

**HAWKE'S BAY REGIONAL COUNCIL**  
**Wednesday 9 & Thursday 10 March 2005**

**SUBJECT: SAWFLY REMEDIATION WORKS**

**INTRODUCTION:**

At their meeting on 17 February 2005, the Asset Management and Biosecurity Committee of Council, considered a briefing paper entitled Sawfly. As a result of debate on this issue the Committee recommended that Council instruct staff, in view of the significantly increased risk created by the impact of sawfly damage to the edge protection of the Heretaunga Plains Flood Control Scheme, and hence of extensive flooding on the Heretaunga Plains, to:

1. Reconsider the programme of works to accelerate the planned remedial works;
2. Further consider remedial works that will more quickly reduce the level of flooding risk faced by the community for a major flood event on the Heretaunga Plains;
3. Further consider funding options for the required works including the use of special targeted rates;
4. Investigate an insurance claim for the damage incurred;
5. Seek Government funding to help limit the costs of the remedial works programme;
6. Plan a public information campaign on the issue.

Council subsequently adopted this recommendation at their meeting on 22 February 2005.

Since the 17 February staff have:

1. Developed a programme to accelerate the planned remedial works, and more quickly reduce the risk of a stopbank breach faced by the community during a major flood event or series of flood events on the Heretaunga Plains. This now includes hard engineering works which will reduce the risk of a stopbank breach in the extreme risk areas and a process to commence the works as soon as possible complying with the Local Government Act 2002.
2. Further considered funding options for the required works including the use of Scheme and regional disaster reserves and special targeted rates;
3. Investigated the possibility of an insurance claim for the damage incurred
4. Referred to the National Civil Defence Plan Disaster Recovery Section to determine whether this provides an opportunity to approach Central Government for financial assistance and made initial contact with the Ministry of Civil Defence and Emergency Management.
5. Commenced the development of a public information campaign.

This paper:

- Advises Council on the above issues and proposes a revised programme of work and approach to funding.
- Seeks Council agreement to allow staff to commit Council immediately to the purchase of plants and materials associated with the works.
- Seeks Council adoption of a "Statement of Proposal" and "Summary of Information" in accordance with Sections 84 and 89 of the Local Government Act 2002

respectively in order to enable to works to commence as quickly as possible. (Given the tight timelines staff are working to, this material will be tabled at the meeting on Wednesday 9 March for consideration together with this agenda material)

## COMMENT:

### 1.0 ACCELERATED PROGRAMME OF WORKS

Staff have reconsidered the proposed programme of works, which initially indicated a 3 year timeframe to carry out structural works and a 5 year planting schedule. This programme has been reviewed to have the structural works, being the rope and rail permeable groynes, completed over 1 year and the planting programme condensed into a 3 year timeframe. Separating the work schedule into a number of areas and utilising a greater number of contractors to carry out this work can accelerate the structural works. The objective of the accelerated programme of works is to as quickly as possible reinstate a level of protection provided by the river edge protection and stopbanks to a capability and capacity of conveying a 1% annual exceedance probability (AEP) flood safely to the sea.

The planting programme has been condensed into a 3 year programme however the year 1 planting schedule remains unchanged due to the limitation on plant numbers available for this period. The year 1 programme allows for the severe risk areas to be planted during this period. Commitments can be made for contract growing materials for years 2 and 3 with the option of using a wider range of species and sourcing material from a wider area of suppliers to satisfy the greater numbers over a shorter period of time.

In response to questioning from Committee members on the 17 February 2005, staff advised the committee that in their view the risk of a stopbank failure had increased significantly as a result of the damage sawfly has caused to the edge protection works.

Staff advised that as a result of the weakened willow edge protection the risk of lateral scour of the river during flood flows is increased with the potential for substantial lateral erosion during any flood greater than a 5-year return period particularly if flood flows remain in the river over an extended period. Repeated floods in any one season could result in substantial lateral erosion and in particular where the stopbanks are within 100 metres of the active river channel under normal conditions the risk of a stopbank breach is substantially increased. Staff therefore estimate that the risk of a stopbank failure may have doubled.

Staff have completed an assessment of the potential damage that may be caused by stopbank breaches in some higher risk areas. These are set out in the Table below. Council should note that the assessments have taken a cautious approach and are likely to be at the low end of a large range of possible damage. In addition the estimates do not include potential damage to roads and other infrastructure (including Council's drainage networks) and do not include any assessment of the indirect economic impact arising from extensive damage that will occur to the agriculture, manufacturing, and tourism industries in Hawke's Bay.

Stopbank breach location	Estimated direct loss
Ngaruroro River - Ngatarawa	\$350,000,000
Tutaekuri River - Moteo	\$60,000,000
Tukituki River – Tennants	\$16,000,000

It is proposed that the work be undertaken over a three year period, with the high risk work being completed first. The indicative work programme is set out in the **attached** table. Reference will need to be made to the **attached** map to identify the exact locations of work. Council should note that if this programme of work is to be achieved additional staff resource will be required specifically to project manage and oversee the work.

## 1.2 Additional Protection Works

The works have been revised since the Asset Management and Biosecurity Committee considered the first estimate of \$6,100,000 at their meeting on 17 February 2005. The revisions reflect the desire of the Committee to reduce the increased risk of a stopbank breach as quickly as possible to a level of risk equivalent to that provided by the Scheme assets with healthy edge protection (ie: a 1% AEP flood event being conveyed safely to the sea). To achieve this objective staff believe that some sections of the river will need to be protected with hard engineering work along the edge of the active river channel where the willow edge protection has been extensively damaged by sawfly and the stopbank is within 100 metres of the existing channel edge.

