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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: GVS&DD Board of Directors

From: Utilities Committee

Date: November 7, 2013 Meeting Date: November 15, 2013

Subject: **GVS&DD Cost Allocation**

UTILITIES COMMITTEE RECOMMENDATION

That the GVS&DD Board approve the revised definitions for Tier II, as presented in the November 1, 2013 report titled "GVS&DD Cost Allocation", to implement that all future wastewater treatment facility capital infrastructure be deemed as Tier II with the exception that facility infrastructure defined as 'community benefit' be deemed as Tier I and with the exception that primary treatment infrastructure equivalent to existing infrastructure that is constructed as part of the Lions Gate and Iona treatment plant upgrade projects be deemed as Tier I.

At its November 7, 2013 meeting, the Utilities Committee considered the attached report titled "GVS&DD Cost Allocation", dated November 1, 2013. The Committee subsequently passed the recommendation above as presented as Alternative 3 in the subject report.

Attachment:
"GVS&DD Cost Allocation", dated November 1, 2013

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ATTACHMENT

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Utilities Committee

From: Carol Mason, Chief Administrative Officer

Date: November 1, 2013 Meeting Date: November 7, 2013

Subject: **GVS&DD Cost Allocation**

RECOMMENDATION

That the GVS&DD Board approve the revised definition for Tier II, as presented in this report, to implement that all future wastewater treatment facility capital infrastructure be deemed as Tier II with the exception that facility infrastructure defined as 'community benefit' be deemed as Tier I.

PURPOSE

To report back to the GVS&DD Board on the interpretation of Tier I and Tier II capital costs and provide a recommendation to the Board on revised definitions for the GVS&DD cost allocation formula for all future wastewater treatment plant capital projects.

BACKGROUND

At the May 21, 2010 meeting of the GVS&DD Board, a report on the "Integrated Liquid Waste and Resource Management Plan Secondary Treatment Timelines" was considered. Among the recommendations approved by the Board was the following direction to the Regional Administrative Advisory Committee (RAAC):

> *The GVS&DD Board:*
>
> *direct staff to review and provide a recommendation, through the Regional Administrative Advisory Committee, of the definitions of Tier I and II costs as included in the Greater Vancouver Sewerage and Drainage District cost allocation formula for all wastewater treatment plant projects, current and proposed.*

The Regional Administrators Advisory Committee (RAAC) concluded its work earlier this fall and recommendations were presented to the October 3, 2013 Utilities Committee. Those recommendations included the proposed endorsement of Guiding Principles for the GVS&DD and the proposed clarification of Tier I and Tier II definitions as they apply to cost allocation for the Lions Gate and Iona Treatment Plant secondary upgrade projects.

The Committee considered both reports and the recommendations were referred back to staff with a direction to bring the Cost Allocation Report back to the November 7th Utilities Committee with revised recommendations. Specifically, the Committee requested that staff amend the report to consider an alternative that would include the implications to the GVS&DD if all future wastewater facility capital infrastructure were deemed as Tier II. The Committee also requested that the report

include information that provided an analysis of Tier I and Tier II investments made at all GVS&DD Wastewater Treatment Plants since the construction of Annacis and Lulu wastewater treatment plants. This report has been prepared in response to this direction.

Current Tier I & Tier II Capital Cost Definitions

The current cost allocation principles for the apportionment of sewerage costs among member municipalities were initially adopted by the Board in November 1993. The principles were endorsed by the Board to reflect a desire for cost allocation to be more closely tied to the concepts of "user pay" and "benefitter pay". Based on these principles, over the years sewer areas have paid for capital costs through the use of DCC's and through cost apportionment which has been based on the application of Tier I and Tier II definitions. Operating costs have been apportioned to the respective sewer areas based on metered flows.

The current definitions for Tier I and Tier II projects are as follows:

Tier I: *Projects involving basic infrastructure, such as the twinning of an interceptor or the construction of a trunk. Under both the old and new cost allocation systems, the capital costs of Tier I projects are allocated only within the relevant Sewerage Area.*

Tier II: *Projects which enhance treatment beyond primary, **such as the current upgrading of the Annacis and Lulu Island Plants**. Under the new cost allocation principles, the capital costs of Tier II projects will be shared on a 70/30 basis between the Region (benefiter) and the relevant Sewerage Area (user).*

At the time that these definitions were considered, it was recommended that they be applied retroactively to January 1, 1992, for all capital projects which had enhanced treatment beyond primary. From that point forward the definitions established new criteria for cost sharing of capital projects which has remained in place over the last 21 years.

The Gap between the Definition of Tier I and Tier II Capital

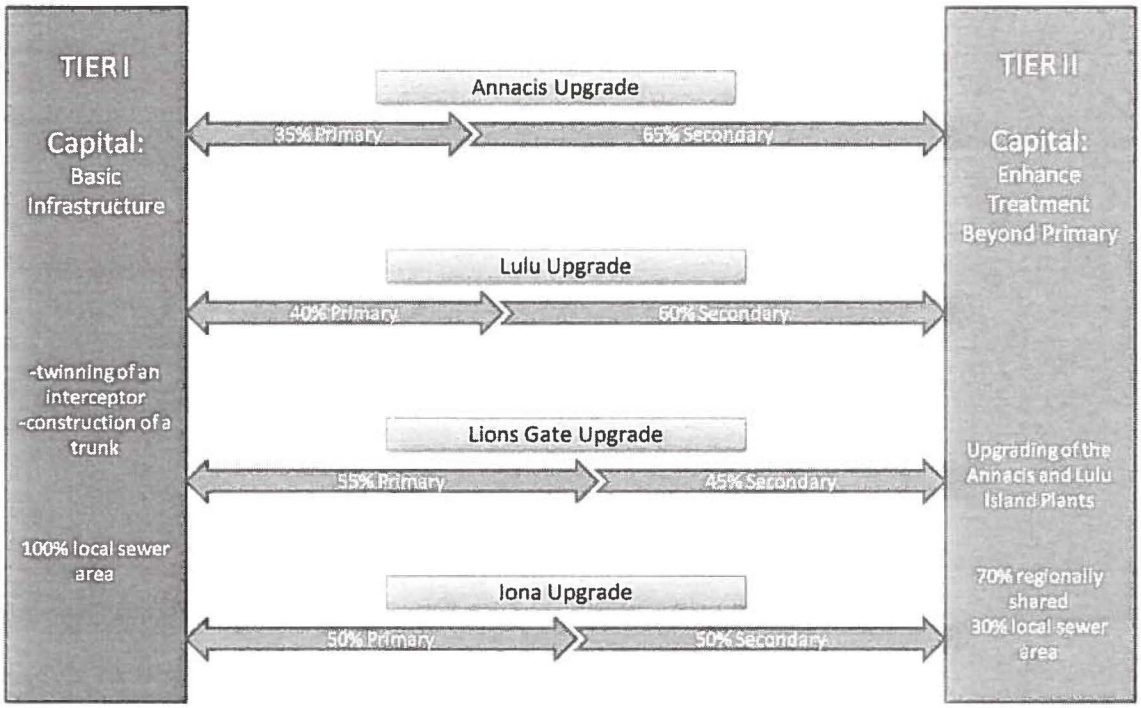
The ambiguity with the current definitions of 'Tier I' and 'Tier II' is that a gap exists between these definitions in defining primary infrastructure that falls between the two tiers. On the one side, basic infrastructure – such as the twinning of an interceptor or the construction of a trunk – is defined as Tier I. On the other side, a project which enhances treatment beyond primary – such as the upgrading of a wastewater treatment plant – is defined as Tier II.

The two examples given as basic infrastructure represent capital projects that are clearly built outside the footprint of a wastewater treatment plant and are readily acknowledged as a local sewer area costs. Capital projects that are undertaken within a treatment plant are evaluated on a project by project basis to determine what components treat effluent at a primary level, what components treat effluent at a secondary level and what components are shared between the primary and secondary treatment systems.

Over the years projects that treat effluent at a primary level have been deemed as Tier I – Basic Infrastructure, even though the current definition does not clearly specify that this infrastructure is Tier I. This interpretation is also inconsistent with the definition of Tier II which includes the Annacis Island and Lulu Island upgrades as Tier II projects, and included elements within those projects that

contained primary infrastructure. The figure below demonstrates how the major facility upgrades fall between the definitions of Tier I and Tier II, although the primary components do not necessarily fit under the definition of Tier I.

Primary & Secondary Components
Of Wastewater Facility Capital Upgrades



This report considers the gap between the two definitions and, as an alternative, proposes to address this gap by amending the definition of Tier II to include all capital facility infrastructure.

Wastewater Regulations

With the introduction of provincial and federal regulations that made it mandatory for secondary treatment to become the minimum level of accepted treatment for new infrastructure discharging into an ocean environment, the capital components previously considered as 'primary treatment' became integrated into the overall treatment of wastewater to meet the new regulatory standards. As a result, in 1994 the Board directed that the upgrades to the Annacis Island and Lulu Island wastewater treatment plants be treated as Tier II projects. Regulatory requirements are not based on treatment processes within facilities, but rather are measured by the quality of the effluent discharged into the receiving environment.

Through the discussion at the October 3rd Utilities Committee, direction was provided to staff to develop an alternative that considered that all future capital infrastructure within wastewater facilities be deemed as Tier II with the exception of facility improvements that that are solely defined as 'community benefit', which would be deemed as Tier I. This revised definition would acknowledge that all four sewer areas are incurring significant capital costs in future years both to meet regulatory requirements and to address maintenance, upgrading and expansion costs.

Wastewater Treatment Project Financial Summary

Along with consideration of a revised alternative that proposed that all new capital infrastructure be deemed as Tier II, the Committee also requested information on how previous capital costs have been apportioned by sewer area over time and allocated on a Tier I and Tier II basis. Staff reviewed capital project budgets spanning the years between 1999 and 2013 and have provided the following summary in the table below.

Table One

1999 – 2013 Capital Projects ($ Millions)			
	Tier I	**Tier II**	**# of Tier II Projects**
Annacis Island	$59.2	$5.7	2
Northwest Langley	$4.6	$73.3	4
Iona Island	$48.5	$17.9	3
Lions Gate	$36.4	$29.3*	6
Lulu Island	$18.0	$36.6	6

** Includes secondary upgrade project definition phase, 40% of land acquisition cost, and projects related to enhanced primary treatment*

Staff have also reviewed capital project budgets included in the long range capital plan that span the years from 2014 to 2023 and have included this information in the table below.

Table Two

2014 – 2023 Capital Projects ($ Millions)			
	Tier I	**Tier II**	**# of Tier II Projects**
Annacis Island	$269.2	$203.8	3
Northwest Langley	$32.6	$37.5	2
Iona Island	$174.6	$128.3	2
Lions Gate	$334.7	$270.0	2
Lulu Island	$54.9	$38.2	4

Under the financial implications section, Table Five presents an estimate of the impact per household on a per capita basis assuming that the capital program shown above is separated between Tier I and Tier II projects and alternatively, with the capital program shown above presented entirely as Tier II projects.

ALTERNATIVES

1. That the GVS&DD Board receive the report for information and make no changes to the cost allocation model for Lions Gate and Iona Secondary Treatment Upgrade projects.

2. That the GVS&DD Board approve the revised definition for Tier II, as presented in this report, to implement that all future wastewater treatment facility capital infrastructure be deemed as

Tier II with the exception that facility infrastructure defined as 'community benefit' be deemed as Tier I.

3. That the GVS&DD Board approve the revised definitions for Tier II, as presented in this report, to implement that all future wastewater treatment facility capital infrastructure be deemed as Tier II with the exception that facility infrastructure defined as 'community benefit' be deemed as Tier I and with the exception that primary treatment infrastructure equivalent to existing infrastructure that is constructed as part of the Lions Gate and Iona treatment plant upgrade projects be deemed as Tier I.

4. That the GVS&DD Board provide alternate direction.

FINANCIAL IMPLICATIONS

Alternative one. If the Board supports alternative one, there would be no change to the Tier I and Tier II definitions. The cost allocation for the Lions Gate project has been updated and based on current information would be apportioned 55% to the local sewer area as Tier I and 45% to the regional sewer area as Tier II (Tier II projects are shared 70% regionally and 30% by sewer area). Current estimates on cost allocation for the Iona project are anticipating an apportionment of 50% to the local sewer area under Tier I and 50% to the regional sewer area under Tier II.

Table Three below provides the estimate of the total requisition by sewer area under alternative one using an annual inflation factor of 2.5%.

