



Nevada Starry Skies Certification Program

2024 PROGRAM MANUAL

NEVADA DIVISION OF OUTDOOR RECREATION

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Photo Credit: Kirstin Graham

Introduction

The Nevada Division of Outdoor Recreation (NDOR) was established in 2019 to advance and promote sustainable, world-class outdoor recreation opportunities throughout Nevada. As a division, NDOR seeks to promote a healthy and sustainable outdoor recreation economy centered on protecting Nevada's natural resources and provide opportunities to create vibrant economies that enhances outdoor recreation. In 2021, NDOR was tasked with establishing a program for awarding dark sky designation sites in Nevada to promote, preserve, protect, and enhance Nevada's dark sky resources ([SB 52](#)).

In a world increasingly illuminated by artificial light, preserving the natural darkness of the night sky is essential for both environmental and human health. Dark skies benefit our environment by conserving energy and protecting ecosystems by ensuring that nocturnal animals, from migratory birds to insects, can thrive without the disruption of light pollution. They also foster a deeper connection to the cosmos, offering a window into the vastness of the universe and inspiring awe and curiosity. Maintaining dark skies can benefit human health by promoting better sleep patterns and reducing the stress and disorientation often associated with excessive use of artificial light. To encourage communities to preserve dark skies and reduce light pollution, NDOR has established the Nevada Starry Skies (NSS) certification program.

'Our desire to light our world at night is not new. We have illuminated our outdoor public places and private realms for centuries. What has changed is that outdoor lighting is now ubiquitous, cheap, and powerful. With it, the world has gotten brighter. A lot brighter.' - **DarkSky International**

This manual frequently references and uses [DarkSky International](#) (DSI) standards and resources. In collaboration with DSI, the Division of Outdoor Recreation is laying the foundation for communities to advocate and promote the health and well-being of communities across the silver state.

This program would not be possible without the support of DarkSky International and the [Basin and Range Dark Skies Cooperative](#).

All links referenced in this document can also be found at the end of pg.9 for individuals who have printed this document out.



| Nevada Starry Skies Program Overview | |
|--------------------------------------|---|
| Purpose | To promote and preserve Nevada's dark skies through infrastructure changes and education on the importance of dark skies. |
| Who may apply? | Municipalities/Unincorporated communities, schools (K-12, private and public schools, higher education facilities and colleges/universities) *, Parks/Open Spaces, Tribal Nations, Home-Owners Associations (HOAs) and Small Businesses |
| Eligibility Requirements | The proposed site be located on public or private land in the State of Nevada and have written consent or permission from respective private or public landowners. |
| Applications Accepted | Year Round |
| Award Announcement | Applicants will be notified within 90 days after the application has been submitted. |
| Annual Reports Due | January 31st of each year |
| Time to complete all benchmarks | Unincorporated Communities/Municipalities: 2 years HOA's: 3 years Parks/Open Spaces: 5 years Downtown Business Association: 5 years Schools: 5 years Tribal Nations: 5 years |

*Properties on which public schools are located must be owned by the school districts and permission provided. If schools are on private property or leased from public landowners or other public entities, permission must be provided with the application.

Nevada Starry Skies Certification

This program seeks to work with different groups to create small changes within communities to reduce light pollution. Interested parties pursuing this certification will need to work towards compiling and approving a management plan, policy or ordinance for the proposed site. Below are the eligible categories for certification.

| Category | Nevada Starry Skies Certification Requirements |
|----------------------------|--|
| Unincorporated Communities | <ul style="list-style-type: none">• Implement a dark skies lighting policy that the community collectively agrees to abide by OR pass a dark skies lighting ordinance.• Provide measurable benchmarks in plan implementation. |
| Municipalities | <ul style="list-style-type: none">• Implement a dark skies lighting policy ordinance.• Provide measurable benchmarks in plan implementation. |
| HOA's* | <ul style="list-style-type: none">• Adopt a dark skies lighting CC&R• Provide measurable benchmarks in plan implementation. |
| Parks/Open Spaces | <ul style="list-style-type: none">• Provide a Management Plan for the proposed site OR adopt an internal lighting policy that requires dark sky compliant lighting throughout the park/open space.• Provide measurable benchmarks on plan implementation. |
| Small Businesses | <ul style="list-style-type: none">• Install and upkeep dark skies compliant lighting on the exterior and interior of building.• Compile a plan for reducing light creep from the interior of the establishment onto the sidewalk or outside. |
| Schools | <ul style="list-style-type: none">• Adopt an internal policy for the school, that includes dark sky compliant lighting.• Provide measurable benchmarks on plan implementation. |

*Homeowners Association CC&R will only include facilities owned by the HOA and street lighting. Residential lighting included in the CC&R is not a requirement for this program.

How to Apply

Steps for application:

1. Contact the Nevada Division of Outdoor Recreation Nevada Starry Skies Program to discuss the process and receive additional information or feedback about the proposed site. Interested applicants can reach out either by email or phone call, using the contact information found in this manual and on the website.