Four specific areas have been identified as fitting these criteria. These are:

River	Section	Length (m)	Priority
Ngaruroro	Cross section 50 to 53 L/B	4,700	1
Tutaekuri	Cross section 44 to 47 R/B	1,850	2
Tukituki	Cross section 10 to 18 R/B	3,200	3
Tutaekuri	Cross section 48 to 53 L/B	2,900	4
	Total length	12,650	

The additional work proposed in these areas includes permeable groynes at 25 metre centres for 8,490 metres of the 12,650 metre total length. For the remaining 4,160 metres it is proposed to use hard protection works consisting of 8 tonne concrete Akmon units. Akmon units are specifically designed concrete units similar, but smaller in size, than those used on the Port of Napier breakwater and the Haumoana groyne. As rock is considerably more expensive, it is proposed that the Akmon units be used to strengthen the edge of the active channel in conjunction with rope and rail work and planting.

The revised programme of work is set out in the attached work programme with an estimated cost in total of \$8,800,000.

## 1.3 Early Commencement of work

Staff seek Council agreement to a process that will allow the commencement of work in the shortest possible time. To achieve this Council will need to:

- Complete a process of amendment of the 2004/14 LTCCP in accordance with the requirements of the Local Government Act 2002.
- Commit to the purchase of trees and shrubs, the purchase of rope and rail materials for the structural works, the fabrication of steel moulds for the Akmon units.

### 1.3.1 Local Government Act 2002 requirements

Under the Local Government Act 2002 (the Act) Council must use a special consultative procedure set out in the Act in relation to any significant alteration to the LTCCP. The cost of the sawfly remediation work is considered "significant" under the Act and Council's significance policy. Staff therefore believe that to comply with the Act, Council will need to use a special consultative procedure to allow the public to consider Council's proposal to undertake the work and the proposed method of funding.

A special consultative procedure may be undertaken in conjunction with Council's 2005/06 Annual Plan process, or may be undertaken separately and be completed more rapidly.

If the process were to be undertaken in conjunction with Council's annual plan process then the consultation procedure would not be completed until the Council meeting programmed for 29 June 2005. If the special consultative procedure were undertaken separately from the Annual Plan then it could be completed by the end of April 2005.

The advantage of completing the process earlier will be to allow for the work to be commenced early in the 2005 winter, and have the benefit of the full winter planting period to enable plants to become better established before the dry summer months. In addition the structural works could be commenced and the reduction of risk can be achieved more rapidly.

Staff recommend that Council agree to undertake a special consultative procedure being undertaken separately from consultation undertaken on the 2005/06 Annual Plan. The required procedure and specific approvals required of Council for this process are the subject of a separate paper which will be circulated to Councillors on 9 March 2005 for their discussion and consideration.

### **1.3.2** *Early commitment to purchase*

Design work and staff enquiries have identified quantities and sources for the materials required for the remediation works.

#### **A)** Trees and shrubs

A total of approx 300,000 trees and shrubs will be required for the remediation works. Staff have made initial enquiries to nurseries to determine how these plants may be sourced. Indications are that a limited number may be available immediately and that in order to secure the remainder, Council will need to enter into a contract with a nursery or nurseries to supply the quantities required for future years. Staff advise that approx \$150,000 of plants are currently available from various sources, but are subject to an order confirming purchase to secure ownership, so hence staff are keen to secure those plants as soon as possible to enable them to be planted over the 2005 winter months.

#### **B)** Wire Rope

Approx 120km of wire rope is required for the works. This is not available in New Zealand and must be secured on the international market. There are significant savings (approx 40%) available if the total quantity of wire rope required for the work is purchased as one order. Staff have been advised that there is approximately 14-16 weeks required for manufacturing and shipping from the time of order. The estimated cost for the total requirement of wire rope is \$220,000.

#### **C)** Rail

Approximately 42km (1,250 tonnes) of steel rail is required for the works. Staff have looked at a range of options for the rails and believe that railway irons provide the best value for the works. There are currently no significant quantities of rail available in New Zealand. Working through a broker, staff have identified a supply of rail in Australia, and as with the wire rope have been able to negotiate significant savings if the total required quantity is purchased as one order. Time for delivery of the rail is 4 to 6 weeks from the placement of order. The estimated cost for the requirement of rail is \$1,050,000.

#### **D)** Akmon moulds

Works Group staff have fabricated a prototype mould for an 8 tonne Akmon unit at a cost of approx \$8,000. An estimated 2,500 Akmon units will be required to complete the works. Staff propose that the manufacture of the Akmon units be contracted out, however there will be a need to provide the moulds to enable a contractor to undertake the work. Staff believe that a minimum of 8 moulds will be required to enable the units to be manufactured in sufficient numbers to allow the proposed work programme to be undertaken. The cost of the required number of moulds is estimated to be \$65,000.

Staff seek Council agreement for the Chief Executive to immediately enter into commitments for the above plants and materials, with a total estimated cost of \$1,485,000 immediately. If Council approves this approach, then it will be necessary to make commitments through a process that does not comply with Council's tendering policy. Staff recommend that Council delegate authority to the Chief Executive to enter into the above commitments once he is satisfied that a full assessment of the options and availability of material has been made.