Table Three
Requisition by Sewer Area – Current LWMP ($ Millions)

Sewer Area	*2012*	*2015*	*2020*	*2025*	*2030*
FSA	87.9	95.6	123.7	164.1	205.1
VSA	52.0	54.1	66.4	97.0	161.4
NSSA	19.1	19.9	45.7	58.8	70.9
LIWSA	16.7	19.0	25.2	31.2	36.6
Total Sewer Area	175.6	188.5	261.1	351.1	474.0

Alternative two. If the Board supports alternative two, the definition for Tier II would be revised to establish that all future wastewater facility capital infrastructure within the four sewer areas would be deemed as Tier II and thereby, cost shared 70% regionally and 30% locally by each sewer area. Operating costs would continue to be apportioned 100% to the applicable sewer area.

The revised definition would provide clarity for GVS&DD members and would also ensure that local sewer areas would be responsible for enhancements to wastewater facilities that provide for community amenities or benefits but that are not essential to the treatment of effluent. Examples of infrastructure that would be defined as 'community benefit' would include elements such as greenhouses or recreational facilities.

Table Four below provides the estimate of the total requisition by sewer area under alternative two using an annual inflation factor of 2.5%.

Table Four
Requisition by Sewer Area – Revised Tier II Definition ($ Millions)

Sewer Area	*2012*	*2015*	*2020*	*2025*	*2030*
FSA	87.9	95.6	126.6	169.6	221.0
VSA	52.0	54.1	72.3	100.9	151.5
NSSA	19.1	19.9	35.4	46.2	57.6
LIWSA	16.7	19.0	26.8	34.4	43.8
Total Sewer Area	175.6	188.5	261.1	351.1	474.0

Table Five below provides a comparison between alternative one and alternative two estimating the projected requisition for an average household using the municipal per capita by each sewer area multiplied by an average household of 2.6 persons and an annual inflation factor of 2.5%.

Table Five
Comparison of Alternatives
Estimate of Household Impact (Per Capita * 2.6 Avg Household)

Sewer	*2015*		*2020*		*2025*		*2030*	
Area	*Alt 1*	*Alt 2*	*Alt 1*	*Alt 2*	*Alt 1*	*Alt 2*	*Alt 1*	*Alt 2*
FSA	182	182	214	219	259	267	300	323
VSA	197	197	232	253	327	341	527	495
NSSA	267	267	587	454	721	566	834	678
LIWSA	247	247	308	328	359	396	397	475

The table shows that in 2015 the range in cost between households within each sewer area is relatively small. However, over time if there is no change in the cost apportionment formula for primary treatment projects, there will be an increasing gap in household cost between the sewer areas.

If the GVS&DD Board approves this alternative, all future wastewater treatment plant facility capital infrastructure would be deemed as Tier II, with the exception of facility infrastructure defined as 'community benefit' which would be deemed as Tier I. Consistent with the application of the definition applied in the 1994 Cost Allocation report, the revised definition would include effluent pipelines and outfalls conveying treated effluent to the receiving environments as Tier II, while pipelines conveying untreated wastewater to the treatment plants from the local sewerage areas would be deemed as Tier I. This application is consistent with the previous application of Tier II costs for the Annacis and Lulu upgrades.

Alternative three. A variation of alternative two that has been raised by Committee members is the question of what portion of the new facilities for Lions Gate and Iona would be identified as local sewer area costs that are replacing the footprint of the existing plants, and what portion of the plants would be identified as Tier II and treated in the same way as the upgrading of Annacis and Lulu?

Under this alternative, it is difficult to precisely quantify the area of the proposed Lions Gate plant that could be considered as equivalent to the original investment in the existing treatment plant. However, for the Annacis and Lulu upgrades the existing primary tanks were already in place but all

other primary, shared and secondary components that were built were deemed Tier II. An assumed equivalency could be adopted that identifies the primary tanks for the new Lions Gate upgrade as a Tier I local cost and all other primary, shared and secondary components as a Tier II cost. The design and construction cost for the primary tanks for the new Lions Gate plant is estimated at $73 million, or about 16 percent of the treatment plant design and construction cost.

Table Six below provides a comparison between alternative two and alternative three estimating the projected requisition for an average household using the municipal per capita for each sewer area multiplied by an average household of 2.6 persons and an annual inflation factor of 2.5%.

