



To: Courtney Kirk, CAO

From: Evangeline Hanuse, Land Use Planning and Community Development Coordinator

Meeting Date: Thursday, July 8, 2021

Subject: BC Hydro Street Lighting Update

Recommendation:

THAT the Board of Directors of the Central Coast Regional District receives the BC Hydro Street Lighting Update report.

Service Background:

The CCRD requisitions taxes in Areas C, D and E for street lighting.

Highlights:

Over the next three years, BC Hydro will be replacing high pressure sodium street lights in communities across the province with energy-efficient LEDs. This is an important project to meet federal regulations that require all light ballasts containing Poly-Chlorinated Biphenyls (PCBs) to be removed by the end of 2025. Across Canada, many communities are switching to LED street lights for much the same reason people are using them in homes: They use far less energy, are more reliable, last longer, and are more sustainable. LED street lights will also help improve public safety by increasing the visibility of sidewalks and roads at night, as well as help reduce light pollution.

BC Hydro is removing old street light fixtures which will be disassembled to facilitate recycling.

BC Hydro is requesting LED wattage and colour temperature for each CCRD street light. It is advantageous to publicize a short online street light survey to gauge what valley residents would like to see in terms of street light colour temperature. The Nuxalk Nation did a similar process with on-reserve residents.

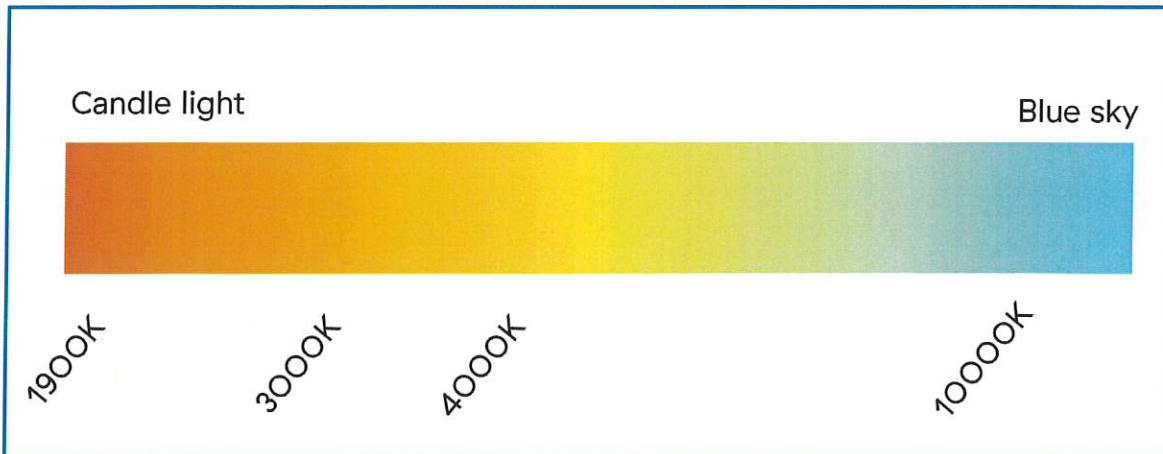
BC Hydro is providing LEDs in a variety of wattages. Each light choice is available in two colour temperatures: 3000K (warm white) and 4000K (cool white). LED street lights are more energy efficient, meaning there will be reduction in electricity use when compared to existing street lights. LED lights have extremely long lives and they don't have filaments

that can quickly burn out. An LED light can last up to 100,000 hours, which means their bulbs won't be filling up landfills. Because of their energy efficiency and long lifespan, LED streetlights help to reduce carbon emissions. LED lights do not contain toxic chemicals like mercury, unlike traditional high-pressure sodium lamps or mercury-vapor lamps.

Will using LED streetlights reduce light pollution?



LED street lights are designed to focus light downward towards the road and sidewalk where it is needed and limits light shining upwards or into nearby property. Because of this, nighttime visibility of roads and sidewalks will improve while also reducing light pollution.

