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Committee Environment Committee  
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## Flood Protection Asset Management Report for 2014/15

### 1. Purpose

- To advise the Environment Committee (the Committee) of the progress made with the Flood Protection Department's asset management system and the overall condition of the department's infrastructural assets.
- To seek endorsement of the 2015/16 budget recommendations made by the Wairarapa River Scheme Advisory Committees.

### 2. Background

Council is responsible for a variety of infrastructural flood protection assets located on 15 schemes across the region. These assets have a total value of \$262.8 million as at June 2012 and provide flood protection to the property and people located on the floodplains of these rivers.

The Flood Protection Department's asset management system identifies the services and strategies required to meet a defined level of service on a sustainable and cost-effective basis, and the expenditure and funding needed to achieve this. Monitoring of these assets over the past financial year is an important component of this system and seeks to re-assure Council that the various assets are being maintained to the required level of service, will perform as designed and, where required, are being enhanced.

### 3. Asset management system

The organisational focus on asset management within the Council has continued and good progress has been made in a number of improvement plan areas including:

- Reviewing and finalising our 2015 Asset Management Plan (AMP) for a 30 year period. A particular focus has been on ensuring consistency of information in the AMP, the Long Term Plan and the Infrastructure Strategy.
- Developing and documenting our business processes around our asset information tool SAP Plant Maintenance.

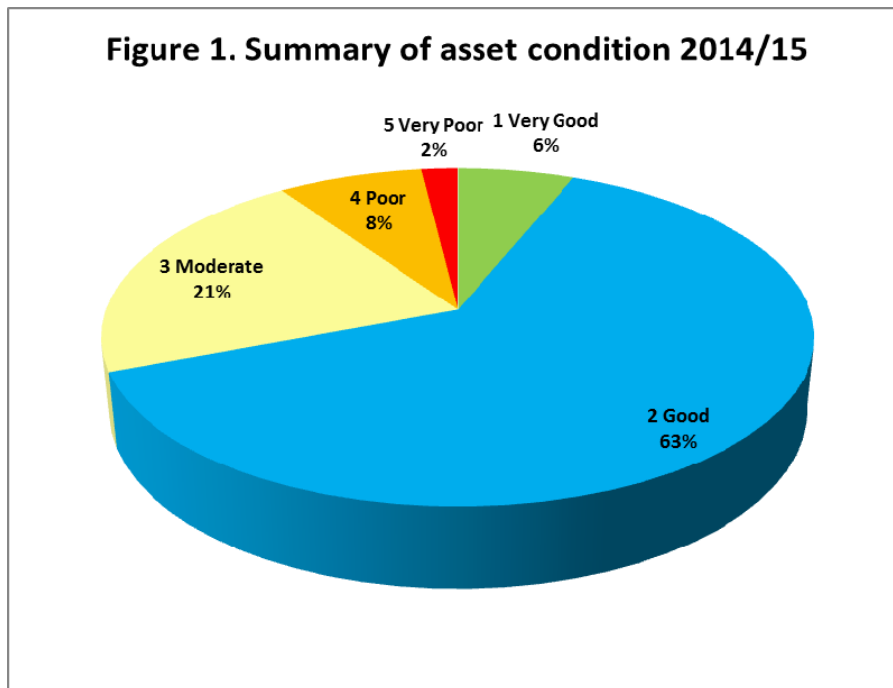
- Involvement in a number of initiatives to improve consistency across Council.
- Recruiting additional skilled resources to meet the current and future needs of the department including progressing the Asset Management Improvement Plan (AMIP)

This financial year we will focus on improving and refining the AMP that include outputs from the various floodplain management projects that are underway. Improving business process will also be a key focus.

### 3.1 Asset condition

The annual asset condition assessment process involves grading each of the 4945 individual assets from 1 to 5. An asset graded 1 is in very good condition, while an asset graded 5 is in poor condition and requires upgrade, replacement or should be written off.

The annual process of systematically visiting and assessing asset condition is a fundamental part of our overall asset management system and is continually being improved. Management inspections also provide robustness to this process. When asset criticality is overlaid, this allows maintenance to be prioritised and ensures that Council is maintaining its critical assets.



A summary of the asset condition is shown in **Figure 1**.

