



MONTGOMERY

TOWNSHIP, NEW JERSEY

ENVIRONMENTAL COMMISSION

via email: board.secretary@bpu.nj.gov

February 10, 2023

Carmen D. Diaz
Acting Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue, 1st Floor
PO Box 350
Trenton NJ 08625-0350

RE: Light Emitting Diode (LED) Streetlight Program
Dkt. No. QO22110710

Dear Acting Secretary Diaz,

I write to you on behalf of Montgomery Township's Environmental Commission / Sustainable Montgomery to express our support of the proposed LED Streetlight Program and encourage the Board to adopt these rules.

LED technology uses a fraction of the energy when compared to traditional incandescent bulbs and sodium vapor lighting. As climate change continues to impact our planet and our local communities, finding ways to decrease energy consumption is vitally important. The change also has practical implications in its sustainable elements of reducing costs to taxpayers, and requiring less maintenance over the lifespan of the fixture.

While we support the spirit of this proposal, this Commission strongly recommends that standards be developed as part of this program in order to minimize negative impacts and prevent light pollution.

- 1. Selected LEDs should utilize a color temperature no greater than 3,000 kelvins, but preferably 2,700 kelvins.**

An increasing number of studies are documenting the negative impacts of too much light, particularly shorter wavelength light (blue light) on human health, birds, sea turtles, insects, and many other species. Blue light has been shown to impact human circadian rhythms, as well as influence hormone secretion, heart rate, body temperature and many other factors that may contribute to chronic disease states such as cancer, diabetes, cardiovascular disease, and sleep

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disorders.

About half of insects are nocturnal, and artificial light negatively impacts reproduction cycles and increases predation. We are currently experiencing an “insect apocalypse” and estimates range from 50% to 75% population loss. In 2018, Brooke Jarvis of the New York Times projected 40% of insect species would be at risk for extinction in the coming years. Loss of pollinators and insects will compromise the global food system with fewer pollinators to fertilize agricultural crops, and cause a collapse of the ecological food web. With fewer insects to feed themselves and their young, bird populations will decline and the effect will reverberate through the entire ecosystem.

2. Lights should be directed downward and/or shielded.

Streetlights should be directed downward to light only the areas necessary – upward pointing light fixtures are an inefficient design and don’t provide directed lighting where it’s needed most. By shielding lighting, it prevents spillover of light onto other areas where light isn’t needed. Additionally, lighting should be mounted as low as possible so the cone of light underneath is minimal. As enumerated above, the negative impacts of artificial light are being increasingly understood and thus should be minimized to the greatest extent possible.

Our Commission is very encouraged that NJBPU is taking a forward-looking approach and prioritizing energy efficiency and hopes it will adopt standards to protect public health and wildlife.

Best Regards,

A handwritten signature in cursive script that reads "Mary M. Reece". The signature is written in black ink and has a long, horizontal flourish extending to the right.

Mary Reece, Chair

cc: Montgomery Township Committee
Lori Savron, Township Administrator/Planning Director
Mark Herrmann, Township Engineer
Devangi Patel, Health Officer