

Report to the Rural Services and Wairarapa Committee
from Ian Heslop, Divisional Engineer

River Scheme Asset Management Plan Performance

1. Purpose

- 1.1 To present the Committee with Performance Statements for the Asset Management Plans produced for five river management schemes within the Wairarapa.
- 1.2 To advise the Committee of discrepancies identified by the Asset Management Plans between current and desirable works programme levels.
- 1.3 To inform the Committee of the outcome of the recent audit of Wairarapa river management works carried out by the Council's Landcare Division.

2. Background

- 2.1 The Local Government Amendment Act (No. 3) of 1996 requires Strategic Financial Plans to be prepared for the infrastructural assets under Council control. Asset Management Plans provide the basis for preparation of credible financial plans.
- 2.2 Basic Asset Management Plans have been prepared for 5 river management Schemes serviced by the Wairarapa Division as listed below.
 - Lower Wairarapa Valley Development Scheme
 - Waiohine-Mangatarere
 - Upper Ruamahanga
 - Waingawa River
 - Waipoua River
- 2.3 The Rural Services and Wairarapa Committee meeting of May 1998 endorsed the asset planning process to date, and received Asset Management Plans for the main Wairarapa River Schemes. Plan improvement programmes were approved, and it was noted that officers would continue to work with Audit NZ to refine the plans.
- 2.4 These plans are "live" documents, and will be improved and updated on an ongoing basis. In particular the asset registers and condition assessments will be updated annually. This will provide a basis for developing sustainable ongoing Scheme maintenance programmes.

- 2.5 Each year a Performance Statement will be prepared reporting on the plan performance indicators. 1998/99 Performance Statements for the Wairarapa River Management Schemes are attached.
- 2.6 In addition to the preparation of Performance Statements and updating of Asset Management Plans, an annual audit of Wairarapa Scheme maintenance standards is carried out by staff from the Flood Protection Group of the Council's Landcare Division. A report summarising the results from the July 1999 audit is attached.

3. Discussion

- 3.1 The Schemes have a combined asset valuation of \$45.4m as itemised in Table 1. These Schemes have a range of infrastructural assets such as stopbanks, the Blundell Barrage, culverts and floodgates, weirs, floodways, fences, erosion protection structures, and protective plantings.

Table 1 - Scheme Asset Valuations & Maintenance Requirements

Scheme	Asset Values	Asset Maintenance Requirements	Current Works Programmes	Desirable Works Programmes
LWVDS	42,420,200	398,900	593,900	* 625,000
Waiohine-Mangatarere	1,011,300	205,800	225,000	240,000
Upper Ruamahanga	706,680	172,200	130,000	222,000
Waingawa	426,850	63,200	170,000	174,000
Waipoua	791,180	49,000	46,000	54,000
Total	\$45,356,210	\$889,100	\$1,164,900	\$1,315,000

* **Note:** The LWVDS level of annual programme is subject to review. This desirable works programme figure is based on long term maintenance/renewal projections.

- 3.2 Table 1 also shows the 1999/2000 existing asset maintenance requirements as determined by the plans, and compares them to current and desirable ongoing levels of works programme. These figures suggest that, with the exception of the Upper Ruamahanga Scheme, the current maintenance requirements are more or less being met. However, because of the future requirements for renewal of structures in the Lower Wairarapa Valley Development Scheme, the need to improve river management standards for the Waiohine and Upper Ruamahanga Schemes, and the need for ongoing asset development and channel maintenance work not identified in the table, desirable works programme levels exceed existing levels.
- 3.3 The floods of September and October 1998 were substantial and caused a great deal of damage, in particular to assets within the Waiohine and Upper Ruamahanga Schemes. "Once in a lifetime" flood events of 80 year and 60 year return periods respectively occurred in the Waipoua and Upper Ruamahanga rivers. Less extreme events of 10 year frequency occurred in the lower Ruamahanga river, and of 5 year frequency occurred in both the Waingawa and Waiohine rivers.

- 3.4 Although a total of \$1.05 m was spent on flood damage repairs, this was not adequate to fully restore the damaged Scheme assets. The deterioration in asset condition and increase in deferred maintenance recorded in the plans are largely a result of these floods, and the cumulative effect of deferred maintenance over previous years.

4. Scheme Status

4.1 Lower Wairarapa Valley Development Scheme

The LWVDS is in very good financial and physical condition. Overall asset condition ratings are favourable, with the majority of the deferred maintenance likely to be addressed over the next three years. Asset Management Plan performance criteria relating to fencing, Barrage gate inspection, and bank protection maintenance were only partially achieved. This was due to the flood damage, and will not compromise the ongoing integrity of the Scheme. The current levels of annual maintenance and flood damage provision are reasonably adequate, and will be reassessed as part of the Scheme Review to be completed by 2004.

Over the next 20 years or so there will be an additional renewal requirement for Scheme culverts and floodgates. Based on Asset Management Plan predictions, the average level of works programme needs to increase to about \$625,000 to meet both maintenance and renewal needs. The long term financial projections indicate that on repayment of the Scheme loans in 2003/04, there will be adequate additional funding to fund the local share cost of these renewals.

4.2 Waiohine-Mangatarere River Management Scheme

The Waiohine-Mangatarere Scheme is in poor physical condition, and has a substantial financial deficit of \$242,000. The Asset Management Plan performance criteria relating to levels of deferred maintenance, condition of stopbanks, and unqualified peer review of maintenance standards (see Section 5) were not satisfied. During 1999/2000 a sum of \$405,000 was spent on flood damage repairs in addition to the basic maintenance programme of \$143,000. The 1999/2000 level of deferred maintenance is \$79,000.

