



HUDSON HIGHLANDS LAND TRUST

Dark-Sky Resource Guide

Reduce Light Pollution . . .
*Be a Good Neighbor and
Reclaim the Night Sky!*



Presented by:
Hudson Highlands Land Trust
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**A RESOURCE BOOK FOR SMART LIGHTING
SOLUTIONS TO REDUCE COSTS, & SAVE ENERGY**

Inside:

- *Community Lighting Challenges*
- *Product Examples by Type*
- *List of Suppliers and Other Resources*

*For more information about light pollution reduction, please visit the
Hudson Highlands Land Trust website at www.hhlt.org*

III. RESOURCES:

Product Suppliers:

American Electric Lighting—www.americanelectric.com
 Architectural Area Lighting — www.aal.net
 Focus Industries Landscape Lighting — www.focusindustries.com
 GlareBusters — www.theglarebuster.com
 Green Earth Lighting — www.greeneearthlighting.com
 Holophane — www.holophane.com
 Kichler Lighting — www.kichler.com
 LampsPlus — www.lampsplus.com
 Parshield — www.parshield.com
 Prolighting — www.prolighting.com
 RAB Incandescent Lighting — www.rabweb.com
 Starry Night Lights — www.starrynightlights.com
 Visionaire Lighting — www.visionairelighting.com
 Zone Lighting Performance Sports Lights — www.zonelighting.com

Look for **Star View Compliant and **IDA Approved** products both online and at your local lighting retailer.*

Other Resources:

Dark Sky Society — www.darkskysociety.org
 Energy Federation — www.energyfederation.org
 Energy Star — www.energystar.gov
 Hudson Highlands Land Trust — www.hhlt.org
 Illuminating Engineering Society of North America — www.iesna.org
 International Dark-Sky Association — www.darksky.org
 Selene — www.selene-ny.org
 Urban Wildlands — www.urbanwildlands.org



About Hudson Highlands Land Trust — The Hudson Highlands Land Trust seeks to protect the special character of the Highlands through land conservation, advocacy, and the promotion of sound long-term planning. HHLT works with landowners and groups of neighbors who are interested in preserving their property for future generations; provides information about our area’s natural resources; draws attention to the high costs of shortsighted development; and organizes community events such as the Annual Family Festival Barbeque & Square Dance and the Sustainability Expo. Our Light Pollution Reduction Campaign is a component of HHLT’s Community Outreach and Public Awareness Programming.

Shades and Shields cont.:



Hubbell Skycap



RAB Wall Pack Curved Shade



Lamp Sleeve (fits over ordinary socket)

Low-glare Light Bulbs:



Compact Fluorescent -- If every American home replaced just one light bulb with an ENERGY STAR, we would save enough energy to light more than 2.5 million homes for a year and prevent greenhouse gases equivalent to the emissions of nearly 800,000 cars. There are many sources available; check out: <http://www.energystar.gov>.



ENERGY STAR



High Pressure Sodium (HPS) - High pressure sodium lamps are quite efficient — about 100 lm/W, up to 150 lm/W, when measured for Photopic lighting conditions. They have been widely used for outdoor lighting such as street-lights and security lighting. Many lighting supply sources provide HPS bulbs and products.

Table of Contents

| | | |
|------|--|-----|
| I. | Community Lighting Challenges | 1-2 |
| II. | Product Examples by Type: | 3-7 |
| | ◆ Bollards | 3 |
| | ◆ Building Light Fixtures | 3 |
| | ◆ Decorative Landscaping- Low Glare | 4 |
| | ◆ Motion-Controlled Lighting and Timers | 5 |
| | ◆ Roadway-Utility Lighting | 5 |
| | ◆ Shades and Shields | 6-7 |
| | ◆ Low-Glare Light Bulbs | 7 |
| III. | List of Suppliers and Other Resources | 8 |

I. THE CHALLENGE: LIGHTING PROBLEMS FACING OUR COMMUNITY

Today, communities struggle with three closely-related lighting problems:

- **Light Trespass** can turn our neighborhoods into light-polluted zones that send unwelcome glare into our homes and those of our neighbors, intruding on privacy and creating a nuisance.
- **Light Pollution/Sky Glow** caused by ineffective lighting can rob us of the night-time skies. As seen from the Hudson Valley, the brightness of the Milky Way used to produce shadows on earth; nowadays many children in our area have never even seen the Milky Way.
- **Glare**, a component of light pollution and trespass, can make roadways, city centers, and suburbs unsafe by limiting our ability to see people and objects. This is especially hazardous when driving.

Many security experts believe that the deep shadows created by bright lighting give criminals hiding places that would not be available with lower-intensity lighting or lights that come on when motion is detected.

Also, the ecological impact from bad lighting is more widespread than many realize. Excessive artificial lighting interferes with some animal migration, breeding, and hunting patterns; encourages some algae bloom/zooplankton imbalances; and contributes to air pollution through the excessive energy consumption required to supply greater than necessary amounts of electricity.

Shades and Shields:



Parashield Glare Visor



Hubbell Skycap Yard Light Package



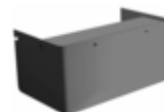
Lite-Blocker External Shield



Dark Sky Sconce



GE Skygard Shield



RAB Wall Pack Shield

Motion-controlled Lighting and Timers:



RAB TUFF Dome Motion Sensor



RAB Motion Detectors



FP Photocontrol—Exterior Timer



RAB Mini-Sensor

Roadway-Utility Lighting:



Luminaire Technologies



Visionaire Monterey Pole Lighting

I. THE CHALLENGE: CONT.

What we need are lighting solutions that support safe, energy-efficient, appropriately-lighted outdoor environments. In the process, it’s estimated that nationwide *we can save up to \$4.5 billion dollars annually in non-wasted energy for unnecessary and excessive lighting!* The equation is simple: *Energy Efficiency = Money Saved.*

Solutions are often easy and sometimes very inexpensive. Using motion-controlled lighting, reducing the wattage of bulbs, replacing bulbs with more energy-efficient types, shielding existing light fixtures, and even simply re-directing existing fixtures can yield immediate benefits in cost savings and reduced light pollution. Many retrofits to existing lights pay for themselves in the first year of use.

This handbook is intended to assist the residents of the Hudson Valley in making energy-efficient and “dark-sky-friendly” choices about outdoor lighting. On the following pages you’ll find many examples of products from many different manufacturers and suppliers. At the end, there’s a list of resources including supplier contact information, organizations concerned with light pollution, and web sites to help you learn even more about how to reduce light pollution in the Hudson Highlands.

II. PRODUCT EXAMPLES BY TYPE:

Bollards:



Visionaire Sahara Bollard



Visionaire Lakeside Bollard



RAB Smart Post

Building Lighting Fixtures:



Green Earth Lighting Glarebuster



Impact Quarter Sphere



RAB Shade Small

Decorative Landscaping – Low Glare:



American Area Lighting



American Area Lighting



American Area Lighting



RAB Landscape Lighting



Focus Industries Lighting