

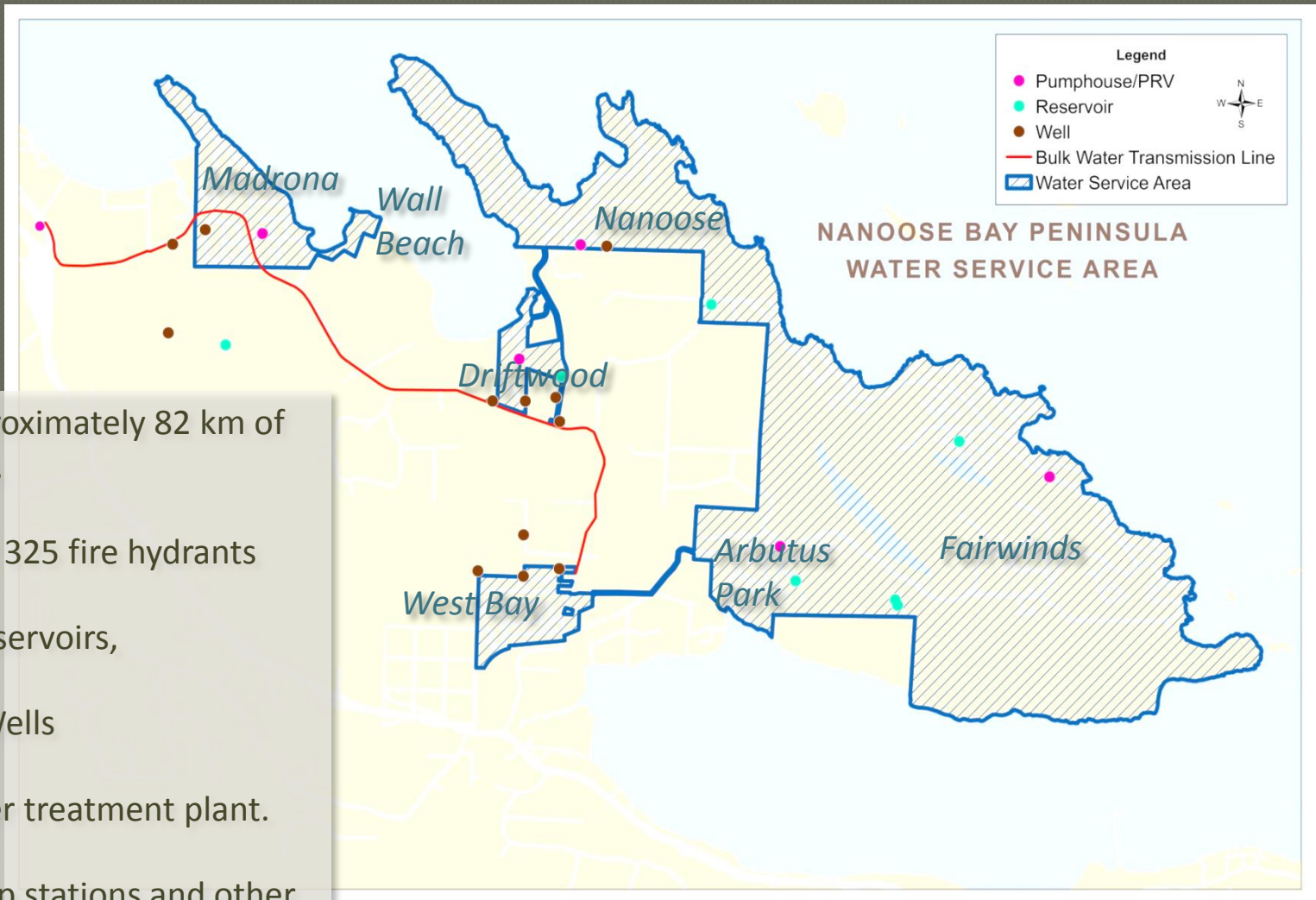
NANOOSE BAY PENINSULA
WATER SERVICE AREA
&
NANOOSE BAY BULK
WATER LOCAL SERVICE AREA