Table Six
Comparison of Alternatives
Estimate of Household Impact (Per Capita * 2.6 Avg Household)

Sewer	*2015*		*2020*		*2025*		*2030*	
Area	*Alt 2*	*Alt 3*	*Alt 2*	*Alt 3*	*Alt 2*	*Alt 3*	*Alt 2*	*Alt 3*
FSA	182	182	219	217	267	263	323	319
VSA	197	197	253	250	341	341	495	495
NSSA	267	267	454	481	566	601	678	715
LIWSA	248	248	328	326	396	391	475	471

Attachments One, Two, and Three have been prepared to provide a detailed comparison between the alternative one, two and three on total requisition by each municipality with estimates of the projected requisition by municipality on a per capita basis using an annual inflation factor of 2.5%.

It is important to note that none of the cost estimates presented in the alternatives above include government cost sharing which would reduce the overall cost apportionment for all members of the GVS&DD.

SUMMARY / CONCLUSION

At the October 3, 2013 Utilities Committee, the Committee considered a report recommending a cost sharing approach for the Lions Gate and Iona Treatment Plant projects that would apply cost sharing consistently with the method used for the Annacis and Lulu Island upgrade projects. The Utilities Committee referred the recommendation back to staff with the direction to explore a new alternative that would consider that all future capital infrastructure within GVS&DD wastewater treatment plants be treated as Tier II for the purpose of cost sharing with the exception of infrastructure that was deemed solely for community benefit.

The proposed cost sharing of wastewater facility capital infrastructure as 70% regional and 30% local is consistent with the original principles adopted by the Board in 1994 and that were applied to the Annacis Island and Lulu Island upgrade projects. The requirement to upgrade facilities to secondary treatment as a minimum level of accepted treatment no longer gives local governments the choice to develop new facilities to a primary level. Capital components previously considered as 'primary infrastructure' are now fully integrated into infrastructure that is built to meet the regulatory standards for effluent to be treated to a 'secondary' level. Regulatory requirements are not measured by what is included as the treatment process within facilities, but rather, it is based

on the quality of the effluent that is discharged into the receiving environment. Primary treatment of effluent is one step in the overall process of treating effluent to either a secondary or higher level.

With the acknowledgement that all five wastewater treatment plants within the GVS&DD are incurring significant costs to maintain, upgrade and expand capital infrastructure to meet growth projections and to meet the operating requirements articulated in the Liquid Waste Management Plan to upgrade all GVS&DD facilities to secondary treatment, it is proposed that alternative two be supported as it provides the best balance between regional and local sewer area costs and continues to ensure that a proportion of those costs are borne locally by the individual sewer area. It should be noted that the cost estimates included in this report do not factor in senior government cost sharing which would reduce overall costs for all member municipalities. Staff recommend that the GVS&DD Board approve alternative two.

Attachments:

1) Alternative 1: Current LWMP Perspective – Revised (No Gov Cost Sharing)
2) Alternative 2: All WWTP Capital Tier II (No Gov Cost Sharing)
3) Alternative 3: All WWTP Capital Tier II except Primary Treatment for Lions Gate & Iona (No Gov Cost Sharing)

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Attachment 1

Alternative 1: Current LWMP Perspective - Revised (No Gov Cost Sharing)

Current Cost Allocation Formula

Tier I – 100% Sewer Area
Tier II – 70% Regional, 30% Sewer Area

Treatment Plant Upgrades:

Lions Gate	Tier I 55%	Tier II 45%
Iona	Tier I 50 %	Tier II 50%

No Senior Government Cost Sharing

Sewer Area Levy (in Millions)	*2012*	*2015*	*2020*	*2025*	*2030*
FSA	$87.9	$95.6	$123.7	$164.1	$205.1
VSA	$52.0	$54.1	$66.4	$97.0	$161.4
NSSA	$19.1	$19.9	$45.7	$58.8	$70.9
LIWSA	$16.7	$19.0	$25.2	$31.2	$36.6
Total Sewer Area	$175.6	$188.5	$261.1	$351.1	$474.0

