





International Dark Sky Community
Annual Designation Update 2018





EXECUTIVE SUMMARY

Bon Accord has completed and maintained the majority of schedule of projects within the original designation application submitted in 2015:

- Light Efficiency Community Standards Bylaw
- Water Fill Station (to be completed)
- Town Office Lighting
- Street Lighting Retrofit
- Centennial Park Lighting
- Digital Commercial Sign
- Arena Lighting
- Rose Garden Lighting (to be completed)
- Community in Bloom Sign

2018 Projects

New and existing projects and partnerships were created and completed by the Town enhancing the Dark Sky Designation:

- Equinox
- Aurora Amphitheatre Music in the Park
- Undergraduate Astrology Society (University of Alberta)
- Royal Astronomical Society of Canada (RASC)
- Wood Glen Condominium Retrofit Lighting
- CARES Grant Bon Accord Dark Sky Community Designation (Business & Brand Development)

Information and awareness to residents and businesses continues to encourage participation and a desire to support the "Dark Sky Designation".





GENERAL INFORMATION

SITE ID CONTACT:

Dianne Allen – Manager, Economic Development dallen@bonaccord.ca

Town of Bon Accord 780.921.3550

COMMUNITY LIGHTING

Were any changes made to local / municipal outdoor lighting policy in the past year? If so, describe and include any code language added or changed.

No changes were required for Bon Accord's Light Efficient Community Policy or Light Efficient Community Standards Bylaw 2015-07. Both were reviewed by Town Administration to ensure that the policy and bylaw remain up to date with best lighting practices. Reviews and comparisons are on-going to ensure Bon Accord is continually served by best practices.

Were there any new municipal lighting installations (or similar, large-scale installations on commercial property) built in the last year to show as examples built to your dark sky-friendly code?

No new municipal installations were completed for 2018. Majority of retrofit were completed in 2016 for streets and municipal buildings.

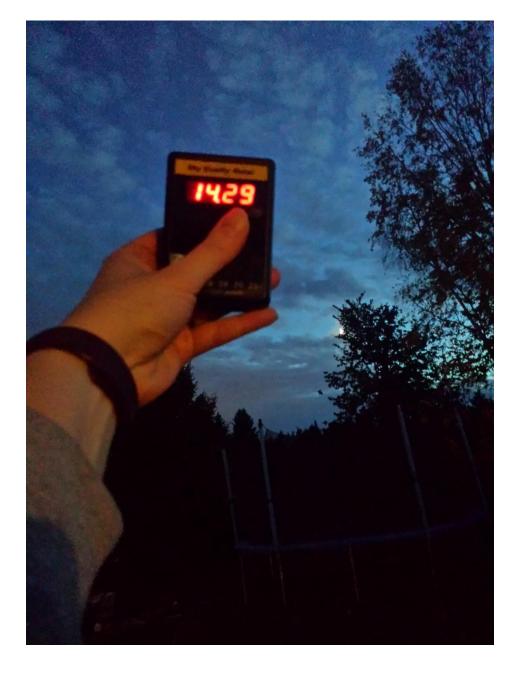
SKY QUALITY

Were sky quality data taken in the past year? If possible, include a table or figure showing the information.

Town Council approved funding at the beginning of 2018 for an assistant to take light meter readings on a consistent basis. The readings are as follows:











Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Nov 30/17	16.68	Partly Cloudy	91%
Downtown	Nov 30/17	15.45	Partly Cloudy	91%
Highway Frontage	Nov 30/17	16.34	Partly Cloudy	91%
Roseglen Park	Nov 30/17	17.45	Partly Cloudy	91%
LS Sports Grounds	Nov 30/17	16.63	Partly Cloudy	91%
Arena Grounds/BACS Field	Nov 30/17	16.47	Partly Cloudy	91%
Bon Acres MR	Nov 30/17	17.26	Partly Cloudy	91%
Highway 28 Corner	Nov 30/17	17.36	Partly Cloudy	91%
Final Lift Station	Nov 30/17	15.91	Partly Cloudy	91%
57 Street	Nov 30/17	17.63	Partly Cloudy	91%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Dec 13/17	17.53	clear	19%
Downtown	Dec 13/17	18.6	clear	19%
Highway Frontage	Dec 13/17	14.05	clear	19%
Roseglen Park	Dec 13/17	20.02	clear	19%
LS Sports Grounds	Dec 13/17	21.51	Clear	19%
Arena Grounds/BACS Field	Dec 13/17	21.03	Clear	19%
Bon Acres MR	Dec 13/17	20.11	Clear	19%
Highway 28 Corner	Dec 13/17	19.55	Clear	19%
Final Lift Station	Dec 13/17	20.89	Clear	19%





Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Jan 23/18	15.98	Cloudy	40%
Downtown	Jan 23/18	15.26	Cloudy	40%
Highway Frontage	Jan 23/18	16.01	Cloudy	40%
Roseglen Park	Jan 23/18	17.04	Cloudy	40%
LS Sports Grounds	Jan 23/18	16.05	Cloudy	40%
Arena Grounds/BACS Field	Jan 23/18	15.98	Cloudy	40%
Bon Acres MR	Jan 23/18	16.87	Cloudy	40%
Highway 28 Corner	Jan 23/18	17.09	Cloudy	40%
Final Lift Station	Jan 23/18	15.08	Cloudy	40%
57 Street	Jan 23/18	17.19	Cloudy	40%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Feb 20/18	19.73	Clear	25%
Downtown	Feb 20/18	18.72	Clear	25%
Highway Frontage	Feb 20/18	14.72	Clear	25%
Roseglen Park	Feb 20/18	18.41	Clear	25%
LS Sports Grounds	Feb 20/18	19.06	Clear	25%
Arena Grounds/BACS Field	Feb 20/18	19.43	Clear	25%
Bon Acres MR	Feb 20/18	19.12	Clear	25%
Highway 28 Corner	Feb 20/18	18.5	Clear	25%
Final Lift Station	Feb 20/18	18.08	Clear	25%
57 Street	Feb 20/18	19.89	Clear	25%





Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	March 29/18	17.02	Mostly Clear	95%
Downtown	March 29/18	16.65	Mostly Clear	95%
Highway Frontage	March 29/18	14.72	Mostly Clear	95%
Roseglen Park	March 29/18	16.64	Mostly Clear	95%
LS Sports Grounds	March 29/18	17.29	Mostly Clear	95%
Arena Grounds/BACS Field	March 29/18	17.38	Mostly Clear	95%
Bon Acres MR	March 29/18	17.23	Mostly Clear	95%
Highway 28 Corner	March 29/18	16.18	Mostly Clear	95%
Final Lift Station	March 29/18	16.07	Mostly Clear	95%
57 Street	March 29/18	17.12	Mostly Clear	95%





Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Apr 11/18	17.05	Mostly Clear	19%
Downtown	Apr 11/18	17.95	Mostly Clear	19%
Highway Frontage	Apr 11/18	13.98	Mostly Clear	19%
Roseglen Park	Apr 11/18	19.82	Mostly Clear	19%
LS Sports Grounds	Apr 11/18	20.53	Mostly Clear	19%
Arena Grounds/BACS Field	Apr 11/18	19.52	Mostly Clear	19%
Bon Acres MR	Apr 11/18	19.79	Mostly Clear	19%
Highway 28 Corner	Apr 11/18	18.89	Mostly Clear	19%
Final Lift Station	Apr 11/18	19.89	Mostly Clear	19%
57 Street	Apr 11/18	18.32	Mostly Clear	19%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	May 9/18	18.97	Clear	45%
Downtown	May 9/18	17.44	Clear	45%
Highway Frontage	May 9/18	16.17	Clear	45%
Roseglen Park	May 9/18	19.38	Clear	45%
LS Sports Grounds	May 9/18	19.44	Clear	45%
Arena Grounds/BACS Field	May 9/18	18.24	Clear	45%
Bon Acres MR	May 9/18	17.23	Clear	45%
Highway 28 Corner	May 9/18	18.18	Clear	45%
Final Lift Station	May 9/18	18.61	Clear	45%
57 Street	May 9/18	19.52	Clear	45%





Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	24 June 2018	17.52	Clear	92%
Downtown	24 June 2018	18.16	Clear	92%
Highway Frontage	24 June 2018	14.24	Clear	92%
Roseglen Park	24 June 2018	17.02	Clear	92%
LS Sports Grounds	24 June 2018	18.39	Clear	92%
Arena Grounds/BACS Field	24 June 2018	17.38	Clear	92%
Bon Acres MR	24 June 2018	17.42	Clear	92%
Highway 28 Corner	24 June 2018	16.81	Clear	92%
Final Lift Station	24 June 2018	17.71	Clear	92%
57 Street	24 June 2018	18.92	Clear	92%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	July 16 2018	17.53	Clear	20%
Downtown	July 16 2018	18.81	Clear	20%
Highway Frontage	July 16 2018	15.1	Clear	20%
Roseglen Park	July 16 2018	20.05	Clear	20%
LS Sports Grounds	July 16 2018	21.49	Clear	20%
Arena Grounds/BACS Field	July 16 2018	20.97	Clear	20%
Bon Acres MR	July 16 2018	19.89	Clear	20%
Highway 28 Corner	July 16 2018	19.67	Clear	20%
Final Lift Station	July 16 2018	20.05	Clear	20%
57 Street	July 16 2018	19.11	Clear	20%





Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Sept 3/18	19.02	Mostly clear	33%
Downtown	Sept 3/18	18.24	Mostly clear	33%
Highway Frontage	Sept 3/18	16.38	Mostly clear	33%
Roseglen Park	Sept 3/18	17.78	Mostly clear	33%
LS Sports Grounds	Sept 3/18	19.29	Mostly clear	33%
Arena Grounds/BACS Field	Sept 3/18	17.84	Mostly clear	33%
Bon Acres MR	Sept 3/18	19.4	Mostly clear	33%
Highway 28 Corner	Sept 3/18	18.53	Mostly clear	33%
Final Lift Station	Sept 3/18	18.92	Mostly clear	33%
57 Street	Sept 3/18	19.04	Mostly clear	33%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Sep 8/18	18.18	Mostly cloudy	1%
Downtown	Sep 8/18	17.54	Mostly cloudy	1%
Highway Frontage	Sep 8/18	17.27	Mostly cloudy	1%
Roseglen Park	Sep 8/18	18.01	Mostly cloudy	1%
LS Sports Grounds	Sep 8/18	17.99	Mostly cloudy	1%
Arena Grounds/BACS Field	Sep 8/18	18.89	Mostly cloudy	1%
Bon Acres MR	Sep 8/18	19.03	Mostly cloudy	1%
Highway 28 Corner	Sep 8/18	16.98	Mostly cloudy	1%
Final Lift Station	Sep 8/18	17.02	Mostly cloudy	1%
57 Street	Sep 8/18	18.97	Mostly cloudy	1%

Unable to take readings for the month of August, due to heavy smoke coverage. Two readings taken for the month of September.





Did sky brightness increase over the previous year? Decrease?

Meter readings indicate Sky Brightness has decreased slightly in some areas or has maintained.

Is a permanently mounted sky monitor installed, or are there plans to install one?

A permanently mounted sky monitor is not currently installed. The Town plans to put solar powered viewing areas around the community, at which time, one site will be selected for a permanently mounted sky monitor.

FUNDING

Currently administrating any grants related to dark-skies programming? If so, describe.

Town Council has approved a policy and funding which is available to residents and businesses. The purpose of this policy is to establish guidelines and procedures for granting funds to residents to retrofit non-compliant lighting with Dark Sky Friendly lighting, which comply with the current Light Efficient Community Standard Bylaw, within the Town of Bon Accord. The funding is based on approved budget resources, with expectation that applicants will meet established criteria and provide supporting documentation.

