



City of
Kelowna

Development Cost Charge Program

20 -Year Servicing Plan &
Financing Strategy

August 22nd, 2022

Table of Contents

EXECUTIVE SUMMARY	1
1 INTRODUCTION AND BACKGROUND	10
1.1 Overview of Servicing Plan and Financing Strategy	10
1.2 Guiding Legislation and Municipal Plans and Policies	10
1.3 Staff and Stakeholder Consultation	11
2 KEY ELEMENTS OF THE DCC REVIEW	13
3 GROWTH PROJECTIONS AND EQUIVALENCIES	16
3.1 Overview of the 2040 OCP	16
3.2 Residential Growth	16
3.3 Non-Residential Growth	18
3.4 Equivalent Units	19
4 MAJOR SERVICING REQUIREMENTS	21
4.1 Summary of Capital Program	21
4.2 Geographic Sector Cost Allocation	22
4.3 Cost Allocation: Benefit To Existing & Growth	22
4.4 Municipal Assist	23
4.5 Secondary Suite Municipal Assist	24
4.6 Interest on Long-term Debt	24
4.7 DCC Capital Projects by Service	25
5 DCC RATE SUMMARY	43
5.1 Summary of Proposed DCC Rates	43
6 IMPLEMENTATION	45
6.1 Timing of collection	45
6.2 In-Stream Applications	45
6.3 DCCs on Redevelopment and Expansion Projects	46
6.4 DCC Rebates and Credits	46

6.5	Monitoring and Accounting	48
6.6	Annual Indexing and Comprehensive Reviews	48
APPENDIX A – RATE CALCULATION		49
APPENDIX B – STAKEHOLDER TOUCH POINTS		58
APPENDIX C – AMENDED BYLAW		60

INDEX OF FIGURES

Figure 1: Total combined DCC by land use and sector.....	7
Figure 2: DCC Transportation Service Sector Plan.....	28
Figure 3: Water DCC Service Sector Plan.....	31
Figure 4: Wastewater Trunk DCC Service Sector Plan.....	34
Figure 5: Wastewater Treatment Service Sector Plan.....	37

INDEX OF TABLES

Table 1: Total DCC Capital Program recoverable costs.....	2
Table 2: Number of areas for current and proposed DCC program.....	5
Table 3- Municipal assist factors for both the base MAF and the secondary suite assist.....	6
Table 4: Proposed DCC Rates.....	9
Table 5: DCC Key Elements and Best Practice.....	13
Table 6: Projected Residential Growth by Unit Type 2021-2040.....	16
Table 7: Projected Non-Residential Growth by Type 2021-2040.....	18
Table 8: Equivalency Factors by Land Use and Unit Type.....	20
Table 9: DCC Costs by Service (\$millions).....	21
Table 10: Benefit to Growth Shares by Service.....	23
Table 11: Municipal Assist Factor.....	23
Table 12: Secondary Suite Municipal Assist Factor.....	24
Table 13: Transportation DCC Program Costs (\$millions).....	25
Table 14: Transportation Level of Service BTE Assumptions.....	26
Table 15: Equivalent Units for Transportation.....	27
Table 16: Water DCC Program Costs (\$millions).....	29
Table 17: Equivalent Units for Water.....	30
Table 18: Wastewater Trunk DCC Program Costs (\$millions).....	32

Table 19: Equivalent Units for Wastewater Trunks	33
Table 20: Wastewater Treatment DCC Program Costs (\$millions)	35
Table 21: Equivalent Units for Wastewater Treatment.....	36
Table 22: Drainage DCC Program Costs (\$millions)	38
Table 23: Equivalent Units for Drainage	39
Table 24: Parkland Acquisition DCC Program Costs (\$millions)	40
Table 25: Equivalent Units for Parkland Acquisition	41
Table 26: Park Development DCC Program Costs (\$millions)	41
Table 27: Equivalent Units for Park Development	42
Table 28: Combined DCC Rate by Location	43
Table 29: Detailed Proposed DCC Rates	44

EXECUTIVE SUMMARY

The purpose of the 20-Year Servicing Plan & Financing Strategy is to provide a detailed analysis of the major servicing required to accommodate growth as outlined in the 2040 Official Community Plan (2040 OCP) and provides the foundation document for the Development Cost Charge (DCC) Bylaw. In conjunction with the proposed 2040 OCP and Transportation Master Plan (TMP), the 20-Year Servicing Plan has been updated to reflect future infrastructure demands for the community. The 20-Year Servicing Plan informs the DCC Bylaw which sets out the charges imposed on developers to offset infrastructure expenditures incurred by the City to service the needs for new development. The 20-Year Servicing Plan and DCC Bylaw have been maintained and administered by the City of Kelowna for more than 30 years.

The 20-Year Servicing Plan and DCC Bylaw are interrelated and for simplicity will be collectively termed herein as the ‘DCC Program.’

The *Local Government Act* limits the infrastructure eligible for recovery through DCCs to roads, water, sanitary and drainage infrastructure as well as parkland acquisition and development. Although this provides an essential framework to service growth, there are many other infrastructure needs required to satisfy the demands of a growing community that are not DCC eligible such as protective services, transit service, recreation/cultural and operational facilities. As well, DCCs only cover a portion of the upfront capital investment for the eligible categories and do not support long-term operation, maintenance, or renewal costs of infrastructure.

Minor DCC Bylaw updates, to bring project estimates in line with updated market construction and land acquisition costs, occur regularly, most recently in April 2019. In February 2020, a new Parks Development DCC category was added to the DCC Program. The last major update to the DCC Program was in 2011 in conjunction with the 2030 OCP.

The current DCC Program aligns closely with the B.C. Best Practice Guide but there are several changes in this proposed update that will help to make it more understandable, transparent, and better reflect the true cost of servicing different forms of development.

The 2040 OCP estimates an additional 45,000 residents and a total population of nearly 190,000 by 2040. Housing needs related to the 2040 population projections anticipate that demand for apartment, townhomes and compact family-friendly housing options will outpace the demand for single-detached housing.

Commercial, Institutional, and Industrial land uses were estimated based on the non-residential land available for development. Modest growth in each of the non-residential categories is expected by 2040.

The DCC Program is comprised of 234 infrastructure and parkland acquisition projects valued at \$1.3 billion and revenue from the DCC Program is legislated to be used exclusively to fund this large capital program that extends to 2040. The DCC Program is funded from DCCs (65%), City funding (29%), and developer constructed works and grants (6%). An important element of the funding strategy for this update is that the City’s share of funding (29%) is the same as the previous program. Assumed grants are not part of the financing strategy and if the City receives provincial/federal grants the DCC Program will be updated to reflect the financial benefit of grant revenue.

Table 1: Total DCC Capital Program recoverable costs

Major Services – Funding Sources (\$ Millions)*						
Service	Developer Funded		Municipal Funded		Government Funded	Total
	Developer Construct	DCCs	Tax	Utility	Grants/ Partnership	
Transportation	40.4	311.2	167.2		9.0	527.8
Water	3.6	32.1		26.2		61.9
Wastewater Trunks	4.1	38.4		20.1		62.7
Wastewater Treatment		85.0		36.8		121.8
Drainage		9.2	28.0		20.8	57.9
Parkland Acquisition		217.8	26.7			244.5
Parks Development		142.4	74.7			217.1
Totals	48.1	836.1	296.6	83.1	29.8	1,293.8

*Numbers presented may not sum to totals due to rounding

Summarized below are the big moves and challenges addressed in the current update:

1. Construction and land acquisition increases. Global supply chain issues, inflation, labour shortage and an oversupply of construction projects flooding the market have caused upward pressure on construction costs, with tender costing coming in significantly higher than engineering estimates. Construction and land costs in the DCC Program have not been updated in more than three years and since that time construction costs have increased on average by 20% and land costs have increased more than 40%. All project costs in this update reflect 2021 cost so are approximately 1 year old and may not reflect the recent surge in construction and land costs.

The estimates have been reviewed by City staff and professional consultants and are considered reasonable on an aggregate basis. There are 234 infrastructure and parkland acquisition projects that each have detailed costing. It is probable that some unit costs may be high and some low, but the aggregated average is within reasonable engineering estimates. Also, the project contingency is in the 25% range for most projects which is on the low end for what Engineers and Geoscientists British Columbia (EGBC) recommends based on the level of project design. As noted, construction and land costs are based on 2021 costs and have not been updated to reflect recent inflationary increases. If construction and land costs continue to trend upward, the DCC Program costs may need to be updated within a year of the adoption of this update to keep pace with inflation.

Secondary Suites and Carriage Houses. It is estimated that 30% of single-family homes in Kelowna will be built with suites or carriage houses. Council agreed in 2008 to charge a flat fee DCC of \$2,500 for all secondary suites and carriage houses which would normally be charged a much higher rate (equivalent to a condominium); with the revenue difference borne by taxation and utility funding. The current practice was flagged by the Ministry as an area that needed to be amended because it provided a specific land use subsidy which is not permitted, as any subsidy must be applied evenly for all land uses.

This update has introduced a new category for Carriage Houses and assessed a higher DCC in the range of \$23,000 - \$28,000, to better reflect the actual infrastructure impact of these stand-alone units.

Secondary suites are often exempt from paying DCCs because their construction value is less than the \$50,000 minimum required to trigger DCCs as defined by the Local Government Act. For this update, it is proposed that suites are not assessed a DCC. Simply stated, once the developer pays their residential DCC for the base build the secondary suite can be constructed with no further DCCs levied. With the expected increase in suites and their associated demand on infrastructure, tax/utility funding used previously to subsidize suites has been carried forward and applied to the municipal tax assist to offset the infrastructure burden that suites may cause. The Ministry agreed that increasing the municipal assist is an equitable and transparent approach to addressing the incremental infrastructure impacts caused by suites.

Industrial DCCs. The City has some of the lowest Industrial DCCs in the province that do not fully fund the servicing demands of the shifting 'light industrial'

development trend. To better reflect the true cost for servicing, the Industrial category has been split into two categories – Light Industrial and Heavy Industrial. The Light Industrial DCC is approximately 50% of the Commercial DCC rate and is more in line with the cost of servicing this development form. The Heavy Industrial DCC is consistent with the previous DCC Program and collects DCC based on a gross site area for land intensive industrial developments like gravel extraction, wrecking yards, outdoor storage, and asphalt and concrete plants.

2. Storm Drainage DCC. DCC legislation permits the inclusion of a Drainage DCC to fund the infrastructure required to meet the demands placed on drainage systems and natural flood zones by development. The recent floods of 2017 and 2018 have demonstrated a need to better manage the City's major drainage systems which include the City's creeks and streams. A new Drainage DCC is proposed to fund the work along the City's primary drainage corridors and outfalls. The first major project is capacity improvements to Mill Creek that runs through the City's core area and is an area of future development densification.

The project funding split assigns 25% to growth and 75% to City funding sources. This proportion is based on the anticipated growth by 2040. The 75% of project funding coming from City funding sources equitably accounts for improvements necessary to remedy existing deficiencies along Mill Creek.

The Mill Creek Flood Protection project is supported by a \$22 million federal grant that reduces the overall project cost and reduces both the City and DCC share of funding equitably.

3. Parks Acquisition DCC for Commercial/Industrial. Council approved the Parks Development DCC in February 2020 and as part of the preferred scenario Council directed staff to explore the inclusion of a Parks Acquisition DCC for the Commercial and Industrial DCCs. This new Parks Acquisition DCC is now included in Commercial and Industrial DCC rates.
4. Shift to City Wide DCCs. Primary objectives of this DCC update are to align with best practice and, where possible, simplify and make the program more understandable for the development community. The City's DCC Program dates to

the 1980's and, back when it was first developed, area specific DCCs were used extensively as there were many suburban areas of the City that had unique servicing demands. With the recent adoption of the 2040 OCP and TMP, the City's land use plan is shifting with more emphasis on development within the core area and urban centres. This change has caused the City to rethink the area specific approach and move to a Municipal-wide approach where appropriate. The proposed DCC Program assesses DCCs on a Municipal-wide basis for all service areas except Transportation where the sectors were consolidated from six in the current program to three for the proposed DCC Program. The three sectors within Transportation were retained as there is unique transportation challenges to each sector that warrant the sector approach.

Table 2: Number of areas for current and proposed DCC Program.

Service	Previous (# of areas)	Proposed (# of areas)
Water	Area specific (3)	Municipal-wide (1)
Wastewater Trunks	Areas specific (3)	Municipal-wide (1)
Wastewater Treatment	Municipal-wide (1)	Municipal-wide (1)
Storm Drainage	N/A*	Municipal-wide (1)
Parks acquisition & Development	Municipal-wide (1)	Municipal-wide (1)
Transportation	Area specific (6)	Area specific (3)

* Storm Drainage is a new DCC proposed in this update.

5. Updated DCC rates. DCCs have increased since the last update in 2019 and are a dependent on where development is occurring in the City (Figure 1 and Table 3). All DCCs except Transportation are city-wide and uniform across the City. Transportation DCCs vary based on three sectors resulting in 3 different DCC rates.
6. Municipal Assist. The *Local Government Act* requires municipalities to provide a level of financial assistance through a municipal assist factor (MAF) which reflects Council's desire to encourage development and is largely a political decision. The way the City has historically applied the MAF for the purpose of DCC calculation is different than most municipalities in BC and not consistent with best practice. The difference is how existing reserves are accounted for in the DCC calculation and is negligible when reserve balances are low, but when the reserve balances are high the difference in the municipal assist amount is appreciable. The City's current approach is defensible but has been changed to align with best practice.

The Council approved subsidy for secondary suites was carried forward in this update but it is now shown as part of the municipal assist as opposed to buried in the DCC calculations.

Table 3- Municipal assist factors for both the base MAF and the secondary suite assist.

Municipal Assist Factors (%)					
	Transportation	Water	Sewer	Drainage	Parks
Base	15%	1%	1%	1%	8%
S. Suites	1%	1%	1%	1%	3%
Total	16%	2%	2%	2%	11%

7. Changes to DCC Bylaw.

- The DCC Bylaw has been updated to align with the new Zoning Bylaw. The new Zoning Bylaw is anticipated to be adopted by Council in September 2022 after Ministry approval.
- The new Carriage House and Light Industrial categories have been added to the DCC Bylaw and the new Drainage DCC has been included.
- Secondary suites are no longer required to pay DCCs and the existing Council approved subsidy has been carried forward but is now shown as a municipal assist factor for transparency.
- There are 4 residential dwelling categories based on the existing density gradient formula of development units per hectare that encourages higher density developments through lower DCCs.
- The Residential 5 category (small apartment < 600 sq. ft.) was rolled up into the Residential 4 category (apartment) because these units have similar infrastructure demand based on the average population per unit. Legislation also exempts micro-suites < 300 sq. ft. from DCCs.
- The proposed DCC Program assesses DCCs on a Municipal-wide basis for all service areas except Transportation where the sectors were consolidated from six in the current program to three for the proposed DCC Program. The three sectors within Transportation were retained as there are unique transportation challenges to each sector that warrant the sector approach.
- In addition to the new DCC Bylaw (12420), a new DCC Reserve Reduction Bylaw (12419) was developed to draw down existing reserves for the sectors that were

consolidated as part of this update. The two bylaws will work together to fund the program but only the DCC Bylaw (12420) will be the ‘forward-facing’ bylaw that will be used to collect DCCs.