Municipal Levy (in Millions)	*2012*	*2015*	*2020*	*2025*	*2030*
Burnaby	$18.4	$19.6	$24.5	$32.2	$41.5
Coquitlam	$10.0	$11.1	$14.7	$20.3	$26.0
Delta	$6.1	$7.1	$8.7	$11.2	$13.6
Langley City	$1.6	$1.7	$2.2	$2.9	$3.6
Langley Township	$3.9	$5.0	$8.1	$11.9	$16.8
Maple Ridge	$5.5	$5.8	$7.5	$9.9	$12.6
New Westminster	$5.2	$6.3	$7.5	$9.7	$12.0
North Vancouver City	$4.9	$5.0	$11.4	$14.7	$17.7
North Vancouver District	$8.5	$8.9	$20.6	$26.5	$31.9
Pitt Meadows	$1.3	$1.3	$1.6	$2.1	$2.5
Port Coquitlam	$4.5	$4.6	$6.1	$8.0	$9.8
Port Moody	$2.5	$2.4	$3.0	$3.9	$4.7
Richmond	$17.7	$20.1	$26.6	$33.1	$39.4
Surrey	$29.2	$30.7	$39.5	$52.1	$65.0
Vancouver	$47.8	$49.8	$61.5	$89.8	$148.4
West Vancouver	$5.7	$6.0	$13.8	$17.7	$21.3
White Rock	$1.2	$1.3	$1.7	$2.2	$2.6
Electoral Area A	$1.6	$1.6	$2.0	$2.9	$4.8
Total Municipality Levy	$175.6	$188.5	$261.1	$351.1	$474.0

Per Capita Municipal Levy	*2012*	*2015*	*2020*	*2025*	*2030*
Burnaby	78	79	90	110	134
Coquitlam	74	75	87	105	123
Delta	60	70	81	100	115
Langley City	60	60	71	89	102
Langley Township	57	61	77	91	107
Maple Ridge	79	78	91	109	126
New Westminster	74	86	94	115	132
North Vancouver City	96	94	206	252	288
North Vancouver District	95	97	213	262	306
Pitt Meadows	75	72	85	106	122
Port Coquitlam	77	75	92	113	130
Port Moody	71	67	78	94	109
Richmond	90	98	122	143	160
Surrey	61	60	71	86	100
Vancouver	75	77	92	131	211
West Vancouver	120	124	273	335	385
White Rock	59	63	75	92	106
Electoral Area A	107	90	86	111	169

Attachment 2

Alternative 2: All WWTP Capital Tier II (No Gov Cost Sharing)

Current Cost Allocation Formula

All WWTP Capital – 100% Tier II

No Senior Government Cost Sharing

Sewer Area Levy (in Millions)	*2012*	*2015*	*2020*	*2025*	*2030*
FSA	$87.9	$95.6	$126.6	$169.6	$221.0
VSA	$52.0	$54.1	$72.3	$100.9	$151.5
NSSA	$19.1	$19.9	$35.4	$46.2	$57.6
LIWSA	$16.7	$19.0	$26.8	$34.4	$43.8
Total Sewer Area	$175.6	$188.5	$261.1	$351.1	$474.0

Municipal Levy (in Millions)	*2012*	*2015*	*2020*	*2025*	*2030*
Burnaby	$18.4	$19.6	$25.3	$33.3	$43.4
Coquitlam	$10.0	$11.1	$15.1	$20.9	$28.0
Delta	$6.1	$7.1	$8.9	$11.6	$14.7
Langley City	$1.6	$1.7	$2.3	$3.0	$3.8
Langley Township	$3.9	$5.0	$8.3	$12.3	$18.1
Maple Ridge	$5.5	$5.8	$7.7	$10.3	$13.6
New Westminster	$5.2	$6.3	$7.6	$10.1	$13.0
North Vancouver City	$4.9	$5.0	$8.8	$11.5	$14.4
North Vancouver District	$8.5	$8.9	$15.9	$20.8	$25.9
Pitt Meadows	$1.3	$1.3	$1.7	$2.2	$2.7
Port Coquitlam	$4.5	$4.6	$6.3	$8.3	$10.5
Port Moody	$2.5	$2.4	$3.1	$4.0	$5.1
Richmond	$17.7	$20.1	$28.3	$36.4	$46.6
Surrey	$29.2	$30.7	$40.5	$53.9	$70.1
Vancouver	$47.8	$49.8	$66.9	$93.4	$139.6
West Vancouver	$5.7	$6.0	$10.6	$13.9	$17.3
White Rock	$1.2	$1.3	$1.7	$2.3	$2.8
Electoral Area A	$1.6	$1.6	$2.2	$3.0	$4.5
Total Municipality Levy	$175.6	$188.5	$261.1	$351.1	$474.0

