

Statement of Proposal – Greater Wellington Regional Council’s Proposed New Rating Classification for the Lower Wairarapa Valley Development Scheme

1. Purpose

The purpose of this document is to inform the public and to seek comments regarding Greater Wellington Regional Council’s (GW) proposal to adopt a new rating classification for the Lower Wairarapa Valley Development Scheme.

2. Background

The Lower Wairarapa Valley Development Scheme (LWVDS) has been in place since the early 1980’s. Construction commenced in 1963 and it was completed in 1987. Since that time only minor changes to the rating classification have occurred.

A review of the rating scheme is long overdue. Because of its age the current rating classification has a number of anomalies. The classification was developed prior to the construction of the Scheme. Parts of what was originally proposed have not been constructed, e.g. polders. In the 1980’s there was a change from capital value to area rated. All areas of government land were rated as Class A rather than on benefit. Some areas have therefore been over-rated for a long time.

A Review Committee comprising representatives of the Advisory Scheme Committee, Department of Conservation, local iwi, and the South Wairarapa District Council was formed in 2004 and has met regularly since that time. Various consultants have worked with the Review Committee – David Bulman (Scheme Classifier), Gary Williams (River Engineer), Doug Hicks (Land Management Advisor), Bill Armstrong (Environmental Advisor) and Phil Wallace (Hydraulic Modeller).

The Scheme has a benefiting area of 40,000 hectares. The total value of the development work in today’s dollars is \$89 million.

The elements of the Scheme are:

- A dredged channel from Lake Onoke to the Tuhitarata Bridge.
- The dredged channel created “The Diversion” which linked two sections of the Ruamahanga River such that the river flows directly to the sea at Lake Onoke. Prior to the scheme the Ruamahanga River flowed into Lake Wairarapa before flowing to the sea.
- The construction of the Barrage Gates. This structure comprises six radial gates which are operated to maintain lake and river levels as appropriate.
- The Ruamahanga River with 68 kilometres of channel in the scheme.
- The Tauherenikau River.

- Eastern and Western tributaries.
- Downstream of Martinborough the Ruamahanga River is stopbanked. In total there is 200 kilometres of stopbank.
- Two standards of stopbank have been constructed. In the lower reaches the flood protection standard has a 100 year frequency (in the areas which were dredged), and in the upper sections it is a 20 year frequency.
- There are 110 culverts and floodgates.
- Within the Scheme there are a total of 9 drainage schemes, 5 of which are pump drained.

The annual maintenance programme is the order of \$750,000.

The Scheme today is seen as a major success. The Scheme withstood the onslaught of the flood events of 2004, 2005 and 2006 extremely well. In some areas the stopbanks constructed to a 20 year frequency were overtopped. One old stopbank (constructed pre-scheme) failed in the lower Huangarua River. With the whole Scheme now having operated for 20 years, and having paid off its loan from central government, it is considered that a review is timely.

3. The New Rating Classification

The Local Government Act(2002) requires local authorities to consider the benefits received by the community as a whole, any identifiable part of the community and any individuals. There are two types of benefit assessed for the development of the new rating classification for the LWVDS, as follows:

1. Direct benefit is assessed as the parcel of advantages accruing to the owners of properties directly affected by periodic or ongoing threat from detrimental actions and vagaries of the river and waterway system, the primary levels being protection from flooding, course change and erosion. Secondary issues are drainage/ponding, diversions and dredge tailing deposits. These benefits allow greater productivity of the land. A points system based on land area has been developed to assess the individual property's rating contribution.

The direct benefits have been built up as a series of layers, as follows;

- The area receiving the most benefit from the Scheme ("The Scheme Extent").
- The flood extent.
- The depth of floodwaters caused by the 1947 equivalent flood and flood extents on tributaries and upstream of Moiki on the Ruamahanga River.
- A layer representing the protection from flooding
- The erosion and alternative flow paths risks.
- A layer representing the protection from erosion and course changes
- Drainage benefit areas.
- Dredge filling areas.

- The Manganui, Tauherenikau, Upland cut off and smaller diversions
- The areas at risk from stopbank breaches due to river bank erosion.

Points have been allocated to each layer in two steps:

- Points to reflect the hazard
- Proportions to show the protection or not from the Scheme

(a) The Scheme Extent

This comprises the area directly affected by the scheme, i.e. the area which receives protection from the scheme plus the Western Lake surrounding the directly affected area from Wharekauhau to Abbotts Creek and the Forest Park boundary and the higher land called Bidwells Cutting. (see Map 1 attached). 10 points have been allocated across this layer for general flood mitigation benefits.

Any wetlands over 4,000 square metres have been excluded from the scheme extent dependent on location.