- A legal review of the DCC Bylaw was completed and there were several housekeeping edits to improve readability, transparency, and consistency with the *Local Government Act*.

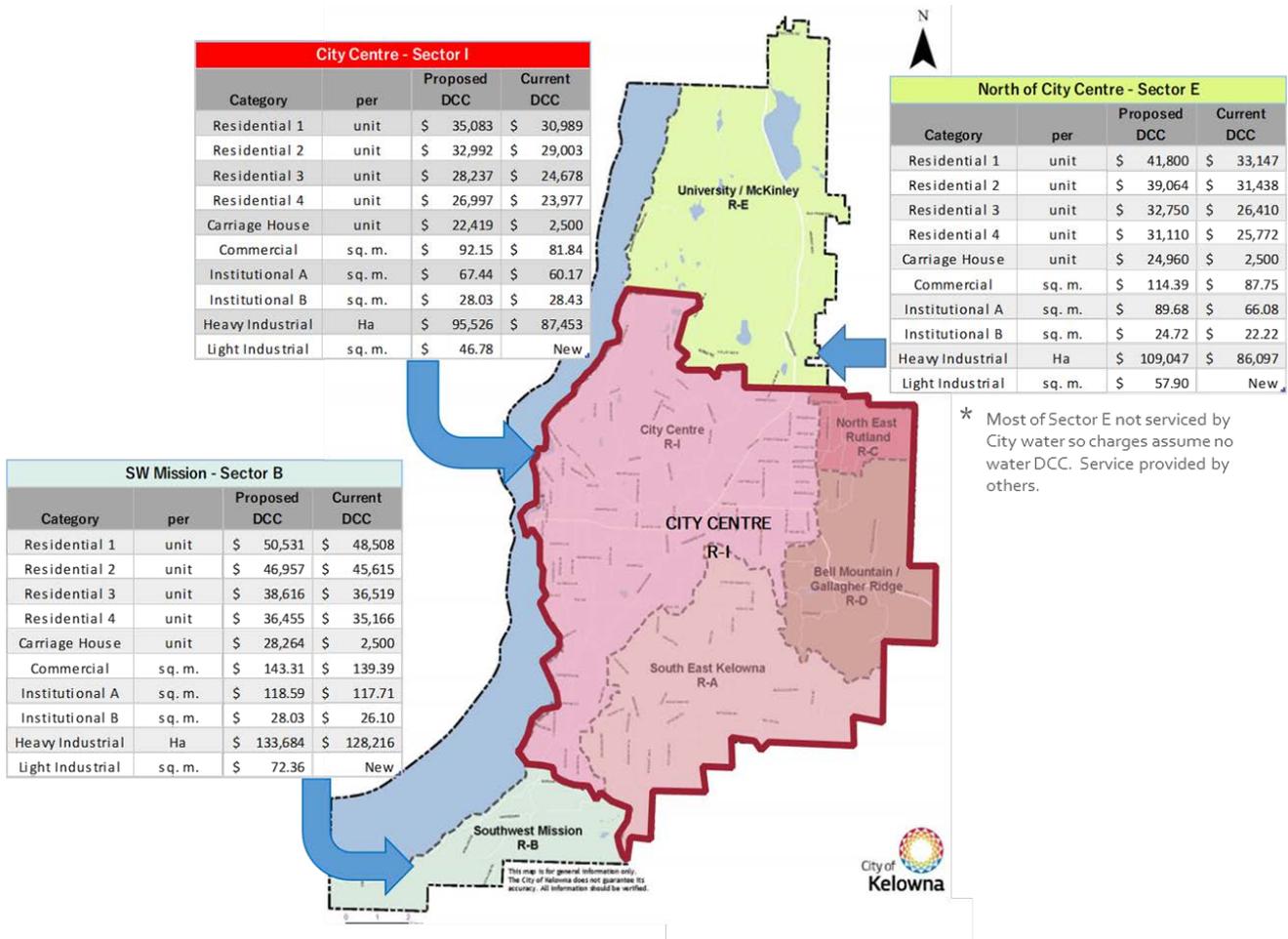


Figure 1: Total combined DCC by land use and sector.

These rates include all DCCs (i.e., water, wastewater, drainage, parks, and transportation). DCC rates are for comparative purpose and actual rates may differ based on services received. For example, development in Southeast Kelowna would not pay Wastewater DCCs because there is no service in that area and the total DCC would be lower than that shown. Similarly, water service for the area north of the Inner City is supplied primarily from other water purveyors so the Water DCC is not included but may be assessed by another water purveyor or the City depending on the location of the development.

DCCs have increased since the last update in 2019 and are dependent on where development is occurring in the City (Figure 1 and Appendix A). City Centre represents about 85% of the new residential units and DCCs have increased less than 5% per year for the past 3-years leading up to this update and are well within recent inflation for construction and land. Cumulative increase in residential DCCs, excluding carriage houses, for the three years since the last update is approximately 14%.

Southwest Mission is nearing buildout with some of the infrastructure already in place. This area is seeing the smallest increase of less than 3% per year since the last update in 2019 but still has the highest overall DCCs due to high costs of extending services to this area at the southern boundary of the City. Cumulative increase in residential DCCs, excluding carriage houses, for the three years since the last update is approximately 4%.

The DCC rates for North of the Inner City have increased in the range of 4% to 12% per year since the last update in 2019. Cumulative increase in residential DCCs, excluding carriage houses, for the three years since the last update is approximately 24%.

In addition to inflationary impacts, this increase reflects the large transportation infrastructure projects needed to support growth in this area including:

- Acland 2 (Airport Way – John Hindle Dr) - \$15.2 million
- Commonwealth Rd - \$10.5 million
- Glenmore 5 (Union – John Hindle) - \$10.5 million
- Glenmore Rd Safety Upgrades (John Hindle – Lake Country) - \$14.8 million
- Hollywood Rd and ATC (various phases) - \$27.3 million

The new Light Industrial DCC reflects the impacts of servicing this development type and is comparable to the Industrial DCC levied by other similar communities. The Heavy Industrial rate remains one of the lowest in the province.

In summary, the City has demonstrated its commitment to achieving a balanced approach for this DCC update. While key cost drivers (land and construction costs) are entirely beyond the City's control, the City has contained the size of the DCC Program and implemented improvements that reflect the true cost of servicing growth while at the same time ensuring the DCC Program is understandable, transparent and aligns with best practice.

Table 4: Proposed DCC Rates.

Land Use	Service Area	Roads			Water	Sanitary Sewers		Drainage	Parks		Total*		
	Sector	R-I	R-B	R-E	W-A	Trunks	Treatment		D-A	Acquisition	Development	Inner City/ Common	South-West Mission
						Unit of Measure	Inner City/ Common	South Mission		North of Inner City	City-wide		
Residential 1	Per unit or lot Single-detached or Units/Ha <= 15	\$11,903	\$27,352	\$19,619	\$998	\$1,908	\$4,772	\$702	\$8,337	\$6,462	\$35,083	\$50,531	\$41,800
Residential 2	Per unit or lot 15 < Units/Ha <= 35	\$10,760	\$24,725	\$17,735	\$903	\$1,725	\$4,314	\$492	\$8,337	\$6,462	\$32,992	\$46,957	\$39,064
Residential 3	Per unit 35 < Units/Ha <= 85	\$7,998	\$18,378	\$13,182	\$671	\$1,282	\$3,207	\$281	\$8,337	\$6,462	\$28,237	\$38,616	\$32,750
Residential 4	Per unit > 85 Units/Ha	\$7,287	\$16,745	\$12,011	\$611	\$1,168	\$2,922	\$211	\$8,337	\$6,462	\$26,997	\$36,455	\$31,110
Carriage House	Per unit	\$4,504	\$10,349	\$7,423	\$378	\$722	\$1,806	\$211	\$8,337	\$6,462	\$22,419	\$28,264	\$24,960
Commercial	Per Square Metre	\$39.42	\$90.57	\$64.96	\$3.31	\$6.32	\$15.80	\$2.81	\$13.80	\$10.70	\$92.15	\$143.31	\$114.39
Institutional A	Per Square Metre	\$39.42	\$90.57	\$64.96	\$3.31	\$6.32	\$15.80	\$2.60	Exempt	Exempt	\$67.44	\$118.59	\$89.68
Institutional B	Per Square Metre	\$0.00	\$0.00	\$0.00	\$3.31	\$6.32	\$15.80	\$2.60	Exempt	Exempt	\$28.03	\$28.03	\$24.72
Heavy Industrial	Per Hectare	\$29,402	\$67,560	\$48,460	\$5,536	\$10,580	\$26,464	\$5,267	\$10,296	\$7,980	\$95,526	\$133,684	\$109,047
Light Industrial	Per Square Metre	\$19.71	\$45.28	\$32.48	\$1.65	\$3.16	\$7.90	\$2.11	\$6.90	\$5.35	\$46.78	\$72.36	\$57.90

Note: * Some parts of Kelowna are not serviced by the City's Water or Wastewater services. These areas would not be subject to the DCC for these specific services. (ex. most of Transportation sector R-E is not serviced by Kelowna's DCC Water program, so the combined total rate does not include the water charge. These areas may be subject to charges from other water service providers, including the Glenmore Ellison Irrigation District, Rutland Waterworks and the Black Mountain Irrigation District.)

1 INTRODUCTION AND BACKGROUND

1.1 OVERVIEW OF SERVICING PLAN AND FINANCING STRATEGY

Located at the core of one of the fastest growing metropolitan areas in Canada, the City of Kelowna is home to a population of over 143,000 residents, making it the largest community in the Regional District of Central Okanagan. Kelowna's population is projected to grow by 45,000 to nearly 190,000 by 2040. To accommodate growth, the City has identified infrastructure investment valued at \$1.3 billion to fund transportation, utilities (water, sanitary sewer, and drainage) and parks infrastructure and land acquisition.

The 20-year Servicing Plan and Financing Strategy serves as the foundation for City's Development Cost Charge (DCC) program. The 20-Year Servicing Plan and DCC Bylaw are interrelated and for simplicity will be collectively termed herein as the 'DCC Program.'

This update to the DCC Program is considered a 'Major' DCC amendment as defined by the BC Best Practice Guide and includes a comprehensive review of growth forecasts, infrastructure servicing demand, construction and land costs, and principles and fundamentals to ensure the DCC Program aligns with best practices in a fair and equitable manner.

1.2 GUIDING LEGISLATION AND MUNICIPAL PLANS AND POLICIES

The DCC Program was developed to be consistent with the following legislation, plans and policy guides:

Local Government Act,

The *Development Cost Charge Best Practice Guide* (BPG),

City of Kelowna Development Cost Charges Bylaw No. 10515, 2020 as amended,

City of Kelowna 2040 Official Community Plan, adopted January 2022,

City of Kelowna 2040 Transportation Master Plan, adopted January 2022,

City of Kelowna 10-year Capital Plan 2021-2030,

City of Kelowna Asset Management Plans,

Kelowna and UDI DCC Review, 2018,

City of Kelowna 2030 Official Community Plan, Bylaw No. 10500, as amended,

City of Kelowna Zoning Bylaw No. 8000, 2022 as amended,

Various capital planning programs and cost estimates.

1.3 STAFF AND STAKEHOLDER CONSULTATION

The DCC Program update has been ongoing for more than two years in parallel with updates to the 2040 OCP and TMP. Along the way, the cross departmental project team has had extensive communication with stakeholders including Urban Development Institute (UDI), Canadian Home Builders Association (CHBA), University of British Columbia (UBCO), Okanagan College, Council, Ministry of Municipal Affairs, members of the Senior Leadership Team and City Staff. Major stakeholder touch points are listed in Appendix C.

1.3.1 Consultation with City Staff

The DCC Program update engaged City staff at key phases of the project. Three key working groups were engaged throughout the course of the assignment.

Steering Committee: This committee was composed of staff and senior management from Finance, Infrastructure, Policy and Planning and Development Services. The Steering Committee provided direction to the project team.

Technical Team: Composed of representatives from Finance, Infrastructure, Policy and Planning and Development Services. The team was consulted regularly and responsible all aspects of the update.

Senior Leadership Team sub-committee: The Senior Leadership sub-committee, including the City Manager, was consulted three times throughout the study process to communicate recommendations and ensure continued support for the DCC Program fundamentals and rates.

1.3.2 External Stakeholders Industry

To date, UDI, CHBA and other stakeholders have been consulted throughout the DCC Program update (Appendix C). Several meetings and correspondence have occurred leading up to this update.

1.3.3 Council Engagement

The following public meetings were held with Council to keep them informed on the process, infrastructure impacts and rates:

- 2040 Infrastructure Impact Analysis August 12th, 2019
- 20-Year Servicing Plan Update – March 16th, 2020
- DCC Program Update September 13th, 2021

1.3.4 Ministry Consultation

Several meetings with the Ministry of Municipal Affairs were held to discuss policy and process issues with regards to costing, the treatment of funding agreements and partnerships, and program implementation. Feedback from these meetings was used to refine assumptions in the DCC Program to ensure they align with Ministry expectations and expedite the approval.

2 KEY ELEMENTS OF THE DCC REVIEW

The last major amendment to the DCC Program was in 2011 in conjunction with the 2030 OCP. Minor DCC Program updates, to bring project cost estimates in line with updated market construction and land acquisition costs, occur regularly, most recently in April 2019. In February 2020, a new Parks Development DCC category was added to the program.

The proposed DCC Program ensures that the benefiter of municipal services pay infrastructure costs in a fair and equitable manner. The proposed DCC Program creates certainty by providing stable charges to the development industry and by allowing timely construction of infrastructure necessary to accommodate growth.

Policy recommendations from this review were assessed against the BC DCC Best Practice Guide to ensure conformity with local practice and precedent. Five outlines key elements, decisions and supporting rationale used in the update, while also indicating whether the proposed approach aligns with the Best Practice Guide.

