INTERNATIONAL DARK-SKY ASSOCIATION

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TO PRESERVE AND PROTECT THE NIGHTTIME ENVIRONMENT AND OUR HERITAGE OF DARK SKIES THROUGH QUALITY OUTDOOR LIGHTING



URBAN NIGHT SKY PLACES

Urban Night Sky Place Program Guidelines

June 2018

TABLE OF CONTENTS

	2
DEFINITION OF AN URBAN NIGHT SKY PLACE	3
GOALS OF URBAN NIGHT SKY PLACE CREATION	3
DESIGNATION BENEFITS	3
ELIGIBILITY	4
MINIMUM REQUIREMENTS FOR ALL UNSPS	5
EVIDENCE OF ELIGIBILITY	
LIGHTING MANAGEMENT PLAN	5
LIGHTING INVENTORY	
EVIDENCE OF COMMITMENT TO QUALITY OUTDOOR LIGHTING	
EDUCATION AND PUBLIC OUTREACH	-
SUBMISSION OF ANNUAL REPORTS	
ALTERNATIVE CERTIFICATION	10
UNSP APPLICATION PROCESS	I I
UNSP APPLICATION PROCESS	
NOMINATION STEPS FOR APPLICANT	11 11
NOMINATION STEPS FOR APPLICANT TO BE INCLUDED IN AN URBAN NIGHT SKY PLACE APPLICATION	11 11 12
NOMINATION STEPS FOR APPLICANT	11 11 12
NOMINATION STEPS FOR APPLICANT TO BE INCLUDED IN AN URBAN NIGHT SKY PLACE APPLICATION	11 11 12 13
NOMINATION STEPS FOR APPLICANT TO BE INCLUDED IN AN URBAN NIGHT SKY PLACE APPLICATION IDA REVIEW PROCESS	11 11 12 13 13
NOMINATION STEPS FOR APPLICANT TO BE INCLUDED IN AN URBAN NIGHT SKY PLACE APPLICATION IDA REVIEW PROCESS ANNUAL REPORTS	11 12 13 13 13
NOMINATION STEPS FOR APPLICANT TO BE INCLUDED IN AN URBAN NIGHT SKY PLACE APPLICATION IDA REVIEW PROCESS ANNUAL REPORTS REASSESSMENT OF UNSP DESIGNATIONS	11 12 13 13 13 13 13 15 15

DEFINITION OF AN URBAN NIGHT SKY PLACE

An Urban Night Sky Place (UNSP) is a municipal park, open space, observing site, or other similar property (hereafter, generally, "places") near or surrounded by large urban environs whose planning and design actively promote an authentic nighttime experience in the midst of significant artificial light. By virtue of their characteristics, these sites do not qualify for designation within any other International Dark Sky Places (IDSP) category. However, they are worthy of recognition for their efforts to educate the public on the benefits of proper outdoor lighting that ensures public safety while minimizing potential harm to the natural nighttime environment.

GOALS OF URBAN NIGHT SKY PLACE CREATION

The purpose of the UNSP designation category is to provide recognition for public, outdoor spaces in and adjacent to urban areas in which quality outdoor lighting installations serve as effective examples of lighting best practices for surrounding communities. These locations:

- Identify places near urban areas with exceptional commitment to and success in implementing the ideals of dark sky conservation;
- Demonstrate that such places can serve as models of dark sky protection for neighboring communities;
- Highlight these urban locations for the public enjoyment of the night sky;
- Engage and involve elected officials, business leaders, residents in light pollution control efforts; and
- Promote the ideals of the International Dark-Sky Association by encouraging places, and the communities in and near which they are located, to identify the conditions of natural darkness as a valuable asset.

DESIGNATION BENEFITS

A UNSP designation draws attention to the problem of light pollution in urban and suburban settings while offering recognition to the efforts of city dwellers to promote dark skies as a valuable resource worthy of protection. It raises the profile and recognition of a place among residents of surrounding cities and advertises the location as a destination for enjoyment by residents and tourists alike. Designation as a UNSP entitles the site and managing entity to display the IDA logo in official publications and promotions, and use of this logo by commercial or other groups within the community when identifying the site itself. IDA will promote and highlight ongoing efforts of UNSPs to protect the nocturnal environment, and maintain a web page identifying and describing all UN-SPs. The place's managing agency may also identify IDA as a partner.