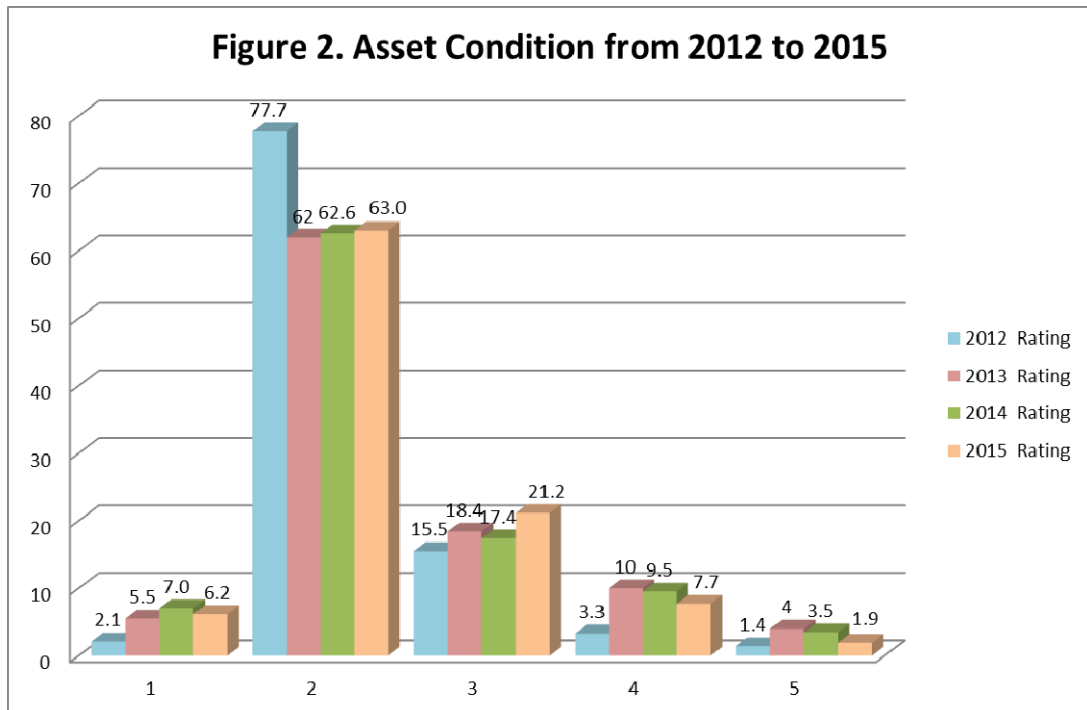
Overall, 90% of the assets are in a good or moderate condition (rated 1 to 3). In this context, good or moderate condition means that there is only general wear or tear with only minor or moderate maintenance required. The majority of the remaining 10% that are in poor condition (4 or 5) are mainly low level erosion protection or vegetative structures.

The exception to this is the Barrage Gates, which received two ratings this year. One was for the superstructure, which was rated a 2. The other was for the electro-mechanical components and these were rated as 4 due to the need to overhaul the electrical control system. A major refurbishment programme is currently at the tender phase and works are expected to begin this summer.

Other significant structures of note are the two Porirua Detention Dams. In June 2015 a Comprehensive Safety Review (CSR) was completed by Damwatch for both these structures. In this review, no significant structural or performance issues were noted. Over the coming year, actions from the CSR relating to improved asset management processes for these dams will be implemented.

The condition rating process is one snapshot at a particular time and hence this report it is only an indication of the general condition of the asset base. Floods in May and June 2015 altered the condition of a number of our assets and while the critical damage was repaired immediately, some repair work is now scheduled in the work programme.

A comparison of asset condition for the last four years is shown in **Figure 2** below. The noticeable change in asset condition from 2012 to 2013 was a result of improvements in assessment techniques and not a change in the physical asset condition. Overall, asset condition is improving however there are still elements of the condition rating process that can be improved to increase the level of reliability and confidence in the assessment.



Detailed information on asset condition can be found in **Attachment 1**.

<b>Table 1: Condition Rating 2014/15</b>						
<b>River Scheme</b>	<b>1 Very Good</b>	<b>2 Good</b>	<b>3 Moderate</b>	<b>4 Poor</b>	<b>5 Very Poor</b>	<b>Grand Total</b>
Hutt River	288	893	223	67	74	1545
Lower Wairarapa Valley Development Scheme	4	809	145	17	4	979
Minor Watercourses			1			1
Otaki River		144	341	188		673
Porirua Stream	14	35		1		50
Ruamahanga Gladstone		162	2	8		172
Ruamahanga Mt Bruce	1	93	35	9		138
Ruamahanga Te Ore Ore	3	176	17	1	1	198
Waikanae River		26	120	58	5	209
Waimeha Stream			1			1
Waingawa		101	8	3	17	129
Wainuiomata River	8	28	28	15	4	83
Waiohine	1	460	18	9	1	489
Waipoua	5	189	34	23		251
Water Course Agreement	16	11				27
<b>Grand Total</b>	<b>340</b>	<b>3126</b>	<b>973</b>	<b>400</b>	<b>105</b>	<b>4945</b>

Condition rating by scheme is shown in **Table 1 above**.