Table 5: DCC Key Elements and Best Practice

Key element	Proposed DCC Update	Rationale	Aligns with Best Practice Guide?
Time Frame	20 years	Aligns with 2040 OCP, TMP and capital planning time frames	✓
City-wide or area-specific charge?	Citywide and area-specific	Each capital program gives due consideration for the geography of service provision and benefit. Allocation of growth and capital projects have been reviewed to consolidate service area geographies in a manner that ensures equitable allocation of cost and benefit from infrastructure investment.	✓
Grant Assistance/ Cost Sharing	Yes	Select transportation and drainage projects will be partially funded via sharing agreements. Grant assistance included in this program reflects approved grants and reflects qualification for inclusion per Ministry direction.	✓

Key element	Proposed DCC Update	Rationale	Aligns with Best Practice Guide?
Developer Contribution	Yes	Select transportation, water and wastewater projects include assumptions for developer contributions, including for frontage improvement requirements.	✓
Interim Financing	Yes	Projects do not require interim financing, however, interest on long-term debt financing has been included for certain projects.	✓
Benefit Allocation	25% to 100%	Benefit to existing and benefit to growth is calculated on a project-by-project basis following service-specific assumptions. 100% is used to reflect exclusive benefit to new development. 25% is used to reflect estimated benefit to new residents based on proportion of new population growth to total population.	✓
Municipal Assist Factor	1% to 15%	The calculation of the municipal assist factors was updated to align with the DCC Best Practices Guide. Kelowna is contributing the minimum allowable assist factor of 1% for water, wastewater, and drainage programs. A municipal assist of 15% is maintained for transportation programs, and 8% for parkland acquisition and parks development programs to offset cost impacts to development and recognize the broader benefit of some of the projects that may not be fully captured by the BTE allocations.	✓
Secondary Suite Assist	1% to 3%	Municipal assist to support infrastructure burden caused by secondary suites is included.	✓

Key element	Proposed DCC Update	Rationale	Aligns with Best Practice Guide?
Units of Charge	Per unit/parcel, per sqm of gross floor area, and per site area	<p>Residential units are assessed on a per lot or unit basis, distinguished by density (in terms of units per ha) in line with anticipated occupancy.</p> <p>Commercial, Institutional and Light Industrial are assessed on a per square meter gross floor area basis, as impact on infrastructure correlates with floor space.</p> <p>Heavy Industrial uses are assessed on a site area basis, as these the impact of these uses correlates more with land area than built space.</p>	✓

3 GROWTH PROJECTIONS AND EQUIVALENCIES

3.1 OVERVIEW OF THE 2040 OCP

Kelowna’s 2040 Official Community Plan (2040 OCP) serves as the guiding document for planning for growth up to 2040. The 2040 OCP addresses land uses, mapping, and policies to reflect the community’s vision and clearly signals where development will be prioritized and supported via planned delivery of infrastructure and amenities.

3.2 RESIDENTIAL GROWTH

Kelowna’s population is projected to grow by approximately 45,000 by 2040 raising the City’s population to 190,000.

Table 6: Projected Residential Growth by Unit Type 2021-2040

Type	Density	New Units	Persons Per Unit	New Population
Residential 1	SFU	4,186	2.64	11,060
Residential 2	15 – 35 UPH	2,392	2.39	5,710
Residential 3	35 – 85 UPH	3,356	1.78	5,960
Residential 4	> 85 UPH	13,602	1.62	22,010
Carriage House	Per Unit	299	1.00	300
Secondary Suite	Per Unit	1,495	1.00	1,500
Total Residential OCP Growth to 2040		25,330	1.84	46,540

Data from the 2016 Census and recent trends in building permit data indicates an overall shift in new residential development towards multi-family units and more compact housing forms. As a result, the DCC Program includes the following housing types, in line with categorizations suggested by the Best Practices Guide:

Residential 1 - (Single-family homes and multi-family development less than 15 dwelling units per hectare) – The City is projecting an additional 4,186 new Residential 1 units which may contain secondary suites. Census data shows no difference in the number of people living in single-family homes relative to lot size. Therefore, the burden on the City’s infrastructure, based on lot size, is the same for single-family homes and on average there are 2.64 people per unit. However, some single-family units are expected to also include secondary suites (see below).

Secondary Suites and Carriage Houses - Secondary Suites and Carriage Houses. It is estimated that 30% of single-family homes in Kelowna will be built with suites or carriage houses. Council agreed in 2008 to charge a flat fee DCC of \$2,500 for all secondary suites and carriage houses which would normally be charged a much higher rate (equivalent to a condominium); with the revenue difference borne by taxation and utility funding. The current practice was flagged by the Ministry as an area that needed to be amended because it provided a specific land use subsidy which is not permitted, as any subsidy must be applied evenly for all land uses.

This update has introduced a new category for Carriage Houses and assessed a higher DCC in the range of \$23,000 - \$28,000, to better reflect the actual infrastructure impact of these stand-alone units.

Secondary suites are often exempt from paying DCCs because their construction value is less than the \$50,000 minimum required to trigger DCCs as defined by the Local Government Act. For this update, it is proposed that suites are not assessed a DCC. Simply stated, once the developer pays their residential DCC for the base build the secondary suite can be constructed with no further DCCs levied. With the expected increase in suites and their associated demand on infrastructure, tax/utility funding used previously to subsidize suites has been carried forward and applied to the municipal assist to offset the infrastructure burden that suites may cause. The Ministry agreed that increasing the municipal assist is an equitable and transparent approach to addressing the incremental infrastructure impacts caused by suites.

Residential 2 – Multi-family developments with a density greater than 15 and less than or equal to 35 residential dwelling units per hectare (duplex, triplex, four-plex and row housing). The City is forecasting an additional 2,392 Residential 2 units by 2040. Census data indicates that these units have similar household size with on average 2.39 PPU.

Residential 3 – Multi-family developments with a density greater than 35 and less than or equal to 85 residential dwelling units per net hectare (generally row housing and up to four storey apartment buildings). The City is forecasting an additional 3,356 Residential 3 units by 2040. Census data indicate that these units have average household size of 1.78 PPU.

Residential 4 – Multi-family developments with a density greater than 85 residential dwelling units per net hectare (generally apartments greater than four storeys). The City is forecasting an additional 13,602 Residential 4 units by 2040. Census data indicates that on average there are 1.62 people per unit living in apartments.

Previous versions of the DCC Program included a Residential 5 category for small apartment units 55.8 square metres (approximately 600 square feet) or less, which qualified for a reduced DCC rate on the assumption that these units typically are home to fewer residents on account of their small size. A review of occupancy patterns determined that the difference in occupancy between Residential 4 (apartment units) and the Residential 5 category was not enough to warrant a separate rate, particularly given that micro suite units of less than 29 square metres are already exempt, per legislation. As such, the previous Residential 5 category has been rolled up into the Residential 4 category, resulting in an adjustment to overall per unit equivalencies to reflect the blended category.

3.3 NON-RESIDENTIAL GROWTH

Estimated future growth for non-residential land uses is noted in Table 7. To estimate the future commercial, industrial, and institutional growth projections, the basis of the current DCC Bylaw was reviewed, along with the amount of available non-residential land available for development. Growth in each non-residential category is stated in terms of the way the DCC is calculated – per square meter of gross floor area for Commercial, Institutional and Light Industrial uses, and per net hectare of site area for Heavy Industrial land uses (Table 7).

Table 7: Projected Non-Residential Growth by Type 2021-2040

Land Use	Calculation Method	New Development
Commercial	Square metres of GFA	313,000
Institutional	Square metres of GFA	210,000
Light Industrial	Square metres of GFA	187,000
Heavy Industrial	Hectares of Site Area	40

Note: Figures have been rounded

Light and Heavy Industrial

Historically, industrial development has been primarily land-extensive in nature, often resulting in buildings with modest gross floor area and coverage ratios when compared to the total area of the development site.

However, given the changing nature of industrial-type work and shifting development trends, it is becoming increasingly common for ‘light industrial’ type employment, such as some commercial, production, distribution, and repair-focused activities, to occur in higher-density built forms. As these activities can locate on smaller sites with more gross floor area and higher coverage ratios, including multi-story development in some cases, the land

area of site may not reflect the amount of employment and customers, or subsequent demand for services, occurring thereon.

The City has some of the lowest Industrial DCCs in the province that do not fully fund the servicing demands of the shifting ‘Light industrial’ development trend. To better reflect the true cost for servicing the Industrial category has been split into two categories – Light Industrial and Heavy Industrial. The distinction between the two industrial categories will be based on the Zoning Bylaw with Zones I1 and I2 categorized as Light Industrial and Zones I3 and I4 categorized as Heavy Industrial. The Light Industrial DCC is approximately 50% of the Commercial DCC rate and is more in line with the cost of servicing this development form

The forecast for industrial demand to 2040 was prepared in terms of land area, with a total forecast of 95 hectares of industrial land. Based on a review of city-wide industrial zoning, 55 ha of the industrial land supply growth projection is assumed to be Light Industrial in nature. Assuming an average development density of 0.34 FSI for Light Industrial projects, in line with higher end assumption of the OCP and recent market studies¹, results in a forecast of just under 187,000 square metres of Light Industrial growth by 2040.

3.4 EQUIVALENT UNITS

Equivalency factors are established to reflect the relative demand on infrastructure from each of the land use categories. The land use category, Residential 1, serves as the baseline for the assessment of impacts on infrastructure of all other residential and non-residential categories.

One (1) Equivalent Unit = 1 Single Family (Residential 1) Unit

Transportation, Water and Wastewater Trunks and Treatment: The relative demand on the transportation, sewer and water systems is determined using estimated number of persons per unit for residential growth, and equivalent population per square metre and per hectare of site area for non-residential growth. These equivalencies mirror the approach employed in the previous DCC Program.

Drainage: The demand on the storm drainage system of developing a parcel of land is expressed as the amount of stormwater run-off that must be accommodated by the system. The accepted parameter for expressing imperviousness in stormwater run-off calculations

¹ Rollo + Associates, *Commercial Demand Study for City of Kelowna*, November 2018

is the “run-off coefficient”. The run-off coefficient reflects the ratio between the impervious area on a parcel and the total area of the parcel. Run-off coefficients are then used to determine equivalency factors necessary to develop Equivalent Drainage Units (EDUs), the basis for calculating drainage DCCs.

Parkland Acquisition and Park Development: Parks Acquisition and Development DCC assumes an equal weighting between all residential unit types, primarily to reflect the relative increase in demand for parks space that comes from higher density development. Non-residential rates are based on the same equivalencies used for transportation, water, and wastewater, but have been adjusted down by 50% to account for the reduced demand for parkland generated by businesses compared to residential uses.

Light Industrial Equivalencies: The built form of the emerging "Light Industrial" buildings is much more dense than traditional Heavy Industrial uses and has a much higher level of employment and customers per hectare. For the DCC services, employment is deemed the key driver of the demand for services. Non-residential land uses with higher employment density generate greater demand for services and should, therefore, be subject to higher DCC rates. The Light Industrial DCC is approximately 50% of the Commercial DCC rate and is more in line with the cost of servicing this development form.

Table 8: Equivalency Factors by Land Use and Unit Type

Equivalency Factors	Transportation	Water & Wastewater Trunks and Treatment	Drainage	Parks
Residential 1 (per dwelling unit)	100%	100%	100%	100%
Residential 2 (per dwelling unit)	90%	90%	70%	100%
Residential 3 (per dwelling unit)	67%	67%	40%	100%
Residential 4 (per dwelling unit)	61%	61%	30%	100%
Carriage House (per dwelling unit)	38%	38%	30%	100%
Commercial (per square metre)	0.33%	0.33%	0.40%	0.17%
Institutional (per square metre)	0.33%	0.33%	0.37%	0.17%
Light Industrial (per square metre)	0.17%	0.17%	0.30%	0.08%
Heavy Industrial (per hectare)	247%	555%	750%	124%

4 MAJOR SERVICING REQUIREMENTS

4.1 SUMMARY OF CAPITAL PROGRAM

The key elements for determining the DCC rates include recoverable infrastructure costs, growth forecasts and equivalencies described earlier in this report.

As specified by the *Local Government Act*, the DCC recoverable costs for the projects include construction costs, engineering, design, administration, contingency, and financing costs on long-term debt where appropriate. The DCC recoverable cost is calculated on a project-by-project basis after accounting for benefit to existing (described below), capital grants, subsidies, developer contributions, or other deductions consistent with legislation.

For some projects, a portion of the project may provide benefit to the existing residents and businesses in Kelowna. This benefit to existing (BTE) and associated net costs are funded from City sources, such as property taxes and utility rates. The amount of City funding, along with the municipal assist factor, is identified as Total Municipal Costs. An overview of the DCC costs by infrastructure type is provided in Table 9.

Table 9: DCC Costs by Service (\$millions)

Service	Total Capital Costs	Cost Sharing ¹	Opening Reserve	DCC Recoverable Program Costs ²	Total Municipal Costs ³
Transportation	\$527.8	\$49.3	\$74.9	\$236.4	\$167.2
Water	\$61.9	\$3.7	\$19.3	\$12.7	\$26.2
Sewer Trunks	\$62.7	\$4.1	\$5.2	\$33.3	\$20.1
Sewer Treatment	\$121.8	-	(\$7.4)	\$92.4	\$36.8
Drainage	\$58.0	\$20.8	-	\$9.2	\$28.0
Parkland Acquisition	\$244.5	-	\$35.4	\$182.4	\$26.7
Park Development	\$217.1	-	\$1.0	\$141.4	\$74.7
Total	\$1,293.8	\$77.9	\$128.4	\$707.8	\$379.7

Note: (1) Cost sharing includes approved government grants and anticipated developer contributions.

(2) Net of DCC reserve balances collected under previous DCC Program

(3) Includes municipal assist factor and benefit to existing development.

4.2 GEOGRAPHIC SECTOR COST ALLOCATION

The BC Best Practice Guide allows DCCs to be calculated on a municipal-wide or area specific (sector) basis, however, the recommended practice is that DCCs are established on a municipal-wide basis, unless there is a significant disparity between development and benefiting users. A municipal-wide charge has been applied to all service areas except Transportation where the sectors were consolidated from six in the previous program to three for the proposed DCC Program. The three sectors within Transportation were retained as there is unique transportation challenges to each sector that warrant the sector approach. These sectors include:

Sector I – City Centre (including City Centre, Southeast Kelowna, Rutland, Black Mountain)

Sector B – South Mission

Sector E – North of Inner City (including University, McKinley, Airport and north Industrial)

4.3 COST ALLOCATION: BENEFIT TO EXISTING & GROWTH

For each capital project, costs are allocated between benefit to existing residents (BTE) and new growth. To determine the proper allocation for each project, individual projects were reviewed using the following criteria:

- Projects that are required solely to accommodate new growth. These projects would not be contemplated if no new growth were forecasted and one hundred percent (100%) of the benefit and cost (net tax assist) of each project in this category has been assigned to new growth.
- Projects that are required for growth but also provide benefit to existing residents either through improvement to service levels or renewal of existing infrastructure. For these projects the BTE was determined by quantifying the level of service improvement and asset renewal costs and summing these two as a percentage of the overall project:

BTE = Level of Service Improvement + Asset Renewal Compensation

Level of service improvement BTE was based on engineer analysis, or the percent of growth expected by 2040 (25%), where appropriate. The asset renewal BTE was assessed based on the depreciated value of assets being replaced as part of the project.

The following table indicates, in general terms, the percentage of costs that are attributable to existing residents according to the type of services.

Table 10: Benefit to Growth Shares by Service

Service	Benefit to existing (%)
Transportation	0% to 94%
Water	0% to 58%
Sewer Trunks	0% to 73%
Sewer Treatment	30%
Drainage	75%
Parkland Acquisition	0%
Park Development*	0% to 52%

Note: *Park development is assumed 100% to growth but is netted down to account for project components that are ineligible for DCC funding, in line with statutory limitations of the LGA.

4.4 MUNICIPAL ASSIST

Legislation requires municipalities to contribute an ‘municipal assist factor’ (MAF) to pay for municipal parks and infrastructure. The assist factor is a percentage of the development related costs that is paid by the municipality and is in addition BTE (described above). No guidance is provided by the Ministry as to the magnitude of the assist factor; some local governments set it as low as one percent, while others have set it as high as 50%. The assist factor reflects Council’s desire to encourage development and is largely a political decision. A comparison of assist factors is set out in the table below. These MAF’s include an assist to support secondary suites discussed in the next section.

