7. SNELLINGS DRAIN COST SHARING SCHEME

Officer responsible Parks and Waterways Manager	**Author** Ken Couling - Team Leader, City Solutions (Water Environmental), DDI 941-8936 Stephen Bensberg - Team Leader, Environmental Services (Knowledge Integration Team) DDI 941-6466

The purpose of this report is for the Board to consider:

(a) The proposed waterway, wetland and drainage scheme that has been developed in the context of green space planning for the Burwood/Marshland area.

(b) The establishment of a formal drainage cost sharing scheme to facilitate the future development of the area.

The proposal is then to be considered by the Parks, Gardens and Waterways Committee and the Regulatory and Consents Committee.

INTRODUCTION

Background

The Snellings Drain catchment is a 314 hectare sub-catchment of the No 2 Drain system that discharges into Horseshoe Lake. The catchment extends from Waitikiri Golf Course south to Clare Park between Burwood and Marshland Roads (see attached plan).

Existing land use is predominantly rural on low lying estuarine silts and sands. The urban area of approximately 109 hectare is located on higher sand dunes along the length of Burwood Road.

Historically no natural drainage pattern existed in the area. No 2 Drain and Snellings Drain were constructed to enable productive use of the land by reducing natural ponding and lowering ground water levels. The timber-lined drain is at capacity for the existing level of catchment development. While ponding occurs on low-lying paddocks during significant storms, flood damage is generally not significant because most of these paddocks are used for extensive grazing only. Seasonally high groundwater levels constrain existing market gardening north of Clare Park.

Through the City Plan hearing process, the Council rezoned approximately 70 hectare on both sides of Prestons Road from Rural to Living. This included 48 hectare of urban L1B land on the south side of Prestons Road that was the subject of a reference to the Environment Court. The Court's recently announced decision was that the L1B zoning should revert to rural RU3 in the meantime.

However, with new urban development (albeit on a much reduced scale in the short term) it is necessary to upgrade Snellings Drain to better manage the increased volume and discharge of stormwater runoff and to maintain or improve the water quality of the discharge into Horseshoe Lake.

In December 2000 the Council adopted in principle a comprehensive scheme for the sustainable management of waterways, wetlands and drainage within Snellings and No 2 Drain catchments. The alternatives considered for Snellings Drain were:

(a) On-site stormwater control within individual subdivisions.

(b) In-line stormwater control within a broad "green corridor" and additional flood storage and stormwater treatment within a large pond/wetland at Clare Park.

Alternative (b) was adopted because not only were total capital and maintenance costs lower, but also recreational and ecological benefits identified were higher.

This report represents the first stage in the implementation of the scheme concept adopted in December 2000. Late stages will be implemented if or when further rural land is rezoned for urban use.

The establishment of a formal cost sharing area is recommended to fund the upgrading of a drainage scheme that will facilitate new development in a way that enhances amenity and restores ecological values.

The project was included in the Marshlands section of the Waterways and Wetlands Natural Asset Management Strategy adopted by the Council in October 2000. Costs to the Council identified in the asset management strategy are included in the draft five year capital works programme for the Parks and Waterways Unit.

Scheme Justification

The new Local Government Act 2002 was passed in December 2002. To comply with the new Act a Financial Contributions Policy is being prepared for adoption by 1 July 2003. New initiatives can be made before 1 July 2003 provided appropriate community consultation is carried out. The Snellings Drain cost sharing proposal recognises and complies with the new Local Government Act.

In the meantime, the Council may constitute a formal cost-sharing scheme pursuant to Sections 407 and 409 of the Resource Management Act 1991 (incorporating Section 283 of the Local Government Act 1974 which has been repealed) to fund the cost of upgrading public infrastructure such as a drainage system necessary to serve new development. The requirement to contribute financially is set as a condition of subdivision consent or building consent. The Council can recover all or part of the costs relating to the upgrading of drainage works in a manner it considers fair and reasonable. It is not incumbent on the Council to seek agreement with all the parties involved, but some consultation is generally undertaken. Any person who objects to the charges can appeal to the Environment Court at the time of subdivision development.

The Snellings Drain Catchment is already served by an existing stormwater drainage system which is adequate for the current level of development. In excessive rainfall events ponding occurs on farm land.

Without further urban development this system would be adequate in the foreseeable future. With further development it is necessary to upgrade this system to better manage the increased volumes of stormwater and the increased flows in significant events, and to maintain or improve the water quality of the discharge to Horseshoe Lake and the Avon River. The upgrading includes increasing the capacity of Snellings Drain and providing in-line storage all within a broad “green” corridor in accordance with modern stormwater management practice.

Since there is an existing system the charge for upgrading will be made pursuant to Section 409 of the Resource Management Act 1991 (incorporating Section 283 of the Local Government Act 1974 which has now been repealed).

A drainage cost-sharing scheme of this type for the catchment was recommended at the City Plan hearings on urban growth. The alternative drainage concept of on-site mitigation measures for each new development was considered by the Council in December 2000, but rejected. The scheme was more costly overall and provided fewer recreational and ecological benefits.

