

Western Rivers Asset Management Plan Draft for Long-Term Financial Strategy (LTFS)

Overview (Executive Summary)

The Landcare Division is responsible for a large number of infrastructural assets with the Flood Protection Group having a stewardship role over the flood protection assets of the Western region. The Western region Flood Protection assets comprise those on the Hutt, Otaki, Waikanae and Wainuiomata Rivers and the Porirua Stream.

Asset Management Planning ensures the prudent management of these assets combining financial, economic and engineering management tools to provide agreed Levels of Service in the most cost effective manner.

Total interim valuation of the assets maintained by the Flood Protection Group as at 30 June 1999 is \$50,898,200 made up as shown in Table 1.

Table 1 : Asset Values

River	Asset Value
Hutt River	\$37,033,500
Otaki River	\$6,301,700
Waikanae River	\$1,285,500
Wainuiomata River	\$1,319,000
Porirua Stream	\$4,958,500
TOTAL	\$50,898,200

Zero based maintenance costs have been estimated for the five rivers for which Asset Management Plans have been prepared. These maintenance costs total \$1,635,200 (excluding overheads) being made up as shown in Table 2.

Table 2 : Maintenance Costs

Maintenance Expenditure	Zero Based Costs	Current Budget	Difference
Hutt River	\$1,045,000	\$840,000	\$205,000
Otaki River	\$410,000	\$277,000	\$133,000
Waikanae River	\$84,000	\$71,000	\$13,000
Wainuiomata River	\$15,700	\$14,200	\$1,500
Porirua Stream	\$80,500	\$73,000	\$7,500
TOTALS	\$1,635,200	\$1,277,200	\$360,000
		Less Funding by Others	\$45,000
		Additional Rates	\$315,000

Note: The current budget varies over the next seven years. The figures and differences shown are for 2000/01 and 2001/02.

As noted in Table 2 \$45,000 of the additional budget required will be funded by Transit NZ (\$40,000) and Territorial Authorities (\$5,000).

Periodic maintenance expenditure is required for the major assets (Seton Nossiter and Stebbings Dams and the Town Centre flood walls) of the Porirua Stream Scheme. This is included as an annual provision in the zero based maintenance costs.

It is recommended the zero based maintenance budget deficits be provided through the Long-term Financial Strategy (LTFS).

Hutt River

The Flood Protection Group manages a 26km length of the Hutt River from the mouth at Petone to Gemstone Drive in Upper Hutt. There is a wide range of assets having a total interim valuation, at 30 June 1999, of \$37,033,500.

The current and proposed Levels of Service are show in Table 3. The Hutt River Floodplain Management Advisory Committee has made a recommendation to the Landcare Committee of a Risk Based 2300 cumec Design Standard, with the main stopbanks, bridges and key structures constructed to 2800 cumec. The Hutt River Floodplain Management Plan, to be completed in June 2001, will confirm the proposed Levels of Service.

Table 3 : Hutt River Levels of Service

Service	Current	Proposed
Flood Protection	Variable – From low, e.g. Hathaway Avenue to 2800m ³ /s with moderate security, e.g. Upper Hutt CBD. Refer “ <i>Living with the River</i> ”.	Risk based 2300 (greater than a 300 year return period) with main stopbanks to 2800. Local areas to various standards. To be confirmed through the FMP process.
Erosion	Average to very high level of service for land and assets behind stopbanks. Low to moderate for land and assets in floodway.	Very high for land and assets behind stopbanks. Low to high for land and assets within the floodway.
Flood Warning	High – Comprehensive flood warning system and procedures in place.	Level of Service will be further improved with enhanced procedures and Emergency Management measures.
Environmental Enhancement	Basic – Clear rubbish, maintain access tracks, mow river berms, and limited environmental plantings.	Options are available to increase this Level of Service through capital improvements and the Environmental Strategy.

The zero based maintenance figures shown in Table 2 indicate a maintenance budget shortfall of \$205,000 for the Hutt River. There will be a recovery of approximately \$40,000, as noted.