Should Council receive strong feedback from the community during the consultative process that they would rather live with the increased risk of a stopbank breach rather than meet the cost of the remedial works, and as a result Council decides to withdraw from the proposed work, then:

- The rope and rail could be used for normal maintenance work by the Heretaunga Plains and Upper Tukituki Schemes over a period of 8 years based on current rates of material usage, or could be sold on the open market as there is considerable demand for the material by other councils in New Zealand.
- The plants would be planted as alternative species within the live edge protection zone of the Heretaunga Plains Scheme. The number of plants is in excess of the number currently planted annually, however the additional number could easily be accommodated within the normal planting programme.
- The Akmon moulds would remain available for use in the future.

With the Scheme account expected to have a surplus at 30 June 2005 of approx \$700,000, and with Council having the ability to review the proposed maintenance and capital works programmes for the Scheme, staff are confident that the early commitment to the purchase of materials could be managed within the current Scheme accounts and programme without any significant affect on Scheme ratepayers.

Staff therefore seek agreement for staff to enter into commitments for the supply, purchase and/or manufacture of plants, rope and rail and Akmon moulds. Wire rope and railway iron has been a commodity that has been purchased as and when available due to the specific nature of its use and the variability of its availability. Recent steel price rises and the requirement for rail in other regions for flood repair works has added to the difficulty of sourcing material in sufficient quantity and at acceptable prices. Due to these limitations there will be little benefit in tendering for supply of these materials within New Zealand and staff believe, from experience, that the negotiations undertaken to date will provide the most economic solution for supply of these materials. Work for the construction of the Akmon moulds will be tendered locally, with the number of local businesses likely to ensure competitive prices.

#### **1.4 Ongoing risks**

Although the work proposed will result in a rapid reduction in risk level there will be an ongoing risk of lateral erosion of the river in any single flood event until the live edge protection is fully established. The extent of such erosion is likely to be considerably greater in willow edge protection weakened by sawfly than it would be with healthy willow or alternative species edge protection. The Scheme assets will therefore be exposed to that risk until the alternative species edge protection is fully established (i.e. 5-8 years). In addition the cost of repairs to any damaged edge protection will be greater than it has been in the past when healthy willows have been able to be used for repair works in establishing a new river edge. With the reduced number of willows available because of the extensive damage by sawfly, and the fact that there are no other alternative species with the strong attributes of willow for reuse, repairs in the future will have a greater element of structural works (rope and rail groynes) or hard engineering works.

To recognise this increased risk, staff propose that the Scheme disaster fund be built up more rapidly than is presently budgeted. The revised estimates therefore include an increased annual contribution, (increasing from \$20,000 to \$50,000). The use of the disaster reserve to fund remedial works is discussed under funding options below.

## **2.0 INSURANCE**

It is the policy of Council to cover the costs incurred as a result of damage caused due to a major disaster event to the Council's infrastructure assets, firstly as a claim against the individual river control or drainage Scheme up to a predetermined Scheme excess, secondly against Council's Disaster Damage Reserves, and thirdly as a claim against the Special Risks Policy – Infrastructural Assets (for a sum up to \$12M). The scheduled value for the infrastructural assets for the year

ending 30 June 2004 was \$81.3M. The annual cost to Council for the insurance policy providing the \$12M top-up insurance is just under \$100,000.

The assets included in the schedules to this policy include bank and edge protection for the Heretaunga Plains Rivers. A sum of \$5.5M was included under this heading for the year ended 30 June 2004. Over 90% of this amount represented willows on river berms.

Discussions have been held with Jardine Lloyd Thompson, Council's insurance brokers, covering the issues of a claim against the Special Risks Policy – Infrastructural Assets. The broker from Jardine Lloyd Thomson has been shown the major areas of damage caused through sawfly in order to gain a better appreciation of Council's exposure to a potential flooding disaster.

Subsequent to this visit, a letter has been received from Council's insurance brokers covering the issue of a claim under the infrastructural assets policy.

The initial stance taken by the underwriters of Council's Special Risks Policy – Infrastructural Assets, as reported by Council's brokers Jardine Lloyd Thompson, is that the sawfly neither passes the test of an insured peril, nor are the willows covered as an insured asset, as standing timber and growing crops are specifically excluded from being covered.

Staff will continue to pursue this issue but it appears that at this stage Council should not allow for any funding to be provided through Council's current insurance policies.

### **3.0 FUNDING OPTIONS**

At their meeting on 17 February 2005, the Asset Management and Biosecurity Committee considered a range of funding options to meet the Scheme contribution (ie 70% of the cost) to the project, including:

- Option 1 - Funding entirely from an increase in targeted rates,
- Option 2 - Funding from increasing targeted rates in line with inflation, and deferring some capital works,
- Option 3 - Funding from borrowing and increasing targeted rates only in line with inflation, and
- Option 4 - Increasing targeted rates by 10% in the 2005/06 year and in line with inflation in future years, deferment of other capital works, and some borrowing.

All of these options were based on the current targeted and general rating structure. The Committee requested staff to consider other methods of funding. A range of possible funding options has been considered including:

1. Scheme and regional disaster reserves
2. Increased rating using the existing rating structure.
3. Rating using alternative rating structures.
4. Central Government funding.

These are discussed below.

#### **3.1 Disaster reserves**

##### **3.1.1 Scheme Disaster Reserve.**

In August 2001 Council adopted a disaster damage risk management approach for river and drainage scheme assets, which are generally uninsurable. Under this policy Council has a three-tiered system for ensuring "uninsurable" scheme assets.

Each scheme is required to have a disaster reserve fund which covers a specified excess, with that fund being the first call for any disaster damage repair costs. The Heretaunga Plains flood control scheme rivers excess is set at \$554,137. As at 30 June 2005 the scheme disaster damage reserve balance is estimated to be \$595,000.