ELIGIBILITY

To be eligible for consideration as a UNSP, a candidate place must meet all of the following criteria:

- An eligible place must be located within the region enclosed by a perimeter extending 50 km beyond the edge of the continuously-built area of a municipality with a permanent population of 10,000 or more people within its territorial jurisdiction, or 50,000 or more people if defined as a "metro area" of two or more adjoining municipalities.
- The geographic situation and/or landscaping of the place must be sufficient to mitigate the effects of any glare or light trespass from outdoor lighting on immediately adjacent properties.
- The place must allow for regular, nighttime public access to the site with or without supervision. A portion of designated land may meet the access requirement, or access must be available for a reasonable fraction of the length of the hours between sunset and sunrise. In some cases, such as when working with areas that protect endangered wildlife, this requirement may be adjusted.
- The place and/or its partner organizations must engage visitors with direct interpretation of the value of natural nighttime darkness and the importance of quality outdoor lighting practices.
- The managing agency of the place, whether or public or private, should be readily identifiable to visitors.

MINIMUM REQUIREMENTS FOR ALL UNSPS

EVIDENCE OF ELIGIBILITY

The place must supply basic information to establish its eligibility for designation as an Urban Night Sky Place. This information includes all of the following:

- 1) A city or regional map indicating the legal boundaries of the place and the location of the site with respect to the geographic constraints described above;
- 2) Wide-angle/panoramic nighttime site photography identifying any neighboring sources of glare/light trespass and showing how these sources are prevented from impinging on the place's interior;
- 3) A statement describing the place's public access policy; and
- 4) A demonstration that the identity of the place's managing agency is evident to the public (through, e.g., appropriate signage).

LIGHTING MANAGEMENT PLAN

A Lighting Management Plan (LMP) is a written policy adopted and published by the managing agency of a place that sets forth conditions under which areas are or are not to be lighted. It should identify different use situations contemplated in the place and prescribe the manner in which areas may be lit in terms of maximum illumination levels, lamp type and spectrum, and appropriate shielding. The LMP must embrace all of the following quality outdoor lighting ethics¹:

- 1) Only use light when and where needed, and in the appropriate amount, given use needs and ambient lighting conditions.
- 2) Outdoor lighting fixtures must be fully shielded and make appropriate use of timers and/or motion sensors.
- 3) Lighting of less than 500 lumens may be unshielded for special purposes, such as historical preservation. Such approved special uses must be clearly stated in the LMP.

The LMP must include all of the following minimum standards:

¹ Lighting required by law under the authority of any entity having higher legal jurisdiction over the place to be designated may be formally exempted from the requirements of this section.

- 1) The LMP applies equally to both new and existing installations of outdoor lighting in the place.
- 2) The policy includes provisions for determining whether it is or is not appropriate to light an area, at what times of night lighting is necessary, and allowable illumination levels.
- 3) Fully shielded² fixtures are required throughout the place. Light fixtures containing lamps emitting less than 500 initial lamp lumens³ may be left unshielded for special purposes, such as historical preservation. The approved special uses must be stated in the LMP. These lights are not exempt from other LMP requirements and must be designed to minimize impact to the nocturnal environment to the greatest extent possible. IDA will scrutinize these uses to ensure that the site lighting is a suitable example of quality lighting for the public and protects the nighttime environment to the maximum practical extent.
- 4) Prescriptive methods are provided for determining the appropriate type of lamp (spectrum, color, energy efficiency, technology) and fixture to be used. The chosen determination method must be established with the goals of maximizing energy efficiency and minimizing impacts to human dark adaptation/recovery time and nocturnal ecology.
- 5) Lighting controlled with motion-activated switches limiting the duration of illumination to less than five (5) minutes after activation is exempt from the other requirements of this section.
- 6) Lighting must be chosen to minimize the amount of short-wavelength light emitted into the nighttime environment. The place's lighting policy must restrict lighting in this respect according to one of the following prescriptions:
 - A) The correlated color temperature (CCT) of lamps must not exceed 3000 Kelvins;
 OR
 - B) Allowed lighting must not emit more than 25% of its total spectral power at wavelengths < 550 nanometers; OR</p>
 - C) The scotopic-to-photopic (S/P) ratio of allowed lighting must not exceed 1.3.

