



RDN REPORT	
CAO APPROVAL	
EAP	
CDW	
SEP 29 2014	
REF.	
BOARD	<input checked="" type="checkbox"/>

MEMORANDUM

TO: Randy Alexander
General Manager, Regional and Community Utilities

DATE: September 26, 2014

FROM: Mike Donnelly
Manager, Water & Utility Services

FILE: 5500-22-NBP-01

SUBJECT: Nanoose Bay Peninsula Water Service Development Cost Charge Bylaw Introduction

PURPOSE

To bring forward the Nanoose Bay Peninsula Water Service Development Cost Charge Bylaw for the Board’s consideration.

BACKGROUND

At the November 2013 meeting of the Board staff were directed to develop a combined Development Cost Charge (DCC) bylaw for both Nanoose Bay Peninsula Water Service Area and the Nanoose Bay Bulk Water Service. The resulting bylaw has been developed using the Province’s DCC Best Practices Guide.

The purpose of the proposed bylaw is to capture those capital improvements needed to address development and to ensure the development community contributes to those costs. This bylaw will address growth centres identified in the Regional Growth Strategy, Nanoose Bay Official Community Plan including Red Gap, Lakes District and Schooner Cove.

Koers and Associates Engineering Ltd. were retained to develop the DCC plan including the inventory of all projects required up to 2031 to meet existing and future improvements to the water system along with costs and relative benefit assessments for both existing and future users (See Attached).

The bylaw address both the existing NBPWSA and the ERWS projects as they are both integral to the supply and long term security of the water system. For the NBPWSA, projects relate to costs for upgrades to the existing infrastructure. For ERWS, projects would reflect costs associated with the Arrowsmith Dam, river intake and treatment process.

The bylaw was presented to the Oceanside Development & Construction Association on May 21st 2014 where RDN staff presented the DCC Technical report. A number of questions and concerns were raised during the meeting and in a subsequent submission provided by the ODCA. The submission was reviewed by staff resulting in a number of changes being made to the technical report. The final draft was discussed with ODCA members in a subsequent meeting held at the RDN Administration office on August 27th, 2014.

Comments received from the ODCA on the process to date have been positive. There are some outstanding questions and comments that staff will address prior to the Board considering the final form of the bylaw. Staff are recommending that the Board give the bylaw 1st reading and then direct staff to

hold a public meeting to receive additional input from the development community prior to second and third reading of the bylaw.

The Technical Report uses a growth rate of 2% per year resulting in a build out population in 2046 of 10,189 matching almost exactly the OCP build out calculation of 10,155. This proposed DCC bylaw is calculated based on 2031 as the planning horizon at which time the population will be approximately 7,570 compared to the estimated 2014 population of 5,406. The following table is extracted from the Koers Technical report.

Equivalent New Population, Year 2031

Land Use Category	Estimated New Development To Year 2031	Equivalent Population Factor	Equivalent New Population
Single Family Res.	775 units	2.2	1,705
Multi-Family Res.	350 units	1.9	665
Senior Living Units	95 units	1.1	105
Commercial	9,125 m ²	0.01	91
Institutional	11,520 m ²	0.005	58
Industrial & Public Utility	n/a	n/a	n/a
Total Equivalent Population			2,624

Using the expected population numbers based on this growth rate the necessary infrastructure can then be determined that will support the population's water demands. This is laid out in the Technical Report in Table 5 – Water Projects and DCC Calculations. It is then possible to determine to what level existing users and the development community benefit from the improvements. This is also included in Table 5 with the resulting charges per building unit type calculated.

Impacting the final resultant costs are the assumption on senior level Government grants and the Assist Factor provided by the service area. Senior level Government grants have been identified in as a source of funding within the cost structure albeit a limited source. The level of assistance, shown at 1%, has been kept intentionally low to reflect the current climate of restricted grant funding.

An Assist Factor, as required under DCC legislation, ensures that the development community does not pay 100% of growth related costs. Most DCC bylaws use assist factors in the 1% to 10% with the higher assist factors used to support growth. This bylaw is based on a 1% assist factor.

The resulting development unit costs are as follows (extracted from the Koers Technical report);

DCC Summary

DCC Category	Charge	Unit
Single Family	\$7,740.20	Dwelling Unit
Multi Family	\$6,684.72	Dwelling Unit
Senior Living Units	\$3,888.62	Unit
Commercial	\$35.09	per m ² of gross floor area
Institutional	\$17.71	per m ² of gross floor area
Industrial	\$0.00	per ha of site area

ALTERNATIVES

1. That the Board give the Nanoose Bay Peninsula Water Service Development Cost Charge Bylaw No. 1715, 2014 first reading and direct staff to obtain public input on the bylaw prior to 2nd and 3rd reading.
2. Do not proceed with the bylaw.

FINANCIAL IMPLICATIONS

Total estimated net expenditures for system improvements to 2031 are \$19,847,415. The development community would be responsible for \$9,231,947 of those costs after the 1% assist factor and \$145,000 currently held in Bulk Water DCC's are taken into consideration. Existing residents would be responsible for \$10,470,468 of the total costs including the 1% assist factor.

STRATEGIC PLAN IMPLICATIONS

The establishment of a DCC structure that address the long term costs of growth in the NBPWSA assists in the progressive development of efficient water management systems in the region.

SUMMARY/CONCLUSIONS

The Nanoose Bay Peninsula Water Service Area will see significant growth over the coming years which will result in a need for updated and improved water supply and distribution infrastructure. The proposed Development Cost Charge bylaw provides the mechanism by which the financial burden for future system upgrades and improvements can be shared equitably between existing and future users.

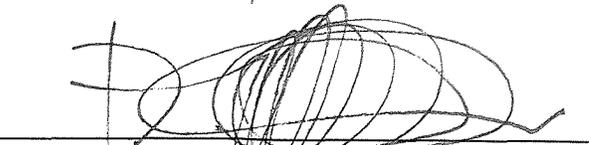
Staff recommend that the bylaw be given first reading by the Board and that additional public and development community input be gathered prior to being brought back to the Board for 2nd and 3rd reading. Once the Board has given 3rd reading to the bylaw it will then be forwarded to the Province for their review and approval.

RECOMMENDATIONS

1. That the Board give the Nanoose Bay Peninsula Water Service Development Cost Charge Bylaw No. 1715, 2014 first reading and direct staff to obtain public and development community input on the bylaw prior to 2nd and 3rd reading.



Report Writer


General Manager Concurrence
CAO Concurrence

REGIONAL DISTRICT OF NANAIMO

BYLAW NO. 1715

A BYLAW TO IMPOSE DEVELOPMENT COST CHARGES WITHIN THE NANOOSE BAY PENINSULA WATER SERVICE AREA

WHEREAS the Board may, pursuant to Section 933 of the *Local Government Act*, impose development cost charges under the terms and conditions of that section;

AND WHEREAS development cost charges may be imposed for the sole purpose of providing funds to assist the Regional District to pay the capital cost of providing, constructing, altering or expanding water facilities, including treatment plants, trunk lines, pump stations and other associated works in order to serve, directly or indirectly, the development for which the charges are imposed;

AND WHEREAS in establishing the development cost charges under this bylaw, the Board has considered the future land use patterns and development, and the phasing of works and services within the boundaries of the Nanoose Bay Peninsula Water Service Area;

AND WHEREAS the Board is of the opinion that the development cost charges imposed under this bylaw:

- (a) are not excessive in relation to the capital costs of prevailing standards of service,
- (b) will not deter development, and
- (c) will not discourage the construction of reasonably priced housing or the provision of reasonably priced serviced land,

within the Regional District of Nanaimo.

NOW THEREFORE the Board of the Regional District of Nanaimo in open meeting assembled enacts as follows:

1. CITATION

This bylaw may be cited as "Nanoose Bay Peninsula Water Service Area Development Cost Charge Bylaw No. 1715, 2014".

2. INTERPRETATION

In this bylaw:

"Building" means any structure and portion thereof, including mechanical rooms, that is used or intended to be used for the purpose of supporting or sheltering any use or occupancy.

"Commercial Use" means the use of land or buildings for any retail, tourist accommodation, restaurant, personal or professional services, commercial entertainment or commercial recreational use, and any other business use which is not an industrial or institutional use.

"DCC" means a development cost charge.

"Dwelling Unit" means one self-contained unit with a separate entrance intended for year-round occupancy, and the principal use of such dwelling unit is residential, with complete living facilities for one or more persons, including permanent provisions for living, sleeping, cooking and sanitation.

"Gross Floor Area" means the total of the horizontal areas of all floors in a building, including the basement, measured to the outside of the exterior walls of the building.

"Industrial Use" means the use of land or buildings for any manufacturing, processing, repair, storage, wholesaling or distribution of goods.

"Institutional Use" means the use of land or buildings for any school, hospital, correctional facility, care facility, or for the purposes of a public body or publicly regulated utility, but does not include "assisted living" uses.

"Lot" means a parcel created by registration of subdivision under the *Land Title Act* (British Columbia) or the Bare Land Strata regulation under the *Strata Property Act* (British Columbia)

"Mobile Home Park" means an unsubdivided parcel of land, not subdivided pursuant to the *Strata Property Act* and amendments thereto, on which are situated three or more mobile homes for the purposes of providing residential accommodation, but specifically excludes a hotel;

"Multiple Family Residential" means a building or buildings containing two or more dwelling units on a parcel and includes row housing, cluster housing, townhouses, apartment and "assisted living" uses.

"Senior Living Units" means a building or buildings used for multiple family residential use, where there may be common facilities and a cafeteria or eating area, but where residents are ambulatory and live in private rooms or units which can be locked and which are not automatically accessible to care staff.

3. **CHARGES**

Every person who obtains:

- a) approval of the subdivision for any purpose of a parcel of land under the *Land Title Act* or the *Strata Property Act* which creates fee simple or bare land strata lots which are zoned to permit no more than two dwelling units, or
- b) a building permit authorizing the construction, alteration or extension of a building, including a building containing less than four self-contained dwelling units and that will, after the construction, alteration or extension, be put to no other use other than the residential use in those dwelling units, or
- c) a building permit for any new floor area which has a construction value in excess of \$50,000.00 or where the total of the building permits issued for the same parcel of land within the preceding 2 years exceeds \$50,000.;

shall pay, at the time of the approval of the subdivision or the issuance of the building permit, the applicable development cost charges as set out in Schedule 'A' attached to and forming part of this bylaw.

4. The charges outlined on Schedule 'A' will apply to properties outlined on Schedule 'B', attached to and forming a part of this bylaw.
5. The charges outlined on Schedule 'A' will be based on the actual use of the building not the zoning category of the property; and,
 - a) where there is more than one use, each use is subject to the charge based on the actual use and there may be more than one category applied per building.
 - b) mezzanines, storage or similar areas within a building are subject to development cost charges based on the same use that the majority area of the building contains.
 - c) where a building is vacant and its future use cannot be determined, development cost charges are payable in accordance with the zoning category for the land upon which the building is situated.

6. **EXCEPTIONS**

- a) Section 3 does not apply to a subdivision or building in respect of which the imposition of a development cost charge is prohibited by statute.
- b) If by statute or by operation of law, this Bylaw does not apply to an application to subdivide or an application for a building permit made prior to the adoption of this bylaw, any bylaw repealed by this bylaw shall remain unrepealed and in force and effect in relation to such applications, so far as is necessary to impose development cost charges under that bylaw at the time of subdivision approval or issuance of the building permit.