SCHEME DESCRIPTION

Snellings Drain Catchment, cost sharing scheme, and land zoning is shown on the attached plan. Vacant land zoned living L1 is located predominantly both sides of Prestons Road in the north of the catchment.

The scheme comprises:

(a) An enlarged Snellings waterway with in-line stormwater storage basins between Waitikiri Golf Course and Cameo Grove. This will provide water quantity control and primary water quality treatment for new subdivisions along the route.

(b) A 15 metre wide access corridor contiguous with the existing timber-lined drain through rural RU3 land between Cameo Grove and Mairehau Road. The existing drain will be retained.

(c) A flood overflow swale through rural RU3 land from Mairehau Road to Clare Park located approximately 110 metre west of Snellings Drain. The existing drain will also be retained.

(d) Access from Dunlops Road and the Styx River in the North to Clare Park in the South. The access will eventually be public.

The scheme will provide primary water quality treatment within the waterway corridor. Secondary treatment will be provided by a large pond/wetland system at Clare Park if or when land use south of Mairehau Road changes from rural to urban.

The scheme is necessary to provide for vacant land already zoned for urban use. In addition it will secure a corridor of minimum width from the Golf Course to Clare Park that will facilitate future urban zoning if or when that occurs.

Alternatively, if the land remains rural for several decades, this corridor will provide the space necessary to "naturalise" the timber-lined drain once the service life of the lining has expired. The overall catchment can be broken down into two sub-catchments: Prestons and Burwood (see plan), that connect at different points to Snellings Drain (that is, above and below Mairehau Road respectively).

Burwood Hospital has just completed stage 1 of a possible full site redevelopment. Stage 2 involves the replace of old wards with new buildings. While the stage 2 development will maintain the current number of beds a further option of a fully reconfigured site is currently being considered. This may significantly increase discharges from the site which would need to be factored into the scheme.

Acquisitions of the drainage corridor will be sought on a willing seller/willing buyer basis. However, if this approach is unsuccessful designation of the corridor may be necessary.

COST ESTIMATES AND FUNDING

Cost Estimates

The estimated capital cost of Snellings Drain upgrading is $1,216,000 broken down as follows:

TABLE 1: Capital Costs

	Component	Total Costs ($)	Drainage Costs ($)
1	Dunlops Road access Link	189,000	0
2	Waitikiri green corridor and inline storage	557,000	416,000
3	Alpine View pond	44,000	0
4	Prestons Road Conduit	10,000	10,000
5	Prestons Road to Cameo Grove access strip and in-line storage	131,000	57,000
6	Cameo Grove to Mairehau Road access strip	59,000	0
7	Mairehau Road culvert	72,000	72,000
8	Overflow swale	181,000	163,000
		$1,243,000	$718,000

The cost of drainage components to be funded by development totals $718,000. The cost of non-drainage components including access strips, amenity planting and Alpine View pond will be met by the Council.

Expenditure is expected to be spread over the next six to eight years. Demand on the Council's five year capital expenditure budget is expected to be approximately $800,000. This is matched by the $790,000 allocated to the Snellings Drain Green Corridor in the draft 2003/04 Five Year Budget as follows:

TABLE 2: Budget Allocation

Year	2003/04	2004/05	2005/06	2006/07	2007/08	Total
Draft Budget ($)	200,000	195,000	195,000	100,000	100,000	**$790,000**

Because the rate of expenditure is largely driven by private development, some substitution within the overall total is likely to be necessary in future years to match budget allocation to development demand.

Also, there is some flexibility in the demand on the capital expenditure budget to the extent that land acquisition and works can be substituted in lieu of cash contribution and reserve contributions for some subdivisions.

Additional annual waterway maintenance costs of $19,000 will be incurred with the proposed green corridor and in-line storage basins between the Golf Course and Cameo Grove. The access strips and overflow swale through rural land will be grazed.

Revenue from drainage rates levied on new residential development will more than meet additional maintenance costs.

Cost Share Contributions

Snellings Drain catchment comprises two district sub-catchments that connect to the trunk system at different points. The "bus-route" method of cost sharing can be applied fairly to the sub-catchments as a "separate connection". However, within each sub-catchment the fundamental benefit gained by developers is the ability to develop irrespective of their locations within the sub-catchment.

A uniform unit cost contribution within each sub-catchment reflects this common benefit.

Without further development, the existing drainage system would be adequate in the foreseeable future. With further development pending it is now necessary to upgrade this system, which supports the argument that the new development should meet most, if not all of the cost of the upgrading.

On the other hand, upgrading based on modern stormwater management practice using waterways and wetlands green corridors where feasible provides for amenity and ecological values as well as drainage. These additional benefits are available to all the community, therefore, the Council should meet the proportion benefiting the wider community.

