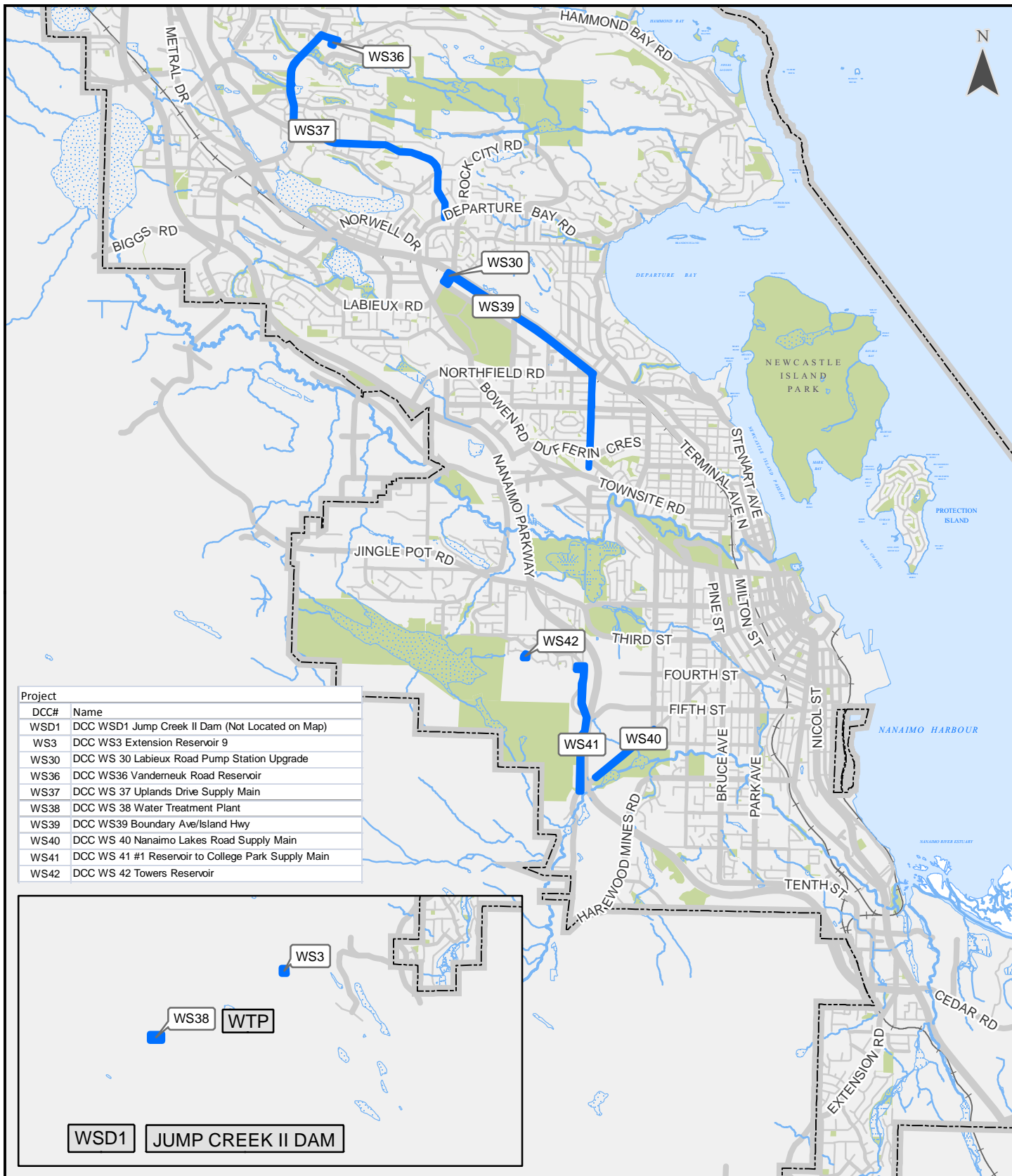


APPENDIX F

2017 DCC Bylaw - Water Supply Project List

					Allocated to Growth		Allocated to Existing Residents	
#	Project Name/Description	Location	Project Timing Range	Total Project Cost	Growth Percent	Growth Cost	Existing Percent	Existing Cost
1	DCC WSD1 Jump Creek II Dam	Jump Creek	2020/2027-2030	\$ 88,000,000	100%	\$ 88,000,000	0%	\$ -
3	DCC WS3 Extension Reservoir 9	Extension Reservoir 9	2027	\$ 3,300,000	100%	\$ 3,300,000	0%	\$ -
30	DCC WS 30 Labieux Road Pump Station Upgrade - install 2 additional pumps	Labieux Road Pump Station	2020	\$ 200,000	100%	\$ 200,000	0%	\$ -
36	DCC WS36 Vanderneuk Road Reservoir - new reservoir	Vanderneuk Road Reservoir	2029	\$ 5,100,000	100%	\$ 5,100,000	0%	\$ -
37	DCC WS 37 Uplands Drive Supply Main - new supply main for Vanderneuk Reservoir	Uplands Drive Supply Main (Rock City Rd to Vanderneuk Reservoir)	2028	\$ 8,900,000	100%	\$ 8,900,000	0%	\$ -
38	DCC WS 38 Water Treatment Plant - incremental cost from last DCC Review can be recovered in the current DCC Review.		2017-2041	\$ 12,000,000	30%	\$ 3,600,000	70%	\$ 8,400,000
39	DCC WS39 Boundary Ave/Island Hwy - increase current supply main capacity	Boundary Ave/Island Hwy Supply Main	2026	\$ 7,300,000	75%	\$ 5,475,000	25%	\$ 1,825,000
40	DCC WS 40 Nanaimo Lakes Road Supply Main - supply main replacement	Nanaimo Lakes Road Supply Main	2025	\$ 1,700,000	25%	\$ 425,000	75%	\$ 1,275,000
41	DCC WS 41 #1 Reservoir to College Park Supply Main - new main adjacent to current main	College Park Supply Main Duplication	2017	\$ 4,803,260	100%	\$ 4,803,260	0%	\$ -