Table 11: Municipal Assist Factor

Community	Municipal Assist Factor (%)				
	Transportation	Water	Sewer	Drainage	Parks
Kelowna	16%	2%	2%	2%	11%
Surrey	5%	10%	10%	10%	5%
Langley	1%	1%	1%	1%	1%
Abbotsford	10%	1%	1%	10%	5%
Chilliwack	10%	10%	10%	10%	10%
Coquitlam	1%	1%	1%	1%	1%
Richmond	1%	1%	1%	1%	1%
Kamloops	10%	1%	1%	1%	1%
Vernon	1%	N/A	1%	1%	N/A

4.5 SECONDARY SUITE MUNICIPAL ASSIST

The Council approved subsidy for secondary suites was carried forward in this update but it is now shown as part of the municipal assist as opposed to buried in the DCC calculations. The Ministry agreed that increasing the municipal assist is an equitable and transparent approach to addressing the incremental infrastructure impacts caused by suites,

The secondary suite municipal assist is included with the municipal assist described in Section 4.4 and increases the MAF used in the previous DCC Program by the amounts shown in Table 12.

Table 12: Secondary Suite Municipal Assist Factor

	Municipal Assist Factors (%)				
	Transportation	Water	Sewer	Drainage	Parks
Base	15%	1%	1%	1%	8%
S. Suites	1%	1%	1%	1%	3%
Total	16%	2%	2%	2%	11%

The unit count for secondary suites has been removed from the DCC calculations because the secondary suite assist included in the DCC rate calculations, as reductions from the DCC recoverable capital costs, more than accounts for any infrastructure needs associated with secondary units. It would be inequitable, to include the secondary suite unit count in the DCC rate calculation as any associate costs have been removed; including the units would artificially reduce the DCC rates and the City would not fully fund the development-related costs associated with meeting the increased needs arising from all other development.

4.6 INTEREST ON LONG-TERM DEBT

Per the Best Practices Guide interest is permitted to be included in a DCC where fixed-capacity infrastructure, such as a Wastewater Treatment Plant ('the Plant'), needs to be constructed before growth can occur, and before adequate DCCs can be collected. The City has identified the Wastewater Treatment Digester project as eligible for interest recovery of growth's share as the project expands the Plant's capacity to facilitate future growth. The interest on long-debt financing must utilize a rate not more than the prevailing Municipal Finance Authority debenture rate and end by the year 2040. The amount is identified in Appendix A of the Wastewater Treatment Servicing Plan & Financing Strategy.

4.7 DCC CAPITAL PROJECTS BY SERVICE

The DCC Program was developed by reviewing infrastructure plans and identifying those projects required to meet the demand to accommodate growth as identified in the 2040 OCP. All project costs were updated to reflect current construction and land acquisition costs. Project details for each service category of infrastructure are included below.

4.7.1 Transportation

The Transportation DCC Program includes new roads and bridges, capacity improvements, active transportation corridors, sidewalks, street improvements, intersection improvements and signalization. The program and calculations are shown in Appendix A.

4.7.2 Total Program Costs

The total cost of the Transportation DCC Program is approximately \$527.8 million. These costs include the construction of new transportation infrastructure, engineering, contingency, project administration, interest, and land costs, where applicable.

Table 13: Transportation DCC Program Costs (\$millions)

Total Capital Costs	Cost Sharing	Opening Reserve	DCC Recoverable Program Costs	Municipal Costs
\$527.8	\$49.3	\$74.8	\$236.5	\$167.2



Sector:	City Centre (R-I)	South Mission (R-B)	North of City centre (R-E)
	\$207.2	\$17.3	\$12

4.7.3 Allocation of Benefit and Tax Assist

The Transportation program identifies the proportion of the costs attributable to new growth for each project. The City share of funding is comprised of renewal costs and level of service improvements as described previously (see Section 4.3). Level of service assumptions are based on the nature of the improvement and are summarized below.

Table 14: Transportation Level of Service BTE Assumptions

Project Type	Assumed BTE
Major Intersection Capacity Improvements	33%
Traffic Signals & Roundabouts	33%
Road Safety Improvements	33%
Urban Centre New Population Share	46%
Stand Alone Biking Projects	50%

The BTE for infrastructure renewal is determined on a project-by-project basis and is added to the level of service BTE. See Appendix A for total BTE for individual projects.

4.7.4 Consideration of Local Contributions by Development

Per s.506, Division 11, Part 14 of the *Local Government Act*, provision of local services is a direct developer responsibility, the functions or services of which are not to be included in the determination of DCC rates. To this effect, when a DCC eligible roads project includes an anticipated local share (i.e., developer construct frontage improvement), the gross cost of the project is netted down to reflect the local share to be provided by developers.

A provision for the local share is included in the Transportation capital program as an assumed percentage of the total program cost, set at 10% for projects where a developer contribution is anticipated (Appendix A). This assumption that development preceding road construction will build some of the road project as part of their frontage improvements reduces the project value and lowers the recoverable DCC. Without this assumption Transportation DCCs would be higher.

4.7.5 Municipal Assist Factor

A municipal assist of 16% is applied for the Transportation DCC Program which is comprised of an 15% municipal assist plus 1% tax assist for secondary suites.

4.7.6 Traffic Generation and Calculation of Road Impact

The demand for transportation infrastructure is based on persons per unit associated with each land use as described in Section 3.4.

Table 15: Equivalent Units for Transportation

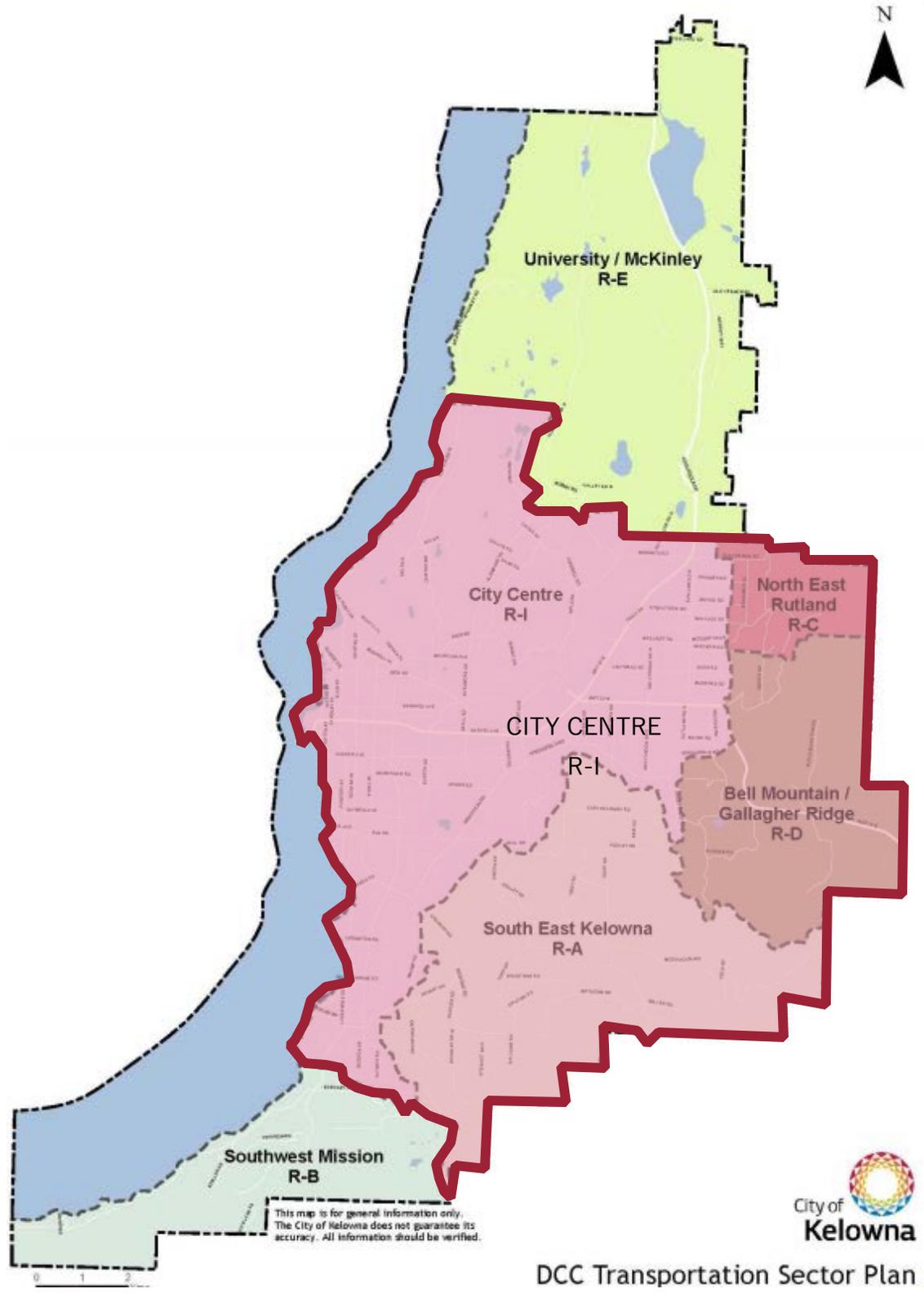
Land Use	Base Unit	Equivalent Unit Per Base Unit
Residential 1	Dwelling Unit	1.00
Residential 2	Dwelling Unit	0.904
Residential 3	Dwelling Unit	0.672
Residential 4	Dwelling Unit	0.612
Carriage House	Dwelling Unit	0.378
Commercial	Gross Floor Area (m ²)	0.0033
Institutional	Gross Floor Area (m ²)	0.0033
Light Industrial	Gross Floor Area (m ²)	0.0017
Heavy Industrial	Site Area (ha)	2.47

4.7.7 Geography of Charges

The Transportation DCC Program uses a sector approach to determine the allocation of project costs. A common sector rate (R-I City Centre) applies across the entire City. Additional area specific rates apply to the north and south sectors of the City,

As part of this update, the number of Transportation sectors was reduced from 6 to 3. Sectors R-A South East Kelowna, R-C North East Rutland and R-D Bell Mountain/Gallagher Ridge were combined with Sector R-I City Centre. Sectors R-B South Mission and R-E North of Inner City were retained as there is unique transportation challenges to each sector that warrant the sector approach. A map of the Transportation program sectors is provided in Figure 1 on the following page.

Figure 2: DCC Transportation Service Sector Plan.



DCC Transportation Sector Plan

4.7.8 Water

The City is one of five major water purveyors operating within Kelowna's municipal boundaries. The City provides water service to approximately 80,000 of its 140,000 residents with the remainder of the City serviced primarily by four independent irrigation districts.

The Water DCC Program includes new and upgraded mains, pump stations, disinfection facilities and reservoirs. The DCC Program and calculations are shown in Appendix A.

Total Program Costs

The total cost of the water program is approximately \$61.9 million. These costs include the construction of new water infrastructure, plus engineering, contingency, project administration and land costs, where applicable.

Table 16: Water DCC Program Costs (\$millions)

Total Capital Costs	Cost Sharing	Opening Reserve	DCC Recoverable Program Costs	Municipal Costs
\$61.9	\$3.7	\$19.3	\$12.7	\$26.2

Allocation of Benefit

Allocation is assumed 100% for growth related projects that are not replacing an existing asset or improving service levels. For projects that replace or upgrade existing infrastructure, the cost for renewal and service level improvement are accounted within the Benefit to Existing category and funded from City sources.

Municipal Assist Factor

A municipal assist of 2% is applied for the Water DCC Program which is comprised of a 1% municipal assist plus a 1% an assist for secondary suites.

Water Demand and Calculation for Equivalent Population

The Water DCC is based on the need for additional infrastructure to meet the demands of growth. Persons per unit are used to project demand for water service as described in Section 3.4 and summarized below.

Table 17: Equivalent Units for Water

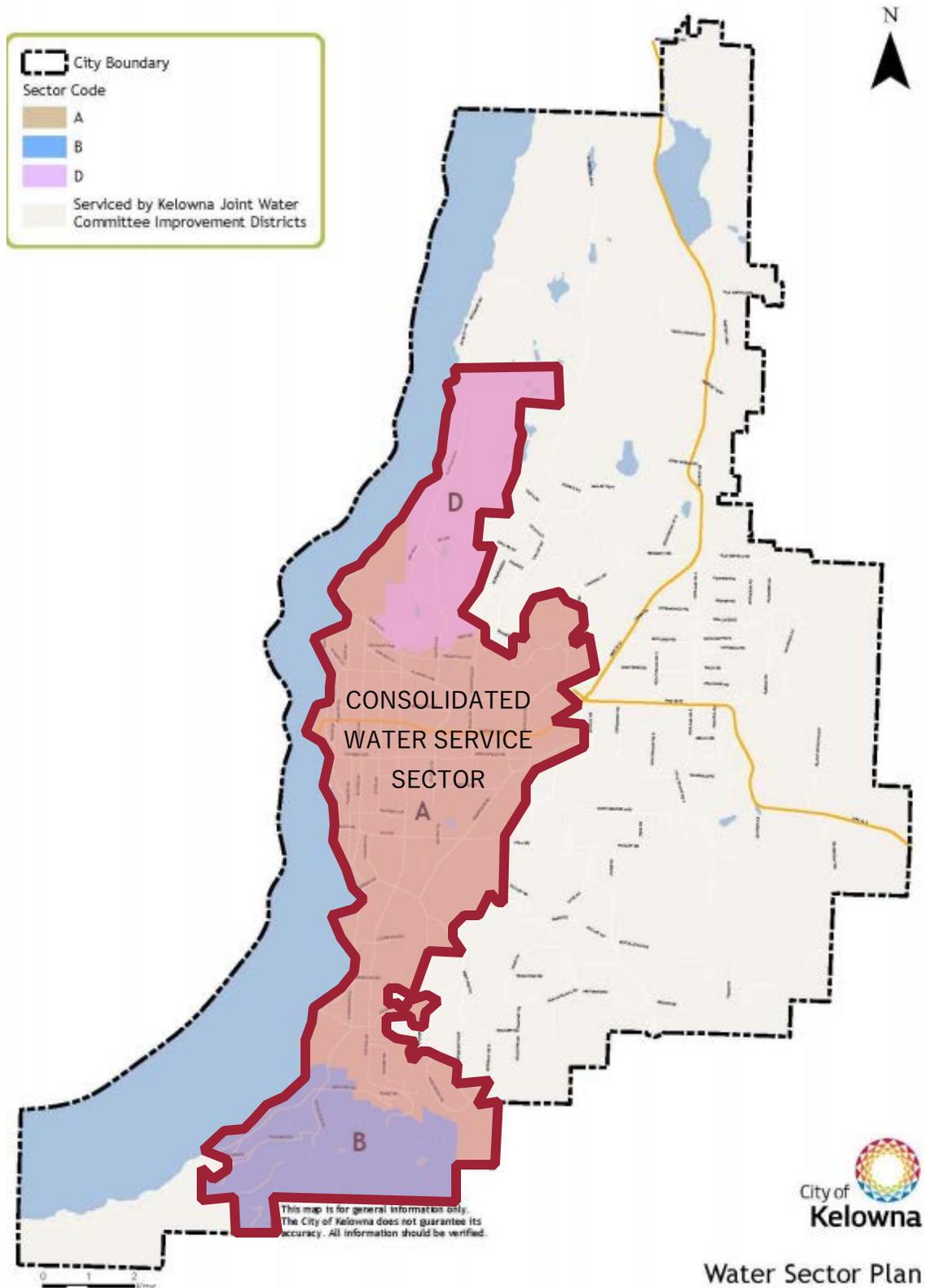
Land Use	Base Unit	Equivalent Unit Per Base Unit
Residential 1	Dwelling Unit	1.000
Residential 2	Dwelling Unit	0.904
Residential 3	Dwelling Unit	0.672
Residential 4	Dwelling Unit	0.612
Carriage House	Dwelling Unit	0.378
Commercial	Gross Floor Area (m ²)	0.0033
Institutional	Gross Floor Area (m ²)	0.0033
Light Industrial	Gross Floor Area (m ²)	0.0017
Heavy Industrial	Site Area (ha)	5.545

Geography of Charges

The Water DCC Program applies only to the area within the City’s water utility boundary. Areas outside this boundary are not subject to the City’s DCCs but may be subject to separate charges administered by the other water purveyors.