For damage in excess of the scheme disaster reserve excess amount, the regional community disaster fund will meet the costs up to \$3M with Council insured for disaster damage for \$15,000,000 with an excess of \$2,446,000.

Council's policy sets out the criteria for the buildup, use and maintenance of disaster damage insurance excess reserves as follows:

- Reserves will always be a funding call of last resort, e.g. if priorities can be reestablished to cover the expenditure, or if unbudgeted income is received these sources of funds will be used initially.
- Reserves will be used to meet the cost of damage repairs (to an equivalent standard to that in place before the damage was incurred) to Council infrastructure assets.
- The initial cost of restoring Councils infrastructure assets (to be referred to as scheme excesses) will be met by relevant flood and drainage schemes to a maximum level per scheme of 2.5% replacement value of edge protection, plus 2% of the replacement value of stopbanks and detention dams, plus 1.5% of the replacement value of all drainage assets of each scheme. This obligation will be met by disaster damage investment funds and annual maintenance budgets able to be redirected to repair disaster damage.
- All efforts will be made to maximise any disaster recovery contributions from Central Government or any other sources.

While funding is available in the Heretaunga Plains Rivers Disaster Reserve, staff suggest that this money not be drawn on for this work for the following reasons:

- The disaster funds were established with their use being envisaged to fund repairs following a major flood or other hazard event, which had adversely affected the Hawke's Bay economy, and the ability of individual property owners to meet the costs of those repairs through increased rating.
- The Council policy states that the reserves will always be a funding call of last resort. Staff have assessed the funding requirements and believe that the costs can be met through acceptable rate increases and levels of borrowing.
- Over the next 5 to 8 years and until the proposed mitigation works are established and effective, the scheme remains at major risk from damage during any flood event. This damage is likely to be more extensive than would have been the case if healthy edge protection remained in place, and more expensive to repair because of a lack of repair material in the form of live willows. It is therefore essential that the scheme remains able to financially respond to potential flood damage over the next several years.

For the above reasons staff do not recommend the use of Scheme disaster reserve funds to meet the costs of the proposed sawfly mitigation works.

### **3.1.2 Regional Community Disaster Reserve**

Council's policy is that financial strategies be in place to provide for the cost of repair and restoration of assets damaged in a disaster, such strategies will include insurance cover up to \$15M on Council infrastructure assets with the first \$3M of each and every claim funded by Council reserves.

The strategy of establishing Council reserves to cover this \$3M disaster damage insurance excess is provided for in a combination of ways including:

- Disaster Reserve Investment Funds accumulated by the regional community
- Disaster Damage Investment Funds accumulated by each individual Council managed flood and drainage scheme
- A proportion of annual maintenance budgets in various flood and drainage schemes able to be redirected to recurring disaster damage

The previous sections of this report dealt with the last two bullet points, namely the Scheme contributions towards the excess. The purpose of this section is to explore the possibility of using the Regional Community Disaster Damage Reserve funding for the sawfly remediation works.

Section 2 of this report covers the response from Council's insurers covering a claim under the special risks policy – infrastructural assets, the initial assessment is that the sawfly remediation works do not fall within that policy's provisions. Accordingly, Council may also hold that a claim against the Council's regional community disaster reserves would also not be proceeded with. However, this paper recommends for Council's consideration that the level of investment included in the regional community disaster reserve be assessed along with the needs for retaining an adequate investment balance to ensure that this reserve would be in a position to contribute to the \$3M excess required in the event of a major disaster in the region. Such disasters would be in the nature of earthquakes, storm damage, tsunami etc.

Council policy is to have sufficient in the regional community disaster reserve in order to cover any required excess 1.5 times. The question now arises as to what the base figure should be on which the 1.5 multiplier would apply. In the event of a disaster, the first call for the excess is made on the schemes that are damaged. The excess contributions from these schemes was set by Council as high as \$554,000 from the Heretaunga Plains Rivers to as low as approximately \$1,000 for the Kopuawhara Scheme. Accordingly, the Regional Community Disaster Reserve would need to contribute a sum as low as \$2,450,000 if the disaster only affected the Heretaunga Plains Rivers Scheme, and as high as \$2,999,000 if the disaster only affected the Kopuawhara Scheme. It would seem reasonable to assume that if there was a major disaster it would affect more than one scheme and hence contributions would be made to this excess by a number of schemes. Furthermore, a small scheme will never incur that level of damage (ie: \$3,000,000) as they do not have that value of asset exposed to damage in a single event.

It is therefore recommended to Council that in order to release funds from the Regional Community Disaster Reserve that the draw from this reserve be taken at the lower end of the requirement, namely \$2.5M.

**Reserve Level Funding Requirement:**

\$2.5M multiplied by 1.5 =	\$3,750,000
Market Value of the reserve at 31 December 2004	\$4,259,000
Funds that could be allocated to sawfly remedial works	<u>\$509,000</u>

It is considered that over a period of time, the investments supporting the Regional Community Disaster Reserve will increase, for example – the market value of this fund has increased by \$76,000 for the 6 months ending 31 December 2004, as well as earning interest and dividends of \$110,000 which has been used to offset general funding requirements.

### 3.2 Increased rating using the existing rating structure

Staff have reviewed the options considered by the Asset Management and Biosecurity Committee at their meeting on 17 February 2005. Because of the increased cost of the project not all of these options remain available.

*Option 1 - Funding entirely from an increase in targeted rates*

To fund the work entirely from rates will require a rate increase of greater than 100%. Therefore staff have discounted this approach as Council's preferred option as the burden on ratepayers will be significant, and it has not been considered further.