7. **EFFECTIVE DATE**

This bylaw will come into full force and effect 60 days from the adoption of the bylaw.

8. **SEVERABILITY**

In the event that any portion of this bylaw is declared invalid it shall be severed and the remainder of the bylaw shall continue in full force and effect.

9. **REPEAL**

On the effective date of this bylaw "Nanoose Bay Bulk Water Local Service Area Development Cost Charge Bylaw No. 1088, 1997", and all amendments thereto are hereby repealed.

Introduced for first and second readings this day of .

Read a third time this day of .

Approved by the Inspector of Municipalities this day of .

Adopted this day of .

CHAIRPERSON

CORPORATE OFFICER

Chairperson

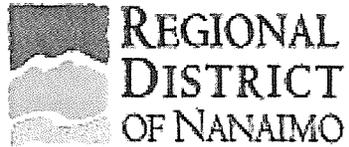
Corporate Officer

SCHEDULE 'A'

Development Cost Charges for Wastewater Treatment/Sanitary Sewer Works and Services

1. Pursuant to Section of this bylaw, development cost charges shall be levied in those areas that will be serviced by water works and services as outlined on the map attached hereto as Schedule 'B'.
2. The assist factor for those works and services shall be 1%.
3. All charges shall be paid in full prior to the approval of a subdivision or building permit unless paid by way of installments in accordance with BC Reg 166/84.
4. The Development Cost Charge Schedule is as follows:

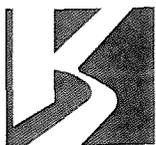
Category	Subdivision	Building Permit
Single Family	\$7,740.20 per lot being created	\$7,740.20 per residential unit constructed
Multi-Family		\$6,684.72 per residential unit constructed
Commercial		\$35.09 per square meter of building gross floor area
Industrial (all uses except Airport)		\$0.00 per square meter of building gross floor area
Institutional		\$17.71 per square meter of building gross floor area
Senior Living Units		\$3,888.62 per residential unit constructed



NANOOSE BAY PENINSULA WATER SYSTEM
DEVELOPMENT COST CHARGE BYLAW
TECHNICAL REPORT

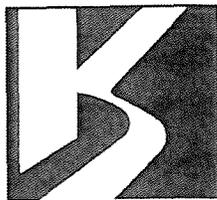
- FINAL DRAFT -

SEPTEMBER 2014



KOERS
& ASSOCIATES
ENGINEERING LTD.
Consulting Engineers

Parksville, BC



**KOERS
& ASSOCIATES
ENGINEERING LTD.**
Consulting Engineers

P.O. BOX 790
194 MEMORIAL AVENUE
PARKSVILLE, B.C. V9P 2G8
Phone: (250) 248-3151
Fax: (250) 248-5362
kael@koers-eng.com
www.koers-eng.com

September 29th, 2014
File: 1443-01

Regional District of Nanaimo
6300 Hammond Bay Rd.
Nanaimo, B.C.
V9T 6N2

Attention: **Mr. Mike Donnelly, ASCT**
 Manager of Water Services

Re: **Nanoose Bay Peninsula Water System**
 Development Cost Charges Study Draft Report, September 2014

We are pleased to submit three copies of our draft report entitled “**Regional District of Nanaimo, Nanoose Bay Peninsula Water System Development Cost Charges Study Draft Report, September 2014**”.

The report details DCC bylaw development and implementation, including growth projections, project cost estimates, and the Development Cost Charge calculation method. It has been prepared in accordance with the Development Cost Charge - Best Practices Guide, published by the Ministry of Community Services. The Draft DCC Report and calculations are based on statistics provided by Regional District staff, and includes current available project planning information and costs up to the year 2031, with no allowance for government grants.

This revision has been modified from earlier drafts to include the costs associated with the Nanoose Bay Peninsula’s portion of the Englishman River Water Service (ERWS) water supply project. The Regional District of Nanaimo has provided preliminary cost estimates which have been added to the DCC Function Table and are included in the DCC calculations.

A number of “out of sequence projects”, which may be constructed by a developer have been identified on the DCC function table as having potential for DCC Credits or Rebates. For further details on Credits, Rebates and Latecomer Agreements, please refer to section 2.10.

Only minor adjustments have been made to the estimated population and growth projections and remain essentially the same as originally presented in 2011. The RDN may want to revisit growth projections during the next major bylaw amendment.

.../2



September 29th, 2014
File: 1443-01

Regional District of Nanaimo
Mr. Mike Donnelly, AScT

Following the Regional District's final review, please feel free to contact Koers & Associates Engineering Ltd. to discuss any final required adjustments. We will then proceed with final edits and issuing of the report.

Yours truly,

KOERS & ASSOCIATES ENGINEERING LTD.

Chris Downey, P.Eng.
Project Manager

Ken Doll, P.Eng.
Project Engineer

Enclosures

REGIONAL DISTRICT OF NANAIMO
-
NANOOSE BAY PENINSULA WATER SYSTEM
DEVELOPMENT COST CHARGES STUDY
SEPTEMBER 2014

TABLE OF CONTENTS

	<u>Page</u>
1 INTRODUCTION	
1.1 Background.....	1
2 BYLAW DEVELOPMENT & IMPLEMENTATION OVERVIEW	
2.1 Purpose of DCCs.....	2
2.2 Exemptions	3
2.3 Bylaw Approval Process & Stakeholder Input	3
2.4 Service Area & Time Frame	4
2.5 Recoverable Costs.....	4
2.6 Bylaw Administration	5
2.7 Grace Period.....	7
2.8 In-Stream Protection	7
2.9 Credits, Rebates & Latecomers Agreements	8
2.10 Amendment Process (Minor vs Major).....	9
3 GROWTH PROJECTIONS	
3.1 Methodology	11
3.2 Population	11
3.3 Residential, Single & Multi-Family Assumptions.....	13
3.4 Senior Living Units Assumptions.....	14
3.5 Commercial & Institutional Assumptions	14
3.6 Industrial & Public Utility Assumptions.....	16

TABLE OF CONTENTS (Cont'd)

4	PROJECT COST ALLOCATION	
4.1	Introduction.....	17
4.2	Project Cost.....	17
4.3	Government Grants.....	18
4.4	Benefit to Existing Users.....	19
4.5	Municipal Assist Factor.....	19
4.6	DCC Reserve Funds.....	19
5	CALCULATION METHOD	
5.1	Common Unit Calculation Method.....	20
6	DEVELOPMENT COST CHARGES	
6.1	Proposed Waterworks.....	21
6.2	Common Unit Calculations.....	22
6.3	Cost Charge Calculations.....	24
7	SUMMARY	
7.1	Summary.....	27

TABLES

1	Population Projections, Current, Year 2031 and OCP Build-Out.....	12
2	Projected New Residential Development to OCP Build-Out.....	14
3	Land Use Growth Projections, Year 2031 and OCP Build-Out.....	16
4	Equivalent New Population Calculation to Year 2031.....	23
5	Water Projects and DCC Function Table.....	(after 23)
6	DCC Summary.....	25
7	Existing Users & DCC Recoverable Annual Costs Comparison.....	26

APPENDICES

- A Water System Improvements Schematic
- B Ministry Submission Summary Checklist

1 INTRODUCTION

1.1 BACKGROUND

The Regional District of Nanaimo (RDN) does not presently have in place a waterworks distribution system development cost charge (DCC) bylaw for the Nanoose Bay Peninsula. A separate bulk water DCC bylaw does currently exist for the Arrowsmith Water Service (AWS), and will no longer be required following the implementation of a new and comprehensive waterworks distribution system DCC bylaw. The new DCC bylaw will include the Englishman River Water Service (ERWS) which replaces the existing bulk water (AWS) DCC bylaw.

With more development comes the need for upgrading and expansion of all waterworks servicing functions throughout the Nanoose Bay Peninsula Water System service area. It is the Board's intention to equitably fund this servicing between existing and new users, by implementing a new DCC bylaw.

Findings detailed in this report result from the Regional District's need to implement DCCs for the various water system components and development categories. It reviews current applicable waterworks projects to the year 2031 in accordance with existing study requirements to estimated build-out in year 2046, with up-to-date cost estimates in anticipated year 2013 dollars, provides estimates of growth in each of the various development types over the year 2013 to 2031 period, and calculates required charges in each category.

2 BYLAW DEVELOPMENT & IMPLEMENTATION OVERVIEW

2.1 PURPOSE OF DCCS

DCCs are imposed to pay that portion of the capital cost of providing, altering, or expanding municipal services to serve new developments. The DCCs collected only represent part of the funding required to construct the capital projects. The balance of the funds will come from the Regional District (taxpayers), possibly with some assistance from the Province of B.C. and Federal Government (i.e. grants). The Regional District's contribution takes into account the benefit of the water distribution system to the existing users, and also includes an assist factor to the development's share of the various project costs.

DCCs are monies collected from land developers by a local government to offset some of the infrastructure expenditures incurred, to service the needs of new development while not adversely affecting existing users. Imposed by bylaw pursuant to the Local Government Act (1996), the charges are intended to facilitate development by providing a method to finance capital projects related to highway facilities, drainage, sewerage systems, waterworks and parks. This report relates only to the waterworks function.

DCCs allow monies to be pooled from many developers, so that funds can be raised to construct necessary services in an equitable manner. Those who will use and benefit from the installation of the capital projects should pay infrastructure costs. Recognizing that costs should be shared amongst all benefiting parties, a breakdown between benefits for existing users and new development should be provided.

The 'Development Cost Charge - Best Practices Guide' (BPG) is a publication by the B.C Ministry of Community Services, dated 2005. It is the objective of the BPG to standardize general practices in the formation and administration of DCC bylaws, while allowing flexibility to meet specific needs as allowed by the Local Government Act.

The BPG contains two parts, Part I is a guidebook for board members and administration staff responsible for developing and adopting policies, and Part II is a technical manual detailing procedures and calculations to be used by technical personnel for preparation of the actual bylaw and calculation of DCC rates.

2.2 EXEMPTIONS

Section 933 (4) of the Local Government Act describes circumstances when development is exempt from paying DCCs and as amended in year 2004. These are:

- i) where a building permit authorizes the construction, alteration, or extension of a building, or part of a building which is solely for public worship such as a church;
- ii) where a building permit is issued for the construction, alteration, or extension of a building that contains less than four dwelling units (See paragraph below on 2004 amendment), and the building is exclusively for residential use; and
- iii) where the value of the work covered by the building permit does not exceed \$50,000 (See paragraph below on 2004 amendment).

In 2004, the exemptions for less than four dwelling units and the maximum \$50,000 building permit value were amended, to provide more flexibility for the local government. Local governments are able to amend their DCC bylaw to charge DCCs on developments of fewer than four dwelling units, and can raise the \$50,000 threshold.

The Regional District will need to incorporate language into the bylaw to allow for any or all of these exemptions.

2.3 BYLAW APPROVAL PROCESS & STAKEHOLDER INPUT

DCC bylaws must be approved by the Ministry. The Ministry has indicated that expedient approval of DCC bylaws will be received when prepared in accordance with the BPG. To assist the Ministry staff in the review of the proposed DCC bylaw, a Ministry Submission Summary Checklist is included in the BPG as Appendix B.