2. Be prepared to provide a primary point of contact, your organization, and an email address. Send updated information to the Nevada Starry Skies Program if the primary contact changes.
3. Complete the application form during the open period and email the completed form in PDF format to nvstarryskies@ndor.nv.gov.

Applications for the Nevada Starry Skies Destination program will open year-round. During this open period, interested parties that already have an established approved management plan/ordinance or policy to submit will need to provide the additional information:

1. Proposed education materials, including number of outreach events if applicable.
2. Benchmark and timelines for completing the proposed implementation.
3. Lighting specifications included in the approved management plan, ordinance or policy.

The application can be downloaded from the [Nevada Division of Outdoor Recreation](#) webpage. For a smooth transition, save the document as a PDF before emailing in the application. Paper copies can be requested by emailing nvstarryskies@ndor.nv.gov and mailed back to:

Nevada Division of Outdoor Recreation

ATTN: Nevada Starry Skies Program
901 S. Stewart St. Ste. 5001
Carson City, NV 89701

Incomplete applications submitted during the open period will not be considered. If the NSS Program Manager denies the application, the applicant may file a written appeal of the decision with the NDOR Administrator within 30 days after receipt of the notice of denial.

Applicants will be informed of the application status within 90 days after the submission date. Applications will be reviewed and processed as capacity allows. NDOR staff will be in communication with applicants about any updated timelines and progress of submitted applications.

Application Resources

Applicants will need to develop a comprehensive management plan, ordinance or policy for the proposed Nevada Starry Skies site. Each of these components should include the DarkSky International [Five Principles for Outdoor Lighting](#).

In 2011, The Dark Skies Association in partnership with Illuminating Engineering Society (IES) compiled a user's guide on how to develop dark sky lighting ordinances including language found in dark skies lighting ordinances. The [guide](#) is an excellent resource that helps develop a comprehensive and effective ordinance plan.

This document is a foundation and blueprint for steps and actions necessary to phase out lights contributing to light pollution and retrofit with lights that are dark sky friendly. This plan will be a guide for future lighting decisions and best practices for modifying existing lighting.

Additional examples are provided below for different eligible categories.

| Category | Management or Ordinance Example |
|---|--|
| Parks/Open Spaces | Lighting Management Plans |
| HOA's | HOA Model CC&R |
| Unincorporated Communities/Municipalities | Pahrump Lighting Ordinance 17.04.750 |

Management Plan Resources

DarkSky International provides a [Dark Sky Assessment Guide](#) that provides suggestions and tips for best practices for a lighting management plan. Management plans should include the following items, which are also outlined in the provided guide.

Lighting Plan

Complete a lighting inventory of all lights that are included in the plan, which should include the following:

- a. Location
- b. Purpose
- c. Manufacturer
 - i. Include lamp specifications and a light distribution chart.
- d. Model number
- e. Lamp type/spectrum
- f. Initial lamp lumens
- g. Operational details such as the usage of adaptive controls

Lighting Zones: Designation of areas based on their lighting needs and impact.

Creating Lighting Zones

- LZO: No Ambient Lighting
- LZ1: Low Ambient Lighting
- LZ2: Moderate Ambient Lighting
- LZ3: Moderately High Ambient Lighting
- LZ4: High Ambient Lighting

Downtown Business Association Eligibility Requirements

This program is designed to engage businesses, either local or larger chain stores and restaurants. Downtown Business Association/Chambers of Commerce/Main Street Committees represent a collective of downtown businesses that will upgrade exterior lighting with dark skies approved lighting and reduce excessive lighting from the establishment being cast onto sidewalks or the exterior of the building. The business must obtain permission from the landlord if renting or leasing the space. Participating businesses do not have to be located next to each other or within the same area. Please see the [Rural-Urban Community Area Codes](#) to learn if the proposed area is considered rural or urban.

Rural Communities with Downtown Business Associations

- Requires commitments from anywhere between 2-15 businesses.
- Each business must identify each outside light required to be replaced and provide a lighting report.
- Provide an implementation timeline.
- Develop and promote standardized messaging as part of the education component in each business. Refer to education guidelines for acceptable outreach materials.

Cities/Municipalities Downtown Business Association Requirement:

- Requires commitments from between 25-50 businesses.
- Provide an implementation timeline.
- Develop and promote standardized messaging as part of the education component with each business partner Refer to education guidelines for acceptable outreach materials.

Dark Skies Approved Lighting

DarkSky International is an excellent resource for finding [dark skies approved vendors](#) and approved vendors. Lighting specs are required when submitting the management plan to show the specific light spectrums, shields and timers/dimmers/motion sensors that are being used for the plan. Applicants are not required to use the vendors on the dark skies approved vendors list. However, lighting must meet dark skies lighting requirements.