*Option 2 - Funding from increasing targeted rates in line with inflation, and deferring some capital works*

With the significantly increased cost of the proposed year 1 work programme, the work can no longer be funded entirely from deferring other capital works and minor increases in targeted rates with no borrowing. This option is therefore not considered practical or feasible.

*Option 3 - Funding from borrowing and increasing targeted rates only in line with inflation*

Because of the increased cost of the programme of works, it is now no longer feasible to fund the work through increases in rates in line with inflation, and borrowing. The financial burden that arises as a result of loan capital repayment and interest cannot be met through this option.

*Option 4 - Increasing targeted rates by 10% in the 2005/06 year and in line with inflation in future years, deferment of other capital works, and some borrowing*

Staff have reviewed this option and consider it the most practical. With the increased cost of the works, it would be necessary to borrow \$5,500,000 over three years to meet the cost of the works as set out below:

Year	Borrowing required
2005/06	\$2,500,000
2006/07	\$2,000,000
2007/08	\$1,000,000

An increase in targeted rates of 10% in 2005/06 and a further 10% in 2006/07 followed by ongoing increases in line with inflation (budgeted at 3%) will be required to meet the Scheme's contribution to the work and the ongoing cost of repaying and servicing the loans.

In addition the capital works programme has been reviewed with some revision of costs and timing for other capital works. These changes are set out in the table below:

Project	Commencement date 2004/14 LTCCP	Proposed commencement date
Ngaruroro River stopbanks	Year 1 & 2 of a 4 year programme completed in 2004/05	Year 3 deferred to 2008/09
Clive River stopbanks	Programmed to commence 2004/05 now revised to 2005/06	Work considered urgent and therefore commencement date remains 2005/06. Costs have been revised as work is best undertaken over one year.
Tutaekuri River stopbanks	Year 1 & 2 of a 4 year programme completed in 2004/05	Year 3 deferred to 2009/10
Tutaekuri/Waimate River stopbanks	2010/11	2017/18
Clive River widening	2009/10	2011/12
Super design flood structures	2010/11	2014/15

The current approach to funding of the Heretaunga Plains Flood Control Scheme – Rivers was established by Council after a year long review culminating in July 1997. As part of that review a range of funding options were considered which reflect the physical benefits in terms of avoided costs of damage for land in different locations on the floodable plains.

The current approach using 2 differentials (F1 and F2) was developed to reflect the interaction between the economic principles and legal requirements on the one hand, and the practicality of engineering analysis on the other. The three sets of issues underlying the current approach to funding are:

- the differences between public goods and private goods;
- the different characteristics of ownership interests and operational interests;
- the legal requirements.

Private goods are the ones where the benefit is clearly defined and goes to a user (usually the payer) who is clearly defined. These were assessed as 70% of the costs of the ongoing maintenance and improvement of the Scheme.

Public goods on the other hand are characterised by:

- external benefits, i.e. benefits do not accrue only to paying customers;
- by non excludable services so non paying customers can also use the service;
- by non-rival consumption where additional uses do not reduce the benefit available to existing users.

30% of the cost of the Scheme is funded from general funding sources reflecting the public and regional benefits provided by the Scheme.

The legal requirements stem from the then current Rating Powers Act 1998 and the Local Government Amendment Act 1996. Both of these have now been superseded by the Local Government (Rating) Act 2002, however, legal requirements for the current mechanism of funding the scheme remains current.

The two differentials F1 and F2 established were:

### **3.2.1 F1**

Two groups of beneficiaries were considered within the F1 differential rating group.

- (a) individuals or groups at risk from failure of specific river alignment and flood control structures on the plains;
- and
- (b) individuals and groups of properties at risk from river realignment and flooding of loss of life, limb, land, and particularly capital assets such as orchards, vineyards, residential commercial, industrial and other properties at risk on the plains.

It was not possible to determine with certainty the exact number or location of the properties, which would be affected in the case of a stopbank failure. In addition it was decided that the present scheme operates as a network in that all the component parts are independent such that the loss of one structure, or part of a structure, would put stress on others and those may sooner or later fail. It was therefore decided that the costs associated with the maintenance of stopbanks where direct benefit could be identified to specific properties, should not be separated from the total maintenance costs or attributed by a differential to specific benefiting properties.

It was also decided that the properties benefiting in the way set out in F1 (b) above, are all properties on the Heretaunga Plains which could be at risk of loss if any of the main rivers changed their course, or the effectiveness of any of the stopbanks or other structures were reduced.

The magnitude of the loss saved annually is the total capital value of the properties in the at risk area multiplied by the cumulative probability that any flood up to a 1 in a 100 year flood will take place in any year. Accordingly the benefit provided by the scheme to individual properties is best reflected by through their capital value.

### 3.2.2 F2

This differential covers:

- (a) Those properties at risk from the indirect affects of river and flood causing loss of the infrastructure available to all people living in the hinterland of the Heretaunga Plains, which could be called the Heretaunga Economic Zone.
- (b) Those properties at risk from the indirect effects of the river and flood causing loss of the specific benefits and opportunities available to people in the immediate Heretaunga Economic Zone due to the larger economy and population which would be lost if this scheme failed.

The logic here was that there are a number of properties which are not directly at risk of destruction from rivers changing course, or from flooding, generally because they are on higher ground, but that they are the close hinterland of the Heretaunga Plains, and so any such river or flood event would cause them loss due to indirect benefit such as loss of infrastructure. Loss of access, communication, destruction of sewerage treatment capability of the Heretaunga Plains and so on, will have an equally bad affect on residents of Havelock North, Te Awanga, Puketapu and Bluff Hill, as it will on the flooded residents of Hastings, Flaxmere or Meeanee.