Wood Glen Condominium worked with the Town to upgrade their complex to "Dark Sky" acceptable exterior light fixtures and energy /light saving LED bulbs. Funds were allotted through the grant policy to support this initiative.

Were any new grants won this year?

As part of the Alberta Jobs Plan, the Alberta Government allocated \$30 million over 2 years to promote long-term economic growth and prosperity in Alberta's communities and regions through the new Community and Regional Economic Support (CARES) program. The Grant request was approved for the "Bon Accord Dark Sky Community Designation – Business & Brand Development Strategy". With this strategy the intent is to assist in the building of local economic development capacity and strengthen the business community by providing a unified identity promoting what the community has to offer. The strategy has three major





components: skills training & development program; tourism strategy development/marketing & implementation plan; marketing & communications plan/implementation. The strategy has a completion date of November 2019.

Are there plans to apply for any future grants?

Dark Sky is a priority for the Town of Bon Accord. Any financial assistance to educate and promote the Dark Sky Designation will be researched and applied for whenever possible.

ARTS AND CULTURE

Is any programming ongoing or planned blending of the arts/culture with dark skies? If so describe.

<u>Equinox</u>: The Towns annual Equinox event was scheduled for September 22, 2018. Unfortunately, due to inclement weather (snow) the event was cancelled. Plans to continue this event will be discussed in detail prior to yearend.







<u>Aurora Amphitheatre:</u> This is a new facility constructed in 2017 in the Towns Centennial Park located in the heart of Bon Accord. The open-air experience lends to the Dark Sky Designation promoting many more events that can be hosted under the stars. Music in the Park has been an outstanding event gathering 60 plus residents per night to enjoy the outdoor ambience. This is a flagship event that will be expanded upon. Currently, Music in the Park runs July and August (once a week) with a variety of talented musicians.







<u>UAS (Undergraduate Astronomy Society):</u> This is an organization meant for undergraduate students with a keen interest in astronomy. The group allows both astrophysics and non-astrophysics students to interact at various social and educational events. These functions include observing nights, study sessions, informal talks and other fun formal and informal gatherings. UAS has been an active partner prepared to administer various activities and sessions centered around "Dark Sky's" to educate the general public and residents of Bon Accord. This group organized and managed Equinox 2018, however, unable to execute the event due to inclement weather.







Royal Astronomical Society of Canada (RASC): Is Canada's leading astronomy organization bringing together over 4,000 enthusiastic amateurs, educators and professionals. The RASC Edmonton Centre, established in 1932, exists to provide the advancement of astronomy and allied sciences as well as to increase public awareness of astronomy as an enjoyable hobby and as important scientific endeavor.

The RASC Edmonton Centre offers local programs and services to stimulate interest in and educate the public in astronomy, including monthly meetings, dark site observing sessions, public observing, public education, an annual star party and special events such as hosting high profile astronomy speakers and astronomy workshops. RASC is prepared to administer various activities and session centered around "Dark Sky's" to educate the general public and residents of Bon Accord.







OUTREACH

Were any new programs begun this year? If so, are they complete or ongoing?

With the completion of the telescope pads in 2017, the Town plans to have local astronomers teach during large super sky watching events.

The Town continues to be an ambassador and support to other communities considering light pollution and preservation of night sky through policy and programs. The Town also educates on the difference between the RASC national designations and the IDA designations.

Are statistics available (Example – how many visitors served, donations, etc.)

Stats are unavailable.

COMMUNITY AND MEDIA RELATIONS

Any new media coverage you would like us to know about? May include PDF attachments.

This year's Equinox event was cancelled due to inclement weather, therefore no new marketing materials to report.

Any engagement with local governments, community organizations or private landowners in the past year to report?

The Town has existing community relations with a variety of stakeholders:

- Undergraduate Astronomy Society (UAS)
- Royal Astronomical Society of Canada (RASC)
- Economic Development Advisory Committee