Draft
Development Cost Charge (DCC)
Bylaw

Nanoose Bay Water Service Areas:

- Serve approximately 2500 parcels in Nanoose Bay Peninsula
- Water provision is broken down into two “Service Areas”:
 1. *“Nanoose Bay Peninsula Water Service Area”*
Wells, treatment, and distribution infrastructure.
 2. *“Nanoose Bay Pen. Bulk Water Local Service Area”*
Surface water supply from the Englishman River
(currently up to 40% of summer peak daily demand)

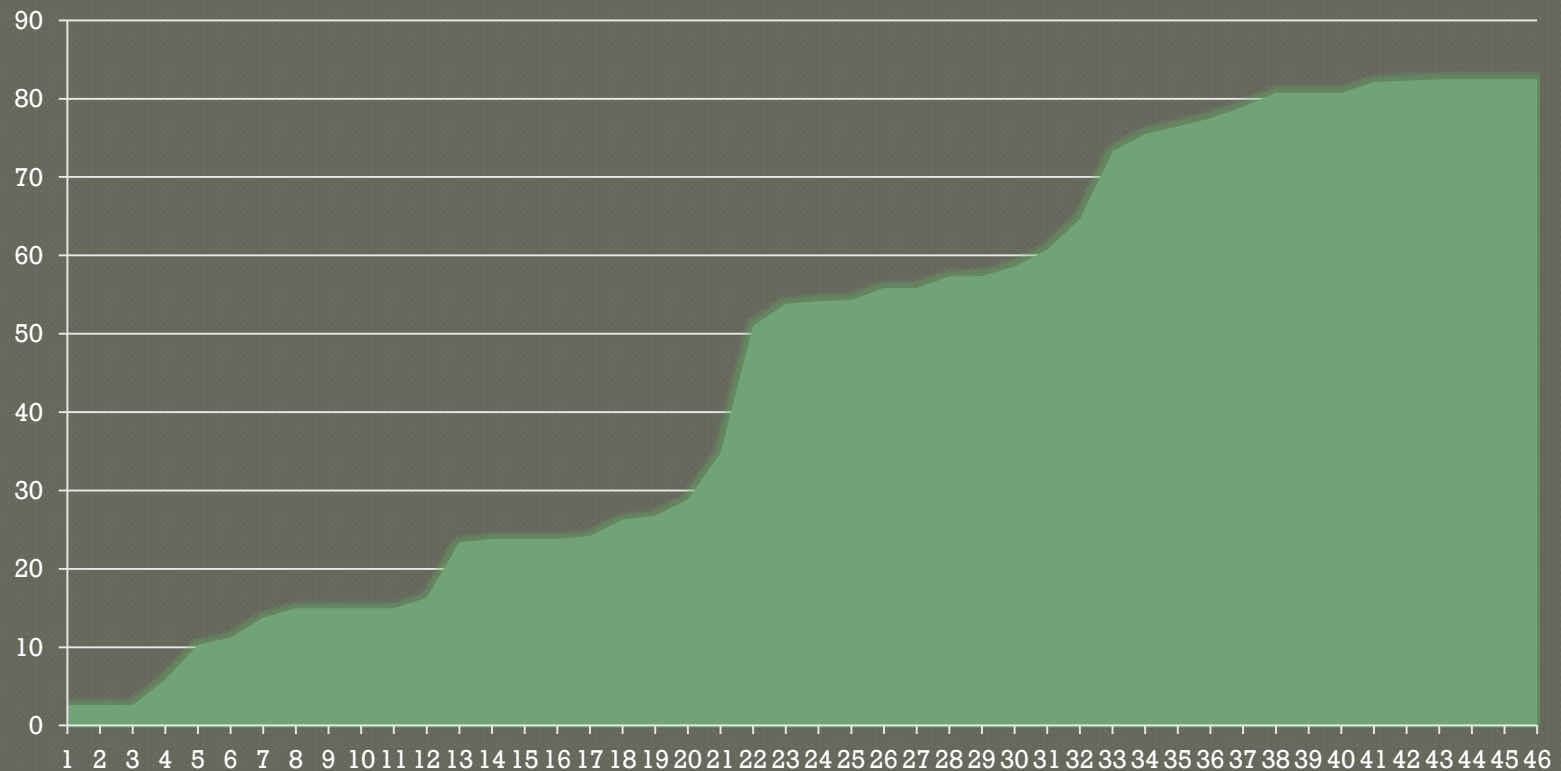
What is the NBPWSA?



- Approximately 82 km of pipe,
- over 325 fire hydrants
- 7 Reservoirs,
- 11 Wells
- water treatment plant.
- pump stations and other facilities

Pipe Inventory Growth Since 1969

(kms)



1969 - 2014

What are DCCs?

- Charges imposed to ensure new development pays its share of capital projects.
- The balance comes from taxpayers, and potentially government grants.

Why do we need a DCC bylaw?

- Not currently a DCC bylaw in place for NBPWSA.
- DCC bylaw for “bulk” (Englishman River) Water is outdated.
- \$20 million in capital projects planned to 2031.

How are DCCs developed?

- Based on the Province's "Development Cost Charge - Best Practices Guide".
- Retained Koers & Associated to undertake the detailed calculations required to establish the DCC rates.
- Opportunities for those affected by the proposed bylaw to provide input.
- Approved by the Ministry of Community, Sport and Cultural Development.
- Opportunity for regular amendments to reflect changes.

What costs can be included in a DCC?

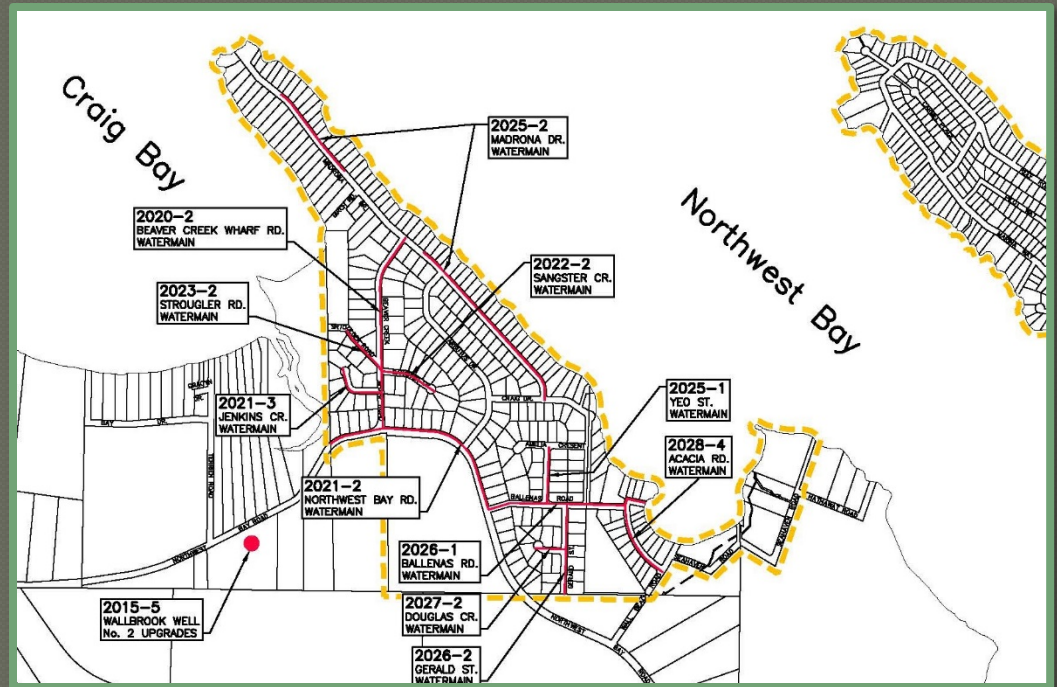
- Planning, consultation, engineering design.
 - Right of way and parkland acquisition.
 - Legal costs
 - Interim financing
 - Contract administration, site inspection
 - Construction costs
 - Contingencies
 - Net sales tax.
-
- Under “exceptional” circumstances long term financing (interest charges) may be considered by the Ministry. Conditions include:
 - Clear indication the DCC reserve fund is in negative cash flow position and borrowing is required
 - Notification of the public.