When a DCC bylaw is implemented or amended, developers or those parties paying DCCs will be affected by the new charges. The BPG recommends a suitable period of notification before the new or amended DCC bylaw is in effect. This is known as a "Grace Period" (see Section 2.8 for further discussion). Newspaper articles and notices, information circulars, and verbal communications should be provided to the residents, taxpayers, and land developers, so they are aware of the proposed update, the anticipated charges, and the approximate timing of the new/amended bylaw's implementation.

The BPG recommends opportunities for stakeholder input be provided at two points during DCC bylaw development:

- i) before first reading by the Council, and
- ii) before third reading by the Council.

In addition, a public information meeting is recommended between the second and third readings of the bylaw, such that stakeholders can be involved in any revision(s) of the bylaw, and concerns arising from the public meeting can be considered in any revision(s).

2.4 SERVICE AREA & TIME FRAME

Deciding whether the proposed DCC will be a 'municipal wide' or 'area specific' charge will influence the composition of the program and the actual calculation of charges. These two options can be summarised as follows:

- A municipal wide DCC applies the same rate for a particular type of land use regardless of the location of any specific development.
- An area specific DCC divides the regional district into separate areas based on specific features such as geographic boundaries or a municipal service boundary.

For this study, DCCs have been applied on an area specific basis, the Nanoose Bay Water Service Area.

When developing the bylaw, an appropriate time frame for the DCC program has to be considered. The DCC can be established on either a "build out" or "revolving" basis. These are defined as:

- Build out applies to the construction of all necessary infrastructure to accommodate development to the full extent of the Official Community Plan, which generally has a long-term time horizon of more than 25 years.
- Revolving applies to construction of the necessary infrastructure to accommodate development for a defined period of time, such as 5, 10 or 15 years. A number of revolving time windows would be required to reach the OCP build-out.

For this study a revolving time frame to year 2031 has been used.

2.5 RECOVERABLE COSTS

The BPG states that DCC recoverable costs should be clearly identified in the DCC documentation and must be consistent with Ministry provisions. According to the Local Government Act, the recoverable capital costs associated with DCC projects include planning, engineering, and legal costs (Section 935(4)). In practice, this section has been interpreted by the Ministry of Community Services to include the following activities:

- planning, public consultation, and engineering design
- right-of-way or parkland acquisition
- legal costs
- interim financing
- contract administration and site inspection services
- construction costs
- contingencies
- appropriate net sales tax in full

Ministry policy does not consider inflation eligible for DCC recovery.

2.5.1 Long Term Financing

Costs generated from long term financing (interest charges) may be considered by the province's Inspector of Municipalities under "exceptional circumstances." These "exceptional circumstances" include the construction of large "fixed capacity infrastructure," such as a water treatment plant, which needs to be constructed before growth can occur and before adequate DCCs can be collected.

Specific financial resolutions/conditions must be provided/demonstrated in order for interest charges to be approved by the Inspector of Municipalities as listed in the BPG. In addition, the following information will need to be provided to the Inspector of Municipalities to review and assess the request:

- i) clear indication the DCC reserve fund for the works in question is in a negative cash flow position and that borrowing is required;
- ii) demonstration that this is an exceptional circumstance;
- iii) details of the interest rate and amortization period; and,
- iv) evidence the amendment has been disclosed to the public in the government's Financial Plan, financial statements, and the DCC Report.

Section 935(3) (c) of the Local Government Act does allow funds in DCC reserve accounts to be used to pay for the interest and principal on a debt resulting from DCC project costs.

2.6 BYLAW ADMINISTRATION

Once the Inspector of Municipalities has granted statutory approval of the DCC bylaw and the Council has adopted it, ongoing administration will be required. This will involve collection of charges, monitoring and accounting, credits and rebates, and the process for bylaw amendment.

2.6.1 Time of Collection

Section 933 (5) of the Local Government Act states DCCs are payable at either the time of subdivision approval or at issuance of building permit. The BPG recommends charges be applied as follows:

- i) Single Family - At the subdivision approval stage, per building parcel being created.
- ii) Multi-Family - At the subdivision approval stage for each dwelling unit permitted to be constructed pursuant to zoning or upon issue of building permit per dwelling being built.
- iii) Commercial/Institutional - Upon issue of building permit based on square metre of gross building area.
- iv) Industrial and Public Utility - Upon issue of building permit based on hectares of lot area under development.

Upon adoption of the new bylaw, the proposed DCCs will immediately apply to subdivision applications under the following conditions:

- Where an application has been denied.
- Where 'Conditional Approval' has lapsed during the one year in-stream protection period.
- Where final approval of subdivision has not been received prior to the first anniversary date of the new bylaw.

Note that developers of multi-phased subdivisions should be especially aware of significant dates. This includes dates such as that of the DCC bylaw adoption, the new bylaw's anniversary, and the expiry date attached to the Letter of Conditional Approval.

2.6.2 Separate Accounts

Section 935 (1) of the Act stipulates DCCs shall be deposited in a separate special DCC reserve fund. The monies collected (together with reserve fund interest) shall then be used to pay for the capital projects within the DCC program. DCC accounts should be set up in a manner that allows easy reporting of:

- how much money has been collected from DCCs,
- the amount of government grants, if any, received towards the capital DCC projects,
- amounts designated as DCC "credits" or "rebates",
- the amount of funds representing the District's share of project costs in the DCC program,

- interest earned,
- under/overages, and
- identification of completed projects.

2.7 GRACE PERIOD

When a DCC bylaw is implemented, developers or those parties paying DCCs will be affected by the new charges. The BPG recommends a suitable period of notification before a DCC bylaw is in effect, known as a “Grace Period”.

Newspaper articles and notices, information circulars and verbal communications should be provided to the Regional District residents, taxpayers and land developers to provide the opportunity to become aware of the proposed bylaw, the anticipated charge rates required and the approximate timing of the new bylaw’s implementation.

The DCC bylaw may state the effective date, or time period (of up to a year) from the date of DCC bylaw adoption, as confirmation of the Grace Period. This would apply to both initial bylaw implementation, and at the time of future updates with rate changes.

As stated in the BPG: “The Grace Period is granted by a municipality as an acknowledgement of the impact DCCs may have on the development industry.” The Grace Period serves to allow time for people to be notified of the new DCC rates as related to building permit applications.

2.8 IN-STREAM PROTECTION

“In-Stream Protection” seeks to provide stability for developers with an application in process during the introduction or amendment of DCCs provided the application meets certain time criteria as noted below.

2.8.1 Subdivision Applications

Section 943 of the Local Government Act provides “In-Stream Protection” for subdivision applications, provided the application fees have been paid. A complete application usually means the developer has received a Letter of Conditional Approval of subdivision, or equivalent such as ‘Preliminary Layout Approval/Review’.

2.8.2 Building Permit Applications

There are no Local Government Act provisions governing building permit applications similar to the “In-Stream Protection” offered to subdivision applications. Unless specified differently in the District’s Building Permit Bylaws, the amount payable is determined in accordance with the rates applicable

at the time of building permit application. As noted in the BPG: "However, the ruling of *Acamar v. City of Surrey* (1997) confirms the view that Section 943 only applies to subdivision applications."

Courts have concluded the date when the appropriate DCCs should be calculated is the date sufficient information has been submitted to the municipality for issuance of the permit and not necessarily the actual date of building permit issuance.

2.9 CREDITS, REBATES & LATECOMERS AGREEMENTS

There are no specific references to "DCC credits" or "DCC rebates" in the Local Government Act. The intent of Clause (8) of Section 933 is that developers providing trunk services beyond the local servicing needs of the development shall have those costs deducted from the applicable DCCs payable. This applies provided it is an identified DCC project in the capital plan. To implement the provisions of the legislation, the concepts of a "DCC credit" and a "DCC rebate" are introduced. Policies regarding when the Regional District should offer a credit versus a rebate should be carefully considered. In either case, the DCC accounting system should allow credits and rebates to be monitored and tracked.

2.9.1 Credits

The DCC program is compiled to service new development in an orderly manner. A situation is likely to arise where a developer desires to proceed with a land development before the required trunk services are installed in that area. This type of development can be considered to be "out of sequence". If the Regional District cannot afford the financial burden of additional infrastructure requirements, the Approving Officer would decline the development for the present time. Alternatively, the developer can construct the necessary trunk services, in advance of the proposed timing.

In this case, the out-of-sequence development could be offered a DCC Credit, where the cost of constructing the required trunk works is deducted from the amount of DCCs that would have otherwise been payable. The DCC credit cannot exceed the amount of DCC payable. For phased developments in the same site vicinity, it is assumed that the Regional District would execute a separate agreement with the land developer allowing any applicable excess credits to be carried forward to apply against future development DCCs. Similar agreements should be implemented to allow transfers of credits on property sale prior to building construction for categories where DCCs are collected at the building permit stage. Such credits should be allowed on a proportional basis against subdivided parcels, on a land area basis or anticipated building area basis, as deemed applicable by the Regional District.

2.9.2 Rebates

The DCC program covers trunk main requirements and other facilities beyond the services required for local development areas. Should a developer wish to proceed with a development before the trunk services fronting his property are installed, the Regional District may allow the developer to construct the necessary portion of the works to a trunk standard. The Regional District would then offer a DCC rebate for the incremental portion of the costs beyond the local requirement, following acceptance of the completed trunk works and registration of the development lands. In such cases, the rebate amount could exceed the DCCs payable.

2.9.3 Latecomers Agreement

Where a development constructs non-DCC project trunk works, which benefit adjacent developments, those servicing function costs, or over-sizing costs, may be considered for inclusion in a Latecomers Agreement. The agreement would be in accordance with the provisions of the Local Government Act.

For this particular DCC, the development would be responsible for setting up and costs of the agreement, which would then be administered by the Regional District. Similarly, "out of sequence" DCC projects that cannot be accommodated by the Regional District as detailed in the BPG, where a developer's costs are not recoverable through a DCC credit or rebate, may also be considered for inclusion in a Latecomers Agreement.

2.10 AMENDMENT PROCESS (Minor vs Major)

The average cost of a typical unit of development should not change significantly over time except for the effects of inflation or changes in standards, provided development projections are accurate. However, due to the periodic revision of the OCP, the Regional District's financial situation, changing infrastructure needs, and other factors affecting new development that are beyond the Regional District's control, the DCC bylaw will require future amendment.

In general there are two levels of amendment: a minor adjustment to DCC rates to reflect inflation, and a major review of the DCC for updating of capital project requirements, development projections, and the DCC accounting.

2.10.1 Minor Amendments

A Minor Amendment to the DCC bylaw is an updating based on changes in construction costs and inflationary effects. This type of bylaw amendment requires statutory approval, but due to its nature is anticipated to receive expeditious Ministry approval. This type of amendment should be carried out when necessary, likely once every two to three years.

2.10.2 Major Amendments

A Major Amendment involves a full review of the DCC methodology, including:

- Underlying DCC assumptions
- Broad policy considerations
- Updated development projections
- DCC program costs
- Study and project review updates and timing of proposed capital projects
- Addition of new projects to the DCC program, and deletion of completed capital projects

In accordance with the BPG recommendation, the major amendment to the DCC bylaws should be completed once every five years.

3 GROWTH PROJECTIONS

3.1 METHODOLOGY

Non-residential land uses are categorized separately from residential land use for DCC bylaws. In order to keep the number of designated land uses at a practical level, it is normal practise to consider the groupings under residential, commercial, industrial, institutional and public utility categories.

Data on existing housing units, recent growth statistics and future development, has been obtained from the Regional District which included planning studies for the Fairwinds Development. This information was used to estimate existing and future population service populations, number of dwelling units and the projected growth of commercial, institutional, industrial, and public utility development.