Previous versions of the DCC Program divided the service area into three distinct sectors. For this DCC Program the three sectors have been combined into one consolidated city-wide sector. The geography of this service sector is shown in Figure 3 on the following page.

Figure 3: Water DCC Service Sector Plan.



4.7.9 Wastewater Trunks

The City’s wastewater utility provides wastewater service for approximately 100,000 of its 140,000 residents. The Wastewater Trunks DCC Program includes new trunk sewer mains, sanitary pump stations and sewer upgrades.

Total Program Costs

The total cost of the Wastewater Trunk DCC Program is approximately \$62.7 million. These costs include the construction of new wastewater infrastructure, plus engineering, contingency, and project administration.

Table 18: Wastewater Trunk DCC Program Costs (\$millions)

Total Capital Costs	Cost Sharing	Opening Reserve	DCC Recoverable Program Costs	Municipal Costs
\$62.7	\$4.1	5.3	\$33.2	\$20.1

Allocation of Benefit

Allocation is assumed 100% for growth related projects that are not replacing an existing asset or improving service levels. For projects that replace or upgrade existing infrastructure, the cost for renewal and service level improvement are accounted within the Benefit to Existing category and funded from City sources (Appendix A).

Municipal Assist Factor

A municipal assist of 2% is applied for the Wastewater Trunks DCC Program which is comprised of a 1% municipal assist plus a 1% assist for secondary suites.

Wastewater Trunk Demand and Calculation for Equivalent Population

The demand for wastewater infrastructure is based on the persons per unit associated with each land use as described in Section 3.4 and summarized below.

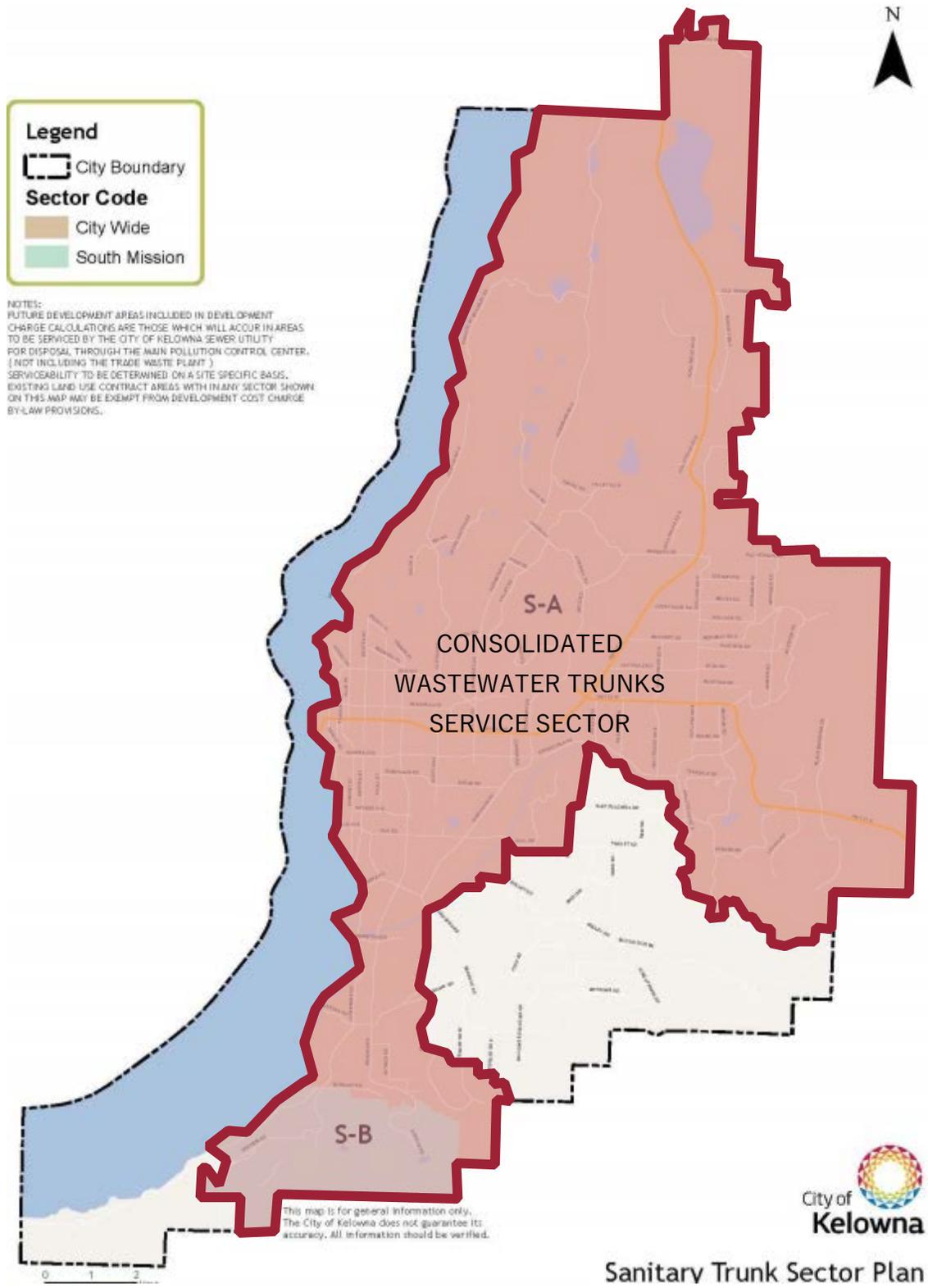
Table 19: Equivalent Units for Wastewater Trunks

Land Use	Base Unit	Equivalent Unit Per Base Unit
Residential 1	Dwelling Unit	1.000
Residential 2	Dwelling Unit	0.904
Residential 3	Dwelling Unit	0.672
Residential 4	Dwelling Unit	0.612
Carriage House	Dwelling Unit	0.378
Commercial	Gross Floor Area (m ²)	0.0033
Institutional	Gross Floor Area (m ²)	0.0033
Light Industrial	Gross Floor Area (m ²)	0.0017
Heavy Industrial	Site Area (ha)	5.545

Geography of Charges

Previous versions of the DCC Program divided the service area into two distinct sectors. For this DCC Program these two sectors have been combined into one consolidated sector (Figure 4).

Figure 4: Wastewater Trunk DCC Service Sector Plan.



4.7.10 Wastewater Treatment

The Wastewater Treatment DCC Program includes the wastewater treatment digester and associated debt financing costs.

Total Program Costs

The total cost of the Wastewater Treatment DCC Program is approximately \$121.8 million. These costs include the construction of new wastewater digester, plus engineering, contingency, project administration, and carry over reserve fund balances, where applicable, plus eligible debt financing costs.

Table 20: Wastewater Treatment DCC Program Costs (\$millions)

Total Capital Costs	Opening Reserve	DCC Recoverable Program Costs	Municipal Costs
\$121.8	\$(7.4)	\$92.4	\$36.8

Allocation of Benefit to Existing

As the wastewater treatment digester serves both growth and existing resident within the Wastewater service area, the benefit to growth is calculated relative to the change in service capacity and change in population within the service area. This equates to a 31% benefit to existing, and 69% benefit allocated to growth.

Municipal Assist Factor

A municipal assist of 2% is applied for the Wastewater Treatment DCC Program which is comprised of a 1% municipal assist plus a 1% assist for secondary suites.

Wastewater Treatment Demand and Calculation for Equivalent Population

Equivalent units for Wastewater Treatment are calculated on an occupancy per unit basis, in the same manner as the Wastewater Trunks program.

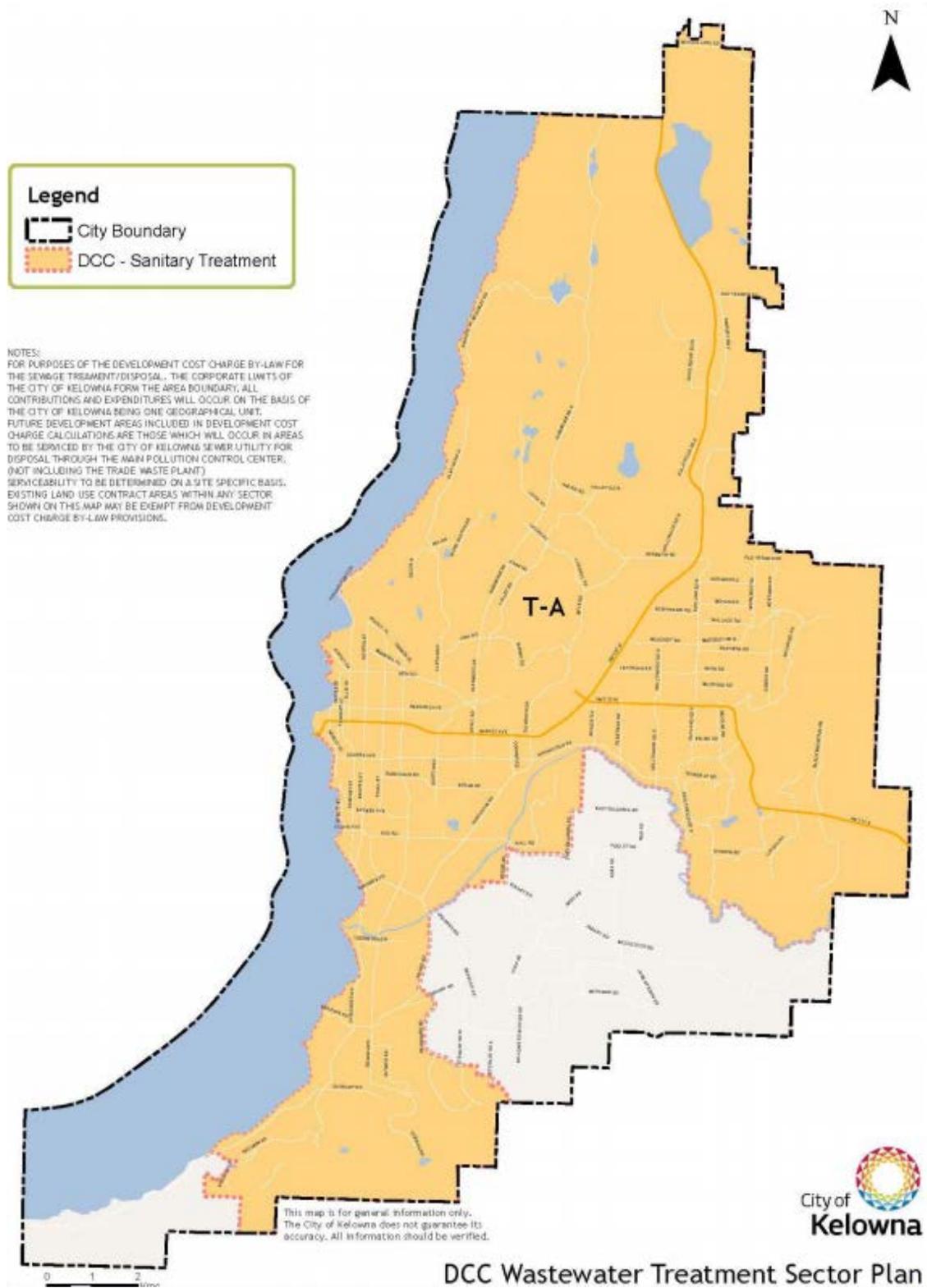
Table 21: Equivalent Units for Wastewater Treatment

Land Use	Base Unit	Equivalent Unit Per Base Unit
Residential 1	Dwelling Unit	1.000
Residential 2	Dwelling Unit	0.904
Residential 3	Dwelling Unit	0.672
Residential 4	Dwelling Unit	0.612
Carriage House	Dwelling Unit	0.378
Commercial	Gross Floor Area (m ²)	0.0033
Institutional	Gross Floor Area (m ²)	0.0033
Light Industrial	Gross Floor Area (m ²)	0.0017
Heavy Industrial	Site Area (ha)	5.545

Geography of Charges

The Wastewater Treatment DCC Program applies to the same geography as the Wastewater Trunks program (Figure 5).

Figure 5: Wastewater Treatment Service Sector Plan.



4.7.11 Stormwater Drainage

The previous DCC Program did not include a separate Drainage DCC but did fund minor drainage infrastructure associated with road works. This includes catch basins, manholes and drainage mains needed for drainage on DCC roads.

The recent floods of 2017 and 2018 have demonstrated a need to better manage the City's major drainage systems which includes the City's creeks and streams. A new Drainage DCC is introduced to fund major system drainage work. The primary focus of drainage works in the next few years is Mill Creek that runs through the City's core area and is an area of future development densification. Future drainage works will focus on other major creeks and streams throughout the City.

Total Program Costs

The total cost of the Drainage DCC Program is \$57.9 million. These costs include the construction of new drainage infrastructure, plus engineering, contingency, project administration, where applicable.

Table 22: Drainage DCC Program Costs (\$millions)

Total Capital Costs	Grant Funding	Opening Reserve	DCC Recoverable Program Costs	Municipal Costs
\$57.9	\$20.8	\$0	\$9.1	\$28.0

Allocation of Benefit

Allocation of benefit to growth is estimated at 25% based on the projected population growth as a share of total population by the 2040.

Municipal Assist Factor

A municipal assist factor of 2% is applied for the Drainage DCC Program which is comprised of a 1% municipal assist plus a 1% assist for secondary suites.

Drainage Demand and Calculation for Equivalent Population

The impact on the storm drainage system by development is expressed as the amount of stormwater run-off that must be accommodated by the system as described in Section 3.4. Run-off coefficients are used to determine equivalency factors necessary to develop Equivalent Drainage Units (EDUs), the basis for calculating drainage DCCs.

Table 23: Equivalent Units for Drainage

Land Use	Base Unit	Equivalent Drainage Unit Per Base Unit
Residential 1	Dwelling Unit	1.000
Residential 2	Dwelling Unit	0.700
Residential 3	Dwelling Unit	0.400
Residential 4	Dwelling Unit	0.300
Carriage House	Dwelling Unit	0.300
Commercial	Gross Floor Area (m ²)	0.004
Institutional	Gross Floor Area (m ²)	0.0037
Light Industrial	Gross Floor Area (m ²)	0.0030
Heavy Industrial	Site Area (ha)	7.500

Geography of Charges

The City's creeks and streams act as major drainage corridors and provide flood protection for the entire City. For this reason, the Drainage DCC is assessed at a city-wide level.