On a more positive note, the Scheme rates have been increased by 60%, which gives adequate funds (except in the event of further flood damage) to repay Scheme debt over a four year period, and to increase the annual maintenance programme to \$225,000. Also in spite of the flood damage the Scheme asset value has been increased by \$113,000. It is planned to address the deferred maintenance over the next three years.

4.3 Waingawa River Management Scheme

Although the Waingawa Scheme sustained damage during the 1998 floods, it is in good overall financial and physical condition. In addition to the \$174,000 annual programme a sum of \$85,000 was spent on flood damage repairs. The Scheme assets are in good condition, the deferred maintenance is minor, and the flood damage reserves stand at \$12,000.

All the Asset Management Plan performance criteria were satisfied with the exception of the requirement to satisfy ratepayers at the three yearly general ratepayer meeting. During the meeting held in September 1998, ratepayers expressed dissatisfaction with

the current rating basis, and the management regime of the upper reaches of the river. A consultation process is underway to resolve these concerns.

4.4 Upper Ruamahanga River Management Scheme

The Upper Ruamahanga Scheme is in a less than satisfactory condition, with the \$68,000 of deferred maintenance unlikely to be addressed by the current level of maintenance programme. Significant damage was experienced during the very large 1998 floods. This was partially attended to with expenditure of \$342,000 in addition to the original works programme of \$126,000.

The rates have been increased by 7% to partially support an increase in annual programme to \$178,000. The rating district however will only fully fund the local share of a works programme of \$130,000. The remainder of the programme will require partial or total funding of the local share cost from the direct beneficiaries. The current Scheme reserves stand at a reasonable level of \$28,000, and the Asset Management Plan performance criteria were satisfied.

4.5 Waipoua River Management Scheme

Considering the very large 1998 floods, the Waipoua scheme is in a satisfactory physical and financial condition. In addition to the \$20,400 annual programme, a sum of \$70,000 was spent on flood damage repairs. The rates have been increased by 12% to support an increase in annual programme from \$20,400 to \$46,000, and to clear the Scheme deficit of \$10,000 within two years. Also it is anticipated that the \$26,000 of deferred stopbank maintenance will be attended to within the next two to three years. The other Asset Management Plan performance criteria have been achieved.

5. Audit of Maintenance Standards

- 5.1 An audit of Wairarapa Scheme maintenance standards was carried out by river engineering staff from the Council's Landcare Division in July 1999 (see attachment).
- 5.2 Within the Lower Wairarapa Valley Development Scheme, the Butcher's stopbank site at Pukio, and the lower Tauherenikau river, Donalds Creek, Oporua Floodway, and Blundell Barrage floodgates were all inspected. Overall maintenance standards were seen as appropriate, however concern was expressed regarding the gravel build up in the lower Tauherenikau River. The need to urgently progress the study of this river was stressed.
- 5.3 Within the Waiohine-Mangatarere River Management Scheme the Greytown and Swamp Road stopbanks were inspected. The auditors reported that the Greytown stopbank was in good condition, but that the Swamp Road stopbank was sited too close to the active river channel and was overgrown in parts with scrub and large trees.
- 5.4 The overall maintenance regime for the Waiohine-Mangatarere Scheme was considered unsustainable, and it was observed that the poor Scheme condition resulted largely from a history of under funding and deferred maintenance. It was recognised that given the financial constraints, the methods being used were appropriate to deal with immediate problems. The asset management planning process was seen as an essential tool for providing a sustainable long term perspective to the management of this Scheme.

6. Summary

- 6.1 The Wairarapa river Scheme Asset Management Plans have been updated, and the 1998/99 Performance Statements for these Plans are attached.
- 6.2 The floods of 1998, including “once in a lifetime” floods in some areas caused extensive damage. In addition to the normal works programmes, a sum of \$1.05m was spent on flood damage repairs.
- 6.3 The Waiohine and Upper Ruamahanga Schemes in particular sustained serious flood damage. To some extent this was because of the poor Scheme condition prior to the floods, which resulted from previous flood damage and deferred maintenance.
- 6.4 The Lower Wairarapa Valley Development Scheme, and the Waipoua and Waingawa Schemes are in good overall condition considering the severity of the floods.
- 6.5 With the exception of the Waiohine Scheme which has a very large deficit of \$242,000, the Scheme reserves are either in surplus, or in minor deficit as in the case of the Waipoua Scheme.
- 6.6 Future works programme increases are required to fund the renewal of structures in the Lower Wairarapa Valley Development Scheme, and the possible improvement of river management standards for the Waiohine and Upper Ruamahanga Schemes. Requests for increased regional funding are likely following Scheme reviews, public consultation, and community agreement for the matching increase in Scheme rates.
- 6.7 The Flood Protection Group audit gave qualified endorsement of Wairarapa river management Scheme maintenance standards. Concern was expressed regarding the sustainability of the current river management approach in the Waiohine-Mangatarere Scheme, and the urgency of the lower Tauherenikau river investigation was stressed.

7. Communications

The matters in this report will be subject to ongoing discussions with Scheme Advisory Committees and landholders on the affected floodplains.

No additional communication initiatives are considered necessary at this stage.

8. Recommendation

That the Committee:

- (1) Endorses the Wairarapa River Management Scheme Asset Management Planning process to date.*
- (2) Receives the Asset Management Plan Performance Statements prepared for the Lower Wairarapa Valley Development Scheme; and the Waiohine-Mangatarere, Upper Ruamahanga, Waingawa, and Waipoua River Management Schemes.*
- (3) Notes the possible future need to increase Scheme works programmes to address discrepancies between existing and desirable programme levels.*
- (4) Receives the 1999 Audit of River Management Asset Maintenance Standards for the Wairarapa.*

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