(b) The Flood Extent

This is the area flooded by the 1947 flood event which is the largest flood on record. The opening at Lake Onoke was partially blocked. Based on the aerial photography, the LIDAR information and an actual flood level marking on a bridge, this included all land below 13.6m (the Lower Valley datum), plus upstream of this area the zone of flooding on the floodplain. This layer regardless of location has been allocated 40 points.

(c) The Depth of Floodwaters

Up to 210 points have been allocated dependent on the difference between the 13.6m level and the ground level determined by the LIDAR survey (see Map 2 which also includes the points from the flood extent as in (b) above).

(d) The Flooding Protection Layer

The flooding protection layer proportions the points allocated for the flood hazard, being

- To the directly affected area of the scheme extent, 10 points
- The floodability layer, 40 points
- The depth, up to 210 points.

The totals are reduced on a percentage basis dependent on the protection afforded by the scheme. The depth of water pre and post scheme has been compared using the hydraulic model. Upstream of the Barrage Gates the hydraulic model has been used to

see what occurs with and without stopbanks. Downstream of the Barrage Gates the flood levels of the 1947 flood event have been used to show the benefit of the stopbanks constructed in this area.

The adjustments are shown on Map 3. They are made by reducing the points by a percentage. For example, flood water has been diverted to floodways, therefore it has been given negative 5%, ie points received from this layer has been deducted from the total points. Areas around Lake Wairarapa have benefited from the diversion and the operation of the Barrage Gates and the Lake Onoke openings. However, Lake Wairarapa is used to store floodwaters and so a reduction has been applied. This layer then shows the flood mitigation benefits from the protection works developed by the LWVDS.

(e) Erosion Risks Flow Paths

All the rivers are vulnerable to erosion. The river edge has been mapped and assessed from an erosion perspective. Areas vulnerable to erosion on the edge of Lake Wairarapa have been identified. Flow paths where the river could break out from its current alignment have been mapped. Points have been allocated (see Map 4) varying from 20 to 300. Landowners adjacent to the river receive a direct benefit from scheme works to hold the river alignment by protecting the river edge and maintaining the river channel capacity.

(f) The Erosion Protection Layer

The points allocated for erosion and flow path hazards are reduced on a percentage basis dependent on the protection afforded by the Scheme. The Scheme provides different levels of management of erosion hazards to the tributaries and different reaches of the Ruamahanga River. The percentages reflect the different levels of protection provided by the Scheme (see Map 5).

(g) Drainage benefits

The Scheme has resulted in lower water levels, whether it be lake or river levels. This has enabled various areas to be drained more effectively. Depending on the location 15 & 30 points have been allocated to cover such a benefits (see Map 6).

(h) Ponding

Due to construction of stopbanks, in some areas, water gets ponded behind the stopbank during flood times as the floodgates get closed, thereby causing pasture damage etc. This is a negative benefit to the land. Therefore 20, 40 & 60 points have been deducted respectively depending on the severity of ponding.(see map7).

(i) Dredge Fillings

The initial construction phase of the LWVDS was to dredge upstream from Lake Onoke to the top of the Diversion. The dredge tailings have filled in low lying areas of the Lower Valley. The areas have been mapped as either gravel or silt. The landowners at these locations have received a direct benefit by having less low lying land with 40 points being allocated as shown on Map 8.

(j) Manganui Diversion & Realignment of Other Watercourses

The Manganui Stream originally flowed to the south into the Ruamahanga River. During the development of the Scheme the stream was diverted such that it now flows into Allsops Bay in Lake Wairarapa. Landowners situated along the old course of the Manganui have gained a significant benefit with reduced flooding and incidence of course change. Other watercourses have similarly been realigned. Points varying from 25 to 50 have been allocated as shown on Map 9.

(k) Risk

As indicated earlier, there are nearly 200 kilometres of stopbank within the Lower Wairarapa Valley Development Scheme. Works to protect and maintain the berm adjacent to the stopbanks form a major part of the annual works programme. Due to various reasons stopbanks have been constructed too close to the river edge in many areas. Over time it has become apparent that some stopbanks have become very vulnerable to erosion, slumping and erosion of berm due to wave lap. e.g. outside bends in Pukio area and wavelap erosion in the lower reaches of the Ruamahanga River. An assessment of the relative risk to the stopbanks has been completed by Gary Williams (Consultant). Points have been allocated, up to 48 in the high risk areas, and are shown on Map 9. The high risk areas have been identified as the areas requiring upgrade in a development works programme totalling \$6.5 million over 8 years. Landowners living adjacent to the stopbanks or situated downstream of the stopbanks clearly gain benefit from the proposed works. A failure in the stopbank can have a significant effect on the integrity of the scheme.