4.7.12 Parkland Acquisition

The Parkland Acquisition DCC Program includes acquiring parkland for neighbourhood, community, recreational, city-wide, and linear parks throughout the city. The program is consistent with the City's OCP, and Linear Parks Master Plan. The program and calculations are shown in Appendix A.

Total Program Costs

Total cost of the Parkland Acquisition DCC Program is \$244.5 million.

Table 24: Parkland Acquisition DCC Program Costs (\$millions)

Total Capital Costs	Opening Reserve	DCC Recoverable Program Costs	Municipal Costs
\$244.5	\$35.4	\$182.4	\$26.7

Allocation of Benefit

The City's Parkland Acquisition program is intended to maintain a parkland provision standard of 2.2 ha of parkland per 1,000 residents as the city grows. As such, 100% of Parkland Acquisition costs are assumed to be associated with growth.

Municipal Assist Factor

A municipal assist of 11% is applied for the Parkland Acquisition DCC Program which is comprised of an 8% tax assist plus a 3% tax assist for secondary suites.

Parkland Acquisition Calculation for Equivalent Population

The City reviewed its parkland demand and land uses as part of the 2020 update to the DCC Program which introduced a Park Development DCC Program. This approach assumes an equal weighting between all residential unit types, primarily to reflect the relative increase in demand for parks space that comes from higher density development and the high cost of land in the core area.

Per Council direction as part of Parks Development DCC, this DCC Program update includes a commercial and industrial Parks acquisition DCC. The Parks equivalency for non-residential use are 50% of those used for water, wastewater, drainage, and transportation to reflect the reduced demand generated by non-residential uses on parks.

Table 25: Equivalent Units for Parkland Acquisition

Land Use	Base Unit	Equivalent Unit Per Base Unit
Residential 1	Dwelling Unit	1.00
Residential 2	Dwelling Unit	1.00
Residential 3	Dwelling Unit	1.00
Residential 4	Dwelling Unit	1.00
Carriage House	Dwelling Unit	1.00
Commercial	Gross Floor Area (m ²)	0.0017
Institutional	Gross Floor Area (m ²)	Exempt
Light Industrial	Gross Floor Area (m ²)	0.0008
Heavy Industrial	Site Area (ha)	1.2350

Geography of Charges

The Parks Acquisition and Development programs are applied municipal-wide consistent with past practice.

4.7.13 Park Development

The Park Development DCC Program includes park improvements neighbourhood, community, city and linear parks throughout the city. The program is consistent with the City’s 2040 OCP, and Linear Parks Master Plan. The program and calculations are shown in Appendix A.

Total Program Costs

Total cost of the Park Development DCC Program is \$217.1 million.

Table 26: Park Development DCC Program Costs (\$millions)

Total Capital Costs	Opening Reserve	DCC Recoverable Program Costs	Municipal Costs
\$217.1	\$1.0	\$141.4	\$74.7

Allocation of Benefit

Like Parkland Acquisition, projects in the Park Development program are assumed to be 100% growth related. However, certain park improvements, such as washrooms, are not considered DCC recoverable per legislation in the *Local Government Act*. These ineligible capital improvements must be municipal funded.

Municipal Assist Factor

A municipal assist of 11% is applied for the Park Development DCC Program which is comprised of an 8% municipal assist plus a 3% tax assist for secondary suites.

Park Development Calculation for Equivalent Population

Park Development equivalencies follow the same approach as described for the Parkland Acquisition program.

Table 27: Equivalent Units for Park Development

Land Use	Base Unit	Equivalent Unit Per Base Unit
Residential 1	Dwelling Unit	1.00
Residential 2	Dwelling Unit	1.00
Residential 3	Dwelling Unit	1.00
Residential 4	Dwelling Unit	1.00
Carriage House	Dwelling Unit	1.00
Commercial	Gross Floor Area (m ²)	0.0017
Institutional	Gross Floor Area (m ²)	Exempt
Light Industrial	Gross Floor Area (m ²)	0.0008
Heavy Industrial	Site Area (ha)	1.2350

Geography of Charges

The Parks Acquisition and Development programs are applied municipal-wide consistent with past practice.

5 DCC RATE SUMMARY

5.1 SUMMARY OF PROPOSED DCC RATES

A summary of the combined charges for each land use category based on the three Transportation sectors (Table 28). The three sectors include:

City Centre – Sector I (including City Centre, Southeast Kelowna, Rutland, Black Mountain)

South Mission - Sector B

North of City Centre – Sector E (including University, McKinley, Airport and north Industrial)

Table 28: Combined DCC Rate by Location

Land use	Unit	City Centre	South Mission	North of City centre*
Residential 1 (Single-detached or < 15 UPH)	Per Unit or Lot	\$35,083	\$50,531	\$41,800
Residential 2 (15< Unit/HA <= 35)	Per Unit or Lot	\$32,992	\$46,957	\$39,064
Residential 3 (35< Unit/HA <= 85 UPH)	Per Unit	\$28,237	\$38,616	\$32,750
Residential 4 (>85 UPH)	Per Unit	\$26,997	\$36,455	\$31,110
Carriage House	Per Unit	\$22,419	\$28,264	\$24,960
Commercial	GFA (m ²)	\$92.15	\$143.31	\$114.39
Institutional	GFA (m ²)	\$67.44	\$118.59	\$89.68
Light Industrial	GFA (m ²)	\$46.78	\$72.36	\$57.90
Heavy Industrial	Site Area (ha)	\$95,526	\$133,684	\$109,047

(*) Areas outside of the Kelowna's water service area are not subject to the City's water DCC. Development in this area may be subject to charges from other water service providers, including the Glenmore Ellison Irrigation District, Rutland Waterworks and the Black Mountain Irrigation District.

Table 29: Detailed Proposed DCC Rates

Land Use	Service Area	Roads			Water	Sanitary Sewers		Drainage	Parks		Total*		
	Sector	R-I	R-B	R-E	W-A	Trunks	Treatment		D-A	Acquisition	Development	Inner City/ Common	South-West Mission
	Unit of Measure	Inner City/ Common	South Mission	North of Inner City	City-wide	City-wide	City-wide	City-wide	City-wide	City-wide	Combined	Combined	Combined
Residential 1	Per unit or lot Single-detached or Units/Ha <= 15	\$11,903	\$27,352	\$19,619	\$998	\$1,908	\$4,772	\$702	\$8,337	\$6,462	\$35,083	\$50,531	\$41,800
Residential 2	Per unit or lot 15 < Units/Ha <= 35	\$10,760	\$24,725	\$17,735	\$903	\$1,725	\$4,314	\$492	\$8,337	\$6,462	\$32,992	\$46,957	\$39,064
Residential 3	Per unit 35 < Units/Ha <= 85	\$7,998	\$18,378	\$13,182	\$671	\$1,282	\$3,207	\$281	\$8,337	\$6,462	\$28,237	\$38,616	\$32,750
Residential 4	Per unit > 85 Units/Ha	\$7,287	\$16,745	\$12,011	\$611	\$1,168	\$2,922	\$211	\$8,337	\$6,462	\$26,997	\$36,455	\$31,110
Carriage House	Per unit	\$4,504	\$10,349	\$7,423	\$378	\$722	\$1,806	\$211	\$8,337	\$6,462	\$22,419	\$28,264	\$24,960
Commercial	Per Square Metre	\$39.42	\$90.57	\$64.96	\$3.31	\$6.32	\$15.80	\$2.81	\$13.80	\$10.70	\$92.15	\$143.31	\$114.39
Institutional A	Per Square Metre	\$39.42	\$90.57	\$64.96	\$3.31	\$6.32	\$15.80	\$2.60	Exempt	Exempt	\$67.44	\$118.59	\$89.68
Institutional B	Per Square Metre	\$0.00	\$0.00	\$0.00	\$3.31	\$6.32	\$15.80	\$2.60	Exempt	Exempt	\$28.03	\$28.03	\$24.72
Heavy Industrial	Per Hectare	\$29,402	\$67,560	\$48,460	\$5,536	\$10,580	\$26,464	\$5,267	\$10,296	\$7,980	\$95,526	\$133,684	\$109,047
Light Industrial	Per Square Metre	\$19.71	\$45.28	\$32.48	\$1.65	\$3.16	\$7.90	\$2.11	\$6.90	\$5.35	\$46.78	\$72.36	\$57.90

Note: * Some parts of Kelowna are not serviced by the City’s Water or Wastewater services. These areas would not be subject to the DCC for these specific services. (e.g., most of Transportation sector R-E is not serviced by Kelowna’s DCC Water program, so the combined total rate does not include the water charge. These areas may be subject to charges from other water service providers, including the Glenmore Ellison Irrigation District, Rutland Waterworks, and the Black Mountain Irrigation District.)

6 IMPLEMENTATION

6.1 TIMING OF COLLECTION

Municipalities collect DCCs at subdivision approval or building permit issuance. The City collects DCCs for detached and attached single family residential developments at time of subdivision approval. All other development will be levied DCCs at time of building permit.

In the case of a phased development, DCCs are payable for the approved phased based on the type and density of development at the time of the subdivision or building permit application. Future phases of development will be assessed later in accordance with the DCC Bylaw at the time of subdivision or building permit approval of each future phase.

6.2 IN-STREAM APPLICATIONS

The new DCC rates will be in force immediately after the adoption by Council of the DCC Bylaw. The *Local Government Act* provides in-stream protection of up to 1-year from changes to DCC rates for subdivision and building permit applications provided the application is complete and all application fees have been paid prior to DCC Bylaw adoption date.

In-stream protection applies to both building permit and subdivision applications received prior to the adoption of the new DCC Bylaw.

For building permit (BP), development permit and rezoning applications:

The application is determined to be complete including receipt of applicable fees and;

The related building permit is issued and DCC paid prior to 1-year from the Bylaw adoption date.

For subdivision applications:

Application for Preliminary Layout Review (PLR) is considered complete including receipt of applicable fees and;

Conditional approval does not lapse during the 1-year exemption period and final subdivision approval and DCC are paid prior to 1-year the anniversary date.

New DCC rates apply in all circumstances for BP and Subdivision applications 1-year after the Bylaw adoption date. All BP or subdivision application extensions beyond the 1-year anniversary are subject to the new DCC rates.

6.3 DCCS ON REDEVELOPMENT AND EXPANSION PROJECTS

When an existing building or development undergoes an expansion or redevelopment the developer is responsible for the applicable DCCs but may receive a DCC credit for the existing development or building on the original site.

For example, if a single-family lot is subdivided into two to construct two small lot single family residential units, then DCCs are credited for the existing single-family lot.

6.4 DCC REBATES AND CREDITS

When development precedes the construction of infrastructure improvements identified in the DCC Program, the developer will be responsible to ‘front-end’ the capital costs for the required trunk works, services and frontage improvements.

Developers may be eligible for DCC credits to offset the capital expenditures provided the work is identified in the DCC Program, is not directly attributable to the development and is not otherwise required through the Subdivision and Servicing Bylaw 7900. DCC credits are only available for the oversizing component of the infrastructure. In other words, the component of the capital costs between local and trunk requirements is eligible for DCC credits. It is expected that developers are responsible for the capital costs associated with the local standard as described below.

6.4.1 DCC Credit for Developments Fronting DCC Roads

This policy explains the standard service component and oversizing component, clarifies the developer’s responsibility and identifies DCC Credit eligibility. The overarching intent of this policy is to improve consistency and clarity for developments adjacent to DCC projects. *All bolded items have definitions provided at the end of the section.*

When development precedes construction of a road identified in the DCC Program, the Developer will be required to construct the following works to the standard identified in the DCC Program and Bylaw 7900, without DCC credits:

- If the development flanks a road identified in the DCC Program, dedicate the required right-of-way to the road centreline and construct the **Standard Service Component** of the road improvements.
- If a DCC road is required through the development, dedicate the required right-of-way and construct the **Standard Service Component** of the road improvements.

If the developer is asked to construct the **Oversizing Component** at the same time as the Standard Service Component, the developer will receive DCC credits for the works associated with the Oversizing Component only.

DCC Credit – The total DCC credit will be the lower of:

1. The applicable DCCs payable for the development for the service and sector for which the works were completed. For example, if the developer constructs road improvements for a DCC road in Sector E, the associated Oversize costs would be deducted from the Sector E Road DCCs only, to the maximum DCC amount payable; or
2. The value of the DCC project as estimated in the latest version of 20 Year Servicing Plan & Financial Strategy; or
3. The actual cost of construction of the project as verified by contract tender costs provided by the developer.

Prior initiating any works, the developer is responsible to identify the scope of works qualifying as Oversizing Component eligible for DCC credits. The City will review the developer's scope of work and cost estimates and provide direction on works that are eligible for DCC credit.

Standard Service Component – Includes all frontage elements that would be required for a road of that classification as per Bylaw 7900, which may include but not be limited to: storm infrastructure, sidewalk, curb, boulevard, parking, bike lane, street lighting and first travel lane. The Standard Service Component is the developer's responsibility and must be constructed regardless of whether the road is a DCC project.

Oversizing Component – The trunk works beyond the Standard Service Component. The Oversizing component may include 3rd and 4th travel lanes of a 4-lane arterial road, centre median, traffic signals, and active transportation corridor. Oversizing Component does not include works directly attributable to the development or any infrastructure required by the developers **TIA**.

Traffic Impact Assessment (TIA) – A study to assess the impacts of a proposed development on the City's existing transportation network.

6.5 MONITORING AND ACCOUNTING

The City undertakes annual reporting on DCC revenues and expenditures. In addition to the annual report, the City tracks all projects in the DCC Program. This tracking system monitors the status of the project from the conceptual stage through to its final construction, and includes information about the estimated costs, the actual construction costs, and the funding sources for the projects. The construction costs are based on the tender prices received, and the land costs based on the actual price of utility areas and or other land and improvements required for servicing purposes. The tracking system indicates when projects are completed, their actual costs, and includes new projects that are added to the program.

It is recommended that this practice continue to ensure transparency and facilitate regular updates to the calculation.

6.6 ANNUAL INDEXING AND COMPREHENSIVE REVIEWS

The Best Practice Guide recommends updating construction and land costs in the DCC Program on an annual or biennial basis, to ensure that costs resulting from inflation are covered. In British Columbia, the *Community Charter* allows municipalities to index their DCC rates in accordance with the percentage change in the applicable consumer price index, without triggering the need for a formal by-law amendment process. The applicable index is the British Columbia consumer price index. Municipalities may use the provision a maximum of once per year for up to four years.

A more comprehensive review of the DCC Program should be undertaken every five years. While the LGA does not mandate regular DCC bylaw reviews, the City would benefit from a regularly scheduled comprehensive DCC update and public process. For example, the City may choose to review its growth forecasts, servicing needs, and project funding every 5 years, involving key stakeholders throughout the process. This, coupled with annual rate indexing, would improve transparency and predictability for the development industry.

