

MEMORANDUM



May 15, 2025

TO: Ben Van Nostrand
CC: Tim Perepolkin
FROM: John Weninger
FILE: Columbia Shuswap Regional District
SUBJECT: Water System Acquisition Prioritization

INTRODUCTION

The CSRSD often receives requests to acquire both existing water systems and systems resulting from new developments. Currently, there are seven water systems in line that have applied to the CSRSD for acquisition. Due to limited resources, the CSRSD Utilities department has a restricted capacity to acquire systems, necessitating the prioritization of these and future acquisition applications.

The *CSRSD Water System Acquisition Policy* provides general guidelines on the preferred criteria for acquisition:

- Existing systems posing significant health risks to users.
- Existing systems that are financially viable.
- New systems that address current health issues within the CSRSD.
- New systems offering economies of scale that benefit other systems.

However, the policy is not specific on how the systems meeting one or more of these criteria will be prioritized relative to other applications.

To address the need for clearer application prioritization, the Director of Environmental Services has retained JW Infrastructure Planning Ltd. to collaborate with department staff on developing a prioritization framework.

PROPOSED FRAMEWORK

After reviewing the problem and examining existing prioritization frameworks from other sectors, it is recommended to create a scoring system to rank each application. This system will assign points to reflect the benefits provided by each application and the number of CSRSD residents affected (referred to as “reach”). Benefits can be categorized as either health or economic benefits. The total score will be the sum of the points attributed to health benefits and those attributed to economic benefits.

Total Points = (Health Benefit Points) + (Economic Benefit Points)

BENEFITS DEFINITIONS

It is proposed that the benefits align with the *CSRD Water System Acquisition Policy* and that the total benefits be the sum of the health benefits and the financial benefits derived from economies of scale.

Health Points

The total health points are calculated as the product of the benefits and the reach of the benefits (i.e. the number and type of residents that receive health benefits).

Total Health Points = Health Benefits x Health Reach

A maximum of 3 benefit points is awarded based on the potential health benefits resulting from the acquisition.

The potential health benefits and the associated points with each is as per the table below:

IMPACT	DESCRIPTION OF ISSUE ADDRESSED	HEALTH BENEFIT POINTS
NONE	NONE	0
MINIMAL	SEASONAL BOIL WATER ADVISORIES	1
MODERATE	CONTINUOUS BOIL WATER ADVISORY	2
SIGNIFICANT	WATER UNDRINKABLE ADVISORY	3

Financial Points

The total financial points are calculated as the product of the economic benefits and the reach of the benefits (i.e. the number and type of residents that receive economic benefits).

Total Economic Points = Economic Benefits x Economic Reach

A maximum of 1.5 benefit points is awarded based the degree to which the system may contribute to the economies of scale of another CSRD system.

The potential economic benefits and the associated points with each is as per the table below:

IMPACT	DESCRIPTION OF ISSUE ADDRESSED	POINTS
MINIMAL	<10% ADDITIONAL SCALE OR >75 USERS (NEW DEV)	0.5
MODERATE	20-50% ADDITIONAL SCALE	1
SIGNIFICANT	>50% SCALE	1.5

REACH DEFINITIONS

The “reach” of the project considers both the customers of the application area and the number of existing customers that would benefit from the increased economies of scale.

TYPE OF CUSTOMER	POINTS PER CUSTOMER
NEW DEVELOPMENT CUSTOMERS	1
CUSTOMERS BENEFITTING FROM ECONOMIES OF SCALE	2
EXISTING RESIDENTS RECEIVING NEW SERVICE	3

The above definition of “reach” points gives the highest priority to existing residents in need of the service, followed by existing CSRD customers who will benefit from the economies of scale. New development customers receive the least points.

The Reach points are calculated separately for both of the Health Benefits Reach and the Economica Benefits Reach

TOTAL SCORE CALCULATION

The total score will be the product of benefits and reach for each category added together.

$$\text{Total Points} = \text{Benefits}_H \times \text{Reach}_H + \text{Benefits}_E \times \text{Reach}_E$$

Expressing the points as a product of benefits and reach acknowledge that two applications with similar benefits but with one application benefitting twice the number of residents should receive twice as many points.

SCORING EXAMPLE

To evaluate the framework, it has been applied to seven applications in the queue.

	UPPER SORRENTO	WILDROSE BAY	COPPER COVE	TALANA	SHELTER BAY	OSPREY	KETTLESON
HEALTH REACH POINTS =	75	318	108	153	50	50	54
HEALTH BENEFIT POINTS =	3	0	0	0	0	0	0
TOTAL HEALTH SCORE =	225	0	0	0	0	0	0
ECONOMIC REACH POINTS =	1341	318	394	439	50	220	54
ECONOMIC BENEFIT POINTS =	0.5	1	1	1	1	1.5	1
TOTAL ECONOMIC SCORE =	670.5	318	394	439	50	330	54
GRAND TOTAL =	895.5	318	394	439	50	330	54

An Excel spreadsheet has been developed to assist the CSRD by automatically calculating the points based on the provided inputs. I look forward to meeting with you to address any questions and receive your input.

Sincerely,

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