



International Dark Sky Community Annual Designation Update 2017

P.O. Box 779, 5025-50 Avenue, Bon Accord, Alberta Canada T0A 0K0

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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

2017 Projects

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

- Equinox 2017
- Aurora Amphitheatre
- Dark Sky Walking Trails
- Dark Sky Signage
- Telescope Pads
- Mini Observatories
- Dark Sky Brochure

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



GENERAL INFORMATION

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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 2017. Majority of retrofit was 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 2017 for an assistant to take light meter readings on a consistent basis. The readings are as follows:





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Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Oct 26/16	15.53	clear	14%
Downtown	Oct 26/16	16.6	clear	14%
Highway Frontage	Oct 26/16	10.03	clear	14%
Roseglen Park	Oct 26/16	19.79	clear	14%
LS Sports Grounds	Oct 26/16	19.51	Clear	14%
Arena Grounds/BACS Field	Oct 26/16	19.36	Clear	14%
Bon Acres MR	Oct 26/16	19.34	Clear	14%
Highway 28 Corner	Oct 26/16	17.56	Clear	14%
Final Lift Station	Oct 26/16	19.95	Clear	14%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Nov 30/16	13.74	Foggy/cloudy	1%
Downtown	Nov 30/16	14.74	Foggy/cloudy	1%
Highway Frontage	Nov 30/16	10.01	Foggy/cloudy	1%
Roseglen Park	Nov 30/16	17.78	Foggy/cloudy	1%
LS Sports Grounds	Nov 30/16	17.43	Foggy/cloudy	1%
Arena Grounds/BACS Field	Nov 30/16	15.96	Foggy/cloudy	1%
Bon Acres MR	Nov 30/16	15.84	Foggy/cloudy	1%
Highway 28 Corner	Nov 30/16	16.89	Foggy/cloudy	1%



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Final Lift Station	Nov 30/16	17.53	Foggy/cloudy	1%
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Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Dec 28/16	19.18	Partly Cloudy	1%
Downtown	Dec 28/16	17.94	Partly Cloudy	1%
Highway Frontage	Dec 28/16	17.57	Partly Cloudy	1%
Roseglen Park	Dec 28/16	18.14	Partly Cloudy	1%
LS Sports Grounds	Dec 28/16	18.04	Partly Cloudy	1%
Arena Grounds/BACS Field	Dec 28/16	19.96	Partly Cloudy	1%
Bon Acres MR	Dec 28/16	19.12	Partly Cloudy	1%
Highway 28 Corner	Dec 28/16	17.12	Partly Cloudy	1%
Final Lift Station	Dec 28/16	18.7	Partly Cloudy	1%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Jan 28/17	19.67	Clear	0%
Downtown	Jan 28/17	19.57	Clear	0%
Highway Frontage	Jan 28/17	10.08	Clear	0%
Roseglen Park	Jan 28/17	20.34	Clear	0%
LS Sports Grounds	Jan 28/17	20.12	Clear	0%
Arena Grounds/BACS Field	Jan 28/17	19.88	Clear	0%
Bon Acres MR	Jan 28/17	20.02	Clear	0%



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Highway 28 Corner	Jan 28/17	17.3	Clear	0%
Final Lift Station	Jan 28/17	20.01	Clear	0%
57 Street	Jan 28/17	21.24	Clear	0%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Feb 28/17	19.28	Mostly Clear	6%
Downtown	Feb 28/17	18.98	Mostly Clear	6%
Highway Frontage	Feb 28/17	10.07	Mostly Clear	6%
Roseglen Park	Feb 28/17	19.98	Mostly Clear	6%
LS Sports Grounds	Feb 28/17	20.01	Mostly Clear	6%
Arena Grounds/BACS Field	Feb 28/17	19.82	Mostly Clear	6%
Bon Acres MR	Feb 28/17	19.97	Mostly Clear	6%
Highway 28 Corner	Feb 28/17	17.01	Mostly Clear	6%
Final Lift Station	Feb 28/17	19.96	Mostly Clear	6%
57 Street	Feb 28/17	20.87	Mostly Clear	6%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Mar 27/17	18.75	Mostly Clear	1%
Downtown	Mar 27/17	18.43	Mostly Clear	1%
Highway Frontage	Mar 27/17	17.2	Mostly Clear	1%
Roseglen Park	Mar 27/17	19.21	Mostly Clear	1%

LS Sports Grounds	Mar 27/17	18.92	Mostly Clear	1%
Arena Grounds/BACS Field	Mar 27/17	18.39	Mostly Clear	1%
Bon Acres MR	Mar 27/17	18.36	Mostly Clear	1%
Highway 28 Corner	Mar 27/17	18.04	Mostly Clear	1%
Final Lift Station	Mar 27/17	18.5	Mostly Clear	1%
57 Street	Mar 27/17	18.6	Mostly Clear	1%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Apr 29/17	16.27	Mostly cloudy	17%
Downtown	Apr 29/17	16.35	Mostly cloudy	17%
Highway Frontage	Apr 29/17	13.06	Mostly cloudy	17%
Roseglen Park	Apr 29/17	16.87	Mostly cloudy	17%
LS Sports Grounds	Apr 29/17	17.02	Mostly cloudy	17%
Arena Grounds/BACS Field	Apr 29/17	16.99	Mostly cloudy	17%
Bon Acres MR	Apr 29/17	17.05	Mostly cloudy	17%
Highway 28 Corner	Apr 29/17	16.76	Mostly cloudy	17%
Final Lift Station	Apr 29/17	17.25	Mostly cloudy	17%
57 Street	Apr 29/17	17.45	Mostly cloudy	17%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	May 30/17	16.49	clear	34%



Downtown	May 30/17	16.48	clear	34%
Highway Frontage	May 30/17	13.89	clear	34%
Roseglen Park	May 30/17	17.08	clear	34%
LS Sports Grounds	May 30/17	16.4	clear	34%
Arena Grounds/BACS Field	May 30/17	16.49	clear	34%
Bon Acres MR	May 30/17	16.23	clear	34%
Highway 28 Corner	May 30/17	14.89	clear	34%
Final Lift Station	May 30/17	16.95	clear	34%
57 Street	May 30/17	16.36	clear	34%

Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	June 5/17	17.15	clear	90%
Downtown	June 5/17	16.9	clear	90%
Highway Frontage	June 5/17	15.69	clear	90%
Roseglen Park	June 5/17	16.8	clear	90%
LS Sports Grounds	June 5/17	16.76	clear	90%
Arena Grounds/BACS Field	June 5/17	17.01	clear	90%
Bon Acres MR	June 5/17	17.24	clear	90%
Highway 28 Corner	June 5/17	16.28	clear	90%
Final Lift Station	June 5/17	16.41	clear	90%



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57 Street	June 5/17	16.34	clear	90%
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Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	july 20/17	17.27	Mostly clear	10%
Downtown	july 20/17	17.35	Mostly clear	10%
Highway Frontage	july 20/17	14.06	Mostly clear	10%
Roseglen Park	july 20/17	17.87	Mostly clear	10%
LS Sports Grounds	july 20/17	18.02	Mostly clear	10%
Arena Grounds/BACS Field	july 20/17	17.99	Mostly clear	10%
Bon Acres MR	july 20/17	18.05	Mostly clear	10%
Highway 28 Corner	july 20/17	17.76	Mostly clear	10%
Final Lift Station	july 20/17	18.25	Mostly clear	10%
57 Street	july 20/17	18.55	Mostly clear	10%
Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Aug 28/17	18.68	Mostly clear	48%
Downtown	Aug 28/17	18.61	Mostly clear	48%
Highway Frontage	Aug 28/17	16.69	Mostly clear	48%
Roseglen Park	Aug 28/17	18.43	Mostly clear	48%
LS Sports Grounds	Aug 28/17	20.01	Mostly clear	48%
Arena Grounds/BACS Field	Aug 28/17	20.15	Mostly clear	48%