APPENDIX A – RATE CALCULATION



**CITY OF KELOWNA
2040 TRANSPORTATION SERVICING PLAN & FINANCING STRATEGY (2022)
DCC CALCULATION (\$000s)**

DCC Sector	Target Year	PROJECT	FROM	TO	TOTAL CAPITAL COST In \$000	NON-DCC REVENUE SOURCES					Net FOR DCC CALC'S	DCC Bylaw 12419 (Zero Charge) Sector Allocations			DCC Bylaw 12420 Sector Allocations		
						By Developer	Current Agreements	Benefit to Existing	Net Benefit Growth	Municipal Assist Factor 16%		A South East Kelowna	C North East Rutland	D North of Hwy 33	B South Mission	E North of Main City	I Main City/ Common
I	2031-2035	Leon Lawrence ATC (Abbott - Richter)	Abbott St	Richter St	\$10,875.0	\$1,087.5	\$0.0	\$5,970.1	\$3,917.4	\$626.8	\$3,296.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,296.6
I	2026-2030	Pandsey Village ATC	Raymer ATC	Abbott ATC	\$2,936.0	\$292.6	\$0.0	\$1,548.0	\$1,085.4	\$173.7	\$911.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$911.8
I	2026-2030	Rail Trail to Greenway ATC	Rail Trail	Mayer Rd	\$9,588.0	\$958.8	\$0.0	\$5,525.2	\$3,104.0	\$496.6	\$2,607.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,607.4
I	2036-2040	Richter 1 ATC (Sutherland - KLO)	Sutherland Ave	KLO Road	\$2,401.0	\$240.1	\$0.0	\$1,200.5	\$960.4	\$153.7	\$806.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$806.7
I	2036-2040	Rutland Rd Multimodal Corridor ATC (Robson - Leathead)	Robson Road	320 m N of Leathead	\$1,575.0	\$157.5	\$0.0	\$787.5	\$630.0	\$100.8	\$529.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$529.2
I	2021-2025	Sutherland 1 ATC (Gordon - Burtch)	Gordon Drive	Burtch Road	\$3,134.0	\$313.4	\$0.0	\$1,739.6	\$1,081.0	\$173.0	\$908.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$908.1
I	2021-2025	Sutherland 1 ATC (Gordon - Burtch) Improvements	Gordon Drive	Burtch Road	\$445.0	\$44.5	\$0.0	\$400.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
I	2021-2025	Sutherland 2 DCC (Ethel - Gordon), ATC	Ethel Street	Gordon Drive	\$1,056.0	\$105.6	\$0.0	\$950.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
I	2036-2040	Sutherland Complete Street ATC (Mill Creek Bridge - Spall)	Mill Creek Bridge	Spall Road	\$1,011.0	\$101.1	\$0.0	\$505.5	\$404.4	\$64.7	\$339.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$339.7
I	2031-2035	UBCO MUP (Quail Ridge - Rail Trail)	Quail Ridge	Rail Trail	\$1,562.0	\$156.2	\$0.0	\$781.0	\$624.8	\$100.0	\$524.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$524.8
SUBTOTAL - ATC					\$102,826.0	\$10,035.5	\$2,438.1	\$54,239.9	\$36,112.4	\$5,778.0	\$30,334.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1,235.1	\$29,099.3
TOTAL - TRANSPORTATION					\$525,433.0	\$40,356.7	\$8,963.1	\$108,364.5	\$367,749.6	\$58,841.8	\$308,908.8	\$5,394.3	\$651.9	\$289.6	\$22,224.9	\$15,267.7	\$265,080.4

Transportation DCC Rates (\$)	DCC Bylaw 12419 (Zero Charge)			DCC Bylaw 12420		
	A South East Kelowna	C North East Rutland	D North of Hwy 33	B South Mission	E North of Main City	I Main City/ Common
Total DCC Project Costs	\$5,394,257	\$651,937	\$289,614	\$22,224,868	\$15,267,714	\$265,080,444
Adjustments:						
Less: Carry Over (2022-01-01 Reserve Balances)	\$5,394,257	\$651,937	\$289,613	\$5,145,264	\$3,389,381	\$59,957,435
Sub-Total DCC Project Costs	\$0	\$0	\$0	\$17,079,604	\$11,878,333	\$205,123,009
Engineering/Administration 1.00%	\$0	\$0	\$0	\$170,796	\$118,783	\$2,051,230
Total DCC Rate Recoverable	\$0	\$0	\$0	\$17,250,400	\$11,997,116	\$207,174,239
Equivalent Units	5	326	664	1,117	1,555	17,405
DCC Per Equivalent Unit	\$0.00	\$0.00	\$0.00	\$15,448.36	\$7,715.51	\$11,903.45
DCC By Type of Development						
Type	Unit Measure	Equiv. Factor	DCC Per Unit	DCC Per Unit	DCC Per Unit	DCC Per Unit
Residential 1	Dwelling Unit	100%	\$0.00	\$0.00	\$0.00	\$11,903.45
Residential 2	Dwelling Unit	90%	\$0.00	\$0.00	\$0.00	\$13,964.58
Residential 3	Dwelling Unit	67%	\$0.00	\$0.00	\$0.00	\$10,379.65
Residential 4	Dwelling Unit	61%	\$0.00	\$0.00	\$0.00	\$9,457.39
Carriage House	Dwelling Unit	38%	\$0.00	\$0.00	\$0.00	\$5,845.33
Commercial	Square Metre	0.33%	\$0.00	\$0.00	\$0.00	\$51.15
Institutional	Square Metre	0.33%	\$0.00	\$0.00	\$0.00	\$51.15
Heavy Industrial	Hectare	247%	\$0.00	\$0.00	\$0.00	\$38,158.23
Light Industrial	Square Metre	0.17%	\$0.00	\$0.00	\$0.00	\$25.58

 CITY OF KELOWNA 2040 WATER SERVICING PLAN & FINANCING STRATEGY (2022) DCC CALCULATION (\$000s)													
Target Quarter	PROJECT	DESCRIPTION	TOTAL CAPITAL COST	NON-DCC REVENUE SOURCES					Net FOR DCC CALC'S	DCC Bylaw 12419 (Zero Charge) Sector Allocations			DCC Bylaw 12420
				By Developer	Current Agreements	Benefit Existing	Net Benefit Growth	Municipal Assist Factor		A	B	D	A
			In \$000	2%					Central	South Mission	Clifton/Glenmore	City-Wide	
WATER													
Q2	Cedar Creek Stage 2	New 750 PVC wm	\$9,011.0	\$0.0	\$0.0	\$6,319.6	\$2,691.4	\$53.8	\$2,637.5	\$0.0	\$0.0	\$0.0	\$2,637.5
Q2	Clifton Main Upgrade 1	Upgrade 900m section of 200mm AC to 300mm	\$2,532.0	\$0.0	\$0.0	\$639.0	\$1,893.1	\$37.9	\$1,855.2	\$0.0	\$0.0	\$0.0	\$1,855.2
Q2	Clifton Main Upgrade 2	Upgrade to 600 DI (300 psi)	\$1,720.0	\$0.0	\$0.0	\$410.4	\$1,309.6	\$26.2	\$1,283.4	\$0.0	\$0.0	\$0.0	\$1,283.4
Q2	Clifton to Dilworth TM	Third and final section from Clifton to Dilworth reservoir	\$8,242.0	\$0.0	\$0.0	\$3,771.2	\$4,470.8	\$89.4	\$4,381.4	\$3,232.3	\$0.0	\$0.0	\$1,149.1
Q2	Ethel Main	Upgraded 300 PVC wm	\$471.0	\$0.0	\$0.0	\$148.0	\$323.0	\$6.5	\$316.5	\$316.5	\$0.0	\$0.0	\$0.0
Q2	Frost Pumpstation	New Cell	\$1,792.0	\$1,792.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Q2	Grainger Reservoir	New Cell	\$1,847.0	\$1,847.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Q2	Knox TM	Upgraded 900 DI TM	\$4,299.0	\$0.0	\$0.0	\$1,954.5	\$2,344.5	\$46.9	\$2,297.6	\$1,998.9	\$0.0	\$0.0	\$298.7
Q2	PZ 419 Reservoir Upgrade	New Cell	\$6,863.0	\$0.0	\$0.0	\$481.3	\$6,381.7	\$127.6	\$6,254.0	\$6,254.0	\$0.0	\$0.0	\$0.0
Q3	Poplar Pt to Knox TM	Install 3.3km of new transmission main at 1200mm	\$10,739.0	\$0.0	\$0.0	\$6,218.6	\$4,520.4	\$90.4	\$4,430.0	\$0.0	\$0.0	\$0.0	\$4,430.0
Q1	Skyline PS	Final build out to the pump station on the corner of High and Clifton Rd	\$1,978.0	\$0.0	\$0.0	\$667.5	\$1,310.5	\$26.2	\$1,284.3	\$0.0	\$0.0	\$1,009.6	\$274.7
Q1	Summit Reservoir - New Cell	New Cell	\$2,131.0	\$0.0	\$0.0	\$1,494.5	\$636.5	\$12.7	\$623.7	\$623.7	\$0.0	\$0.0	\$0.0
Q1	TM - Gordon to Clifton	Second section of Royalview bypass from Gordon to Clifton	\$2,579.0	\$0.0	\$0.0	\$180.9	\$2,398.1	\$48.0	\$2,350.2	\$2,044.6	\$0.0	\$0.0	\$305.5
Q1	TM - Knox Reservoir to Gordon	Reservoir to Gordon via Trench PI	\$6,108.0	\$0.0	\$0.0	\$3,250.0	\$2,858.0	\$57.2	\$2,800.9	\$2,436.8	\$0.0	\$0.0	\$364.1
SUBTOTAL - WATER			\$60,312.0	\$3,639.0	\$0.0	\$25,535.5	\$31,137.5	\$622.8	\$30,514.8	\$16,907.0	\$0.0	\$1,009.6	\$12,598.2
ANNUAL OVERSIZING													
Annual	Annual Oversizing	Annual Oversizing Component	\$1,438.0	\$0.0	\$0.0	\$0.0	\$1,438.0	\$28.8	\$1,409.2	\$1,409.2	\$0.0	\$0.0	\$0.0
SUBTOTAL - ANNUAL OVERSIZING			\$1,438.0	\$0.0	\$0.0	\$0.0	\$1,438.0	\$28.8	\$1,409.2	\$1,409.2	\$0.0	\$0.0	\$0.0
TOTAL - WATER			\$61,750.0	\$3,639.0	\$0.0	\$25,535.5	\$32,575.5	\$651.5	\$31,924.0	\$18,316.2	\$0.0	\$1,009.6	\$12,598.2

Water DCC Rates (\$)	DCC Bylaw 12419 (Zero Charge)			DCC Bylaw 12420
	A	B	D	A
	Central	South Mission	Clifton/Glenmore	City-Wide
Total DCC Project Costs	\$18,316,190	\$0	\$1,009,649	\$12,598,186
Adjustments:				
Less: Carry Over (2022-01-01 Reserve Balances)	\$18,316,190	\$0	\$1,009,649	\$0
Sub-Total DCC Project Costs	\$0	\$0	\$0	\$12,598,186
Engineering/Administration	\$0	\$0	\$0	\$125,982
Total DCC Rate Recoverable	\$0	\$0	\$0	\$12,724,168
Equivalent Units	10,436	1,150	1,158	12,744
DCC Per Equivalent Unit	\$0.00	\$0.00	\$0.00	\$998.41
DCC By Type of Development				
Type Unit Measure	Equiv. Factor	DCC Rate Per Unit	DCC Rate Per Unit	DCC Rate Per Unit
Residential 1 Dwelling Unit	100%	\$0.00	\$0.00	\$998.41
Residential 2 Dwelling Unit	90%	\$0.00	\$0.00	\$902.54
Residential 3 Dwelling Unit	67%	\$0.00	\$0.00	\$670.82
Residential 4 Dwelling Unit	61%	\$0.00	\$0.00	\$611.22
Carriage House Dwelling Unit	38%	\$0.00	\$0.00	\$377.78
Commercial Square Metre	0.33%	\$0.00	\$0.00	\$3.31
Institutional Square Metre	0.33%	\$0.00	\$0.00	\$3.31
Heavy Industri: Hectare	555%	\$0.00	\$0.00	\$5,536.29
Light Industrial Square Metre	0.17%	\$0.00	\$0.00	\$1.65

CITY OF KELOWNA 2040 WASTEWATER TRUNKS SERVICING PLAN & FINANCING STRATEGY (2022) DCC CALCULATION (\$000s)												
Target Quarter	PROJECT	DESCRIPTION	TOTAL CAPITAL COST In \$000	NON-DCC REVENUE SOURCES					Net FOR DCC CALC'S	DCC Bylaw 12419 (Zero Charge) Sector Allocations		DCC Bylaw 12420 FOR DCC CALC'S
				By Developer	Current Agreements	Benefit Existing	Net Benefit Growth	Municipal Assist Factor 2.00%		A Inner City	B South Mission	
WASTEWATER TRUNKS												
Q2	BYRNS/BARON - Ph 2	Byrns to WWTF	\$10,596.0	\$0.0	\$0.0	\$1,557.7	\$9,038.3	\$180.8	\$8,857.6	\$0.0	\$0.0	\$8,857.6
Q4	Burch Trunk Upgrades	Upgrades of 750 and 1050PVC	\$3,505.0	\$0.0	\$0.0	\$1,853.1	\$1,651.9	\$33.0	\$1,618.8	\$0.0	\$0.0	\$1,618.8
Q3	Capri/Landmark Urban Centre - South East Quadrant Trunk Upgrades	Upgrade to 350PVC	\$3,325.0	\$0.0	\$0.0	\$1,689.6	\$1,635.4	\$32.7	\$1,602.7	\$0.0	\$0.0	\$1,602.7
Q1	Glenmore Connection	Cross - 200 m. North of Scenic	\$2,969.0	\$0.0	\$0.0	\$211.8	\$2,757.2	\$55.1	\$2,702.1	\$2,702.1	\$0.0	\$0.0
Q1	Guy LS Upgrade	Guy@Bay	\$1,936.0	\$0.0	\$0.0	\$1,086.2	\$849.8	\$17.0	\$832.8	\$832.8	\$0.0	\$0.0
Q1	Gyro LS (Lift Station)	Lakeshore - Swordy	\$2,212.0	\$0.0	\$0.0	\$211.8	\$2,000.2	\$40.0	\$1,960.2	\$490.1	\$1,198.6	\$271.5
Q1	Hall Rd Mission Creek Crossing	400mm	\$2,056.0	\$2,056.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Q2	Lakeshore Trunk - (Cook - Gyro)	Lakeshore Trunk - (Cook - Gyro)	\$2,390.0	\$0.0	\$0.0	\$846.5	\$1,543.6	\$30.9	\$1,512.7	\$0.0	\$0.0	\$1,512.7
Q2	Lakeshore Trunk - (Old Meadows - Lexington)	(Old Meadows - Lexington)	\$3,242.0	\$0.0	\$0.0	\$1,492.5	\$1,749.5	\$35.0	\$1,714.5	\$0.0	\$0.0	\$1,714.5
Q1	Lakeshore Trunk - (Swordy - Barrera/Casorso)	(Swordy - Barrera/Casorso)	\$2,390.0	\$0.0	\$0.0	\$811.2	\$1,578.8	\$31.6	\$1,547.2	\$0.0	\$0.0	\$1,547.2
Q2	New Harvey Downtown (Water St) Crossing	500m 750PVC600m Regraded Sewers	\$10,024.0	\$0.0	\$0.0	\$2,578.1	\$7,445.9	\$148.9	\$7,297.0	\$0.0	\$0.0	\$7,297.0
Q1	New Water Street Lift Station	Mechanical and Safety Upgrades	\$3,050.0	\$0.0	\$0.0	\$1,877.9	\$1,172.1	\$23.4	\$1,148.6	\$0.0	\$0.0	\$1,148.6
Q2	North End Tolko Linear Upgrades	1100m twin FM	\$2,188.0	\$0.0	\$0.0	\$0.0	\$2,188.0	\$43.8	\$2,144.2	\$0.0	\$0.0	\$2,144.2
Q2	North End Tolko New Lift Station	New Lift Station	\$1,837.0	\$0.0	\$0.0	\$0.0	\$1,837.0	\$36.7	\$1,800.3	\$0.0	\$0.0	\$1,800.3
Q2	Rose Ave LS (Lift Station)	Rose Ave @ Hospital	\$2,053.0	\$2,053.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Q2	Rutland Trunk	Ziprick to Houghton	\$1,692.0	\$0.0	\$0.0	\$685.9	\$1,006.2	\$20.1	\$986.0	\$0.0	\$0.0	\$986.0
Q4	South Glenmore Hydraulic Capacity Upgrades	Upgrades	\$2,057.0	\$0.0	\$0.0	\$1,468.7	\$588.3	\$11.8	\$576.6	\$0.0	\$0.0	\$576.6
Q3	Trunk Upgrades - Ball Diamonds S. of Clement to/through Bernard	Upgrade to 600PVC	\$3,607.0	\$0.0	\$0.0	\$2,618.0	\$989.0	\$19.8	\$969.2	\$0.0	\$0.0	\$969.2
SUBTOTAL - WASTEWATER TRUNKS			\$61,129.0	\$4,109.0	\$0.0	\$18,988.8	\$38,031.2	\$760.6	\$37,270.5	\$4,025.0	\$1,198.6	\$32,046.9
ANNUAL OVERSIZING												
Annual	Annual Oversizing	Annual Oversizing Component	\$1,200.0	\$0.0	\$0.0	\$352.9	\$847.1	\$16.9	\$830.1	\$9.6	\$0.0	\$820.5
SUBTOTAL - ANNUAL OVERSIZING			\$1,200.0	\$0.0	\$0.0	\$352.9	\$847.1	\$16.9	\$830.1	\$9.6	\$0.0	\$820.5
TOTAL - WASTEWATER TRUNKS			\$62,329.0	\$4,109.0	\$0.0	\$19,341.8	\$38,878.2	\$777.6	\$38,100.6	\$4,034.6	\$1,198.6	\$32,867.4