It is recommended that the Landcare Committee make provision to include this shortfall through the LTFS process. The shortfall will allow a proactive replacement/maintenance programme to cover existing deficiencies and will include:

- Additional channel shaping = \$40,000
- Proactive replacement of failing debris fences and willows through the River Works Agreement reach of the river = \$40,000
- Replacement/refurbishment of 100m of cabled gabion baskets per annum at Haukaretu Park = \$20,000
- Increasing stopbank maintenance to eliminate deferred maintenance = \$20,000
- Increased tip fees = \$10,000
- Rejuvenation of old willow stands = \$25,000
- Berm maintenance costs have increased due to mowing costs and maintaining public access.

Otaki River

The Flood Protection Group manages a 13.5km length of the Otaki River from the mouth to just below the gorge. There is a total interim asset valuation, at 30 June 1999, of \$6,301,700.

“The Otaki Floodplain Management Plan included a capital works programme to provide the desired Levels of Service. The capital works programme made provision for \$6.58 million for structural works, 17 percent of which will be complete by 30 June 2000, and \$5.40 million for river management works of which 18 percent will be complete by 30 June 2000.”

Levels of Service have been determined through the Floodplain Management Plan and approved by the Council in December 1998. The current and approved Levels of Service are summarised in Table 4.

Table 4 : Otaki River Levels of Service

Service	Current	Approved
Flood Protection	Variable – Ranges from low to 10 years for rural land, currently approximately 30 year level for Otaki township.	Otaki township – 100 year level. Rural land – 10-20 year level.
Erosion	Variable – Ranges from nil, south bank cliff tops. Variable, low to high for land/assets behind main north bank stopbank.	Very high level of security for land/assets behind stopbanks. Low to moderate level of security for land in floodway and adjacent to buffer zones.

Service	Current	Approved
Flood Warning	High – Comprehensive flood warning system and procedures in place.	Level of Service will be further improved with enhanced procedures and Emergency Management measures.
Environmental Enhancement	Basic – Clear rubbish. Provide limited access to rural areas and basic environmental plantings.	Moderate to High – Improved access, more native plantings, abandoned use of demolition concrete. No timetable for implementation of Environmental Strategy.

The zero based maintenance figures shown in Table 2 indicate a maintenance budget shortfall of \$133,000 for the Otaki River.

It is recommended that the Landcare Committee make provision to include this shortfall through the LTFS process. The shortfall will allow a proactive replacement/maintenance programme that includes:

- Increased lower river maintenance to ensure 100–150m of rock line is brought up to standard each year. This work is required due to deferred maintenance on the Manawatu Catchment Board rocklines.
- 200 hours of bulldozer time to help establish and maintain the developing buffer zones in the upper river at a cost of \$40,000.
- \$20,000 to refurbish and extend debris fences – being the most successful way to get new plantings established.

Waikanae River

The Flood Protection Group manages a 7.3km length of the Waikanae River from the mouth to the bridge at State Highway 1. There is a total interim asset valuation, at 30 June 1999, of \$1,285,500.

Levels of Service have been determined through the Waikanae Floodplain Management Plan and approved by the Council in October 1997. The current and approved Levels of Service are summarised in Table 5.

The Floodplain Management Plan included a capital works programme to deliver the approved Level of Service. The capital works programme made provision for \$3.64 million for structural works, 39 percent of which will be completed by 30 June 2000 and \$2.85 million for river management works with 48 percent to be completed by 30 June 2000.