A discussion on projected population and land-use growth to Year 2031 and Build-Out is presented below.

3.2 POPULATION

3.2.1 Current (Year 2011)

The current (Year 2011) residential population was estimated at 5,095 people and is derived from multiplying the number of residential units by the average number of persons per dwelling unit.

The number of residential, multi-family, commercial, and institutional properties serviced was extrapolated from the RDN 2010 water records which showed the following:

- 1,975 Single-Family services (462 within Fairwinds and 1,493 in the remainder of the service area).
- 238 Multi-Family Units (118 townhomes within Fairwinds, 100 mobile home units on Apollo Drive, and 20 condominiums on Brynmarl Road)
- 22 Commercial services, and
- 5 Institutional services.

The number of residential units serviced in 2011 was calculated by applying the projected annual growth rate of 2%, resulting in an estimated 2,014 Single-Family and 243 Multi-Family Units.

For calculating the population increase from 2010 to 2011, it was deemed appropriate to assume a median average density of 2.3 and 1.9 persons per dwelling unit for Single-Family and Multi-Family, resulting in total service population of 5,095. Current population densities is considered to be slightly

lower, therefore, a lower density of 2.2 and 1.9 persons per unit were used to estimate population from 2011 to year 2031 and build-out.

3.2.2 Future (Year 2031 and Build-Out)

Future population estimates are based on growth within the existing boundaries of the Nanoose Bay Peninsula Water System service area. No allowance has been made for future expansion of the service area.

In the February 2007 Nanoose Bay Peninsula Water System Study, the RDN provided an estimate of the total number of residential units to Build-Out in accordance with the OCP. The split of Single-Family to Multi-Family Units was calculated based on the same proportion as existed in 2005, resulting in a future total Build-Out of 4,709 residential units, made up of 4,026 Single-Family and 683 Multi-Family. Based on historic average densities of 2.4 and 2.0 persons per Single-Family and Multi-Family unit, respectively, the ultimate Build-Out residential service population was previously calculated at 11,028 (2007 study).

Census Canada and RDN planning data reveals average population per single-family residence has steadily dropped during the past 25 years. For the 2011 Census, the average density per occupied dwelling unit was 2.27.

For this study (Year 2011), a lower density of 2.2 and 1.9 persons per unit were applied to Single-Family and Multi-Family, respectively. Applying these lower densities to the residential Build-Out projections from the 2007 Nanoose Bay Peninsula Water System Study, results in a project service population of 10,155, slightly lower than the 2007 study due to the lower capita per dwelling unit.

RDN planning staff indicated the population is expected to increase at an average compounded rate of 2% per year for the foreseeable future. Applying this annual growth rate to the 2011 population estimate, results in a Year 2046 population of 10,189, which is very close to the OCP Build-Out calculation of 10,155. Table 1 presents the current and future population estimates for Year 2031 (the revolving time frame for this DCC study and OCP Build-Out).

Table 1 – Population Projections, Current, Year 2031 and OCP Build-Out

Year	Population Estimate	Increase	
		#	%
2011	5,095	-	-
2031	7,570	2,475	49 %
OCP Build-Out (2046)	10,155	5,060	99 %

A discussion of the growth projections for each DCC land-use category follows below.

3.3 RESIDENTIAL, SINGLE & MULTI-FAMILY ASSUMPTIONS

Residential growth is separated by density into two categories:

- Single Family, and
- Multi-Family (such as duplex, townhouses, apartments, condominiums)

Current available data (Year 2011) indicates there are 2,014 Single Family and 243 Multi-Family Units serviced by the Nanoose Bay Peninsula Water System.

Much of the future development lands are contained within the Fairwinds development mainly the Lakes District Neighbourhood Plan, and the proposed redevelopment of the existing Schooner Cove area designated as the Schooner Cove Neighbourhood Plan.

For the Lakes District, an approximate breakdown between single-family and multi family-development units is made for the total 1,675 allowable units, based on the objectives of the neighbourhood plan.

There are three developments in-stream (Fairwinds Phase 7D, 8, and 11B). In addition, there is a potential 57 unit multi-family development on Andover Road, a 10 lot single family development on Schooner Cove Dr at Dolphin Dr and a multi-family development for the fully serviced Lot 1 on Redden Rd at Dolphin Drive.

Other development within the overall Nanoose Bay Peninsula Water System service area includes the Red Gap area, where the OCP states the area can accommodate 211 more units beyond the existing 289, and small scattered subdivisions, as well as potential redevelopment on existing developed parcels, some with possible rezoning.

For the Red Gap area and remainder of Nanoose, an allowance has been included for some infill single-family housing.

Table 2 presents the projected residential growth development to OCP Build-Out, which is reached in Year 2046 based on the projected population annual growth of 2% per year. It is noted that the projected OCP Build-Out contains a higher percentage of Multi-Family Units compared to that estimated during the year 2007 Water Study. This is due to changing demographics, the desires and objectives of the Lakes District Neighbourhood Plan, and particularly as a result of proposed Schooner Cove redevelopment as detailed in the Schooner Cove Neighbourhood Plan.

The breakdown estimate between Single Family and Multi-Family should be reviewed and adjusted if necessary in future DCC update studies. Should a higher percentage of single-family development actually occur, it is not anticipated additional infrastructure works would be needed, due to the relatively small

difference in design population per unit for the housing types. DCC funding would also not be adversely affected, as the higher DCC charge for single-family residential development would generate additional funds due to its greater burden.

Table 2 - Projected New Residential Development to OCP Build-out

Description	Single Family	Multi Family	Senior Family Units
Lakes District Neighbourhood Plan	1,000	674	140
Schooner Cove Neighbourhood Plan	-	360	-
Goodrich Rd (Fairwinds Phase 7D)	25	-	-
Collingwood Dr (Fairwinds Phase 8)	-	18	-
Schooner Ridge (Fairwinds Phase 11)	-	32	-
Andover Road	-	57	-
Schooner Cove Drive	10	-	-
Lot 1, Redden Road	-	3	-
Red Gap Area	65	86	-
Remainder of Nanoose	67	-	-
Total Additional to Build-out Projection (Year 2046)	1,167	1,230	140

The number of residential units to be constructed by year 2031 was estimated based on the projected population increase of 2,475 as noted in Table 1. This growth is assumed to be accommodated with the construction of 775 Single Family Units (1,705 people) and 350 Multi-Family Units (665 people), plus an allowance for 95 Senior Family Units (105 people).

3.4 SENIOR LIVING UNITS FACILITY ASSUMPTIONS

The RDN's Nanoose Bay Peninsula Official Community Plan (OCP) does not reference the development of Senior Living Units within the Nanoose Bay Peninsula. However, this report considers the potential construction of 140 new Senior Living Units to build-out (Year 2046), with an allowance for 95 units to be constructed by Year 2031.

Senior Living Units are expected to average 100 m² per unit (100 units per ha) and site coverage is estimated at approximately 40%.

3.5 COMMERCIAL AND INSTITUTIONAL ASSUMPTIONS

Commercial use includes service commercial, office commercial and commercial portion of mixed commercial/residential development.

Institutional use includes government offices, recreational facilities, churches,

community halls, fire halls, municipal halls and buildings, public and private schools, colleges, and universities, hospitals including private care facilities, and senior or low-cost housing (depending on the provisions of the Zoning Bylaw).

The BPG recommends commercial and institutional development be charged on the basis of building floor space expressed in square metres. The Regional District has selected to charge on the basis of gross building area expressed in square metres.

It is recommended, and assumed in this report, both Commercial and Institutional DCCs be charged for the construction, or alteration, or extension of a building that results in an increase of the original building area and where the value of the work covered by the building permit is greater than \$100,000. The Bylaw should be worded such that DCCs would only apply to the increased building size, beyond the pre-existing area, or number of housing units for mixed-use developments.

For Institutional DCCs, it is possible an existing school may be closed and demolished after a new school has been built on a different site, resulting in a transfer of the servicing burden. The Bylaw should be worded to allow credit for DCCs payable in such instances, to ensure they are only charged where an increased burden results from redevelopment or new development. DCCs would only apply to any upsized building area, and for new development when it occurs at the old site. If the building use is retained at the old site, for alternative additional use or sale, an increased burden will result, and this DCC credit would not be applicable. Similar provisions should be worded for all Commercial and Institutional buildings, where DCCs would only be charged on the increased building floor area beyond the existing total floor area, to equitably charge for the increased burden.

The Nanoose Bay Peninsula commercial zones currently consist of the Schooner Cove Neighbourhood Centre and the much larger Red Gap Village Centre.

Significant commercial and mixed-use development is planned for the Schooner Cove Neighbourhood Centre and in Lakes District Neighbourhood Plan. It is anticipated at build-out, approximately 12,725 m² of new commercial gross floor space will have been constructed as follows:

- 5,600 m² of commercial at the Red Gap Village Centre,
- 2,325 m² of commercial in the Schooner Cove Neighbourhood Centre, and
- 4,800 m² of mixed-use buildings in the Lakes District.

By 2031, it is estimated the Red Gap expansion and Schooner Cove will be fully developed, and one-third of the Lakes District commercial, for a total of 9,125 m².

For Institutional, it is anticipated 11,520 m² of new gross floor space will be developed by Build-Out as follows:

- redevelopment of Nanoose Bay Elementary School, with a 50% size increase totalling 2,320 m².
- 9,200 m² for the Lakehouse Centre in the Lakes District.

It is anticipated Institutional development will be fully built by 2031.

3.6 INDUSTRIAL & PUBLIC UTILITY ASSUMPTIONS

Industrial use includes light, medium or heavy industrial uses, warehouses, mini-storage, minor repair, fabrication and storage facilities or space, and fuel storage areas.

Public utility use includes BC Hydro, Telus, FortisBC Gas, Shaw Cablesystems, and similar utility storage, distribution and plant facilities.

As determined and agreed upon through discussions with RDN staff, Industrial development is not applicable to this report at this time, as there are no industrial designated lands in the OCP. Similarly, no Public Utility use facilities that burden the water system are anticipated. Therefore, the Bylaw should be worded to ensure Industrial & Public Utility DCCs are charged on a case by case basis.

Should the situation change in the future for Industrial or Public Utility land uses, the anticipated burden would be established, and the appropriate DCC charges would apply and be included in a Minor update to the DCC Bylaw.

A summary of the land-use growth projections presented above (Sections 3.3 through 3.6) for Year 2031 and OCP Build-Out is presented below in Table 3.

Table 3 – Land-Use Growth Projections, Year 2031 and OCP Build-Out

Land-Use	Additional By Year 2031	Total At OCP Build-Out (Year 2046)
Residential		
- Single Family	775 units	1,167 units
- Multi-Family	350 units	1,230 units
Senior Living Units	95 units	140 units
Commercial	9,125 m ²	12,725 m ²
Institutional	11,520 m ²	11,520 m ²
Industrial	-	-
Public Utility	-	-

4.1 INTRODUCTION

With the establishment of a list of capital projects and their estimated construction costs, the portion of the project cost attributed to development is calculated using the equation:

$$DCP = PC - GG - BEU - AF - RF$$

Where:

DCP	=	Development Cost Portion
PC	=	Project Cost
GG	=	Government Grants
BEU	=	Benefit to Existing Users
AF	=	Assist Factor
RF	=	Reserve Funds

A discussion on each category and the amounts used in this study is presented the following sections.