Wastewater Trunk DCC Rates (\$)	DCC Bylaw 12419 (Zero Charge)		DCC Bylaw 12420
	A Inner City	B South Mission	A City-Wide
Total DCC Project Costs	\$4,034,610	\$1,198,629	\$32,867,408
Adjustments:			
Less: Carry Over (2022-01-01 Reserve Balances)	\$4,034,610	\$1,198,629	\$0
Sub-Total DCC Project Costs	\$0	\$0	\$32,867,408
Engineering/Administration 1.0%	\$0	\$0	\$328,674
Total DCC Rate Recoverable	\$0	\$0	\$33,196,082
Equivalent Units	16,282	1,116	17,399
DCC Per Equivalent Unit	\$0.00	\$0.00	\$1,907.98
DCC By Type of Development			
Type	Unit Measure	Equiv. Factor	DCC Rate Per Unit
Residential 1	Dwelling Unit	100%	\$0.00
Residential 2	Dwelling Unit	90%	\$0.00
Residential 3	Dwelling Unit	67%	\$0.00
Residential 4	Dwelling Unit	61%	\$0.00
Carriage House	Dwelling Unit	38%	\$0.00
Commercial	Square Metre	0.33%	\$0.00
Institutional	Square Metre	0.33%	\$0.00
Heavy Industrial	Hectare	555%	\$0.00
Light Industrial	Square Metre	0.17%	\$0.00

Target Year	PROJECT	TOTAL CAPITAL COST	NON-DCC REVENUE SOURCES					Net
			By Developer	Current Agreements	Benefit to Existing	Net Benefit Growth	Municipal Assist Factor	FOR DCC CALC'S
		In \$000						2.00%
TREATMENT								
2030	Wastewater Treatment Digester	\$78,000.0	\$0.0	\$0.0	\$24,225.9	\$53,774.1	\$1,075.5	\$52,698.6
2030	Provision for financing costs	\$35,568.0	\$0.0	\$0.0	\$11,047.0	\$24,521.0	\$490.4	\$24,030.6
SUBTOTAL - TREATMENT		\$113,568.0	\$0.0	\$0.0	\$35,272.9	\$78,295.1	\$1,565.9	\$76,729.2
TOTAL - TREATMENT		\$113,568.0	\$0.0	\$0.0	\$35,272.9	\$78,295.1	\$1,565.9	\$76,729.2

Wastewater Treatment DCC Rates (\$)				A
				City Wide
Total DCC Project Costs				\$76,729,213
Adjustments:				
Less: Carry Over (2022-01-01 Reserve Balances)				(\$7,428,153)
Sub-Total DCC Project Costs				\$84,157,366
Engineering/Administration				1.0% \$841,574
Total DCC Rate Recoverable				\$84,998,940
Equivalent Units				17,810
DCC Per Equivalent Unit				\$4,772.42
DCC By Type of Development				
Type	Unit Measure	Equiv. Factor	DCC Per Unit	
Residential 1	Dwelling Unit	100%	\$4,772.42	
Residential 2	Dwelling Unit	90%	\$4,314.16	
Residential 3	Dwelling Unit	67%	\$3,206.56	
Residential 4	Dwelling Unit	61%	\$2,921.64	
Carriage House	Dwelling Unit	38%	\$1,805.78	
Commercial	Square Metre	0.33%	\$15.80	
Institutional	Square Metre	0.33%	\$15.80	
Heavy Industrial	Hectare	555%	\$26,463.60	
Light Industrial	Square Metre	0.17%	\$7.90	

		CITY OF KELOWNA 2040 DRAINAGE SERVICING PLAN & FINANCING STRATEGY (2022) DCC CALCULATION (\$000s)						Net FOR DCC CALC'S
		Target Year	PROJECT	TOTAL CAPITAL COST In \$000	NON-DCC REVENUE SOURCES			
By Developer	Current Agreements				Benefit Existing	Net Benefit Growth	Municipal Assist Factor	
			2.00%					
DRAINAGE								
2022-2026	Downtown Capacity and Habitat Improvements	\$5,887.0	\$0.0	\$0.0	\$4,415.3	\$1,471.8	\$29.4	\$1,442.3
2022-2026	Industrial Corridor Capacity Improvements	\$14,242.0	\$0.0	\$5,696.8	\$6,408.9	\$2,136.3	\$42.7	\$2,093.6
2022-2026	Mill Creek to Brandt's Creek Diversion	\$19,055.0	\$0.0	\$7,622.0	\$8,574.8	\$2,858.3	\$57.2	\$2,801.1
2022-2026	Mill Creek to Mission Creek Diversion Upgrades	\$12,638.0	\$0.0	\$5,055.2	\$5,687.1	\$1,895.7	\$37.9	\$1,857.8
2022-2026	YLW Mill Creek Capacity Upgrades	\$6,035.0	\$0.0	\$2,414.0	\$2,715.8	\$905.3	\$18.1	\$887.1
SUBTOTAL - DRAINAGE		\$57,857.0	\$0.0	\$20,788.0	\$27,801.8	\$9,267.3	\$185.3	\$9,081.9
TOTAL - DRAINAGE		\$57,857.0	\$0.0	\$20,788.0	\$27,801.8	\$9,267.3	\$185.3	\$9,081.9

Drainage DCC Rates (\$)			A
			City Wide
Total DCC Project Costs			\$9,081,905
Adjustments:			
Less: Carry Over (2022-01-01 Reserve Balances)			\$0
Sub-Total DCC Project Costs			\$9,081,905
Engineering/Administration			1.0% \$90,819
Total DCC Rate Recoverable			\$9,172,724
Equivalent Units			13,060
DCC Per Equivalent Unit			\$702.33
DCC By Type of Development			DCC Per Unit
Type	Unit Measure	Equiv. Factor	
Residential 1	Dwelling Unit	100%	\$702.33
Residential 2	Dwelling Unit	70%	\$491.63
Residential 3	Dwelling Unit	40%	\$280.93
Residential 4	Dwelling Unit	30%	\$210.70
Carriage House	Dwelling Unit	30%	\$210.70
Commercial	Square Metre	0.40%	\$2.81
Institutional	Square Metre	0.37%	\$2.60
Heavy Industrial	Hectare	750%	\$5,267.49
Light Industrial	Square Metre	0.30%	\$2.11

ACQUISITIONS		PARK TYPE	TOTAL CAPITAL COST	NON-DCC REVENUE SOURCES				Net FOR DCC CALC'S
				By Developer	Current Agreements	Benefit to Existing	Net Benefit Growth	
			In \$000					11.00%
PARKLAND ACQUISITION								
29 Hectares	City-Wide	99,904.0	\$0.00	\$0.00	\$0.00	\$99,904.0	\$10,989.4	\$88,914.6
5 Hectares	Community	19,606.0	\$0.00	\$0.00	\$0.00	\$19,606.0	\$2,156.7	\$17,449.3
23 Hectares	Linear	34,999.2	\$0.00	\$0.00	\$0.00	\$34,999.2	\$3,849.9	\$31,149.3
17 Hectares	Neighbourhood	63,754.7	\$0.00	\$0.00	\$0.00	\$63,754.7	\$7,013.0	\$56,741.7
24 Hectares	Recreation	24,460.0	\$0.00	\$0.00	\$0.00	\$24,460.0	\$2,690.6	\$21,769.4
TOTAL - PARKLAND ACQUISITION			\$242,723.9	\$0.0	\$0.0	\$242,723.9	\$26,699.6	\$216,024.3

Parkland Acquisition DCC Rates (\$)				A
				City Wide
Total DCC Project Costs				\$216,024,267
Adjustments:				
Less: Carry Over (2022-01-01 Reserve Balances)				\$35,428,144
Sub-Total DCC Project Costs				
	Engineering/Administration		1.0%	\$1,805,961
Total DCC Rate Recoverable				\$182,402,083
Equivalent Units				21,879
DCC Per Equivalent Unit				\$8,337.04
DCC By Type of Development				
Type	Unit Measure		Equiv. Factor	DCC Per Unit
Residential 1	Dwelling Unit		100%	\$8,337.04
Residential 2	Dwelling Unit		100%	\$8,337.04
Residential 3	Dwelling Unit		100%	\$8,337.04
Residential 4	Dwelling Unit		100%	\$8,337.04
Carriage House	Dwelling Unit		100%	\$8,337.04
Commercial	Square Metre		0.17%	\$13.80
Institutional	Square Metre		0.17%	Exempt
Heavy Industrial	Hectare		124%	\$10,296.46
Light Industrial	Square Metre		0.08%	\$6.90

		CITY OF KELOWNA 2040 PARK DEVELOPMENT SERVICING PLAN & FINANCING STRATEGY (2022) DCC CALCULATION (\$000s)						Net FOR DCC CALC'S
		ACQUISITIONS	PARK TYPE	TOTAL CAPITAL COST In \$000	NON-DCC REVENUE SOURCES			
By Developer	Current Agreements				Ineligible / Benefit to Existing	Net Benefit Growth	Municipal Assist Factor	11.00%
PARK DEVELOPMENT								
14 Hectares	City-Wide	55,180.0	-	-	\$15,467.0	\$39,713.0	\$4,368.4	\$35,344.6
16 Hectares	Community	45,780.0	-	-	\$7,283.0	\$38,497.0	\$4,234.7	\$34,262.3
27 Hectares	Linear	19,883.0	-	-	\$283.0	\$19,600.0	\$2,156.0	\$17,444.0
9 Hectares	Neighbourhood	28,212.0	-	-	\$4,473.0	\$23,739.0	\$2,611.3	\$21,127.7
27 Hectares	Recreation	66,695.0	-	-	\$29,811.0	\$36,884.0	\$4,057.2	\$32,826.8
TOTAL - PARK DEVELOPMENT		\$215,750.0	\$0.0	\$0.0	\$57,317.0	\$158,433.0	\$17,427.6	\$141,005.4

Park Development DCC Rates (\$)		A
		City Wide
Total DCC Project Costs		\$141,005,370
Adjustments:		
Less: Carry Over (2022-01-01 Reserve Balances)		\$1,036,989
Sub-Total DCC Project Costs		\$139,968,381
Engineering/Administration	1.0%	\$1,399,684
Total DCC Rate Recoverable		\$141,368,065
Equivalent Units		21,879
DCC Per Equivalent Unit		\$6,461.50
DCC By Type of Development		
Type	Unit Measure	Equiv. Factor DCC Per Unit
Residential 1	Dwelling Unit	100% \$6,461.50
Residential 2	Dwelling Unit	100% \$6,461.50
Residential 3	Dwelling Unit	100% \$6,461.50
Residential 4	Dwelling Unit	100% \$6,461.50
Carriage House	Dwelling Unit	100% \$6,461.50
Commercial	Square Metre	0.17% \$10.70
Institutional	Square Metre	0.17% Exempt
Heavy Industrial	Hectare	124% \$7,980.12
Light Industrial	Square Metre	0.08% \$5.35

APPENDIX B – STAKEHOLDER TOUCH POINTS

Stakeholder Engagement	Date
City/UDI DCC Working Group Meeting #1	Jan 20, 2020
Council Report – 20-Year Servicing Plan Update	Mar 16, 2020
City/UDI DCC Working Group Meeting #2	Jul 17, 2020
Council Report – 20-Year Servicing Plan – Water, Wastewater, Drainage	Aug 10, 2020
City/UDI DCC Working Group Meeting #3	Feb 19, 2021
Ministry of Municipal Affairs Meeting	Mar 3, 2021
SLT DCC Update #1	Apr 14, 2021
SLT DCC Update #2	July 22, 2021
Council Report - DCC Program Update (including proposed DCC rates)	Sep 13, 2021
City/UDI/CHBA Stakeholder Engagement meeting	Sep 17, 2021
Draft 20-Year Servicing Plan circulated to UDI	Oct 8, 2021
Letter to UDI - City response to questions	Dec 3, 2021
Letter to UDI - City response to questions	Dec 17, 2021
Ministry of Municipal Affairs Meeting	Dec 17, 2021
Letter to UDI – City response to questions	Jan 28, 2022
Letter to UDI – City response to questions #4	Feb 4, 2022
Letter to City – UDI’s feedback on DCC Update	Feb 16, 2022
UDI meeting with City Manager, Senior Leaders and staff	Mar 11, 2022
Letter to UDI – City response to UDI questions from Mar 11 meeting	Apr 29, 2022
Okanagan College meeting	Jun 17 th , 2022
City/UDI/CHBA stakeholder engagement meeting	July 18 th , 2022
University of British Columbia Okanagan	Jul 22 nd , 2022
Email to UDI/CHBA – City response to questions from Jul 18 th meeting	Aug 2 nd , 2022

APPENDIX C – AMENDED BYLAW