In addition there is indirect benefit to people in the close hinterland of having direct access to a larger market and more services than would be the case were the Scheme to be lost and the Heretaunga Plains be again reduced to mainly pastoral production, with the broader processing and servicing industry being eventually lost. It was considered that this would result in significant reduction of population in the Heretaunga Zone, considerable reduction of amenities of all types, and this would be indicated by a significant loss of value of all properties in the Zone, including the properties on higher land mentioned above and not only those at risk of flooding.

Again it was considered that the capital value of properties best reflected the benefits received by properties within this area determined to be the whole of the Hastings District Council area and Napier City Council areas.

Staff believe that the targeted rates levied on properties within the Hastings District and Napier City Council areas under both the F1 and F2 differentials, fairly reflect the benefits received by properties throughout those areas as a result of the Heretaunga Plains Flood Control Scheme being present, and therefore that the current rating structure best reflects the benefit received by ratepayers, and therefore is the most appropriate method of attributing the rating liability for the proposed sawfly remediation work.

The table below gives an indication of the proposed increased rating on a number of properties using the F1 and F2 differentials. It should however be noted that significant rating movements will occur on many properties over the next two years as a result of property revaluations being undertaken in the Hastings and Napier Districts over the 2004/05 and 2005/06 years.

Property Location	Capital value 2004/05	Total rates 2004/05	Heretaunga Plains rates F1 &F2 2004/05	Heretaunga Plains rates F1 &F2 2005/06
<b>F2 Only</b>	\$	\$	\$	\$
Ahuriri without F1 rates	470,000	152.43	17.01	18.71
<b>F1 and F2</b>				
Taradale	300,000	162.75	53.40	58.74
Hastings				
Hemi Street	99,000	84.25	19.67	21.64
Omahu	180,000	268.80	35.76	39.34
Raymond Road, Clive	380,000	434.36	75.50	83.05
Ferry Road, Clive	85,000	154.36	16.89	18.58
Taihape Road, Fernhill	64,000	48.78	12.72	13.99

### 3.3 Rating using alternative rating structures

There are approximately 36,200 rateable properties rated for F1 and 50,700 rated for F2. Under the current F1 and F2 differential system F1 properties meet 70% of the share of the targeted rates and F2 meet 30%. Under Council's funding policy general rate funding to the Scheme is met through general rate.

With capital value being the current basis for the targeted rating and land value being the basis for general funding input, and both of these being carefully and extensively considered, debated and reviewed over a number of years, staff have been unable to determine any new rationale that would justify an alternative approach now being made to rating for the sawfly remediation work.

### 3.4 General funding

The revenue and financing policy as adopted in the LTCCP 2004-14, states that the funding required for the Heretaunga Plains Scheme – Rivers is 30% public funding and 70% private funding (targeted rates). The proposed increases in targeted rates to fund the sawfly remediation works have been included above in this paper. This section sets out the proposed method of funding the 30% of total capital works on the sawfly remediation works that require to be funded from general funding sources.

The paper considered by the Asset Management Biosecurity Committee on Thursday 17 February 2005, set out three methods that could be used by the Council to secure additional general funding for this project. These were:

- Operating Cash Balances
- Regional Income
- General Funding Rate

Given that the review of the sawfly remediation works has substantially increased in costs from \$6.1M to \$8.8M, the requirement for general funding has also increased. The previous programme was to be implemented over a 5 year time frame, this time frame has now been reduced to 3 years, therefore the requirement for sourcing general funding places greater pressure in the initial years.

Set out below is the estimated capital costs that require to be funded from general funding sources. In addition, the recommended sources for general funding are also shown in this table.

	2005-06 \$000	2006-07 \$000	2007-08 \$000	2008-09 \$000	Total \$000
<b>Expenditure</b>					
Total	4,817	2,674	1,283	-	8,774
Public Funded Contribution (30%)	1,445	802	385	-	2,632
<b>Funding Sources</b>					
Operating Cash Balances	945	2	(15)	-	932
Regional Disaster Damage	500	-	-	-	500
Loans	-	800	400	-	1,200
<b>Total Funding</b>	<b>1,445</b>	<b>802</b>	<b>385</b>	<b>-</b>	<b>2,632</b>
<b>Loan Servicing</b>					
Loan Repayment (10 year plan)			120	120	
General Funding Rates (3.8% increases on Land Value Rates)			(120)	(120)	
Interest			96	86	
Operating Cash Balances			(96)	(86)	

### 3.4.1 Comments on Funding Sources

#### a. Operating Cash Balances

The Overview section of the Annual Plan 2005-06 workpapers submitted for Council consideration at this meeting, have established that the forecast cash operating balance of \$4.9M at the end of the 2005-06 year is \$1M higher than the estimated cash balance of \$3.7M in the LTCCP for the same time period. The reasons given for this are:

- The unspent portion of the additional cash operating surplus for 2003-04 was calculated to be \$430,000
- The Annual Plan 2005-06 shows a reduced deficit of \$581,000 as compared to the deficit included in the LTCCP for the 2005-06 year.

These two amounts taken together provide the Council with additional cash operating funds, which can be allocated to specific projects etc. Staff recommend that the \$945,000 be used to fund the general funded portion of the sawfly remediation works.