(j) Final Classification

Information has been loaded into the Geographic Information System (GIS). The LIDAR information has enabled detailed information on the shape of the land to be used in the classification.

Points have been allocated per hectare within each layer. These have been totalled and divided into the balance of the local share of funds required to fund the works in the scheme – half of the funds coming from the Greater Wellington general rate (the balance being the total local share minus the funds collected from the dwelling/curtilage charges). Thus a charge per area is derived (See Map 11). The points then being summed for each particular property.

2. Indirect benefits arise collectively across properties or to people in an area from the enhancement of community activities, which are inter-connected and have cumulative effects. These benefits accrue to properties/people who have direct benefits (as they form a community or are affected as a community), but also to other properties/people who do not receive direct benefits.

Thus, firstly, properties outside the direct benefiting areas (as defined by the classification maps of direct benefit) DO NOT have works on their property. If they did, they would receive direct benefit, and thus be within the direct benefiting areas, as classified.

Secondly, a general rate (eg of the first layer identifying the area receiving the most benefit from the scheme –“The Scheme Extent”) for indirect benefit covers the "core" of direct beneficiaries, as well as others receiving a significant benefit beyond the core eg. Western Lake area..

Indirect benefit does cover the general social and economic benefits arising from the scheme to the area in general, and to a lesser extent to the region (and nation!). The major indirect benefits enjoyed by landowners within the “catchment” of the LWVDS are seen as including the protection, to varying levels, of infrastructural assets such as roads, bridges, sewage systems, electric power and telecommunications reticulation. Thereby increasing the ability of children to get to school, the delivery of mail and requisites, the mobility of labour to reach its employment, access by servicemen/trades people, along with the ability of residents to reach health services, generally or in an emergency, also destinations for social and sporting interaction.

Other advantages accruing are seen as the improved ability for the movement of product and requisites in and out of the area and mobility within it such as providing improved opportunity for the farming of multiple separated properties. The scheme has had a considerable economic benefit, significantly increasing the commercial opportunities and services available to, and by, the wider community. Martinborough, because of these economic benefits and the wine grape industry, has managed to retain facilities such as banking, shops, professional services etc, and also greatly increased property values when many other similar rural towns went through a period of losing their facilities.

These benefits are shared benefits, arising from the community interaction of social and economic activities, and are thus less well-defined and more diffuse in character.

It is considered that the sharing equitably of these indirect benefits is most practically reflected in a rate on each dwelling and business base as defined in the South Wairarapa District Council’s rating roll, see Map No 12. The full dwelling charge is attributed to all dwellings falling within either the core area or below the 80masl contour. This contour approximates the boundary between the flat to rolling country and the steeper hinterland. We consider that as distances increase and circumstances change away from the “core” area of the scheme there is likely to be a variable decrease in the worth of the benefits of the scheme’s operation and it has been our

challenge to devise a “best fit” scenario of annual rating charges to reflect those benefits available to each rating unit eg. out to Cape Palliser and upstream of Martinborough associated with the Huangaroa river. To this end it is proposed to reduce or exclude the residence/business charge in more remote locations. Two dwelling charges are proposed \$35 and \$17.50 (excl GST).

4. The Funding

In the LWVDS funding has been structured as follows: (the funds generated under each category are indicated within brackets)

- (1) Direct benefits:
 - (a) to land, in this case damage reduction and overall productivity advantages. (\$463,545)
- (2) Indirect benefits:
 - (a) to the local community, including the properties/people who have direct benefit - another 'layer' or rate over the local area, the scheme extent layer. (\$62,398)
 - (b) to the wider district - for instance as a (regional council) works rate over a district council area, described as the dwelling charge being \$35 or \$17.50(excl GST) dependant on location (\$64,557)
 - (c) to the wider region – at present 50% of the annual works programme from the general rates of the regional council. (\$501,100 this year)

5. Significance

The proposed new rating classification for the LWVDS will not result in a change to the mode of delivery of a significant activity, under GW’s Significance Policy.

6. Submission Process

Comments and submissions on the proposed new rating classification for the LWVDS are invited to be received by Greater Wellington by **5pm on 16 November 2007**. You can send your written submission to *Proposed New Rating Classification Lower Wairarapa Valley Development Schemes, Greater Wellington Regional Council PO Box 41 Masterton or fax 06 378 2146*. Alternatively, you can submit online at www.gw.govt.nz.

Please include your name, address and phone number in your submission and clearly state whether or not you would like to make an oral presentation in support of your submission. A sub-committee of Greater Wellington Regional Council will hear oral presentations in support of written submissions in early December 2007.

Please also note that any submission you make may become publicly available if a request for it is made under the Local Government Official Information and Meetings Act 1987. If you are making a submission as an individual Greater Wellington will consider removing your personal details if you request this in your submission.