² "Fully shielded" is defined such that the light source is screened and its light directed in such a way that none is emitted above the horizontal plane passing through the lowest light-emitting portion of a fixture.

³ "Initial lamp lumens" is defined as the number of lumens of light emitted by a lamp when new and not counting any depreciation of output due to the age of the lamp. This information can be found in manufacturer data sheets.

These metrics may be found in manufacturer data sheets for lighting products.

- 7) Regulation of visitor activities with respect to the introduction of unnecessary artificial light at night into the place environment. This should include reasonable limits on the lighting of camping equipment and recreational vehicles, as well as a general prohibition of "light painting," the use of searchlights, and similar activities. Note that this requirement is in no way intended to compromise visitor safety; lighting required in emergency situations may be exempted from compliance.
- 8) The use of illuminated signs⁴ must be regulated according to all of the following:
 - A) Use prohibited from one hour after local sunset to one hour before local sunrise (unless strictly required for wayfinding or identification of concessions in the place during normal business hours)
 - B) Displays must be single-color on a black background
 - C) Luminance after sunset may not exceed 100 nits (100 candelas per square meter)
- 9) The LMP must conform to or surpass local governing authority policy on lighting and dark sky protection as well as other applicable laws depending on the jurisdiction.

The IDSP Program Manager will review the LMP in order to ensure that site lighting is a suitable example for the public and protects the nighttime environment to the maximum practical extent given ambient lighting conditions and specific safety concerns. IDA may request additional descriptions, photographs, or drawings of any lighting deemed exempt under the shielding provision stated above.

LIGHTING INVENTORY

A lighting inventory is a formal audit of all outdoor lighting in a place. It is used to determine rates of compliance with the LMP and to identify lighting equipment in need of rehabilitation through retrofitting or replacement. A complete inventory of outdoor lighting in the place is a requirement for UNSP status. The inventory should show that all lighting on the property complies with the LMP at the time the application to IDA is made.

⁴ "Illuminated sign" is defined as any informational or advertising sign that is illuminated by either internal or external means. Descriptive terms are adjusted here accordingly according to the type of illumination.

Prospective Urban Night Sky Places must conduct an inventory of all fixtures on the property. A lighting inventory should specify all of the following for each light fixture:

- Location
- Purpose
- Manufacturer
- Model number
- Lamp type/spectrum
- Initial lamp lumens
- Operational details such as the usage of adaptive controls⁵

When there are numerous outdoor lights in a single installation, it is acceptable to group fixtures by facility or area. Whether the fixtures are fully shielded, are special purpose fixtures under 500 lumens, and what the lighting application is must be noted for each fixture or group of fixtures. Daytime photographs or manufacturer dia-grams/data sheets of each fixture type must also accompany the inventory.

Inoperable fixtures **must** be inventoried. Only those fixtures physically disconnected from power supplies may be counted as compliant for the purpose of determining the rate of LMP compliance.

Location	Fixture	Fully- Shielded?	Operable?	Special Purpose <500 lu- mens	Application	Conformity with LMP
Visitor Center	12 fixtures on 14' pole, 70 W HPS	YES	YES	NO	Parking log, timer off at 10pm	YES
	2 door lights, 100 W MH	YES	NO	NO	Building egress	YES
	6 bollard (post) lights, 32 W CFL	NO	YES	NO	Walkway	NO – see plan

The following is a sample table from portion of a lighting inventory:

⁵ "Adaptive controls" is defined as devices used to modulate the output of a lamp according to time of night, environmental conditions, or for other means. Examples include timers and motion sensors.

