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Committee	Dural Services and Wair		

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Flood Damage - Wairarapa - October 2004

1. Purpose

To obtain approval for withdrawals from the Council's Flood Damage Contingency Fund to undertake flood damage repairs within Wairarapa's river management schemes.

2. Background

- 2.1 The Wairarapa Division maintains nine river management schemes within the Ruamahanga River catchment in accordance with Council policy and approved asset management plans. These schemes have a total asset valuation of \$73 million and a current maintenance budget of \$1.4 million annually.
- 2.2 The Ruamahanga River catchment has had a succession of flood events throughout 2004, as follows:
 - February \$1.286 million of flood damage repairs approved
 - June
 - August \$0.59 million of flood damage repairs approved
 - September
 - October
- 2.3 The succession of floods has left the river systems very vulnerable to damage. Logistic problems such as achieving access, the availability of suitable equipment and materials has also meant that the following floods have caused further damage as previous damage repair work was unable to be completed.
- 2.4 On 16 October an extended north-westerly storm occurred within the Tararua Ranges. 24 hour rainfall totals were as follows:
 - Angle Knob 431 millimetres (6 year return period)
 - Carkeek 231 millimetres (5 year return period)
 - Bull Mound 221 millimetres (4 year return period)
 - Mt Bruce 118 millimetres (< 2 year return period)

- 2.5 This resulted in moderate floods occurring with high water levels for up to 20 hours duration. Typical floods from the Tararaua Ranges are short and peaky.
- 2.6 Return periods for the flood events were:
 - Ruamahanga River at Gladstone (3 year return period)
 - Mangatarere Stream at the Gorge (4 year return period)
 - Ruamahanga River at Waihenga (6 year return period peak stage height of 5.023 metres, *c/f* to 5.3 (February) and 5.1 (August)
 - The remaining rivers had floods of less than a 2 year return period. However, as indicated above, an unusual characteristic of the October flood is that it sat at a high level for an extended period of time (20 hours).

Gary Williams (river management consultant) has stated that following the February floods even small floods will cause significant damage because of the amount of gravel moved in the February floods. This has proven to be the case in the subsequent floods, including the October event.

- 2.7 In the Lower Wairarapa Valley Development Scheme substantial repairs are required at:
 - Shelton and Guscott properties ongoing since February due to access problems and high river levels
 - Devenport and Tobin properties slumping on opposite sides of the river totalling 150m in length
 - Oporua Spillway repair of baskets and toe erosion. This site needs careful management. In the early 1990's the spillway was redesigned and upgraded.
- 2.8 Significant damage in the Waiohine River scheme means that work is required on:
 - Channel alignment
 - Willow clumps
 - Rebuilding groynes
 - Bank erosion
- 2.9 The major damage in the Waingawa and Waipoua River Schemes occurred in the lower reaches and required repair work includes:
 - Channel realignment
 - Cabling of willows and rebuilding the berm to reduce flood water overflows
- 2.10 It is intended to fund the local share for two sites on the Waipoua River outside of the river scheme. At Gold's property, heavy rock protection works were constructed following the October 2003 floods. These are of a higher protection standard than normal in this scheme. Masterton District Council will be requested to contribute to the repairs at this site. The Mahunga Golf Course has been subject to erosion for some time. A proposal has been prepared which

would require the Golf Club to fund 50% of proposed heavy protection works totalling \$50,000 (i.e. \$25,000). They are currently looking for external funds to undertake these works.

- 2.11 In the Te Ore Ore section of the Upper Ruamahanga River scheme the major flood damage repairs are:
 - Construction of rock groynes
- 2.12 As in previous requests for flood damage repair monies, the works have been prioritised, non-essential programme works have been deferred, and if possible flood damage repair work have been absorbed into the schemes maintenance programme.
- 2.13 The Lower Wairarapa Valley Development Scheme Advisory Committee met on 25 November 2004. The following motion was moved and passed unanimously:

"That the flood damage schedule, as itemised, be adopted at a total estimated cost of \$307,000".

- 2.14 The Waiohine River Scheme Advisory Committee will meet on 3 December to consider its flood damage schedule. Any resolutions from this meeting will be available prior to the Rural Services and Wairarapa Committee meeting on 9 December.
- 2.15 To date, meetings have not been scheduled for the Waingawa, Waipoua and Te Ore Ore Upper Ruamahanga River Schemes. At the present time these schemes do not have a managing river engineer. A new river engineer will commence duties in mid-January 2005. Assessments of flood damage have been made for the above schemes. Once the flood damage funds have been approved, scheme meetings will be scheduled to seek the approval of the various schemes of the flood damage repairs.

Scheme	Total Damage	Requested Withdrawal from the Council's Flood	
		Contingency Fund	
Lower Wairarapa Valley			
Development Scheme	\$307,000	\$153,500	
Waiohine	\$95,000	\$47,500	
Waingawa	\$30,000	\$15,000	
Waipoua	\$147,500	\$73,750	
Te Ore Ore – Upper	\$30,000	\$15,000	
Ruamahanga			
Totals	\$609,500	\$304,750	

2.16 The total flood damage from the October 2004 floods can be summarised as follows:

3. Discussion

- 3.1 The Divisional Manager, Wairarapa is able to approve withdrawals from the Flood Contingency Fund of up to \$100,000 under delegated authority. Flood damage repairs in excess of \$100,000 are placed in front of the Rural Services and Wairarapa Committee for recommendation to Council
- 3.2 The process of presenting proposed flood damage repair work to scheme advisory committees is seen as being particularly robust. The priorities and affordability of the programmes are carefully checked and considered by people who are both familiar with the situation and directly pay for a share of the costs involved.
- 3.3 In the event of significant flood damage, the 50% regional funding component is obtained from the Council's Flood Contingency Fund in accordance with Council's funding policies. The 50% local share in the Wairarapa is usually obtained from the direct beneficiaries through appropriate scheme rating district.
- 3.4 The current position with the Council's Flood Contingency Fund is as follows:

	\$
Balance at June 2004	76,859
Plus 2004/05 budgeted contribution	200,000
Less uncompleted flood damage repairs from 2003/04	(168,000)
Plus contribution from Government	283,000
Less already approved August 2004 flood damage	(269,500)
Balance of Contingency Reserve	122,359

A further withdrawal from the Council's Flood Contingency Fund of \$304,750 is now being sought. This will leave the Flood Contingency Fund in a deficit position for the first time.

3.5 The Flood Contingency Fund is for flood damage repairs to the Council's administered schemes within the Wellington Region as a whole. The Landcare Division does not currently have any known flood damage repairs to be undertaken for the western part of the region.

3.6 The situation with the local share funding after the October 2004 flood damage is estimated to be as follows:

Scheme	Current Scheme Reserve at June 2004	Scheme Reserve Total after all Flood Damage Repairs and the Budgeted 2004/05 Contribution and Government Contribution
Lower Wairarapa Valley	\$1,319,846	\$961,346
Development Scheme		
Waiohine	\$29,738	\$99,330
Waingawa	\$9,031	\$19,958
Waipoua	(\$39,721)	(\$35,904)
Te Ore Ore – Upper	(\$3,217)	\$4,953
Ruamahanga		

4. Communications

The October 2004 flood damage is being fully discussed with both river scheme advisory committees and the Wairarapa constituency councillors.

5. Recommendation

- (1) That the Committee recommend that Council approve the flood damage repair works in the Wairarapa following the October 2004 flood events, as per the attached schedules, noting that the total expenditure is estimated at \$609,500 requiring a withdrawal of \$304,750 from the Council's Flood Contingency Fund.
- (2) That approval be obtained from the Waingawa, Waipoua and Te Ore Ore Upper Ruamahanga River Scheme Advisory Committees before commencing flood damage repair works in those schemes.

Report prepared by:

Report approved by:

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