The total Regional District's contribution to the DCC projects consists of:

- i) total capital cost attributed to existing users (BEU),
- ii) assist factor (AF), and
- iii) portion of costs associated with developments exempt from DCCs (see previous discussion under Section 2.2).

4.2 PROJECT COST

Project cost estimates in this report are preliminary, order of magnitude. No preliminary or detail engineering work has been completed, and as such, the costs are considered Class D estimates. They are suitable for project control budgets, for program planning, and to obtain approval in principle.

Construction cost estimates were prepared and updated from earlier studies as appropriate, together with consideration of recent project unit costs provided by the RDN.

The estimates include a nominal 15% allowance for engineering design, tendering, contract administration, inspection; and record drawing production. The estimates includes a 30% contingency allowance to cover RDN administration, legal and interim financing costs, as well as additional or unexpected engineering and construction expenditures which may arise as the projects proceed to detailed design and construction completion.

No allowance has been made for inflation as this is not permitted under the Local Government Act. The impact of inflation should be reviewed regularly as time and projects proceed, and project costs adjusted accordingly as part of a minor amendment to DCCs.

No allowance has been made for long-term financing. As noted previously in Section 2.5, inclusion of long-term financing costs require Ministry approval and are only granted under special circumstances for “fixed capacity infrastructure”. Also, for the purpose of this study it is assumed that amortisation periods for long-term financing will not extend past 2032.

Construction costs are in 2013 dollars and are exclusive of GST (The October 2013 construction cost index (ENR CCI) value was 9,689).

4.3 GOVERNMENT GRANTS

Government grants, including Federal/Provincial infrastructure funding programs and Provincial revenue sharing programs may be available for projects, particularly those that contribute towards regional water supply and addressing water quality issues. If awarded, these can provide:

- A significant portion of study cost recovery.
- 25%, 33.3% or 75 to 80% Provincial Government funding, through various provincial programs.
- A total of 66.7% combined assistance under Infrastructure Funding Programs supported through joint Federal / Provincial agreements.

Given the extremely limited potential for availability, successful application, and award of grants under the ongoing anticipated economic climate, the calculations have assumed that no grants will be available for listed projects. An assumption of 1% has therefore been made and shown under the government grant column of the spreadsheet.

The Regional District should still continue to make every effort to obtain financial assistance towards all key eligible projects, particularly the larger scale and environmental type of system expansions. Small studies, reviews, and major DCC updates may prove to be eligible for receipt of some funding, such as a 50% study grant.

4.4 BENEFIT TO EXISTING USERS

Capital costs for DCC calculations must be net costs. It is recognized that most improvements within the Regional District provide a partial benefit to the existing residents and users.

The cost for each project applicable to existing users is deducted from the total project expenditure, after subtracting the government grant contribution, to calculate the allowable DCC recoverable portion of the project. Assumptions on the allocation are shown on the table detailing the DCC calculation.

4.5 MUNICIPAL ASSIST FACTOR

Section 933 (2) of the Local Government Act states that the purpose of DCCs is to provide funds to “assist” local government in paying costs of infrastructure. By not allowing 100% of the growth related costs to be charged to new developments, the legislation implicitly requires an “assist factor”, with a minimum of 1%. It is important to note that this assist factor is separate from the allocation of project costs between new development and existing users, which is considered on a project specific basis.

The chosen assist factor will reflect the Regional District’s desire to encourage development, and is largely a political decision. Most DCC bylaws use assist factors in the 1% to 10% range. Under certain conditions, the assist factor is adjusted to maintain DCC rates within a perceived affordable level. When the economy is slow, a higher assist factor, such as 10% can be used to encourage new development. With a healthy development climate, a low assist factor, such as 1% is considered appropriate.

With the above considerations in mind, the Regional District has chosen a 1% assist factor.

4.6 DCC RESERVE FUNDS

The reserve funds are the total amounts that have been collected from developers, and not yet been spent on DCC projects. The existing bulk water (AWS) reserve fund totalling \$145,000, has been included in the DCC calculations and will be transferred into the new DCC account.

5.1 COMMON UNIT CALCULATION METHOD

DCCs are calculated in accordance with the recommendation of the BPG using a common unit basis for each function (roads, storm drainage, sanitary sewer, waterworks and parks) to provide an equitable basis for the calculations.

For water supply and distribution, costs are related using an equivalent population demand, which is based on average densities and demand/usage, for each of the land-use categories.

6.1 PROPOSED WATERWORKS

The proposed waterworks projects are derived from information contained in the followings studies as well as current knowledge of future projects, the RDN Capital Works Plan, and input from RDN staff:

- Nanoose Peninsula Water Audit Study, January 2006,
- Nanoose Peninsula Water Distribution Study, February 2007, and
- Nanoose Peninsula Water System Capital Planning Study, September 2008.

The waterwork DCCS are to be imposed on the Nanoose Bay Peninsula Water System, in keeping with the BPG.

A brief discussion of the various types of waterworks projects from supply and treatment to distribution and metering, are presented below. The location and proposed construction year for each project, excluding overall system instrumentation, such as Supervisory Control and Data Acquisition (SCADA) and metering, is shown on the Water System Improvements Schematic located in Appendix A.

6.1.1 Water Supply and Treatment

Englishman River Water Service

In the 1990s, the Arrowsmith Water Service (AWS) was formed and tasked with developing the Englishman River water supply. The goal was to ensure an abundant source of high quality water would be available to the Nanoose, Parksville, French Creek, and Qualicum Beach areas for the foreseeable future. However for works beyond the Arrowsmith Dam, the joint venture was recently reformed to include Nanoose and Parksville only, with Nanoose's portion equalling 27%. This reformed joint venture is referred to as the Englishman River Water Service (ERWS).

The capital cost of the ERWS projects, including the river intake, water treatment plant, supply and transmission mains, aquifer storage and recovery, and land acquisition has been estimated to be \$36,984,494, with RDN's 27% portion equalling \$10,046,023.

Groundwater Wells

If significant development occurs prior to the implementation of the ERWS, additional well capacity will be required. It is anticipated the capacity increase will need to be in service prior to sufficient DCC funds being generated. It is anticipated therefore, the RDN would have the works installed by a developer and on land secured by the same developer. Under this scenario, the developer would receive a DCC credit for cost of the works and approved "fair market" value for

the land. The credit would be paid following acceptance of the completed works.

6.1.2 Watermains

Trunk Mains

Several trunk watermains are required by 2031 to meet the Fairwinds requirements for servicing adjacent lands in the Lakes District and Schooner Cove neighbourhoods. It is anticipated these trunk mains will be required prior to sufficient DCC funds being generated. Therefore, the RDN would have the works installed by the developer. Under this scenario, the developer may receive a DCC rebate for the incremental portion of the costs beyond the local requirement. The rebate would occur following acceptance of the completed trunk works and registration of the applicable portion of subdivision lands. In such cases, the rebate amount could exceed the DCCs payable during the initial subdivision phases.

Distribution Watermains

Local projects, mostly involving replacement of aged distribution system and service connection piping, some with upsizing to meet current design flow needs, have most of the costs allocated to existing users. The small benefit to new development allows for some infill subdivision and potential redevelopment/small rezonings on such local streets.

6.1.3 Studies, SCADA and Radio-read Water Meters

Allowance has been made for an Fairwinds Reservoir Pre-design Study, major updates to the DCC Bylaw once every five years, implementation and updates to a system wide Supervisory Control and Data Acquisition (SCADA) system and conversion of water meters to radio read to improve system capacity through leak detection and water use tracking and resulting targeted water conservation programs.

6.2 COMMON UNIT CALCULATIONS

Development cost charges were calculated based on the common unit of equivalent population served for each of the six land use categories.

For Single-Family and Multi-Family development, the equivalent population factor is assumed to be equal to the average population per unit as anticipated by RDN staff.

For Senior Living Units, a population factor of 1.1 person per unit was assumed.

Equivalent population factors for the Commercial and Institutional categories were reviewed initially by comparing the 2010 water consumption data provided by RDN staff and dividing it by the per-capita average daily consumption and approximate building footprint areas. These calculations assist in producing an estimated equivalent population factor. For the commercial category, a value of

0.005 persons per square metre equivalent was obtained. For new development it is anticipated that smaller floor-space commercial units will be built compared to existing, where an approximate doubling of the load is likely. As this would closely match the 0.009 p/m² of the City of Nanaimo sanitary sewer standards, an equivalent population demand for commercial of 0.01 p/m² has been used in the calculations.

For Institutional, the City of Nanaimo standard of 0.005 p/m² is considered to be appropriate for use in the projections.

These equivalent population demand factors should be monitored against actual demand experienced as new development occurs and appropriate adjustments made in future major amendments of the DCC Bylaw.

Table 4 shows the equivalent population calculation to Year 2031 (the revolving time frame for this study) for each land-use category.

Table 4 - Equivalent New Population, Year 2031

Land Use Category	Estimated New Development To Year 2031	Equivalent Population Factor	Equivalent New Population
Single Family Res.	775 units	2.2	1,705
Multi-Family Res.	350 units	1.9	665
Senior Living Units	95 units	1.1	105
Commercial	9,125 m ²	0.01	91
Institutional	11,520 m ²	0.005	58
Industrial & Public Utility	n/a	n/a	n/a
Total Equivalent Population			2,624