Restrooms	2 carriage style lights at doorways, 40 W incan- descent	NO	YES	YES	Historic Preserva- tion, egress	YES
Maintenance Yard	6 wall packs, 250 W MH	NO	YES	NO	Occasional night opera- tions	NO – see plan
	8 Glarebust- ers, 11 W CFL	YES	YES	NO	Egress, se- curity	YES

EVIDENCE OF COMMITMENT TO QUALITY OUTDOOR LIGHTING

The place's commitment to quality outdoor lighting must be demonstrated by all of the following:

- 1) The place management recognizes dark skies as an important natural, cultural, and/or scientific resource value as shown by inclusion in appropriate management documents⁶
- 2) Documentation that all existing outdoor lighting fixtures within the place's boundaries conform to the LMP at the time of application

EDUCATION AND PUBLIC OUTREACH

The place's commitment to education and public outreach must be demonstrated by all of the following:

⁶ Examples of such documents include General Management Plans, Resource Management Plans, and Facility Development Plans. Consult IDA staff as to whether a particular type of management document meets this requirement.

- The importance of dark skies/natural darkness and the benefits of quality lighting must be a central theme of on-site interpretation/outreach programs⁷. If interpretive programs are not typically offered, then extensive publications, flyers, press releases, media, social media, or other outreach are appropriate substitutes.
- 2) IDA encourages IDA Chapters to lead outreach efforts with places. IDA sees this as a means to provide Chapters with additional ways to involve themselves in furthering the organization's mission and an effective means for administrators to leverage the utility of volunteers.
- 3) If the urban site is within 100 km of an existing Dark Sky Park or Dark Sky Reserve, IDA expects to see evidence of cross-promotion between the designated sites.

SIGNAGE

Once established, the site must erect and maintain a sign indicating the Urban Night Sky Place designation along a roadway entrance, along a footpath entrance if no roadway exists, or a visitor contact center. Once the sign is erected a picture documenting this sign must be taken and sent to IDA for records along with a description of its location.

SUBMISSION OF ANNUAL REPORTS

The place agrees to submit an annual report to IDA by 1 October of each year detailing activities and progress towards fulfilling UNSP goals during the previous year. See "Annual Reports", below.

ALTERNATIVE CERTIFICATION

IDA reserves the right to request stronger or alternative requirements if deemed appropriate and deny Urban Night Sky Place status if these requirements are not met. Any such requests by IDA will be made through direct contact and communication with the site management. IDA commits to informing applicants with ample time to accommodate any additional requirements imposed on a place in the application process.

⁷ 'Dark skies education' refers not only to astronomy education but also education about wildlife, energy efficiency, safety, and human health. Astronomy education events such as star parties only count as 'dark skies education' if they prominently feature material about dark skies and outdoor lighting.

UNSP APPLICATION PROCESS

NOMINATION

The nomination of a prospective Urban Night Sky Place may be initiated by a qualified IDA nominator⁸. Nominators are encouraged to establish and maintain close contact with the IDSP Program Manager throughout the process from initial inquiry through submission of the application package and beyond. If a nearby IDA Chapter exists, the applicant is further advised to establish contact with that Chapter and seek its endorsement.

In addition, the application must include evidence, such as in the form of a letter of support, from the local leadership, such as a superintendent or administrator, consenting to consideration for UNSP status.

STEPS FOR APPLICANT

- Make initial contact IDA by phone or email to discuss the process, followed by continued communications to update IDA staff on progress and receive additional guidance.
- 2) Designate a formal point of contact (POC) person, such as a project manager, and provide their telephone number, address and email information to IDA staff. This individual may be affiliated with the local IDA chapter or the management of the candidate place. Before and after designation, any changes to this POC, or their information, must be communicated to IDA immediately in order to ensure continuous communication at all times.
- 3) Obtain a letter of nomination from a qualified IDA member nominator, as well as a supporting letter from the local leadership, such as a superintendent or administrator. Solicit additional letters of support from community organizations, clubs, groups, universities, etc.
- 4) Upon completion, sends the application to IDA staff electronically in PDF or Microsoft Word format for review of the document at least one month before the chosen submission deadline date. IDA staff will confirm that the application is complete

⁸ An "IDA qualified nominator" is defined as an individual or organization holding an IDA membership in good standing at the time that the IDSP application is submitted. The place's managing agency itself may join IDA as an organizational member and self-nominate.

and ready for submission-or return it with suggestions for improvements.