Color Temperature Chart



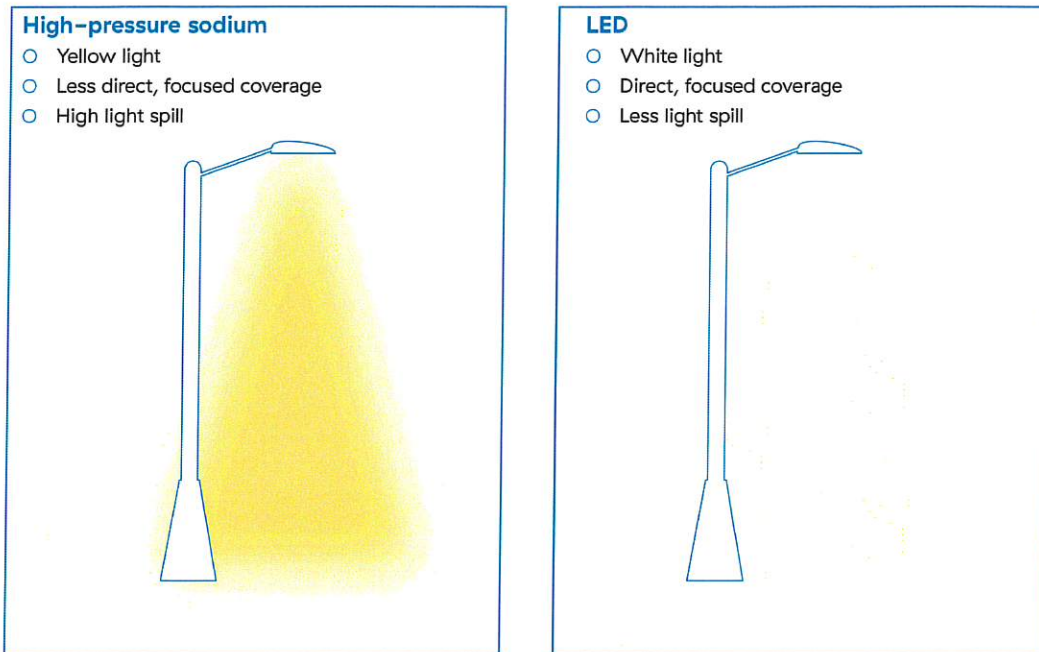
Kelvin Comparison Chart

Kelvin comparison

	Kelvin	Color tone	Typical use
	3000K	Warmer (or softer) white light	<ul style="list-style-type: none"> ○ Residential neighbourhoods ○ Environmentally sensitive areas
	4000K	Cooler (or neutral) white light	<ul style="list-style-type: none"> ○ Commercial and industrial areas ○ Non-residential roadways and intersections

How to Spot the Difference

How to spot the difference



Before and After Photos

The CCRD has identified 11 street lights to remove from the service as they are being billed to the CCRD but were not sanctioned by the CCRD. Examples include private home owner street lights or other customers, such as businesses. BC Hydro is aware of the issue and working collaboratively.

Board Priorities - Service Specific Progress of CCRD Strategic Plan 2019 – 2022:

Although the Street Lighting Service is not directly in the current Strategic Plan, it is an operational requirement that must be managed in conjunction with the Street Lighting Agreement with BC Hydro.

Financial/Budgetary:

2021 Revenue Sources for Valley Street Lights

Tax Levy	\$8,858
Ministry of Trans Cost Share	\$650
Total	\$9,508

2021 Revenue Sources for Townsite Street Lights

Tax Levy	\$18,784
Grants in lieu of taxes	\$1,413
Total	\$20,197

Apportioned Administration Reflecting Time Requirements – Staff and Elected Officials:

Apportioning administrative (operational) costs to each service the CCRD operates is a requirement under the *Local Government Act* s. 379(1). The CCRD calculates apportioned administration using a two pronged formula that considers:

- an estimate of staff time dedicated to a particular service (estimated from an average of approximate time spent the preceding year and time contemplated for the upcoming year); as well as
- an allocation of the combined total costs of Board governance, yearly audit and financial services, insurance and core administrative overhead (i.e. office space and supplies).

