

March 11, 2008

Dr. Thomas Armitage, DFO  
 EPA Science Advisory Board (1400F)  
 U.S. Environmental Protection Agency  
 1200 Pennsylvania Avenue, NW  
 Washington, DC 20460

Subject: EPA Ecological Research Program's Multi-Year Plan

Members of the EPA Science Advisory Board:

*"Light Pollution"* is one area of research the EPA may be interested in supporting. The brightness of the night sky is an environmental indicator.

With all the attention being given to ever increasing energy demands, global climate change and developing nations, we should be doing our very best to use energy wisely and not waste it or add unwanted, unnecessary and harmful byproducts (CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, mercury, etc) to the environment at a rate that has long term consequences and could be disastrous.

Just recently, using DSMP satellite images of 147 communities in Israel in the first large scale population study of its kind, researchers concluded that there is a strong correlation between exposure to light at night and breast cancer. Similar studies should follow, and prudent public action should be taken.

< <http://www.informaworld.com/smpp/content~content=a790773188~db=ai~order=page> >

The National Park Service (NPS) has started a program to monitor the night sky in a few selected places to protect our national parks. For additional information, be sure to contact Chad Moore and Dan Duriscoe of the NPS Night Sky Team in Bryce Canyon National Park, Utah.

The efforts need to be expanded to include all areas – not just national parks and astronomical observatories – to make the data more meaningful. Involvement by the EPA is a natural fit. Also, the EPA even has its own superfund clean up sites where outdoor lighting needs to be controlled, such as the ones being built to dredge PCB's out of the Hudson River.

There is much interest worldwide, including the UK, Italy, Canada, and elsewhere. Much of it is "grassroots," and there is a crying need for development of new, affordable, monitoring equipment, data gathering procedures, data reduction, and overall coordination.

The need has been recognized with the introduction of several bills in the New York State Legislature:

[A7438 / S4364](#) – the "Healthy, Safe and Energy Efficient Outdoor Lighting Act."

[A7406](#) directs the NYS Department of Health to support research on the health effects of artificial light at night.

[A7429](#) requires NYS Energy and Research Development Authority to collect and make available information regarding the availability and the use of energy efficient and environmentally sensitive outdoor lighting.

[A7430](#) adds elimination of wasteful artificial night lighting to the state lighting efficiency standards for public buildings.

Also, "outdoor lighting" is subject to the "*State Environmental Quality Review Act*" and is usually a topic of much debate by many municipal planning and zoning boards with little to no expertise during site plan review.

Would the EPA be interested in:

- a) becoming involved,
- b) willing to work with some of the over 10,000 members of the International Dark Sky Association (IDA) from all 50 states and more than 70 countries, and
- c) assisting state and local governments?

Attached is a copy of my recent report (with minor changes) to the SAB for their review of the EPA's "Report on the Environment (2007)."

Yours truly,

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Dark Skies for the Adirondacks  
"A Natural Resource Worth Saving"  
<http://www.timesunion.com/communities/darksky>

enc:

cc: Tom Miller, Robert Wagner, Chad Moore, Dan Duriscoe, Steve Pauley, Chris Elvidge