 Submit in plenty of time for IDA staff to review and prepare your application to make the bi-monthly deadline that you prefer. Requests to rush applications will **NOT** be accepted; meaning that planning ahead is essential if the place elects to meet a particular submission deadline

TO BE INCLUDED IN AN URBAN NIGHT SKY PLACE APPLICATION

- 1) Map(s) of the area to be designated. The map must indicate the legal boundaries of the place and show the context of the surrounding urban area.
- 2) Letter of nomination from a qualified IDA member nominator.
- 3) Letter of support from appropriate local administrator.
- 4) Site photography establishing nighttime conditions in/near the place.
- 5) A summary of the place's public access policy.
- 6) Any management documents supporting dark skies and/or natural nighttime darkness as a valued resource.
- An LMP, forming a clear statement of the applicable outdoor lighting policy in the proposed UNSP from the responsible management agency or organization, which should include an assessment of applicable local, state/provincial, and national laws.
- 8) Documentation of a baseline sky quality measurement survey to establish conditions in the candidate UNSP prior to designation. Measurements of night sky brightness must be obtained using IDA-approved night sky brightness measuring equipment. Applicants are encouraged, but not required, to submit their measurements to the citizen science projects such as My Sky At Night (<u>myskyatnight.com</u>) and Globe At Night (<u>globeatnight.org</u>).
- 9) A lighting inventory of the place.
- 10) Description of interpretive programs/products related to dark skies awareness, as well as any related examples of successful education and outreach efforts (photos, documentation of student projects, etc.).
- 11) Future plans for site activities.

IDA REVIEW PROCESS

Six (6) application submission deadlines occur in each calendar year, commencing in January and continuing every other month. Before the place's final application is submitted, it is highly recommended that the place be in regular communication with the Dark Sky Places Program Manager to perfect the application before the next application deadline.

IDA staff regularly forwards applications to the IDA Dark Sky Places Committee for review. Endorsement of applications by the DSPC is by a 2/3 supermajority vote; otherwise, the DSPC will return applications with reasons for denial of an endorsement and specific recommendations for improvement.

If endorsed, the applicants will be notified and the Dark Sky Places Program Manager will present the application to the IDA Board of Directors (BOD). A ten (10) calendarday waiting period then commences during which the BOD has the right to deny UNSP status should it determine that any problems with the application exist.

If the BOD registers no objection within the ten-calendar-day waiting period, the UNSP designation is considered immediately awarded by IDA. The place has the right to choose when the designation is made public, but it must organize the announcement to be made at the same time as the IDA public notice unless otherwise agreed by both parties. Along with the announcement notice, IDA will publish the place's application on its website; by submitting the application, the place agrees in advance that the application will be made publicly available.

If an application is denied final approval by the BOD, a letter will be sent to the applicant outlining elements of the application that need improvement along with specific recommendations for ways to remedy any problems the BOD identifies. Applications may be resubmitted for future consideration after remediation is complete. Resubmitted applications will be considered without prejudice.

ANNUAL REPORTS

To ensure that UNSPs continue to be exemplary in their protection and restoration of natural nighttime darkness, IDA will periodically reevaluate the status of each place. Each site shall submit to IDA no later than 1 October of any calendar year a report summarizing activities in the year beginning the previous 1 October in Microsoft Word or PDF format. On or about 1 August and 1 September of each year, the International Dark Sky Places Program Manager will remind local contacts at each IDSP of the

pending 1 October annual report submission deadline. The report should not require significant time to produce so as to not be burdensome.

The annual report should include dates and brief descriptions of any formal interpretive events, lighting retrofit projects, community outreach, sky brightness measurements taken within the previous 12-month period, and any evidence of cross-promotional activity with any IDA Dark Sky Parks or Dark Sky Reserves within 100 km of the site. Samples of printed materials and press articles should also be included.

A new UNSP shall be exempted from this requirement until at least 12 consecutive months have passed from its formal designation.

If annual reports are not received by IDA in a timely fashion or questions or concerns cannot be resolved after the review, it may be necessary for IDA to suspend or revoke the UNSP status until resolution can be achieved (see "Reassessment of USP UNSP Designations", below).