The paper also recommends that the interest on the loan is funded from general funded sources other than an increase in general funding rates. The feasibility of achieving this will be one of the issues covered in the LTCCP 2006-16 budget discussions. The cost of interest commences in year 1 at \$96,000 and reduced each year as the loan is repaid. The interest payment for year being only \$9,600.

Furthermore, the reforecasting exercise for 2004-05 that will be reported to Council in April 2005, will most probably present to Council a deficit position that will be more favourable than the deficit of \$1,138,000 set out in the LTCCP for the 2004-05 year. The previous paper to the Asset Management Biosecurity Committee considered by that Committee on 17 February 2005, commented on increased operating interest income due to the higher investment balances in the sale of land account. That paper indicated that the favourable variance for the interest earned from that account alone would be in the order of \$200,000.

## b. Regional Disaster Damage

As set out earlier in this paper, the Regional Disaster Damage Reserve has \$500,000 in excess of the core funding requirements as established by Council policy for that reserve. This paper therefore recommends that this \$500,000 be used to provide for part of the general funding contribution for the sawfly mitigation initiatives. These funds would be used in the first year of the capital spend.

## c. Loan Funding

The remaining general funding requirement for the sawfly mitigation initiatives is approximately \$1.2M, such funding needs to come from an increase in general funding rates, specifically the land value based general funding rate as set out in Council's finance and funding policy for the Heretaunga Flood Plains Rivers Scheme.

In order to ensure intergenerational equity and also to limit the increase in the funding rates, this paper recommends that a loan of \$1.2M be raised and repayable over a 10 year period. This paper also recommends that the general funding rates be increased to finance the yearly repayment of \$120,000. This strategy also provides flexibility if any insurance or central government funding is received.

If the final drawdown on the loan was during the year 2007-08 (the third year of the sawfly remediation works programme) then the first repayment will not be made until the end of that financial year. Hence general funding rates would not need to increase before 2007-08. The increase would be 3.8% on that level as set out in the current LTCCP for that year. The table below best illustrates the effect of this increase.

### General Funding Rates

	UAGC		Land Value			Total	
	\$000 Excl. GST	Per Property (Incl. GST)	\$000 Excl. GST	Per \$100,000 Land Value (Incl. GST)		\$000 Excl. GST	% Increase from previous year
				1/9/03 Values	1/9/04 Values		
Current Levels 2004/05	1,716	\$32.02	909	11.91\$	N/A	2,625	
LTCCP 2005/06	1,904	35.52	1,020	\$12.64	\$8.78	2,924	11.4%
LTCCP 2006/07	2,054	\$38.32	1,220	\$13.90	\$9.65	3,175	8.6%
LTCCP 2007/08	2,219	\$41.40	1,331	\$15.12	\$10.50	3,439	8.3%
<b>Revised 2007/08</b>	<b>2,219</b>	<b>\$41.40</b>	<b>1,451</b>	<b>\$16.48</b>	<b>\$11.44</b>	<b>3,559</b>	<b>12.1%</b>

## 4.0 CENTRAL GOVERNMENT FUNDING

The National Civil Defence Plan Part 2 Disaster Recovery Section sets out the framework and responsibilities for Disaster and Emergency Recovery Operations and the principles and existing policies for Post Disaster Activity from Central Government.

Central Government recovery assistance will normally only be provided where:

- (a) There is a statutory requirement for action, or a need to invoke a statute to achieve the ends desired from the recovery process;  
or
- (b) Recovery processes can not be carried out without Central Government assistance;  
or

- (c) Central Government assistance will aid the coordination of the recovery process to a significant extent;  
or
- (d) There are advantages of economies of scale.

Staff have reviewed this section of the National Civil Defence Plan and believe that it is sufficiently broad in scope to enable staff to develop a case to Central Government to meet a portion of the cost of the remediation works. Initial contact has been made with the Ministry of Civil Defence and Emergency Management to forewarn them of a claim under the Recovery Section of the National Civil Defence Plan.

While the reaction of Central Government to a funding case presented cannot be predetermined, if a case is accepted, and payment made on the basis of the National Civil Defence Plan – Recovery Section, the calculation would be as follows, with a regional excess calculated on the net equalised property value of the region.

Cost of remedial works	\$8,800,000
<b>Less</b> 0.002% of equalised capital value of the region (ie .002% of \$24,000,000,000 being the regional threshold as set out in the National CD Plan Recovery Section)	\$480,000
Amount eligible for assistance	\$8,320,000
Government assistance (60%)	\$4,992,000
Regional share (40%)	\$3,328,000

Obviously the level of assistance would have a large affect on the required income levels previously presented. It would reduce the targeted rates input to the project from \$6.14M to \$2.33M and general funding from \$2.632M to \$0.998M.

## 5.0 PUBLIC INFORMATION CAMPAIGN

Staff have commenced the development of a public information campaign which, if the recommendations of this paper are adopted, will form the basis of a special consultative process in accordance with the Local Government Act 2002.

A special consultative process requires the preparation of a “Statement of Proposal” setting out:

- The details of the proposal
- The reasons for the proposal.
- An analysis of the reasonably practical options, including the proposed option.

This Statement of Proposal must be available for public review.

In addition Council are required to prepare a “Summary of Information” which is a summary of the information contained in the Statement of Proposal and must be:

- A fair representation of the major matters in the statement of proposal.
- Distributed widely as reasonably practicable as a basis for general consultation.

The contents of the Statement of Proposal and Summary of Information are presently being finalised by staff and will be distributed to Councillors on 9 March for consideration in conjunction with this paper.