CCRD Policy F-5 ensures a reasonable apportionment of general administration costs to the various services provided by the CCRD.

The total apportioned administration costs determined for the entirety of CCRD's Street Lighting service was calculated to be \$6,000 for 2021-2025.

CCRD Mandate for Service Delivery:

By authority of the *Local Government Act*, the following bylaws are in place:

The "Bella Coola Street Lighting Service Establishment Bylaw No. 177" was adopted in March 1992 in conjunction with the dissolution of the Bella Coola Waterworks District. This is a local service area affecting residents and businesses on the Bella Coola Townsite. The bylaw and subsequent amendment provided that there are 46 lamps in this portion of electoral area E.

The "Bella Coola **Valley** Street Lighting Service Area Establishment Bylaw No. 266, 1996" was adopted in March of that year in response to a request from the Ministry of Transportation. They were seeking to light intersections in the upper valley that they considered to be dangerous, particularly for vehicle traffic. The bylaw and subsequent amendments provides that there are 24 lights in this service area.

Options for Consideration:

THAT the Board of Directors of the Central Coast Regional District authorizes Administration to publicize the Street Lighting Survey for Bella Coola Valley residents.

Submitted by: _____
Evangeline Hanuse, Land Use Planning & Community Development
Coordinator

Reviewed by: _____
Courtney Kirk, Chief Administrative Officer

Bella Coola Valley Street Lighting Survey

Question Title

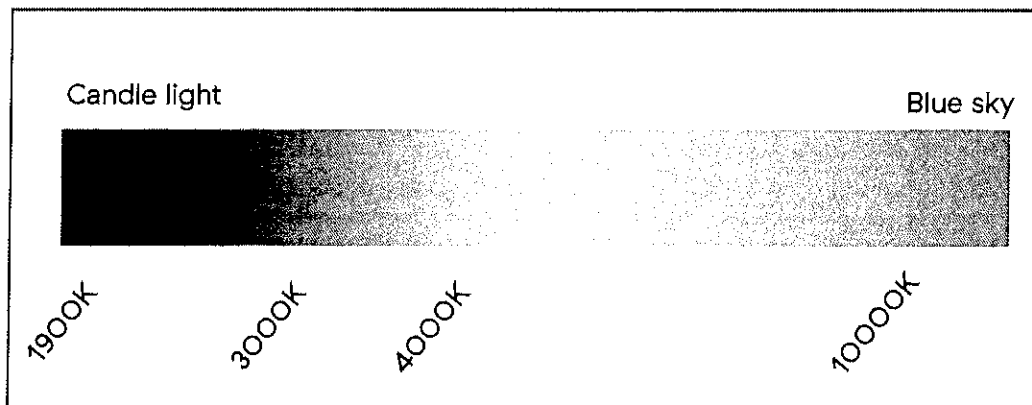
1. BC Hydro is upgrading street lights in the Bella Coola Valley from high pressure sodium street lights to energy efficient LED lights.

History of streetlighting in the Bella Coola Valley:

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○



Question Title

2. What kind of street lighting would you prefer in your residential area?

3000K Residential Yellow (warmer or softer light)

4000K Commercial Blue (cooler or neutral light)

Question Title

3. Would you prefer a combination of lighting in the Bella Coola Valley?

Question Title

4. If you answered yes to Question 3, would you prefer warmer lights in residential areas and cooler lights in commercial areas and at highway intersections?

Question Title

5. If you answered yes to Question 3, would you prefer cooler lights in residential areas and warmer lights in commercial areas and at highway intersections?

Question Title

6. Do you have any further comments?

Done