New development within Prestons sub-catchment will meet the drainage costs north of Mairehau Road (Components 1 to 6 on Table 1). All new development will share the cost from Mairehau Road south (components 7 and 8). The estimated drainage cost share contribution for each new lot (or second or more dwellings on an existing lot) are listed in Table 3:

TABLE 3: Unit Cost Share Contributions

Sub-catchment	Potential new lots	$ / lot (excl GST)	Revenue ($)
Prestons	310	2,207.26	684,252
Burwood	52	649.00	33,748
	362	$2,856.26	$718,000

Cost Sharing Scheme

The Snellings Drainage Cost Sharing proposal is:

(a) Total Council capital contribution 42%.

(b) Cost share levy per new lot is $2,162.10 or $649 depending on sub-catchment.

(c) The first dwelling on any lot existing at the time the cost sharing scheme is adopted by Council, will not be liable for the levy. However, the second and subsequent dwellings on the same lot will each attract the levy.

(d) Special developments (such as retirement villages or hospitals) that have several building units on a single site will be assessed for the levy on the basis of impervious area.

(e) Calculations to date have been based on estimates. The estimates will be updated regularly to actual costs upon completion of each phase of the scheme upgrading.

(f) Annual adjustments will be made for the value of money over time. Historical expenditure will be adjusted in accordance with the Consumers Price Index as at 1 July each year.

The cost sharing scheme discussed in this report details the works required to mitigate the adverse effects of land rezoned as part of the current City Plan process. Should further land within the catchment be rezoned then the cost sharing scheme will need to be reassessed and a revised scheme established.

CONSULTATION AND CONSENTS

To comply with the new Local Government Act 2002, consultation *"to the extent the local authority considers reasonable"* is required. The proposed communication and notification steps for the cost sharing scheme are:

(a) Presentation to the Burwood/Pegasus Community Board; Parks, Gardens and Waterways Committee and the Regulatory and Consents Committee.

(b) A brief mailout circular to land owners within the scheme area inviting feedback on the proposed scheme.

(c) A consultation period of at least one month during which landowner feedback received will be assessed.

(d) Presentation of the scheme to the Council for adoption.

(e) Formal public notification of the scheme.

Environment Canterbury requires that subdivisions of 30 lots or more obtain a discharge permit for the discharge of stormwater to natural water.

In the past, each developer has been responsible for obtaining any consents necessary from Environment Canterbury. However, in this instance, Environment Canterbury has recommended that the Council lodge an application for a comprehensive consent that covers all stormwater discharges within Snellings Drain catchment. This approach is consistent with the protocol on surface water management that Parks and Waterways Unit planning staff are developing with Environment Canterbury.

A comprehensive catchment-wide consent application is expected to be lodged during May 2003.

DRAFT RECOMMENDATIONS TO COUNCIL

1. That the Council approve the upgrading of the Snellings Drain system (total estimated capital cost $1,216,000) to provide for new urban development.

2. That the Council establishes the Snellings Drain Cost Sharing Area pursuant to Sections 407 and 409 of the Resource Management Act 1991 (which saves the otherwise repealed provisions of Section 283 of the Local Government Act 1974) to finance the upgrading of the drainage systems.

3. That the Council approve the areas shown on the plan (attached) called Snellings Drain Cost Sharing Scheme.

4. That the Council sets as a condition of all future subdivision consents, and building consents for dwellings and other premises within existing subdivisions a requirement for cost contribution as described in the agenda report.

5. That the developers within the catchment area be advised of the Council's decision.

6. That a consultation period of at least one month during which developer and landowner feedback will be received and assessed be provided.

7. That the Council apply to Environment Canterbury for a comprehensive resource consent that will authorise stormwater discharge from development within the catchment.

8. That land acquisition negotiations to secure the scheme's drainage and access corridor commence as a matter of priority.

NATURAL + PEOPLE + ECONOMIC STEP ASSESSMENT

#	CONDITION:	Meets condition ✓✓0✖	HOW IT HELPS MEET CONDITION:
		The Natural Step	
N1	**Reduce non-renewable resource use**	✓	Provides opportunities for pedestrian and cycle use along corridor.
N2	**Eliminate emission of harmful substances**	✓	See above.
N3	**Protect and restore biodiversity and ecosystems**	✓✓	Environmentally sustainable surface water management. Stormwater quality treatment to protect Horseshoe Lake.
N4	**People needs met fairly and efficiently**	*NA*	*NA - See People Step + Economic Step.*
		The People Step	
P1	**Basic needs met**	✓	Protects people and property from flooding.
P2	**Full potential developed**	✓	Provides opportunities for recreation.
P3	**Social capital enhanced**	✓	Creates public outdoor spaces for people to come together informally.
P4	**Culture and identity protected**	✓	Recognises Maori heritage.
P5	**Governance and participatory democracy strengthened**	0	
		The Economic Step	
E1	**Effective and efficient use of all resources**	✓	More efficient and effective than individual subdivision mitigation measures.
E2	**Job rich local economy**	0	
E3	**Financial sustainability**	✓	Sustainable surface water management system with lower life cycle cost.

Staff Recommendation: That the Burwood/Pegasus Community Board provide the Parks, Gardens and Waterway Committee with feedback on the Snellings Drain Cost Sharing Scheme.

Chairperson's Recommendation: That the Board support the proposed scheme.