Table 5 - Water Projects and DCC Calculations

PROJECT COST ESTIMATE ALLOCATION											
No.	Project Description (for Replacements, Year reaching end of life is shown in brackets)	A Project Cost Estimate (2012)	B Government Grant -1% (6 x %)	C % Benefit to Existing Users	D Net Expenditure (A - B)	E Benefit to Existing Users (D x C)	F Benefit to New Develop. (D - E)	G % Municipal Assit (F x 1%)	H User Fees (Regional District) (E + G)	I DCC Recoverable (D - H)	
N2015-1	Gary Oak Drive PRV	52,300	2,233	100%	50,067	51,777	0	0	51,777	0	
N2015-2	Hartford/Bea Lion Loop & Footbridge (System Improvements)	237,500	2,375	75%	235,125	176,344	58,781	588	176,932	56,163	
N2015-3	Arbutus Crescent Main (System Improvements)	163,500	1,635	60%	161,865	148,866	16,999	171	149,037	17,845	
N2015-4	Hemlock Drive Main (System Improvements)	76,000	760	50%	75,240	37,620	37,620	377	76,000	147,897	
N2015-4	Collingwood Drive Loop Main (Potential DCC Rebate)	201,200	2,012	25%	199,188	49,797	149,391	1,464	151,255	147,815	
N2015-5	Walbrook West No. 2 Upgrades	150,000	1,500	0%	148,500	0	148,500	1,485	150,000	0	
TOTAL 2015		885,100	8,851		876,249	176,755	16,852	199	560,151	377,128	
N2016-1	Armening & McBurn Loop (System Improvements)	235,000	2,350	50%	232,650	116,325	116,325	1,163	117,488	116,325	
N2016-2	West Bay PRV Upgrade	12,700	127	25%	12,573	3,143	9,430	94	12,624	12,507	
TOTAL 2016		215,300	2,151		213,149	119,468	12,574	1,257	128,042	182,171	
N2017-1	Maine Drive Watermain Replacement (2016)	152,100	1,521	50%	150,579	75,289	75,289	753	151,342	150,579	
N2017-2	Gary Oak Drive Main (System Improvements)	238,500	2,385	90%	236,115	212,503	23,612	236	212,739	23,612	
N2017-3	Anchor Way Watermain Replacement (2016)	238,100	2,381	50%	235,719	117,859	117,859	1,179	119,038	117,859	
N2017-4	Bonington Drive Loop Main Phase 1 (Potential DCC Rebate)	261,200	2,612	25%	258,588	64,647	193,941	1,939	260,880	192,002	
N2017-5	Engleman River Water Services Projects (ERWS) Inlet and Raw Water Pump Sns & Piping Water Treatment Plant Joint Transmission Main Aquifer Storage & Recovery (ASR) North West Bay Transmission Main Craig Bay Control Sns & Decommissioning (RD's Overall 27% Contribution) (25% of cost included in ERWS) (25% of cost included in ERWS) (50% of cost included in ERWS) (100% of cost included in ERWS)	10,046,000	100,460	34%	9,945,540	3,381,491	6,564,049	65,641	3,447,132	6,498,431	
TOTAL 2017		10,921,500	109,215		10,812,285	3,842,342	65,641	667	3,848,650	6,841,672	
N2018-1	West Bay Pumphouse Upgrade (System Improvements)	114,500	1,145	25%	113,355	28,339	85,016	851	85,867	84,495	
N2018-2	Cullinger Road Main (System Improvements)	124,600	1,246	62%	123,354	76,412	46,942	469	47,411	106,144	
N2018-3	DCC Major Update Study	11,500	115	0%	11,385	5,693	5,692	57	5,749	5,632	
N2018-4	Beaumont Drive Loop Main Phase 2 (Potential DCC Rebate)	312,200	3,122	0%	309,078	0	309,078	3,091	312,169	309,078	
TOTAL 2018		562,800	5,622		557,178	28,339	46,942	607	47,546	478,485	
N2019-1	Corpus Christi Rd Main (System Improvements)	174,471	1,745	50%	172,726	86,363	86,363	864	87,227	86,363	
N2019-2	Schooner Cove Drive Loop Main Phase 1 (Potential DCC Rebate)	155,600	1,556	0%	154,044	0	154,044	1,540	155,584	154,044	
TOTAL 2019		763,471	7,623		755,847	113,655	113,655	1,137	114,888	175,308	
N2020-1	SCADA - Inlet System	230,000	2,300	0%	227,700	0	227,700	2,277	230,000	227,700	
N2020-2	Beaver Creek Wharf Rd Northwest Bay to Madrona Drive (Potential DCC Rebate)	73,300	733	95%	72,567	68,936	3,631	36	69,000	68,936	
N2020-3	Farmers Pre-design Study	17,500	175	0%	17,325	0	17,325	173	17,500	17,325	
TOTAL 2020		315,800	3,153		312,645	68,936	3,631	36	69,000	68,936	
N2021-1	SCADA - Continue Expanding/Programming (2012)	57,500	575	100%	56,925	56,925	0	0	56,925	56,925	
N2021-2	Northwest Bay Rd #1812 to Balcones (2012)	340,400	3,404	95%	336,996	309,174	22,822	228	230,000	16,898	
N2021-3	Jenkins Crescent Watermain Replacement (2012) (Potential DCC Rebate)	73,300	733	95%	72,567	68,936	3,631	36	69,000	68,936	
N2021-4	Schooner Cove Drive Loop Main Phase 2 (Potential DCC Rebate)	871,200	8,712	25%	862,488	217,107	645,381	6,454	651,835	645,381	
N2021-5	Farmers Pre-design Study	17,500	175	0%	17,325	0	17,325	173	17,500	17,325	
TOTAL 2021		2,356,400	23,564		2,332,836	56,925	56,925	571	57,500	1,271,843	
N2022-1	SCADA - Continue Expanding/Programming (2012)	40,300	403	95%	39,897	37,902	1,995	20	38,000	37,902	
N2022-2	Sangster Crescent Watermain Replacement (2012)	40,300	403	95%	39,897	37,902	1,995	20	38,000	37,902	
N2022-3	Farmers Weir No. 1, 2 & 3 Replacement	269,000	2,690	100%	266,310	266,310	0	0	266,310	266,310	
TOTAL 2022		614,600	6,146		608,204	766,112	1,995	40	766,552	766,552	
N2023-1	SCADA - Continue Expanding/Programming (2012)	57,500	575	100%	56,925	56,925	0	0	56,925	56,925	
N2023-2	Shugart Rd Watermain Replacement (2012)	73,300	733	95%	72,567	68,936	3,631	36	69,000	68,936	
N2023-3	DCC Major Update Study	11,500	115	0%	11,385	5,693	5,692	57	5,749	5,632	
TOTAL 2023		142,300	1,423		140,812	133,554	9,315	93	133,647	133,647	
N2024-1	SCADA - Continue Expanding/Programming	67,000	670	100%	66,330	66,330	0	0	66,330	66,330	
N2024-2	Arbutus Pump Station Improvements	178,400	1,784	75%	176,616	132,462	44,154	441	44,595	30,971	
TOTAL 2024		245,400	2,454		243,146	202,792	44,154	441	203,237	197,259	
N2025-1	140 Street Watermain Replacement (2012)	40,300	403	95%	39,897	37,902	1,995	20	38,000	37,902	
N2025-2	Madrona Drive Watermain Replacement (2012)	363,600	3,636	95%	359,964	340,414	19,550	195	340,609	340,414	
TOTAL 2025		403,900	4,039		399,861	378,316	21,545	215	215,609	215,609	
N2026-1	Balmer Road Watermain Replacement (2012)	162,000	1,620	95%	160,380	152,381	8,000	80	152,461	152,381	
N2026-2	Garnett Street Watermain Replacement (2012)	131,600	1,316	95%	130,284	123,668	6,616	66	123,734	123,668	
TOTAL 2026		293,600	2,936		290,664	276,049	14,616	146	146,197	146,197	
N2027-1	Radio Road Water Meters - Inlet System (2012)	344,600	3,446	100%	341,154	341,154	0	0	341,154	341,154	
N2027-2	Quail Creek Watermain Replacement (2012)	48,300	483	95%	47,817	45,426	2,391	24	45,450	45,426	
TOTAL 2027		392,900	3,929		388,971	386,580	2,391	24	286,604	286,604	
N2028-1	Ida Lake Watermain Replacement (2014)	56,200	562	95%	55,638	52,859	2,779	28	53,000	52,859	
N2028-2	Radio Road Water Meters - Continue System Conversion (2012)	114,800	1,148	100%	113,652	113,652	0	0	113,652	113,652	
N2028-3	DCC Major Update Study	11,500	115	0%	11,385	5,693	5,692	57	5,749	5,632	
N2028-4	Arbutus Road Watermain Replacement (2012)	153,800	1,538	95%	152,262	143,638	8,624	86	8,710	8,624	
TOTAL 2028		336,300	3,363		333,435	272,143	8,624	86	272,229	272,229	
N2029-1	Leisure Way Watermain Replacement (2014)	112,300	1,123	95%	111,177	105,918	5,259	53	106,000	105,918	
N2029-2	Spruce Drive Watermain Replacement (2014)	146,600	1,466	95%	145,134	137,763	7,371	73	137,836	137,763	
N2029-3	Radio Road Water Meters - Continue System Conversion (2014)	114,800	1,148	100%	113,652	113,652	0	0	113,652	113,652	
TOTAL 2029		373,700	3,737		370,563	357,133	12,630	126	357,259	357,259	
N2030-1	Sheppard Road Watermain Replacement (2014)	30,200	302	95%	29,898	28,289	1,609	16	28,300	28,289	
N2030-2	Armening Crescent Watermain Replacement (2014)	300,200	3,002	95%	297,198	282,338	14,860	148	14,908	14,711	
N2030-3	Radio Road Water Meters - Continue System Conversion (2014)	114,800	1,148	100%	113,652	113,652	0	0	113,652	113,652	
TOTAL 2030		445,200	4,452		439,048	423,279	16,469	165	165,767	165,767	
N2031-1	Wheat Avenue Watermain Replacement (2014)	34,500	345	95%	34,155	32,783	1,372	14	1,386	1,372	
N2031-2	Collins Crescent Watermain Replacement (2014)	336,800	3,368	95%	333,432	316,760	16,672	167	16,839	16,672	
N2031-3	Radio Road Water Meters - Continue System Conversion (2014)	114,800	1,148	100%	113,652	113,652	0	0	113,652	113,652	
N2031-4	Arbutus Drive Watermain Replacement (2014)	19,600	196	95%	19,404	18,484	920	9	929	920	
N2031-5	Gann Place Watermain Replacement (2014)	45,200	452	95%	44,748	43,451	2,297	23	2,320	2,297	
TOTAL 2031		531,900	5,319		526,212	504,432	22,821	228	228,660	228,660	
NET RECONSTRUCTION COST										5,769,514	
DCC RESERVE FUND										148,000	
TOTALS		\$20,047,894	\$200,478		\$19,847,415	\$10,275,751	\$3,471,864	\$84,717	\$10,470,468	\$9,231,847	

GROWTH PROJECT & TOTAL DCC REVENUE PER LAND USE						
Land Use Category	Projected Growth		Service Population Factor	Resulting Service Population		Portion of Total Cost (\$)
	(#)	(UNIT)		(#)	(%)	
Single Family	775	Dwelling Units	1.705	1,327	65.0%	\$5,590,655
Multi-Family	350	Dwelling Units	1.60	560	25.0%	\$2,330,651
Senior Living Units	86	Unit	1.10	95	4.0%	\$369,416
Commercial	9,125	m ² gross floor area	0.0100	91	3.5%	\$320,163
Institutional	11,520	m ² gross floor area	0	0	0.0%	\$204,060
Industrial	0	ha	0	0	0.0%	0
Totals				2,074	100%	\$9,231,847

DCC CALCULATION PER LAND USE					
Land Use Category	Projected Growth (#)	Portion of Total Cost (\$)	Resulting DCC (\$ per unit)	Unit	(Unit)
Single Family	775	\$5,590,655	\$7,214	Dwelling Unit	
Multi-Family	350	\$2,330,651	\$6,662	Dwelling Unit	
Senior Living Units	86	\$369,416	\$4,296	Unit	
Commercial	9,125	\$320,163	\$35.09	per m ² of gross floor area	
Institutional	11,520	\$204,060	\$17		

6.3 COST CHARGE CALCULATIONS

Table 5 presents a list of the water projects by name and description along with a numbering system containing a notation of anticipated construction year and project number.

For each project, an assessment of the benefit to existing users is made. Examples are presented below:

- N2017-5 Englishman River Water Service. An allocation of 34% benefit to existing users has been used. This was calculated taking the estimated “build-out” Max Day demand (10,344 m³/day), subtracting the estimated “new-development” Max Day demand (6,816 m³/day), then dividing the difference (3,528 m³/day) by 10,344 m³/day (the estimated “build-out” Max Day demand). For the purpose of this calculation the estimated demands are ERWS surface water supply demands only and do not include any available groundwater supplies. These ERWS demands were estimated and from projections made by the Associated Engineering pre-design team, which included Koers & Associates and Kerr Wood Leidel.
- N2015-5, Wallbrook Well No. 2 Upgrades are considered to be 100% benefit to new development. The cost estimate of \$150,000 does not include an allowance for land acquisition.
- Trunk watermain projects N2015-4, Collingwood Drive Loop Main, N2017-4 and N2018-5 Bonnington Drive Loop Main, and N2019-2 and N2021-4 Schooner Cove Drive Loop Main are required to service new development. The benefit to existing users is estimated at 25%, based on the mains servicing an additional 1,800 new units compared to the approximately 600 existing units.
- N2015-2, Harlequin/Sea Lion Loop and Footbridge, is assessed at 75% to existing users as it is a system improvement, leaving 25% benefitting new development through improved flow capability for the relatively small potential additional development or redevelopment it serves.
- N2016-3 and N2018-1 West Bay PRV and Building Upgrade, provide some improvement to existing users and a much larger design capacity to suit growth, and are therefore assessed at 25% benefit to existing users.
- N2021-5, Fairwinds Reservoir, is assessed at 50% benefit to existing users. This involves the construction of a new water reservoir at the existing Fairwinds reservoir site, providing additional storage required to service the future Nanoose Bay Peninsula demands.

