

## **International Dark-Sky Association - International Dark-Sky City**

Proposal to the IDA Board from the Flagstaff Dark Skies Coalition  
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The Flagstaff Dark Skies Coalition proposes to have IDA initiate an "International Dark-Sky City" designation. The details are as follows.

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### Objectives

- To identify towns and cities with exceptional commitment to and success in implementing the ideals of dark sky preservation and/or restoration, and their promotion through quality outdoor lighting;
- To provide international recognition for such communities;
- To promote the ideals of the IDA by encouraging communities to identify dark skies as a valuable community asset and goal.

### Process

- Nomination by IDA member in good standing, with supporting signatures of at least three additional IDA members, two from outside the community receiving the nomination, and supporting information to demonstrate that the minimum requirements have been met;
- Official supporting letter for nomination from mayor and/or council of the municipality;

*[This assures a level of education in the community such that they are aware of the IDA, the IDA IDSC program, its goals and requirements.]*

- Approval of nomination by the IDA Board of Directors by a majority vote.

*[Note: IDA may consider formation of an IDA International Dark-Sky City committee to review and perhaps produce nominations and develop a recommendation concerning each nomination for the IDA Board of Directors. This committee would be appointed by the IDA Board of Directors, and should consist of at least three but no more than five persons to meet on an ad hoc basis.]*

### Minimum requirements

- A quality comprehensive lighting code, with the following minimum standards:

- Full shielding or full cutoff standard for all lighting fixtures over 5000 lumens initial lamp output;
- Restrictions on total amount of unshielded lighting, such as a limit on lumens per acre or total site lumens in unshielded fixtures.
- A method to address overlighting, such as lumens/acre caps or illuminance specifications;
- Municipal commitment to Dark Skies and Quality Lighting, as shown by
  - City-owned lighting conforming or committed to becoming conforming with the lighting code (if the latter, a published plan with a time-line for completion of no more than 5 years);
  - Municipal support of dark skies and good lighting as indicated through city publications, flyers, PSAs, LC updates, funding of lighting upgrades, etc.
- Broad support for Dark Skies from community organizations (e.g. Chamber of Commerce, local electrical utility, local IDA section, lighting retailers).
- Success in light pollution control. At least one of the following conditions must be demonstrated:
  - Examples of a minimum of 10 [more?] projects built under the lighting code, demonstrating effective application of the code. Lighting in submitted projects must total at least 1,000,000 [more?] lumens.
  - DMSP image of community must be at least 20% fainter than the mean for communities of similar size in the region.
  - Measurement of zenith sky brightness increase over natural condition must be at least 15% below composite BV prediction based on "standard" Garstang model (DUSTPOL9 analysis with 15% ground reflectance, 10% direct uplight, and standard ratio of B to V photons produced by artificial lighting). This measure should be made from a sufficient distance from the community that local effects (i.e. nearby lighting) are minimal.

*[This requirement will be the hardest to demonstrate, but some measure of actual success is vital to assure we recognize results in addition to intentions. Unfortunately the entire field is weak on methods to measure results, as we all know. Perhaps there are additional measurement options?]*

- Designation is permanent, but subject to review and possible revocation upon request of any IDA Board member.

*[To minimize such reconsiderations, it can happen only at the request of an IDA board member.]*

### Benefits

Designation as an IDA IDSC entitles the City to display of the IDA IDSC logo in official municipal publications and promotions, and use of this logo by commercial or other groups within the community when identifying the city itself (i.e. an organization can say "located in Star City, an IDA IDSC" or other words to the same effect). IDA will maintain a web page identifying and describing all IDSCs.

Additional Comments:

The emphasis is intentionally on Dark Skies first, quality lighting second. There can be differences, such as a community that decides to emphasize extensive illumination of buildings or architectural features. These can be done well, but the approach and other extensive but non-vital uses of outdoor lighting are fundamentally at odds with the preservation of a dark sky.