?....

- \* What solutions do you think are appropriate in addressing these issues/problems?

## THE ROLE OF COUNCIL & DOC

The Council has several means available under the RMAct to promote river landscape management. These include

- (i) education/advocacy
- (ii) service delivery like provision of labour, establishment of nurseries, purchasing of river margins, provision of technical advice & facilitation of joint agreements.
- (iii) economic instruments like rating relief, subsidies & grants
- (iv) regulation such as adopting measures which allow for the limited application of the esplanade reserve or strip provisions

- \* Which do you think are the most appropriate means to promote river landscape management?

## FUTURE RIVER LANDSCAPE

Now, I want you to think what would happen to this landscape in the next twenty years if things didn't go well...

- \* What would be the major changes?
- \* How have they been managed?
- \* What decisions have been made?
- \* What exists for these people?

Let's come back to the present and start again...

Let's imagine we come back to Marlborough in twenty years time and things have gone well...

- \* What would be the major changes?
- \* How have they been managed?
- \* What decisions have been made?
- \* What exists for these people?
- \* What would be their ideal experience in the river landscape?