



**House
Legislative
Analysis
Section**

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DARK SKY PRESERVE

AS ENROLLED

**House Bill 4025 (Substitute H-1)
First Analysis (5-4-93)**

**Sponsor: Rep. Timothy L. Walberg
Committee: Tourism & Recreation**

THE APPARENT PROBLEM:

While most attempts to control environmental pollution are aimed at reducing the amount of toxic substances produced each year that contribute to air, water and ground contamination, some people have turned their attention to another growing pollution problem--excessive night light. Of course, most light "pollution" exists in or near larger urban areas. But as people have moved from urban centers into the suburbs and other outlying areas, artificial light usually has accompanied this migration. Light pollution results primarily when outdoor lighting used during hours of darkness "leaks" into night skies (as many fixtures are not designed to direct light only toward the ground where it is needed), which not only causes glare and reduces night-sky visibility but also wastes energy and significantly raises costs borne by society at large. Some states have attempted to limit the problem by creating "dark sky preserves," where special lighting is used and other measures are taken to reduce the amount of light pollution emitted in these areas. Some night-sky experts in Michigan believe the skies over the Lake Hudson State Recreation Area in Lenawee County contain perhaps the least amount of light pollution of any area in the southern part of the state. To help preserve this area for quality night sky-gazing activities, some people believe the park should be designated as the state's first dark sky preserve.

THE CONTENT OF THE BILL:

The bill would designate certain state-owned land at Lake Hudson, located within Lenawee County, as a "dark sky preserve." Under the bill, the Natural Resources Commission (NRC) would have to ensure that outdoor lighting within the preserve was not installed unless it was needed for safety, security or the reasonable use and enjoyment of property in the preserve. The commission also would have to ensure that outdoor lighting in the preserve did not unreasonably interfere with "nighttime activities that require darkness" (i.e., night sky-gazing, night

photography, etc.). The bill would expire 10 years after its effective date.

Within 90 days of the bill's effective date the commission would have to ensure that all outdoor lighting within a preserve was 1) directed downward, 2) provided, when possible, by "fully shielded" fixtures (defined as specially-made lighting fixtures that shield light from the naked eye), and 3) provided, where practical, by "motion sensor" lighting fixtures rather than by those that remain lit during all hours of darkness.

The bill would not restrict the use and development of state-owned land at Lake Hudson as prescribed by the master plan approved by the NRC if the use and development complied with the bill's provisions.

FISCAL IMPLICATIONS:

The Department of Natural Resources says the bill would have minimal fiscal implications for the state. (4-29-93)

ARGUMENTS:

For:

Light pollution in night skies generally exists in larger urban areas throughout the country, although the migration of populations to suburban and rural areas has caused the problem to spread even to the countryside. In many places the night sky has become flooded with glare from excess outdoor lighting that is often poorly designed and utilized, leaving stargazers and others who enjoy studying the grandeur of the night sky to seek out special places where night light is less profuse. One such spot in Michigan exists in the area surrounding the Lake Hudson State Recreation Area, which has become a mecca of sorts for stargazers from Michigan and surrounding states. By designating this state park as the state's first dark sky preserve and requiring the Natural Resources Commission to plan development

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of the park around this theme, the bill would establish the area as a special place in southern Michigan where the outdoors could be enjoyed in a unique way. The bill specifically would require the commission to ensure that outdoor lighting in a preserve either was not used at all or, if needed, that special fixtures be utilized and light directed downward away from the night sky. And while the main thrust of the bill is to provide another recreational opportunity for tourists from Michigan and elsewhere, the dark sky preserve that the bill would create could also be used as a pilot project to study the impact (both environmentally and fiscally) of improper use of outdoor lighting.

Response:

Rather than create a dark sky preserve at one state park in southern Michigan, it would seem more prudent if the state developed a broad policy to encourage the use of more energy-efficient, ecologically-conscious outdoor lighting at all state facilities. Ironically, the bill ignores the fact that most light pollution in the Lake Hudson area emanates from a state prison about fifteen miles away.

Against:

The bill is unnecessary as the Natural Resources Commission currently has the authority to encourage better use of outdoor lighting to prevent light pollution, not only at Lake Hudson but at all state parks and state facilities. But in doing so, the commission would like to solicit input from various experts as well as the general public about how to do this in the most cost-effective and ecologically sound manner possible. Proponents of the bill claim the commission has over the last year shown scant interest in the dark sky preserve concept, and yet, according to a DNR spokesman, the commission has scheduled a hearing in May to discuss the issue with interested groups. Not only does the bill fail to allow for input from the general public on how to develop and implement the concept, it could very well restrict the NRC's plans to develop Lake Hudson State Park as a multipurpose recreational facility.

SUGGESTED AMENDMENTS:

The Department of Natural Resources suggests amending the bill to revise language pertaining to the use and development of state-owned land as prescribed by the NRC master plan. The bill currently states that it would not restrict the use and development of the Lake Hudson State Recreation

Area as prescribed by the NRC-approved master plan "if the use and development [were] in compliance with" the bill. The department suggests amending the bill to remove this conditional clause from the provision.

POSITIONS:

A spokesman for the Astronomical Society of Lenawee County testified in support of the original version of the bill before the House Tourism and Recreation Committee on 2-25-93.

The Department of Natural Resources opposes the bill, though it supports the concept of altering state policy to encourage better use of outdoor lighting at all state facilities in order to reduce night light pollution. (4-29-93)