NEW 42	DCC WS 42 Towers Reservoir - increase existing tank or construct 2nd tank	Towers Reservoir	2019	\$ 1,800,000	50%	\$ 900,000	50%	\$ 900,000
				\$ 133,103,260		\$ 120,703,260		\$ 12,400,000



City of Nanaimo
2017
Water Supply DCC
Project Map

Legend

■ Water Supply DCC Project

Published: May 11, 2017
0 625 1,250 2,500
Meters
1:65,000



DISCLAIMER

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Engineering and Public Works Project Summary Sheet

DCC WSD-1 (100% Growth) Jump Creek II Dam - New Water Storage

Project:

Components:

	2030	Funding				
	Budget	General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
2361 DCC WSD-1 (100% Growth) Jump Creek II Dam - New Water Storage	88,000,000	0	88,000,000	0	0	0
	88,000,000	0	88,000,000	0	0	0

Project Description:

Development and construction of new water supply reservoir/dam, Jump Creek II Dam.

Asset Management Description of Work:

New - Not existing before

Justification:

Increase capacity to existing dam and reservoir at Jump Creek Dam. Provides for future growth and climate change adaptation.

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Engineering and Public Works Project Summary Sheet

DCC WS3 : (100% Growth) Extension Reservoir 9A

Project:

Components:

610 DCC WS3 : (100% Growth) Extension Reservoir 9A

2027 Budget	Funding				
	General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
4,300,000	0	4,300,000	0	0	0
4,300,000	0	4,300,000	0	0	0

Project Description:

Construction of new 4900m³ concrete reservoir with TWL 198m
Includes piping from control building to new reservoir (increase of \$1M) *NEW

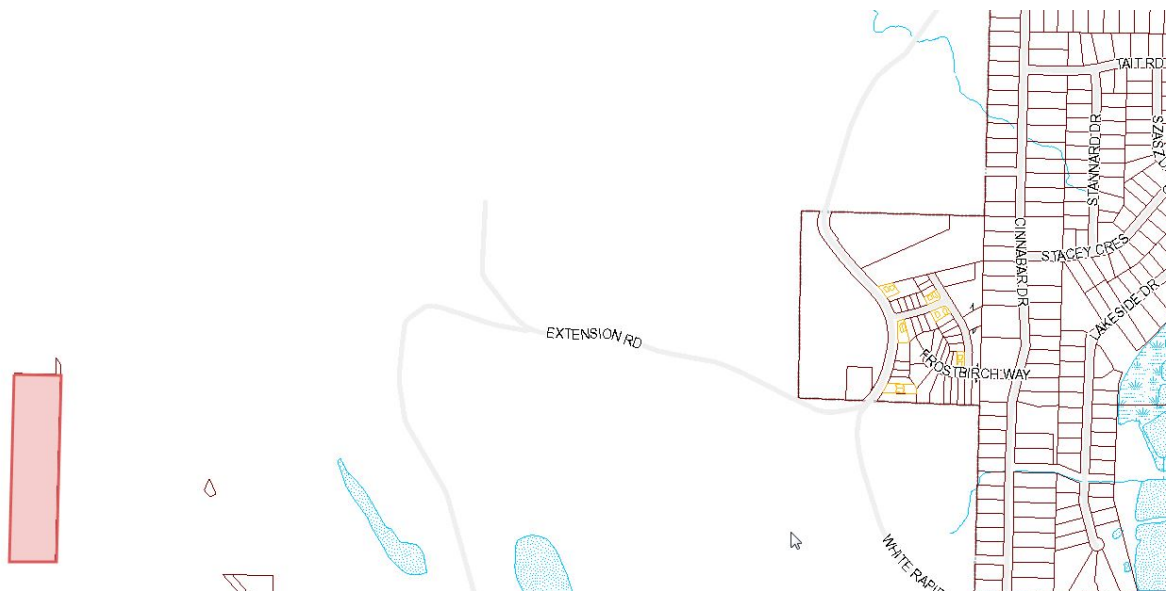
Asset Management Description of Work:

Upgrades - Increased service capacity

Justification:

This is required for capacity - for balancing storage and to provide fire flow

Project Map:



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Engineering and Public Works Project Summary Sheet

DCC WS-30 (100% Growth) Labieux Booster PS Upgrades

Project:

Components:

2126 DCC WS-30 (100% Growth) Labieux Booster PS Upgrades

2020 Budget	Funding				
	General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
200,000	0	200,000	0	0	0
200,000	0	200,000	0	0	0

Project Description:

DCC Water Supply System -Upgrade Labieux booster pump station to meet increasing water demands.

Asset Management Description of Work:

Labieux Booster PS Upgrades

Justification:

Growth - Add two new pumps to support continued growth

Project Map:



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Engineering and Public Works Project Summary Sheet

DCC WS36 : (100% Growth) Vanderneuk Reservoir

Project:

Components:

815 DCC WS36 :
Vanderneuk Reservoir

2029 Budget	Funding				
	General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
5,100,000	0	5,100,000	0	0	0
5,100,000	0	5,100,000	0	0	0

Project Description:

Construction of a new 2 million gallon (9230 m3) closed concrete or steel reservoir with a TWL of 170m

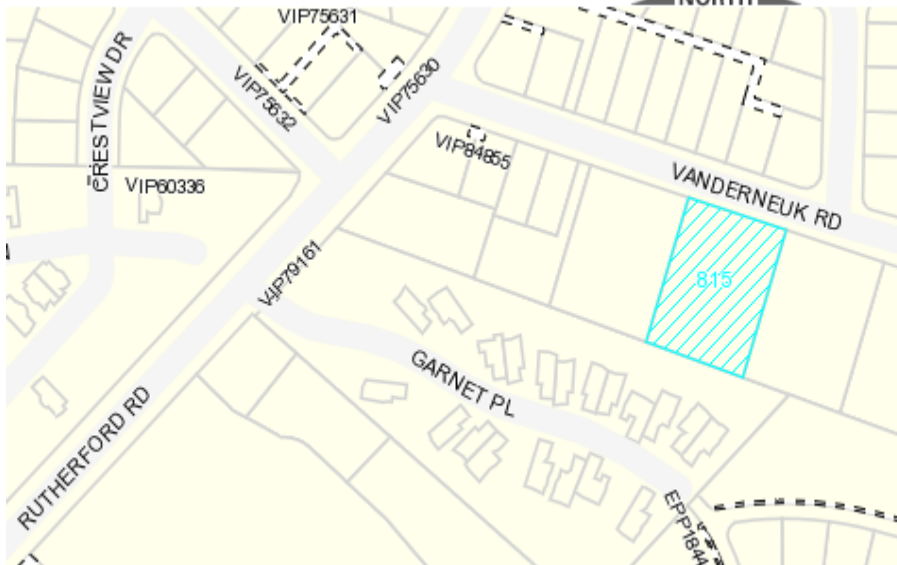
Asset Management Description of Work:

New reservoir

Justification:

Allows continued growth in north end, augments Lost Lake Reservoir No 2; supports fire flow.

Project Map:



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Engineering and Public Works Project Summary Sheet

DCC WS37 : (100% Growth) Uplands Drive Supply Main

Project:

Components:

	2028	Funding				
	Budget	General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
816 DCC WS37: (100% Growth) Uplands Drive Supply Main	8,900,000	0	8,900,000	0	0	0
	8,900,000	0	8,900,000	0	0	0

Project Description:

Uplands Drive Supply Main - Departure Bay Road to Vanderneuk Road to Turner

Asset Management Description of Work:

New - Not existing before

Justification:

Allows continued growth in north end, supplies Vanderneuk Reservoir; supports fire flow.

Project Map:



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Engineering and Public Works Project Summary Sheet

DCC WS38 (30% Growth): Water Treatment Plant

Project:

Components:

	2014	Funding				
	Budget	General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
619 South Fork Water Treatment Plant	510,000	0	0	510,000	0	0
817 DCC WS38 : Water Treatment Plant	61,000,000	0	9,863,873	933,757	0	50,202,370
	61,510,000	0	9,863,873	1,443,757	0	50,202,370

Project Description:

Portion of Water Treatment Plant attributable to development (80,000-130,000)

Asset Management Description of Work:

New - Not existing before

Justification:

Regulatory requirement; protects drinking water quality for generations.



