

IDA Report
CAPULIN VOLCANO NATIONAL MONUMENT

General: Current Information for the Site's IDA Contacts

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VISITATION:

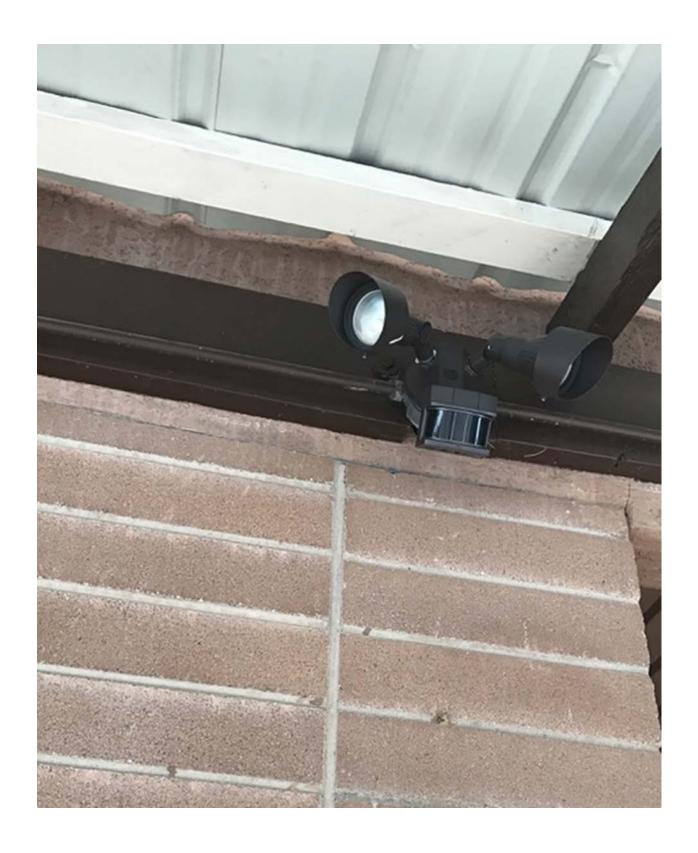
Estimated number of site visitation for fiscal year 2017 is 57,791 visitors, of that 364 participated in dark-skies programming.

Lighting:

There were six DualBrite lights installed on park property to replace the non-compliant security lighting. All were installed in September 2017. The lights are motion activated with 100W Bi-Pin halogen bulbs. These lights are shielded to aim the light down and set to a 1-minute motion timer. These lights were installed as outdoor security lights for the three park housing units, and three lights were installed as outdoor security lights for the Park Offices and Administration building. All park lighting is compliant with the Light Management Panel.

Below are photos of the lights installed in the park:



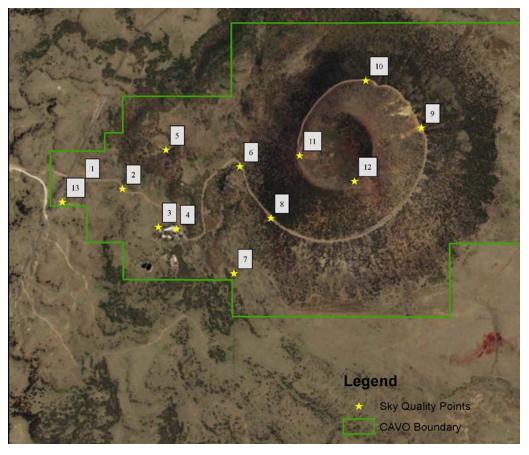


Sky Quality:

Below, Map 1 shows where the data was taken within the park using the Sky Quality Meter in 2016. Map 2 shows locations measured in 2017; though many points are identical Map 2 shows a slight adjustment to point 7 and the inclusion of point 13. A permanent sky monitor has been purchased and there are current plans to install it by summer 2018.



Map 1



Below are the sky quality meter measurements from 2016 (figure 1) and 2017 (figure 2) using mapped coordinates:

Fig. 1

Observation Points	Sky Quality Meter
(2016-2017)	
1	21.94
2	21.95
3	21.95
4	21.93
5	21.89
6	21.88
7	21.95
8	21.90
9	21.89
10	21.94
11	22.01
12	21.98
13	N/A

Fig. 2

Observation Points (2017-2018)	Sky Quality Meter
1	24.15
2	23.86
3	24.12
4	23.65
5	24.39
6	23.88
7	23.97
8	23.62
9	23.79
10	23.77
11	23.84
12	23.99
13	23.67

Outreach:

There were five interpretive dark-sky programs scheduled for summer 2017. The program dates were: May 28, June 23, and July 28, August 71 (solar eclipse), August 25, and September 8.

These events were all hosted in the Capulin Volcano oversize vehicle parking lot, except for the solar eclipse event that was hosted in the Rim Parking lot on top of the volcano. The events began at 8:00 pm (MST) and ended by 10:30 p.m. (MST). At the events, Diana Hicks gave brief interpretive talks about the night sky and any astronomical events to be viewed. Equipment out for visitor use was a 14 inch Dobsonian Reflector Telescope, an 8 inch Sirius Reflector Telescope, two night sky viewing binoculars, and park tablets with the app 'Night Sky' installed for the convenience of the visitor. Each event scheduled was advertised through social media, flyers, and local radio interviews. The park plans to host these events once a month each summer in coming years, and partner with more organizations for these future events. The park also received funding in FY 2017 to purchase materials and signage to construct a fully accessible Dark Sky viewing station.

Visitation for each event: May-20 visitors, June-41 visitors, July-0 visitors, August-32 visitors, Solar Eclipse event (August)-163 visitors, September-0.

Arts & Culture:

The Capulin Volcano interpretive dark skies program includes dialogue that interprets the night skies of New Mexico as a cultural treasure worth protecting. These programs seek to foster an appreciation for protecting and conserving the night sky. There is current research being done to explore the connection of Capulin's night sky with the 17 Native American tribes affiliated with the monument.

Community & Media Relations:

Capulin Volcano developed partnerships with several organizations to deliver night sky programs that remind the public; "the dark sky is a resource worth protecting". The park partnered with the Mandala Center, (Des Moines, NM) to deliver night sky programs and with the Western National Park's Association to develop designs to sell night sky products. Items sold with these designs included postcards, magnets, posters, etc., and provided minimal funding to dark sky programs. The park also partnered with Empire High School, (Duncan, OK) through Capulin's Outdoor Leadership Academy to provide a night sky program to the students of this school at the park.

Photographs:

Featured on the following pages are photos from Capulin's dark sky viewing events including the 2017 Eclipse event:















