

Why NEPA matters and what does it have to do with the night sky?

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Fajada Butte at night. NPS Image

The [National Environmental Policy Act](#) (NEPA) was passed in 1969 requiring federal decision makers to fully consider the environmental impacts of a proposed action. The intended result of this process is the conservation and protection of our nation's resources for the benefit of future generations. The NEPA was passed during the height of the environmental movement in the U.S. and coincided with many other landmark laws including the 1964 [Wilderness Act](#), 1970 [Clean Air Act](#), 1972 [Clean Water Act](#), and 1973 [Endangered Species Act](#). These Acts were prefaced by the publication of [Rachel Carson's Silent Spring](#) in 1962 that highlighted the dangers of pesticides. By 1970 the Environmental Protection Agency was established, and the first [Earth Day](#) was observed to help Americans discuss environmental issues and how we could change our lifestyles to be better stewards of our environment.

Why is this relevant to protecting naturally dark night skies and reducing light pollution you might ask? Well, I work for the [Natural Sounds and Night Skies Division](#) (NSNSD) of the National Park Service based out of Ft. Collins, CO serving over 421 park units nationwide. To me, protecting the night sky resource is just as valuable as protecting the air that we breath and the water that we drink. As an Environmental Protection Specialist I have used the NEPA process to: (a) help public land managers (both internal and external to parks) make decisions that are based on an understanding of the environmental consequences to

a proposed action, and (b) provide recommendations that would protect, restore, or enhance the night sky resource.

The NEPA process is often misunderstood by park managers and seen as a stumbling block to getting a project done. However, conducting proper environmental analysis of a proposed project at the beginning of the planning process gives us the best opportunity to reduce light pollution that could potentially impact wildlife behavior and survival, the visitor experience, public and employee health, wilderness character, cultural resources, and indigenous values associated with the night sky. For example, light pollution from developments and artificial light at night near turtle nesting beaches negatively impact sea turtles because of the way the turtle's nocturnal behavior is impacted (e.g., how turtles choose nesting sites, how they return to the sea after nesting, and how hatchlings find the sea after emerging from their nests). Dark skies are critical to help hatchlings navigate back to the ocean via the downward slope of the beach and the reflections of the moon and stars on the water (see [Footnotes 1 and 2](#)).

Through proper planning for new lighting and retrofitting existing lighting with dark sky friendly lighting, parks can not only enhance the darkness of the night sky, but also increase energy efficiency, reduce maintenance and operational costs, and set an example for our neighbors on simple ways to protect the environment.

Growing up in the west and living and working most of my adult life in national parks that have very dark skies such as Bryce Canyon National Park, Chaco Culture National Historical Park, and Organ Pipe Cactus National Monument (to name a few), I have been spoiled because I could just step outside, look up, and see tons of stars at night. Now I live in a very urban environment but still find joy in looking up and finding inspiration either in a sunset or in a clear night sky away from the manmade lights. I am an amateur photographer and have traveled throughout North and South America photographing landscapes and people in their environment. I now have a great desire to photograph the night with its natural lights, shadows, shapes, and unique influence over sense of place.

Before coming to the NSNSD, I had the honor of developing [Bryce Canyon National Park's Dark Sky](#) Park application, and before that leading the planning and management of the Total Solar Eclipse event for the Challis Field Office Bureau of Land Management, Idaho. One of the things I love about my job is how challenging and exciting it is to help protect non-traditional and

somewhat intangible resources — especially natural sounds and night skies in our national parks.

1. Blair E. Witherington and R. Erik Martin, 1996. Understanding, Assessing, and Resolving Light-Pollution Problems on Sea Turtle Nesting Beaches. Florida Department of Environmental Protection. FMRI Technical Report TR 2. <https://irma.nps.gov/DataStore/DownloadFile/496017>
2. <https://blogs.nasa.gov/kennedy/2018/05/16/nesting-sea-turtles-depend-on-dark-skies/>



Gina taking a picture of the fall colors in colorful Colorado!

Learn More

- To learn more about the Natural Sounds and Night Skies Program of the National Park Service please visit: nps.gov/orgs/1050/index.htm
- To learn more about publications related to light impacts on wildlife and humans, please visit: nps.gov/articles/effectsoflight.htm
- To learn about how you can make a difference in protecting the night sky, please visit: nps.gov/subjects/nightskies/practices.htm

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