The resulting total annual net DCC Recoverable and cost to Existing Users is shown in the last two columns (H & I). The cumulative total for each is also shown. The portion of the total cumulative cost attributed to each land-use categories is calculated based on its percentage of the equivalent service population.

The unit DCC for each land use is calculated by dividing the calculated total DCC cost for each land-use by the land-use projected total growth. A summary of the DCC per land-use is shown in Table 6.

Table 6 – DCC Summary

DCC Category	Charge	Unit
Single Family	\$7,740.20	Dwelling Unit
Multi Family	\$6,684.72	Dwelling Unit
Senior Living Units	\$3,888.62	Unit
Commercial	\$35.09	per m ² of gross floor area
Institutional	\$17.71	per m ² of gross floor area
Industrial	\$0.00	per ha of site area

DCCs for Single Family residential development would be collected at the subdivision stage. Cost charges for residential units are expected to be applied to all forms of single-family development, including bare-land strata developments.

DCCs for Multi-Family land uses, including mobile and modular homes, would be collected at the time of building permit issuance, when the exact number of units in the development is known.

DCCs for Senior Living land uses, would be collected at the time of building permit issuance, when the exact number of units in the development is known.

DCCs for Commercial and Institutional land uses would be collected at the time of building permit issuance, when charges related to floor space are easily calculated.

DCC for Industrial and Public Utility land uses would be collected at the time of building permit issuance.

A summary of the existing users and DCC recoverable annual costs are summarized in Table 7 on the following page.

Table 7 – Existing Users & DCC Recoverable Annual Costs Comparison

Existing User Fees		DCC Net Recoverable	
Year	Cost	Year	Cost
2015	\$500,111	2015	\$377,128
2016	\$182,171	2016	\$28,996
2017	\$3,980,536	2017	\$6,841,672
2018	\$128,133	2018	\$428,465
2019	\$586,469	2019	\$175,308
2020	\$190,213	2020	\$122,429
2021	\$1,271,845	2021	\$1,253,249
2022	\$627,487	2022	\$3,935
2023	\$131,649	2023	\$9,228
2024	\$151,090	2024	\$30,971
2025	\$450,831	2025	\$23,478
2026	\$276,464	2026	\$14,398
2027	\$386,604	2027	\$2,367
2028	\$296,407	2028	\$14,849
2029	\$357,281	2029	\$12,682
2030	\$428,420	2030	\$16,387
2031	\$524,778	2031	\$21,405
Total	\$10,470,468	Total	\$9,376,947

7.1 SUMMARY

To receive expedient approval of the amended DCC bylaw, the Ministry of Community Services publication *Development Cost Charge - Best Practices Guide* should be followed in amending the bylaw preparation, including stakeholder consultation and public notifications.

The completed 'Ministry Submission Summary Checklist' a copy of which is presented in Appendix B, should be completed and forwarded with the amended bylaw for the Ministry's review and approval.

The DCCs are established to Year 2031 and are on a revolving time basis.

If development occurs prior to the implementation of the ERWS, additional well capacity will be required. This capacity expansion may be required before sufficient DCC funds are available. In accordance with the BPG, the works could be installed by the developer. A DCC rebate would then be paid to the developer for the incremental portion of the costs beyond the local requirement. This would occur following acceptance of the completed well works.

Several trunk watermains are required to service adjacent lands in the Lakes District and Schooner Cove neighbourhoods. It is anticipated that these trunk mains will require being in service prior to sufficient DCC funds being generated. If installed by the developer, a DCC rebate would be paid to the developer for the incremental portion of the costs beyond the local requirement. This would occur following acceptance of the completed trunk works and registration of the applicable portion of subdivision lands.

In-stream protection is to be provided to any complete subdivision application, provided application fees have been paid, as per the Local Government Act Section 943.

When a DCC bylaw is implemented or amended, those parties paying DCCs will be affected by the new or amended charges. As project funding is generally arranged in the early stages of a development, sometimes even in advance of obtaining rezoning, cost increases can have a significant impact on a project's viability. As such a "grace period" is recommended before new or amended DCCs are brought in. The "grace period" is a length of time providing notification before the new or amended DCCs are adopted. The "grace period" is provided by the municipality as an acknowledgement to the development industry the impact DCCs may have on their business.

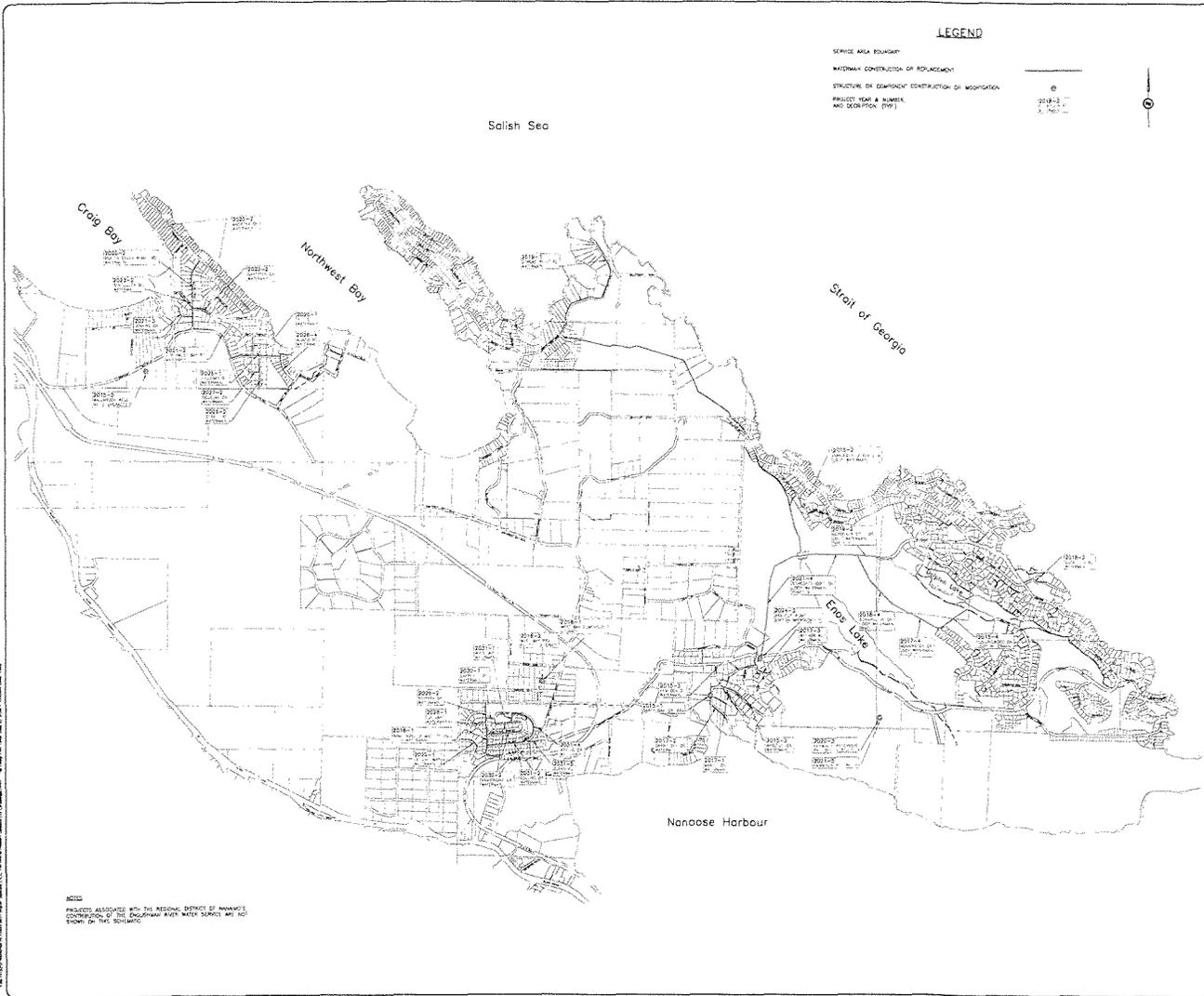
Table 6 provides a summary of the proposed DCC for each function by development (land-use) category.

Table 7 provides a comparison of the annual cost of the DCC program to existing system users and DCC recoverable costs. The existing user's column includes the capital works projects' percentage benefit to existing plus the 1% municipal assist factor applied against the developers' portion of the costs. These are the total funds the District needs to provide in order to carry out the DCC projects listed in the tables.

APPENDIX A

Water System Improvements Schematic





LEGEND

- SERVICE AREA BOUNDARY
- WATERMAIN CONSTRUCTION OR REPLACEMENT
- STRUCTURE OR EQUIPMENT CONSTRUCTION OR MODIFICATION
- PROJECT YEAR & NUMBER AND DESCRIPTION (N/A)

KOERS & ASSOCIATES ENGINEERING LTD.
 Consulting Engineers

10000 OF 1443-014	
REV	DESCRIPTION
A	10SEP14 CACH NO FINAL DRAFT
B	01 OCT 14 BY JND L. SERRAVALLO
PROJECT DESCRIPTION	

PROJECT NO	1443 (old No. 1086)
DRAWN BY	CACH
DESIGNED BY	RD
CHECKED BY	GD
APPROVED BY	GD
DATE	SEP 2014
SCALE	1:15,000
C. ENG.	

REGIONAL DISTRICT OF NANAIMO

PROJECT

NBP WATER SYSTEM DCC TECHNICAL REPORT UPDATE

WATER SYSTEM IMPROVEMENTS SCHEMATIC (TO 2031)

1443 - Fig. 1 - 1/1

NOTES

PROJECTS ASSOCIATED WITH THE REGIONAL DISTRICT OF NANAIMO CONSTRUCTION OF THE ENGLISHMAN RIVER WATER SERVICE ARE NOT SHOWN ON THIS SCHEMATIC

APPENDIX B

Ministry Submission Summary Checklist

**MUNICIPALITY/REGIONAL DISTRICT
MINISTRY OF COMMUNITY SERVICES
SUBMISSION SUMMARY CHECKLIST**
(to be completed by local government)
DCC BYLAW(S) NO.(S)

- Is this bylaw a New DCC Bylaw
 Major DCC Bylaw Amendment
 Minor DCC Bylaw Amendment

Please complete checklist by marking the appropriate boxes, and providing references to background material and other requested information. If DCCs are established on a basis other than the DCC Best Practices Guide, provide a brief explanation for the approach used. If space is insufficient, reference pages in submission where this is covered or append additional pages.

	DCC RECOMMENDED BEST PRACTICE	Submission Page reference
1.	Did the development of this DCC bylaw include: <input checked="" type="checkbox"/> a full public process? Yes <input type="checkbox"/> input from stakeholders? <input type="checkbox"/> Council input only?	3
	Why? Local developers and the general public have been kept advised of the proposed DCC bylaw implementation. The RDN intends to follow the Stakeholder Participation Strategy identified in the best practices guide.	3
2.	Are the Road DCCs established: <input type="checkbox"/> on a municipal-wide basis? <input type="checkbox"/> on an area specific basis?	
	Why? Waterworks DCCs only	
3.	Are the Storm drainage DCCs established: <input type="checkbox"/> on a municipal-wide basis? No <input type="checkbox"/> on an area specific basis?	
	Why? Waterworks DCCs only	
4.	Are the Sanitary sewer DCCs established: <input type="checkbox"/> on a municipal-wide basis? <input type="checkbox"/> on an area specific basis?	
	Why? Waterworks DCCs only	

	DCC RECOMMENDED BEST PRACTICE	Submission Page reference
5.	Are Water DCCs established: <input checked="" type="checkbox"/> on a municipal-wide basis? Yes <input type="checkbox"/> on an area specific basis?	21
	Why? Waterworks only	21
6.	Are Parkland and parkland improvement DCCs established: <input type="checkbox"/> on a municipal-wide basis? No <input type="checkbox"/> on an area specific basis?	
	Why? Waterworks only	
7.	Is the DCC time frame: <input checked="" type="checkbox"/> a revolving program (<u>18</u> Years)? Yes <input type="checkbox"/> a build out program (_____ Years)? <input type="checkbox"/> other?	1
	Why? DCC program is tied into the same 20-year capital expenditure plan developed in 2011, to year 2031..	1
8.	Are residential DCC categories established on the basis of: <input type="checkbox"/> density gradient? <input checked="" type="checkbox"/> building form? <input type="checkbox"/> other?	13
	Why? This is the traditional approach, with established records of average population per unit available to assist in the projection estimates.	13
9.(a)	Are residential DCCs imposed on the basis of: <input checked="" type="checkbox"/> development units? Yes <input type="checkbox"/> floor space? <input type="checkbox"/> other? If single-family residential DCCs are imposed on the basis of floor space, does the local government have a bylaw in place allowing DCCs to be levied at the building permit stage on fewer than 4 self-contained dwelling units?	13
	Why? Unit projection information is available.	13

	DCC RECOMMENDED BEST PRACTICE	Submission Page reference
9.(b)	Are commercial and institutional DCCs imposed on the basis of: <input checked="" type="checkbox"/> floor space? Yes, per square metre of gross building floor space. <input type="checkbox"/> other?	14
	Why? Reliable, as records of equivalent to residential impacts are available.	14
9.(c)	Are industrial DCCs imposed on the basis of: <input checked="" type="checkbox"/> gross site area? Yes, per square meter of gross site area. <input type="checkbox"/> other?	16
	Why? Reliable, as historical record of equivalent to residential impacts are available.	16
10.	Is the DCC program consistent with: <input checked="" type="checkbox"/> the <i>Local Government Act</i> ? Yes <input checked="" type="checkbox"/> Regional Growth Strategy? Yes <input checked="" type="checkbox"/> Official Community Plan? Yes <input type="checkbox"/> Master Transportation Plan? <input type="checkbox"/> Master Parks Plan? <input type="checkbox"/> Liquid Waste Management Plan? <input type="checkbox"/> Affordable Housing Policy? <input checked="" type="checkbox"/> Five Year Financial Plan Yes	1, 2, 3, 4 11, 16 11 21
	Why not? Other plans are not applicable to this DCC bylaw.	
11.	Are DCC recoverable costs, consistent with Ministry policy, clearly identified in the DCC documentation: <input checked="" type="checkbox"/> Cost allocation between new and existing? Yes <input checked="" type="checkbox"/> Grant Assistance? Yes <input checked="" type="checkbox"/> Developer Contribution? Yes <input checked="" type="checkbox"/> Municipal assist Factor? Yes <input checked="" type="checkbox"/> Interim Financing? Yes <input type="checkbox"/> Other:	19 18 22 19 5
	Why? To conform to the BPG.	
	Is capital cost information provided for: <input type="checkbox"/> Roads? <input type="checkbox"/> Storm Drainage? <input type="checkbox"/> Sanitary Sewer? <input checked="" type="checkbox"/> Water? Yes <input type="checkbox"/> Parkland? <input type="checkbox"/> Parkland improvements?	After 23

	DCC RECOMMENDED BEST PRACTICE	Submission Page reference																								
12.	<p>Are DCC recoverable costs which include interest clearly identified in the DCC documentation as follows:</p> <p><input checked="" type="checkbox"/> Interest on long-term debt is <i>excluded</i>? Yes <input type="checkbox"/> For specific projects, interest on long-term debt is <i>included</i>? <input type="checkbox"/> Other?</p> <p>If interest on long-term debt is included for specific projects, does the DCC submission include:</p> <p><input type="checkbox"/> A council/board resolution authorizing the use of interest? <input type="checkbox"/> Confirmation that the interest applied does not exceed the MFA rate <u>or</u> if borrowing has already been undertaken, the actual rate providing it does not exceed the MFA rate? <input type="checkbox"/> Confirmation that the amortization period does not exceed the DCC program time frame? <input type="checkbox"/> Evidence that the current DCC reserve fund balance is insufficient for the work in question? <input type="checkbox"/> Demonstration that the project is an exceptional circumstance (fixed capacity, out-of-sequence, or Greenfield)? <input type="checkbox"/> Evidence of public consultation and disclosure in the financial plan and DCC report regarding inclusion of interest?</p>	5																								
13.	<p>Does the municipal assist factor reflect:</p> <p><input checked="" type="checkbox"/> the community's' financial support towards the financing of services for development? Yes <input type="checkbox"/> other?</p>	19																								
	<p>Why? Low assist factor is considered appropriate at this time, with the very healthy development climate on Vancouver Island.</p>	19																								
	<p>Has a municipal assist factor been provided for:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"><input checked="" type="checkbox"/> Roads?</td> <td style="width: 20%;">Assist factor</td> <td style="width: 20%; text-align: center;">_____ %</td> <td style="width: 20%;"></td> </tr> <tr> <td><input checked="" type="checkbox"/> Storm Drainage?</td> <td>Assist factor</td> <td style="text-align: center;">_____ %</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Sanitary Sewer?</td> <td>Assist factor</td> <td style="text-align: center;">_____ %</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Water? Yes</td> <td>Assist factor</td> <td style="text-align: center;">1 _____ %</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Park land?</td> <td>Assist factor</td> <td style="text-align: center;">_____ %</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Park land improvements?</td> <td>Assist factor</td> <td style="text-align: center;">_____ %</td> <td></td> </tr> </table>	<input checked="" type="checkbox"/> Roads?	Assist factor	_____ %		<input checked="" type="checkbox"/> Storm Drainage?	Assist factor	_____ %		<input checked="" type="checkbox"/> Sanitary Sewer?	Assist factor	_____ %		<input checked="" type="checkbox"/> Water? Yes	Assist factor	1 _____ %		<input checked="" type="checkbox"/> Park land?	Assist factor	_____ %		<input checked="" type="checkbox"/> Park land improvements?	Assist factor	_____ %		19
<input checked="" type="checkbox"/> Roads?	Assist factor	_____ %																								
<input checked="" type="checkbox"/> Storm Drainage?	Assist factor	_____ %																								
<input checked="" type="checkbox"/> Sanitary Sewer?	Assist factor	_____ %																								
<input checked="" type="checkbox"/> Water? Yes	Assist factor	1 _____ %																								
<input checked="" type="checkbox"/> Park land?	Assist factor	_____ %																								
<input checked="" type="checkbox"/> Park land improvements?	Assist factor	_____ %																								
14.	<p>Are DCCs for single family developments to be collected:</p> <p><input checked="" type="checkbox"/> at the time of subdivision approval? Yes <input type="checkbox"/> other?</p>	7																								
	<p>Why? Recommended by the BPG. Subdivision approval collection creates an orderly flow of funds to allow for completion of the required works in a timely schedule, to achieve the necessary level of service.</p>	7																								

	DCC RECOMMENDED BEST PRACTICE	Submission Page reference
15.	Are DCCs for multi-family land uses to be collected: <input type="checkbox"/> at the time of subdivision? <input checked="" type="checkbox"/> at the time of building permit issuance? Yes	7
	Why? As the BPG. Charges related to floorspace and the exact number of units are easily calculated at the building permit stage.	7
16.	Is a DCC monitoring and accounting system to provide a clear basis for the tracking of projects and the financial status of DCC accounts: <input type="checkbox"/> in place? <input checked="" type="checkbox"/> to be set up? Yes	8
	Why? This is a new DCC bylaw. System will be set up once bylaw is implemented.	
17.	Is a suitable period of notification before a new DCC bylaw is in effect, known as a grace period: <input checked="" type="checkbox"/> provided for? Yes <input type="checkbox"/> other?	7
	Why not?	
18.(a)	Does the DCC bylaw set out the situations in which a DCC credit or rebate are to be given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8
18.(b)	If no, has Council adopted a policy statement that clearly identifies situations in which a DCC credit or rebate should be given or would be considered by Council? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, a copy of the policy statement is included with this submission.	Ref. _____
	If no, why not?	

	DCC RECOMMENDED BEST PRACTICE	Submission Page reference
19.	Has a process to provide for minor routine amendments to the DCC bylaw to reflect changes in construction and other capital costs: <input checked="" type="checkbox"/> been established? Yes <input type="checkbox"/> not considered necessary? <input type="checkbox"/> other?	9
	Why? To reflect changes in inflation, or changes in construction costs.	9
20.	Has a process to provide for major amendments to the DCC bylaw, involving a full review of DCC issues and methodology, to be completed not more than once every five years: <input checked="" type="checkbox"/> been established? Yes <input type="checkbox"/> not considered necessary? <input type="checkbox"/> other?	9
	Why? To review DCC assumptions, updated development projections, program costs, reserve funds, system update studies, project timing, new projects, costs.	9
	Contact _____ Position _____ Phone _____ *Signed by _____ Position _____ (*Signature of the Head of engineering, finance or planning for the local government.) Signed by (second signature optional) _____ Position _____ Date _____	

MUNICIPALITY

SUMMARY OF DCCs - BYLAW NO(S).

	Residential (per single family dwelling)	Commercial (per square metre)	Industrial (per square metre) [per hectare]	Institutional (per square metre)
Roads				
Storm Drainage				
Sanitary Sewer				
Water	\$9,787.83	\$44.37		\$22.40
Park Land				
Park Land Improvements – Included in Park Land				
Total	\$9,787.83	\$44.37		\$22.40

Note: If not on a municipal-wide basis, please indicate minimum and maximum charges.

For amendment bylaw, please indicate nature of change	Existing	Proposed
• New DCC service added		
• Time horizon		
• Capital costs		
• Weighting of types of development (residential, commercial, industrial, etc.)		
• Potential development		
• Allocation of benefit between existing and potential units of development		
• Assist factor		
• Inclusion of Specific Interest Charges		
• Provide that a charge is payable where there is fewer than 4 self-contained dwelling units		
• Establish an amount higher than the \$50,000 minimum provided for in the <i>Local Government Act</i> .		
• Is a suitable period of notification before a new DCC bylaw in effect, known as a grace period?		
Other: (please list) • •		