Education

Education is one of the biggest barriers for communities when understanding the importance of the preservation of dark skies. To address these information barriers, each site awardee will complete outreach or education opportunities to help educate the public about the changes being made and to create dark sky advocates in the community.

| Entities Applying | Acceptable Outreach |
|-------------------------------|---|
| Homeowners Association | <ul style="list-style-type: none"> • Provide information about the importance of dark sky lighting including health benefits for animals, plants and to residents. • Mailer- includes 5 principles of lighting to all current residents. |
| Downtown Business Association | <ul style="list-style-type: none"> • Post flyers at participating businesses about the importance of dark skies lighting. |
| Parks/Open Space | <ul style="list-style-type: none"> • Host two-star parties per year. Content and talking points will be developed by staff. • Provide a one-page educational flyer at visitor centers/kiosks/ website about the importance of dark skies. • Place plaques in campgrounds or near kiosks. |
| Schools | <ul style="list-style-type: none"> • Implement dark skies educational lessons into lesson plans or create and implement a school wide activity. |

All education materials, such as flyers or other hand out materials must be submitted to the NSS Program Officer for review. This should be included with the application process.

Ongoing Project Implementation and Reporting

Nevada Starry Skies Destination awardees must provide timelines for the anticipated completion. Once a year, awardees will submit a report to NDOR staff for review. Yearly reports are due on the 31st of January each year after being accepted into the Nevada Starry Skies program. Sites approved during the application period will need to report the following year. Once the management plan or policies of the proposed site have been completed and the proposed site remains within compliance of the programs guidelines during that time, a Nevada Starry Skies Certification will be awarded. NDOR may terminate projects that do not meet critical milestones.

Project Completion

A final report will be required at the completion of the management plan implementation.

Audits and Recordkeeping

All records relevant to the Nevada Starry Skies Destination program must be on file with the grantee and are subject to audit by the state and inspection by NDOR staff. Full and free access must be allowed to project documents and must be retained for three (3) years after the completion of the project. The Administrator reserves the right to require that the records be kept for a longer time.

Funding Opportunities

Currently, the Nevada Division of Outdoor Recreation does not have grant funding available for this certification process. This certification is free to apply, with the understanding that awardees are responsible for implementing the plan and will need to allocate funding appropriately. The NDOR website will provide additional funding sources that may be relevant to a proposed NSS site.

Nevada Starry Skies Compliance

If the Administrator of the program receives or becomes aware of information indicating that a site which has been designated as a Nevada Starry Sky site no longer meets the standards set forth by the Division of Outdoor Recreation, the Administrator, in consultation with the contact person for the site, will develop a plan for the site to regain compliance with those standards within a specific period.

If the site does not regain compliance with the standards set forth by the Administrator within the period specified in the plan developed, the Administrator will provide written notification of the suspension of the designation, pending that the site can regain compliance with the provided standards and with additional action specified by the Administrator. The Administrator will reinstate a suspended designation upon submission of proof of the completion of additional action.

The Nevada Starry Skies Program can revoke the Nevada Starry Skies certification of a site if the Administrator determines that the site cannot regain compliance with the standards provided

by the Division of Outdoor Recreation. Written notification of revocation will be provided to the person who is designated as the contact person for the site and any person who submits a written request to the Administrator to receive such notification. Upon revocation or suspension of a sites NSS designation, a person may file a written appeal with NDOR's Administrator within 30 days after receipt of the notification.

Contact Information

Nevada Division of Outdoor Recreation

Nevada Starry Skies Program
901 S. Stewart St. Ste. 5001
Carson City, NV 89701
Email: nvstarryskies@ndor.nv.gov

Nevada Division of Outdoor Recreation Administrator

Denise Beronio
Email: dberonio@ndor.nv.gov
Work Phone: 775.684.2716

Document Links:

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| Dark Skies International | https://darksky.org/ |
| Basin and Range Dark Sky Cooperative | https://brdarks skies.org/ |
| Nevada Division of Outdoor Recreation Website | https://dcnr.nv.gov/divisions-boards/ndor |
| Illuminating Engineering Model Ordinance Guide | https://darksky.org/app/uploads/bsk-pdf-manager/16_MLO_FINAL_JUNE2011.PDF |
| Lighting Management Plan Example | https://darksky.org/app/uploads/bsk-pdf-manager/Sample-LMP_62.pdf |
| Model CC&R's | https://darksky.org/app/uploads/bsk-pdf-manager/Sample-LMP_62.pdf |
| Example Ordinance | https://www.nyecountynv.gov/DocumentCenter/View/34940/ORD-552 |
| Dark Skies Assessment Guide | https://darksky.org/app/uploads/bsk-pdf-manager/2019/06/Dark-Sky-Assessment-Guide-Update-6-11-19.pdf |
| The Five Principals of Dark Skies Lighting | https://darksky.org/what-we-do/advancing-responsible-outdoor-lighting/ |
| Creating Lighting Zones | https://darksky.org/resources/guides-and-how-tos/lighting-zones/ |
| Rural-Urban Commuting Area Codes | https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/ |
| Dark Skies Lighting Approved Vendors | https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/ |
| Application Link | https://dcnr.nv.gov/uploads/ndor-docs/FINAL_Nevada_Starry_Skies_Program_Manual.pdf |