## DECISION MAKING PROCESS

Council is required to make every decision in accordance with Part 6 Sub-Part 1, of the Local Government Act 2002 (the Act).

Staff have assessed the requirements contained within the section of the Act in relation to this item and have included the following.

1. Section 88 of the Act covering the changing mode of delivery for example, where a local Council that has in the past delivered an activity transfers the delivery of that activity to a Council-controlled organisation or to another private organisation or person etc., does not apply.
2. Section 97 of the Act, which covers a significant change in the intended level of service provision of a significant activity or where a decision will significantly affect the cost of delivery of an activity, as identified in the Long Term Council Community Plan, does apply. Consequently, the effect of a decision as recommended in this paper would trigger an amendment to the LTCCP 2004-14 and Council must use a special consultative procedure for this purpose.
3. Section 84 of the Act where a special consultative procedure is used in relation to an amendment to a Long Term Council Community Plan applies. The effect of the recommendations in this paper would be to require a statement of proposal to be prepared and either included in the Annual Plan 2005-06, or used as part of a special consultative procedure independent of the Annual Plan consultation.
4. The decision does fall within the definition of the Council's Policy on Significance, specifically to the criteria "*the impact or consequences of the decision or proposal on the effected persons (being a large proportion of the local community) will be substantial*" and, furthermore, the criteria "*the financial implications of the decision on the Council's overall resources are substantial*".
5. The persons affected by this decision in this paper will be the ratepayers of the Heretaunga Plains and Rivers Scheme and all ratepayers within the Hawke's Bay region as contributors to general funding rates.
6. Section 80 of the Act covering decisions that are significantly inconsistent with any existing policy or plans does not apply.

## RECOMMENDATIONS:

That Council:

1. Agree that the decisions to be made on the full remediation works are significant under the criteria contained in the Council's adopted Policy on Significance and so such a decision does trigger an amendment to the LTCCP 2004-14 as set out in Section 97(1)(a) of the Act (change to the level of service) and Section 97(1)(d) of the Act (where there is a significant increase in the cost to the local authority in relation to any activity identified in the Long Term Council Community Plan), and so a special consultative process under Section 84 of the Act will need to be carried out prior to a final decision on whether or not Council should proceed with the proposed sawfly mitigation work.
2. Adopt for consultation the revised programme of works to be undertaken over a three year period with an estimated cost of \$8,800,000 for the remediation of sawfly damaged edge protection on the Heretaunga Plains, with this method and programme to be included in a statement of proposal as the preferred Council option for the special consultative procedure.

3. Adopt for consultation that the programme be funded from the following sources in the proportions which the Heretaunga Plains Flood Control Scheme – Rivers is currently funded, ie 70% Scheme ratepayers through targeted rates and 30% general funded through general funding sources including general rates levied on the basis of land value:
  - a. Scheme funds
    - i) Borrowing of approximately \$5,500,000 with borrowing of \$2,500,000 occurring in the 2005/06 year, \$2,000,000 in the 2006/07 year, and \$1,000,000 in the 2007/08 year.
    - ii) An increase in the Heretaunga Plains Flood Control Scheme targeted rate of 10% in the 2005/06 year, a further increase of 10% in the 2006/07 year, and ongoing increases in line with inflation in future years.
  - b. General funding
    - i) Operating cash balances of \$945,000 plus \$500,000 from the Regional Community Disaster Reserve in the 2005/06 year.
    - ii) Borrowing of \$800,000 in the 2006/07 financial year and \$400,000 in the 2007/08 financial year.

With both proposals being a '*worse case scenario*' on the basis there is neither insurance nor Central Government funding assistance for these works.

4. Agree that Council undertake a special consultative procedure for the proposed sawfly remediation works in accordance with section 84 of the Local Government Act 2002, separate from the consultative process to be undertaken associated with Council's 2005/06 Annual Plan. (Note that the required procedure and specific approvals required of Council for this process are the subject of a separate paper which will be circulated to Councillors on 9 March 2005 for their discussion and consideration).
5. Agree to commence the special consultative process.
6. Agree to increase the annual disaster reserve contribution to the Heretaunga Plains Flood Control Scheme - Rivers to \$50,000 commencing in the 2005/06 year.
7. Agree that staff should continue to pursue a case for Central Government to meet a portion of the cost of the sawfly remediation work.
8. Agree that staff should continue to pursue Council's insurers in an effort to secure insurance payment for any legitimate claim that Council can prove.
9. Agree it can make a decision on the request by staff to immediately commit to the purchase of \$1,485,000 worth of required plants and materials without engaging in a consultative process because, as allowed under section 79(2)(c) of the Local Government Act 2002, Council can make a judgment on consultation given the urgent need to make a decision on this matter in order to commence immediate works on sawfly damaged edge protection works which has resulted in a significantly increased level of flooding to the Heretaunga Plains.
10. Notwithstanding the restraints and requirements contained in clause 2.1.4.1 (Financial Delegations on Public Bodies Contracts Act) and 2.1.4.2(1) (Contracts and Tenders) of Council's Policy Handbook, authorise the Chief Executive of Council to enter into commitments for the plants and materials (wire rope, steel rail, and akmon moulds), associated with the proposed sawfly remedial works, with a total estimated cost of \$1,485,000 once he is satisfied the Council is receiving fair

value for the plants and materials to be purchased given the limited availability of those plants and materials due to the urgency for them to be secured.

**Mike Adye**  
**GROUP MANAGER ASSET MANAGEMENT**

**Graeme Hansen**  
**BUSINESS UNIT MANAGER**

**Andrew Caseley**  
**CHIEF EXECUTIVE**