Table 5 : Waikanae River Levels of Service

Service	Current	Approved
Flood Protection	Variable – Ranges from low for some south bank farm land and Otaihanga residents, to 100 year with high security to residential areas on the north bank.	100 year flood protection for residential development. Variable for rural land.
Erosion	Variable – Low at Kebbels, Sunny Glen, Maple Lane, Jim Cooke Park. Moderate to very high for development outside stopbanks.	Very high level of security for land/assets behind stopbanks. Low to moderate level of security for land in floodway and adjacent to buffer zones.
Flood Warning	High – Comprehensive flood warning system and procedures in place.	Level of Service will be further improved with enhanced procedures and Emergency Management measures.
Environmental Enhancement	Basic – Clear rubbish, mow Pukekawa Reserve, environmental plantings, care with construction of new structures, good public access.	Moderate to High – More native plantings, improved access, and purchase of river corridor land. No timetable for implementation of environmental strategy.

The zero based maintenance figures shown in Table 2 indicate a maintenance budget shortfall of \$13,000 for the Waikanae River.

It is recommended that the Landcare Committee make provision to include this shortfall through the LTFS process. The shortfall will be used to maintain existing assets and “soon to be constructed” rock work.

Wainuiomata River

The Flood Protection Group manages a 4.5km length of the Wainuiomata River from Richard Prowse Park to the Water Treatment Plant. Assets are located through the township reach only having an interim asset valuation, at 30 June 1999, of \$1,319,000.

A Flood Hazard Assessment is currently being prepared although there is no proposal to change the Levels of Service. The Flood Hazard Assessment is due for completion in June 2000. Summaries of the Levels of Service are shown in Table 6.

Table 6 : Wainuiomata Levels of Service

Service	Current	Proposed
Flood Protection	100 year flood for homes within the township behind the stopbanks.	No change currently proposed
Erosion	High Level of Service through township reach. No service provided downstream of the Waste Water Treatment Plant.	No change currently proposed
Flood Warning	Adequate flood warning system in place.	Revised and improved flood procedures.
Environmental Enhancement	Basic – Clear rubbish, maintain access tracks and limited environmental plantings. (Maintained as park by HCC.)	No change currently proposed.

The zero based maintenance figures shown in Table 2 indicate a maintenance budget shortfall of \$1,500 for the Wainuiomata River.

It is recommended that the Landcare Committee make provision to include this shortfall through the LTFS process. The shortfall will be used to cover increased tip fees and provide for survey cross-section point maintenance.

Porirua Stream

The Flood Protection Group manages a 12km length of the Porirua Stream. Three principal assets are located at Seton Nossiter and Stebbings Dams, and the Porirua town centre reach.

The assets have an interim valuation of \$4,958,500 as at 30 June 1999.

The current Levels of Service are variable with no change proposed. A review of the surveillance of the two dams is required in 2001/02. Summaries of the Levels of Service are shown in Table 7.

Table 7 : Porirua Stream Levels of Service

Service	Current	Proposed
Flood Protection	Variable from 10 year to 100 year at town centre.	No change currently proposed.
Erosion	Moderate to high through the town centre.	No change currently proposed.

Service	Current	Proposed
Flood Warning	Adequate flood warning system in place.	Revised and improved flood procedures.
Environmental Enhancement	Basic – Clear rubbish only. (Seton Nossiter and City Centre areas maintained by WCC and PCC respectively.)	No change currently proposed.

The zero based maintenance figures shown in Table 2 indicate a maintenance budget shortfall of \$7,500 for the Porirua Stream. There will be a recovery of approximately \$5,000 from the Territorial Authorities.

It is recommended that the Landcare Committee make provision to include this shortfall through the LTFS process. The shortfall is to cover the increased costs of reach mowing which has been contracted out and increased staff time to monitor, inspect and manage the assets which had not previously be provided for.

Summary

Asset Management continues to be a high priority activity of the Flood Protection Group with the main emphasis for this financial year being the:

- Confirmation of the asset valuations
- Development of an asset Data Management System (in-house)
- Completion of the Asset Management Plan and adoption by Council.

The interim plan to which this executive summary applies has been prepared to determine recommendations for LTFS.

The principal recommendation is the provision of an additional net \$315,000 to cover increased maintenance costs providing a total maintenance budget of \$1,635,200.