Analysis of **Table 1** above indicates that for the schemes with the highest number of assets, the majority are in a good or moderate condition (rated 1 to 3).

The Otaki scheme does have a high number of moderate rated assets, however this is primarily due to the quality of the vegetation growth over functioning assets where performance is not effected.

As the asset management assessment process develops further we will also rate asset criticality for flood protection assets to confirm asset performance and prioritise investment decisions.

#### **4. Scheme budgets and reserves**

Greater Wellington Regional Council manages 15 river schemes across the region. Staff report to River Scheme Advisory Committees who confirm they are satisfied with the standard of maintenance.

Scheme reserves have been established to enable flood damage repairs to be funded following a flood event. These reserves are available for floods from a 5 to 25 year return period. For floods greater than a 25 year return period the Major Flood Investment Reserve can be called upon. The total scheme reserves for the region to 30 June 2015 are \$12.4 million.

This year, all the Wairarapa Scheme Advisory Committees recommended an increase in river scheme rates for 2015/16. Maintenance budgets, together with

the scheme reserves, are sufficient to ensure that assets can continue to be maintained to the required service level across the region in 2015/16.

The various Scheme Advisory Committee recommendations are included in Attachment 1.

A summary of the individual river schemes and total reserves are detailed in Table 2 below.

<b>Scheme</b>	<b>Scheme Reserve</b>	<b>Major Flood Investment Reserves</b>	<b>Total Reserves</b>
Lower Valley	1,902,361	1,170,378	<b>3,072,739</b>
Waiohine	671,483	38,600	<b>710,083</b>
Mount Bruce	77,659	8,749	<b>86,408</b>
Te Ore Ore	271,290	8,749	<b>280,039</b>
Gladstone	69,770	8,749	<b>78,519</b>
Waingawa	120,246	25,735	<b>145,980</b>
Waipoua	144,499	25,735	<b>170,234</b>
Kopuaranga	-61,422		<b>-61,422</b>
Taueru	9,075		<b>9,075</b>
Whangaehu	10,364		<b>10,364</b>
Eastern River Total	3,215,325	1,286,694	<b>4,502,018</b>
Western Rivers Total	2,571,938	1,286,694	<b>3,858,632</b>
Sub Total of Schemes Reserves	5,787,263	2,573,387	<b>8,360,650</b>
GW Flood Contingency Reserve	1,503,184		<b>1,503,184</b>
GW Major Flood Investment		2,573,388	<b>2,573,388</b>
<b>Total of All Schemes Reserves</b>	<b>7,290,447</b>	<b>5,146,775</b>	<b>12,437,222</b>

**Table 2: River Scheme reserves as at 30 June 2015**

## **5. Summary**

Council can be confident that all flood protection infrastructural assets are being adequately maintained to the required level of service. This is demonstrated by:

- The annual condition assessment process and staff inspection has established that the majority of Flood Protection's infrastructural assets are in good to moderate condition.
- Resolutions of the various Scheme Advisory Committees have confirmed that the schemes are being maintained to their satisfaction.
- Sufficient financial provision has been made available through the maintenance budgets and scheme reserves to ensure completion of the maintenance programmes.

## **6. The decision-making process and significance**

Officers recognise that the matters referenced in this report may have a high degree of importance to affected or interested parties.

The matters requiring decision in this report have been considered by officers against the requirements of Part 6 of the Local Government Act 2002 (the Act). Part 6 sets out the obligations of local authorities in relation to the making of decisions.

### **6.1 Significance of the decision**

Part 6 requires Greater Wellington Regional Council to consider the significance of the decision. The term ‘significance’ has a statutory definition set out in the Act.

Officers have considered the significance of the matter, taking the Council's significance policy and decision-making guidelines into account. Officers recommend that the matter be considered to have low significance.

Officers do not consider that a formal record outlining consideration of the decision-making process is required in this instance.

### **6.2 Engagement**

Engagement on the matters contained in this report aligns with the level of significance assessed. Engagement has been undertaken in the Wairarapa River Advisory Committees and western river Friends’ Groups. In accordance with the significance and engagement policy, no further engagement on the matters for decision is required.

## **7. Recommendations**

*That the Committee:*

1. ***Receives the report.***
2. ***Notes the content of the report.***
3. ***Notes the resolutions of the various Scheme Advisory Committees.***
4. ***Endorses the budget recommendations of the various Wairarapa River Scheme Advisory Committees for the 2015/16 financial year.***
5. ***Confirms that the 15 River Management Schemes in the region have been maintained to the satisfaction of Council.***

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**Attachment 1:** Supplementary information