What does the DCC Bylaw include?

- \$20 million in capital works required to 2031, including \$10 million for ERWS Intake and treatment
- ERWS required for future growth due to cost and limitations on groundwater.
- Based on growth within existing service area, no allowance for future expansion of the service area.
- Based on:
 - *Official Community Plan*
 - *2007/8 Water System Studies*
 - *2011 Census.*
 - *Lakes District and Schooner Cove Neighbourhood Plans*
 - *RDN Planning data*

Proposed Project Overview

- Water Supply and Treatment
 - *ERWS*
 - *Well replacements*
- Water-mains
 - *New trunk water-mains for development.*
 - *Replace aging distribution water-mains for existing users.*
- Control system updates, radio read water metres
- Pump stations and reservoirs.



Calculating DCCs

Development
Cost Portion

=

Project
Cost

-

Gov.
Grants

-

Assist
Factor

-

Reserve
Funds

-

Benefit to
Existing
Users

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 (2013)	B Government Grant - 1% (A x 1%)	C % Benefit to Existing Users
N2015-1	Garry Oak Drive PRV	52,300	523	100%
N2015-2	Harlequin/Sea Lion Loop & Footbridge (System Improvements)	237,500	2,375	75%
N2015-3	Arbutus Crescent Main (System Improvements)	167,100	1,671	90%
N2015-3	Hemlock Drive Main (System Improvements)	78,000	780	90%
N2015-4	Collingwood Drive Loop Main (Potential DCC Rebate)	201,200	2,012	25%
N2015-5	Wallbrook Well No. 2 Upgrades (Potential DCC Credit)	150,000	1,500	0%
TOTAL 2015		886,100		
N2016-1	Armstrong / McDivitt Loop (System Improvements)	200,800	2,008	90%
N2016-2	West Bay PRV Upgrade	12,700	127	25%
TOTAL 2016		213,300		
N2017-1	Marine Drive Watermain Replacement (2016)	155,100	1,551	90%
N2017-2	Garry Oak Drive Main (System Improvements)	239,500	2,395	90%
N2017-3	Anchor Way Watermain Replacement (2016)	229,700	2,297	50%
N2017-4	Bonnington Drive Loop Main, Phase 1 (Potential DCC Rebate)	261,200	2,612	25%
N2017-5	Englishman River Water Service Projects (ERWS) (RDN's Overall 27% Contribution)	10,046,023	100,460	34%
	Intake and Raw Water Pump Stn & Piping (26% of cost included in ERWS)			
	Water Treatment Plant (26% of cost included in ERWS)			
	Joint Transmission Mains (26% of cost included in ERWS)			

Calculating DCCs

$$\text{Development Cost Portion} = \text{Project Cost} - \text{Gov. Grants} - \text{Assist Factor} - \text{Reserve Funds} - \text{Benefit to Existing Users}$$

Calculating Benefit to Existing Users

$$\text{Benefit to Existing Users} = \text{Fraction serving existing users} \times \text{Total Project Cost}$$

Englishman River Water Service = 34% BEU

Trunk water-mains = 25% BEU

Fairwinds Reservoir = 50% BEU

Projected Development to 2031

- 2011 Population = 5,095
- 2031 projection = 7,570
- OCP Build-out (2046) = 10,155

