

Dark Skies

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Commission

Tonight I walk. I am watching the sky. I think of the people who came before me and how they knew the placement of stars in the sky, watched the moving sun long and hard enough to witness how a certain angle of light touched a stone only once a year. Without written records, they knew the gods of every night, the small, fine details of the world around them and of immensity above them...Walking, I am listening to a deeper way. Suddenly all my ancestors are behind me. Be still, they say. Watch and listen. You are the result of the love of thousands.

- Linda Hogan, "Walking"

Those who spend time in Jemez Springs know how stunning our night skies are. For some, being here is the first time they have ever seen the Milky Way Galaxy or shooting stars, or realized the immense scale of our universe. This is no accident. For sure, as a rural community we have fewer illuminations creating the light pollution that hides the night sky for much of the world. But our views of the night sky are also the result of intentional planning by the Village of Jemez Springs.

Jemez Springs is a Dark Sky compliant community. Our Village Code provides specific standards for how lighting fixtures should be designed to reduce light pollution. Village leaders some two decades ago understood the economic, cultural, and wildlife values from limiting light pollution. Gradually, our Village mayors and council crafted and revised ordinance language and secured funding to bring Village-owned light fixtures into compliance. This June, Jemez Springs reached a milestone achievement in this quest when all streetlights were fitted with Dark Sky compliant fixtures. At last, all municipal buildings and streetlights are Dark Sky compliant.

Being a Dark Sky community also requires private and business community members to adhere to expectations laid out in the Village Code. As a resident or business-owner in Jemez Springs, what does being part of a Dark Sky community require of us? Here is what we need to know:

1. What is involved in making my property Dark Sky compliant? Here are five useful principles for responsible outdoor lighting (<https://darksky.org/get-involved/home-lighting-assessment/>):
 - Use lights when they have a clear purpose and only when and where they are needed.
 - Use lights that are warm-colored – these cause less skyglow.
 - Shield and aim your lights so they land downward and not out and upward.
 - Don't use lights that are brighter than necessary.

- Use timers and motion sensors so that your lights are on only when needed.
2. How restrictive are the requirements? Village Code states, “It is the intent of this chapter to encourage, through regulation of the types, kinds, construction, installation and uses of outdoor electrically powered illuminating devices, lighting practices and systems which will conserve energy *while maintaining nighttime safety, utility, security, and productivity.*” Dark Sky regulations are intended to balance the ability to see the night sky with issues like safety. Interestingly, research indicates that fixtures that direct light downward – as Dark Sky compliant lights do – create fewer shadows and allow for better visibility when walking at night.
 3. Do I have to immediately replace all my outside lights with Dark Sky Compliant fixtures? No. But when you install a new outside light fixture or replace an old one, your installment needs to comply with Village Code. The Planning and Zoning Commission requires all building permit applicants to commit to following Dark Sky regulations.
 4. How bright can a light be? For residential properties, Village Code requires a limit of “1,260 Lumens for each Luminaire and the total Lumens for the property shall be no more than 2.5 lumens per square foot.” For reference, 800 lumens is roughly equivalent to the light given off by a standard incandescent 60 watt bulb.
 5. How much does the light need to be “shielded”? No outdoor lighting may be aimed upward. “...All outdoor luminaires, whether for private or public use, shall be shielded in such a manner that light rays emitted by the luminaire whether directly or indirectly, are restricted to regions below an angle of 25° beneath the horizontal plane running through the lowest point of the luminaire where light is emitted. No significant intensity of light shall be emitted from the luminaire horizontally....” If this seems confusing, visit <https://darksky.org/get-involved/home-lighting-assessment/> or when purchasing lighting fixtures, just look for those designated “Dark Sky Compliant.” They can readily be found on-line or at most hardware-type stores.
 6. Do I need to turn my lights off at some point at night? Yes. Except for businesses when open to the public (see #8 below), all outdoor “luminaires” should be turned off between 11 p.m. and sunrise.
 7. Can I still have my twinkle lights? Yes! “Decorator lamps smaller than 10 watt rating and 70 Lumens, or strings of such lamps, used for holiday decoration are exempt from the requirements....” Remember, though, the five principles listed above, and consider putting those twinkle lights on a timer.

8. As a business-owner, what do I need to know about lighting? Business lights may stay on after 11 p.m. as long as the establishment is open to the public. Illuminated signs may stay on while open to the public but should be turned off after that. See the Village Code for more details about signage lighting requirements (Chapter 51; <https://www.jemezsprings-nm.gov/wp-content/uploads/files/code/051-Lighting-Outdoor.pdf>)
9. What if I don't live within the Village boundaries? The Village Code applies only to those properties within the borders of the Village of Jemez Springs. But, if you live outside the Village, consider also following responsible lighting at night. Some people travel intentionally to Dark Sky locations, creating an economic benefit for these areas and the communities around them. For example, the Valles Caldera became an International Dark Sky Park in 2021, and this is among the many reasons people come to visit it. The Jemez Valley as a whole has a view of the night sky that is becoming increasingly rare – and our entire community can benefit from it. For other international Dark Sky locations, visit <https://darksky.org/>
10. What else does the Village Code say that is important? Read Chapter 51 of the Village Code to learn more about requirements and exemptions. (Chapter 51; <https://www.jemezsprings-nm.gov/wp-content/uploads/files/code/051-Lighting-Outdoor.pdf>)