Per Capita Municipal Levy	*2012*	*2015*	*2020*	*2025*	*2030*
Burnaby	$78	$79	$93	$114	$140
Coquitlam	$74	$75	$90	$109	$133
Delta	$60	$70	$83	$103	$124
Langley City	$60	$60	$73	$92	$110
Langley Township	$57	$61	$79	$94	$116
Maple Ridge	$79	$78	$93	$112	$135
New Westminster	$74	$86	$97	$118	$142
North Vancouver City	$96	$94	$159	$198	$234
North Vancouver District	$95	$97	$164	$205	$249
Pitt Meadows	$75	$72	$87	$109	$131
Port Coquitlam	$77	$75	$94	$117	$140
Port Moody	$71	$67	$80	$97	$116
Richmond	$90	$98	$130	$157	$189
Surrey	$61	$60	$72	$89	$107
Vancouver	$75	$77	$100	$136	$199
West Vancouver	$120	$124	$212	$263	$313
White Rock	$59	$63	$76	$95	$114
Electoral Area A	$107	$90	$94	$116	$159

Attachment 3

Alternative 3: All WWTP Capital Tier II except Primary Treatment for Lions Gate & Iona (No Gov Cost Sharing)

Current Cost Allocation Formula

All WWTP Capital – 100% Tier II except Primary Treatment for Lions Gate & Iona deemed Tier I
No Senior Government Cost Sharing

Sewer Area Levy (in Millions)	*2012*	*2015*	*2020*	*2025*	*2030*
FSA	$87.9	$95.6	$125.6	$167.1	$218.4
VSA	$52.0	$54.1	$71.3	$100.9	$151.4
NSSA	$19.1	$19.9	$37.5	$49.1	$60.8
LIWSA	$16.7	$19.0	$26.7	$34.0	$43.4
Total Sewer Area	$175.6	$188.5	$261.1	$351.1	$474.0

Municipal Levy (in Millions)	*2012*	*2015*	*2020*	*2025*	*2030*
Burnaby	$18.4	$19.6	$25.1	$32.9	$43.0
Coquitlam	$10.0	$11.1	$15.0	$20.6	$27.6
Delta	$6.1	$7.1	$8.8	$11.5	$14.5
Langley City	$1.6	$1.7	$2.3	$3.0	$3.8
Langley Township	$3.9	$5.0	$8.2	$12.1	$17.9
Maple Ridge	$5.5	$5.8	$7.6	$10.1	$13.4
New Westminster	$5.2	$6.3	$7.6	$9.9	$12.8
North Vancouver City	$4.9	$5.0	$9.4	$12.3	$15.2
North Vancouver District	$8.5	$8.9	$16.9	$22.1	$27.3
Pitt Meadows	$1.3	$1.3	$1.7	$2.1	$2.6
Port Coquitlam	$4.5	$4.6	$6.2	$8.2	$10.4
Port Moody	$2.5	$2.4	$3.1	$3.9	$5.0
Richmond	$17.7	$20.1	$28.1	$36.0	$46.1
Surrey	$29.2	$30.7	$40.1	$53.0	$69.3
Vancouver	$47.8	$49.8	$66.0	$93.4	$139.5
West Vancouver	$5.7	$6.0	$11.3	$14.8	$18.3
White Rock	$1.2	$1.3	$1.7	$2.2	$2.8
Electoral Area A	$1.6	$1.6	$2.1	$3.0	$4.5
Total Municipality Levy	$175.6	$188.5	$261.1	$351.1	$474.0

Per Capita Municipal Levy	*2012*	*2015*	*2020*	*2025*	*2030*
Burnaby	$78	$79	$92	$112	$139
Coquitlam	$74	$75	$89	$107	$131
Delta	$60	$70	$82	$102	$122
Langley City	$60	$60	$73	$90	$109
Langley Township	$57	$61	$78	$92	$114
Maple Ridge	$79	$78	$92	$111	$133
New Westminster	$74	$86	$96	$117	$141
North Vancouver City	$96	$94	$169	$210	$247
North Vancouver District	$95	$97	$174	$218	$262
Pitt Meadows	$75	$72	$86	$108	$130
Port Coquitlam	$77	$75	$93	$115	$139
Port Moody	$71	$67	$79	$96	$115
Richmond	$90	$98	$129	$155	$187
Surrey	$61	$60	$72	$87	$106
Vancouver	$75	$77	$99	$136	$199
West Vancouver	$120	$124	$224	$280	$330
White Rock	$59	$63	$76	$94	$113
Electoral Area A	$107	$90	$93	$116	$159