REASSESSMENT OF UNSP DESIGNATIONS

The value of a UNSP designation to both IDA and the recipient site is significantly damaged should the UNSP management act contrary to the spirit of these guidelines, other than in good faith, or in dereliction of its responsibilities to IDA after a designation is received. Recognizing this, IDA institutes the disciplinary plan described below in which IDA retains the right to sever the relationship with the UNSP at any time.

Reassessment of a UNSP designation may be initiated for a variety of reasons, including but not limited to either or both of the following conditions:

- Failure to meet the requirements of the Lighting Management Plan, without prior consultation with and approval of the IDA Program Manager.
- Failure to submit an annual reported by the annual deadline absent communication of exigent circumstances to the IDA Program Manager in advance.

Either of these actions shall constitute a breach of the agreement between the site and IDA represented by the latter granting UNSP status. Consequences of such a breach range up to and include temporary or permanent revocation of the UNSP designation by IDA. IDA may, at its discretion, investigate claims in which it is alleged that UNSPs are not adhering to commitments made to IDA and the public in their applications to

the Program. This section details the IDA procedure for carrying out such investigations, and the rights of UNSPs in such matters.

INVESTIGATION AND DUE PROCESS

An allegation of impropriety concerning any of the elements of participation in the Program outlined in this document is subject to IDA investigation and potential remedial action including temporary suspension and/or permanent revocation of the UNSP designation. IDA staff shall perform due diligence in gathering facts concerning such allegations it deems credible, and will prepare a report of its findings for consideration by the DSPC. The DSPC commits to weighing the evidence fairly and impartially, and to seek to resolve disputes whenever possible through dialog. A UNSP subject to an investigation shall be notified in a timely manner and solicited for evidence contrary to the specifics of the allegation at hand. The UNSP will be given an opportunity to correct any deficiencies with regard to the Program guidelines established by the IDA investigation within a reasonable time period to be prescribed by the DSPC.

Failure to achieve consensus through these means risks a DSPC recommendation for suspension or revocation of the UNSP designation. If made, such a recommendation will be forwarded to the BOD for formal ratification before coming into force. The BOD's decision on any disciplinary matters involving an IDSP shall be considered definitive and binding.

Any UNSP so investigated has the right to review the allegations against it and all factual information collected by IDA pertinent to the allegations.

REINSTATEMENT FOLLOWING SUSPENSION

If the DSPC recommends a suspension of a UNSP designation, and the BOD ratifies the suspension, the UNSP shall be immediately notified. The status of a suspended UNSP shall be changed to "Provisional" in all IDA communications until the designation is reinstated or revoked; however, the process of obtaining reinstatement of a designation is not the same as that outlined in the "Provisional Status" section of these guide-lines.

To obtain reinstatement of a suspended designation, the UNSP must provide evidence to the DSPC's satisfaction that the specific issues identified by the DSPC as grounds for the suspension have been corrected and that all Program guidelines are once again met. The DSPC will consider the evidence presented by the UNSP and render a judgment to either

• Accept the reinstatement petition, OR

- Reject the petition and recommend revocation, OR
- Return the petition with further instructions and a defined deadline for a DSP response.

A suspension left unresolved after one (1) year from the date of the BOD's assent to the suspension automatically becomes a permanent revocation. Revocation entails removal of the UNSP from IDA's roll of approved Dark Sky Places, and from mention on the IDA website and in member and external communications. IDA reserves the right to take legal action against any former UNSP whose designation is duly revoked but continues to use the IDA name/logo in advertising, communications, and/or signage.

SALE OR TRANSFER OF LAND OWNERSHIP

IDA considers the rights and privileges outlined here in association with UNSP status to be simultaneously permanent and revocable. Furthermore, IDA requires that the responsibilities and obligations of the landowner at the time UNSP status is achieved are incumbent upon all future landowner(s) if a participating place is sold or its title is otherwise transferred to any other public or private owner. A new owner or owners may unilaterally withdraw from participation in the program at any time by indicating these wishes in writing; otherwise, IDA will hold a new owner or owners accountable to the provisions of these guidelines in perpetuity.

Any failure of new ownership to abide by the conditions for continued participation in the program laid out in this document, whether indicated by withdrawal or abandonment of responsibilities, will cause IDA to take action as described above ('Investigation and Due Process') which may result in the permanent revocation of UNSP status.