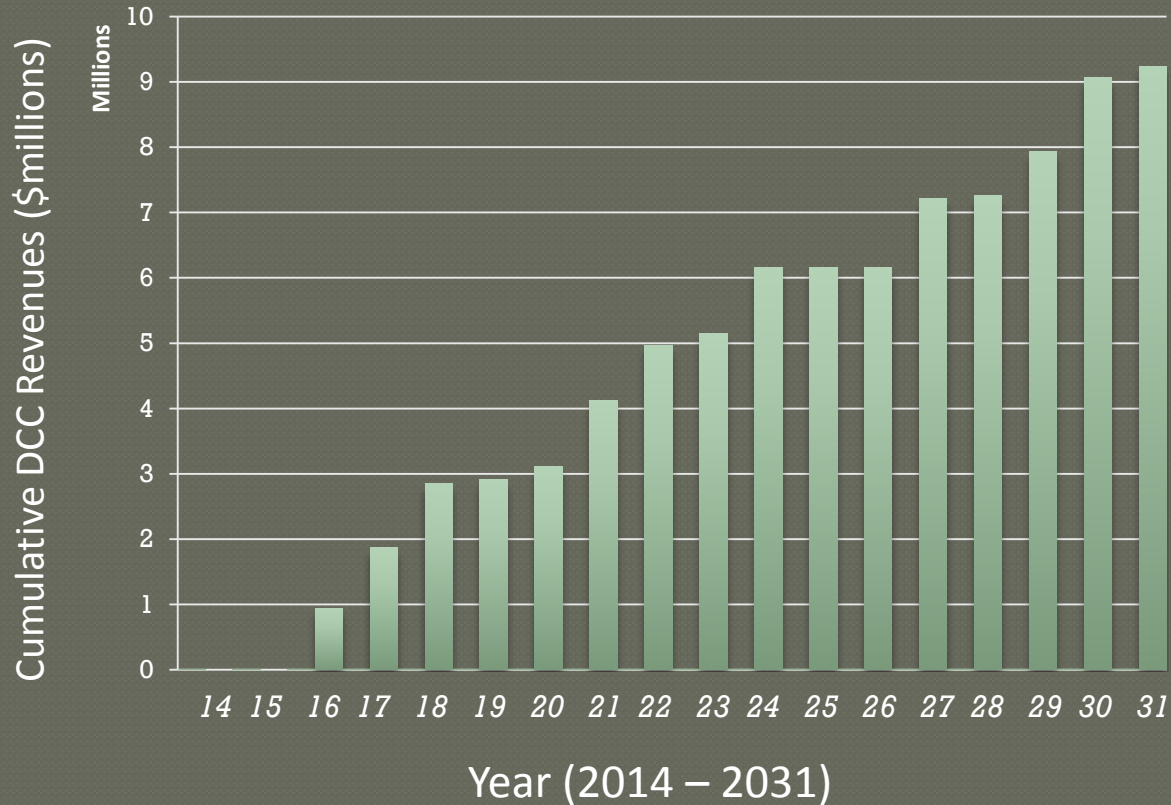
Land Use Category	Est. New Development To Year 2031	Equivalent Population Factor	Equivalent New Population	Portion of Total DCC Costs
Single Family Res.	775 units	2.2	1,705	65.0%
Multi-Family Res.	350 units	1.9	665	25.3%
Senior Living Units	95 units	1.1	105	4.0%
Commercial	9,125 m ²	0.01	91	3.5%
Institutional	11,520 m ²	0.005	58	2.2%
Industrial & Utility	n/a	n/a	n/a	0.0%
<i>Total Equivalent Population</i>			2,624	

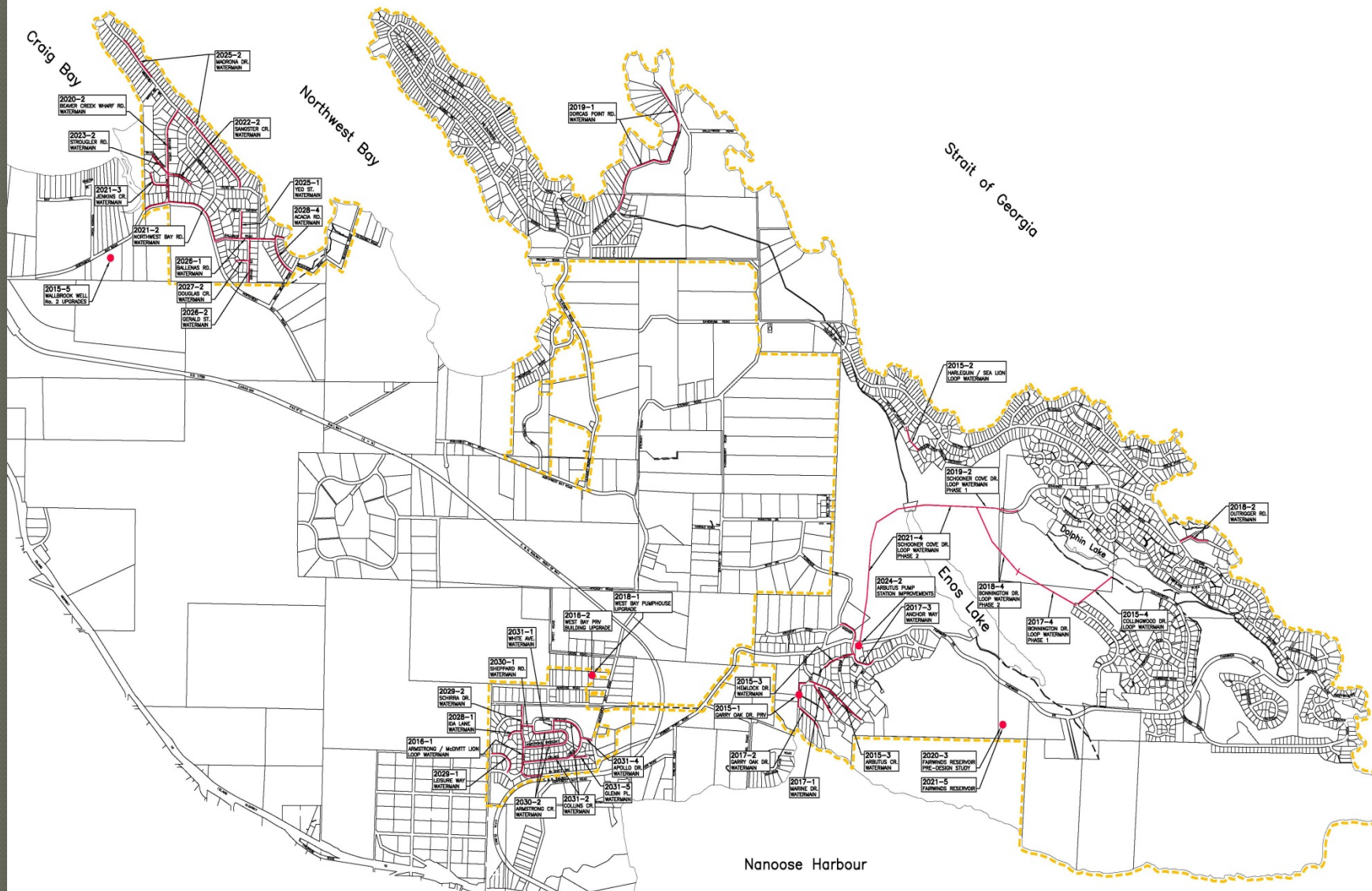
DCC Summary

Single Family DCC (per unit) = (Portion of total cost) / (projected units growth)

DCC Category	Charge	Unit
Single Family Res.	\$7,740.20	dwelling unit
Multi-Family Res.	\$6,684.72	dwelling unit
Senior Living Units	\$3,888.62	Unit
Commercial	\$35.09	per m ² floor area
Institutional	\$17.71	per m ² floor area
Industrial	\$0.00	Per Ha

Projected Cumulative DCC Revenues





Questions?

Thank you