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Engineering and Public Works Project Summary Sheet

DCC WS39 : (75% Growth) Boundary Ave / Island Hwy Supply Main

Project:

Components:

818 DCC WS39 : Boundary Ave /
Island Hwy Supply Main

2026 Budget	Funding				
	General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
7,300,000	0	5,475,000	1,825,000	0	0
7,300,000	0	5,475,000	1,825,000	0	0

Project Description:

Boundary Ave/Island Hwy Supply Main (Construction over 2 years 2025/2026)

Asset Management Description of Work:

Upgrades - Increased service capacity

Justification:

Augment capacity and provide duplication of Bowen Rd Supply main to provide for continued growth and fire flow.

Project Map:



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Engineering and Public Works Project Summary Sheet

DCC WS40 : (25% Growth) Nanaimo Lakes Road Supply Main

Project:

Components:

	Budget	Funding				
		General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
819 DCC WS40 : (25% Growth) Nanaimo Lakes Road Supply Main	1,700,000	0	425,000	1,275,000	0	0
	1,700,000	0	425,000	1,275,000	0	0

Project Description:

Nanaimo Lakes Road Supply Main

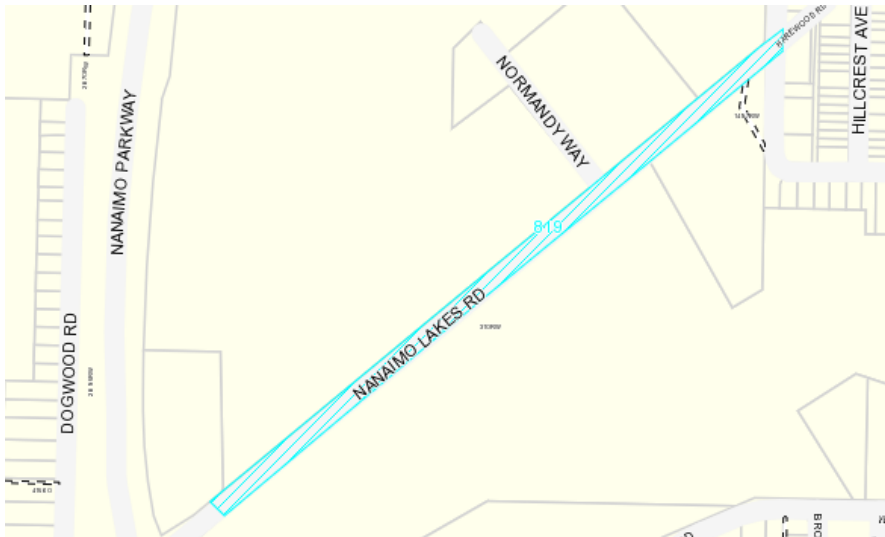
Asset Management Description of Work:

Growth – Identified as a DCC Project

Justification:

Provides capacity for growth and fire protection in lower pressure zone

Project Map:



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Engineering and Public Works Project Summary Sheet

DCC WS41: (100% Growth) #1 RES to College Pk Dup Supply WM & PRV

Project:

Components:

625 DCC WS41 (100% Growth): #1 RES to College Pk Dup Supply WM – New

2017 Budget	Funding				
	General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
4,360,000	0	4,360,000	0	0	0
4,360,000	0	4,360,000	0	0	0

Project Description:

Construction of a new water supply main, 1.6 km-750mm diameter steel, from Nanaimo Lakes Road to College Park Reservoirs.

The pipeline will increase the supply capacity and water system reliability to the City.

Asset Management Description of Work:

New – Not existing before

Justification:

This is required for capacity - to feed North end for growth. This also improves fire storage in existing reservoirs.

Project Map:



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Engineering and Public Works Project Summary Sheet

DCC WS 42 – (50% Growth) Towers Reservoir

Project:

Components:

DCC WS42 (50% Growth):
Towers Reservoir

2019 Budget	Funding				
	General Taxation	DCC's	Water Reserves	Sewer Reserves	Other Sources
1,800,000	0	900,000	900,000	0	0
1,800,000	0	900,000	900,000	0	0

Project Description:

DCC WS42 (50% Growth): Towers Reservoir - Replacement

Asset Management Description of Work:

Replacement, Capacity Upgrade

Justification:

This is required for capacity – to feed West Nanaimo for balancing storage and to provide fire flow. Existing reservoir was undersized.

Project Map:



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