Bon Acres MR	Aug 28/17	20.1	Mostly clear	48%
Highway 28 Corner	Aug 28/17	17.92	Mostly clear	48%
Final Lift Station	Aug 28/17	17.82	Mostly clear	48%
57 Street	Aug 28/17	20.08	Mostly clear	48%
Location	Date	Reading	Weather Conditions	Moon Luminosity
Springbrook Park	Sep 12/17	18.7	Mostly clear	77%
Downtown	Sep 12/17	18.42	Mostly clear	77%
Highway Frontage	Sep 12/17	15.63	Mostly clear	77%
Roseglen Park	Sep 12/17	18.43	Mostly clear	77%
LS Sports Grounds	Sep 12/17	18.75	Mostly clear	77%
Arena Grounds/BACS Field	Sep 12/17	19.67	Mostly clear	77%
Bon Acres MR	Sep 12/17	19.52	Mostly clear	77%
Highway 28 Corner	Sep 12/17	14.08	Mostly clear	77%
Final Lift Station	Sep 12/17	18.34	Mostly clear	77%
57 Street	Sep 12/17	19.48	Mostly clear	77%



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.

Were any new grants won this year?

A grant was approved through Servus Credit Union, specifically for Bon Accords 6th Annual Equinox Festival. Additionally, marketing and event sponsorship has been received to supplement costs.

Are there plans to apply for any future grants?

Dark Sky is a high 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.

Equinox: The Town's annual Equinox event was held on September 16, 2017 featuring expert speakers focusing on topics: The Amazing Sky, Cosmos Through Star Formation, the Size of our Solar System, Night Sky Photography, Twilight Tea, and Side Walk Astronomy.

Aurora Amphitheatre: This is a new facility constructed this year in the Town's 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.



Dark Sky Walking Trails: Walking trails were created to enjoy the Dark Sky experience. Currently, there is 685 meters with future expansion considered.

Dark Sky Signage: Along the walking trails, signage marks the pathways incorporating the “Dark Sky Designation.”



Telescope Pads: Alberta Recycling Management Authority provided an opportunity for Municipalities to purchase recycled tire products made from eligible Alberta scrap tires for use in public projects. The Town received a grant to build four telescope platforms that enhance the dark-sky initiative for star gazers to set up and enjoy the night sky. Two of the pads will provide small observatories that will include power hook-up for telescope users reducing background light to improve night sky observation. The pads are placed at strategic locations within town that have direct or planned access to the Dark Sky Walking Trails.

Mini Observatories:

The Town of Bon Accord invested in two mini “Sky Shed” observatories putting fun back into Astronomy. The community and visitors can utilize these observatories, bringing their own telescopes to view the night sky’s year-round. These domes provide the ability to walk out your backdoor observing the night sky with thermally equilibrated telescopes within minutes.





UAS (Undergraduate Astronomy Society): Prepared to administer various activities and sessions centered around “Dark Sky’s” to educate the general public and residents of Bon Accord.

Royal Astronomical Society of Canada (RASC): Prepared to administer various activities and session centered around “Dark Sky’s” to educate the general public and residents of Bon Accord.

Dark Sky Brochure: Created to further educate the public and residents of the benefits and the importance of retaining the Town’s designation (attached).

In partnerships with the Towns Library, community organizations, schools and local businesses, Bon Accord will continue to promote educational and cultural programming related to the night sky and light pollution abatement messaging and understanding.

OUTREACH

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

With the completion of the telescope pads 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 projected a personalized and much more intimate event for the community. Marketing materials to promote the event included postcards and event programs (attached).

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

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

- Local Business - Liquid Therapy hosted an event that was complementary to Equinox
- Local Band - The Wet Secrets provided music and entertainment
- Food Trucks - Incredible Edibles, Mini Donut King, Prairie Gardens, Street Side Celebrations
- Government - MLA Colin Piquette hosted a Twilight Tea

Event sponsors:

- Gold Sponsors: Bon Accord & District Agriculture Society, PSAV
- Silver Sponsors: Fortis Alberta, Home Hardware, North Parkland Power, Schmode Contracting, Sturgeon County Victim Services
- Bronze: Servus Credit Union
- Friends: Rene's Vacuum Service