



NANTUCKET TOWN ASSOCIATION MEETING

February 28, 2023, at 4:00 pm

Meeting held by Zoom conferencing

FINAL AND APPROVED MINUTES

Attendance (Participants as noted by Zoom): Mary Longacre, Susan Renzulli, Bill Seay, Anne Terry, Henry Terry, Barbara von der Groeben, Charley Walters, and Paula Williams.

Guest: Gail Walker, Nantucket Lights.

Thanks to the Atheneum, Samantha Aguiar, for hosting the meeting. which was recorded and the link to YouTube is included here: :

<https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fyoutu.be%2F%2F0vSDfLdlpY&data=05%7C01%7Csaperste%40mst.edu%7C4bb5803bf8aa44a20ee808db19dadf90%7Ce3fefdbef7e9401ba51a355e01b05a89%7C0%7C0%7C638132200233750067%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0%3D%7C2000%7C%7C%7C&sdata=H%2B4wr7qe4RIAJOuT6TZPP2f7sUOMQ6CaS6l555awxiE%3D&reserved=0>

I. Call the February 28, 2023, Nantucket Town Association Annual Meeting to Order.

President Henry Terry called the meeting to order at 4:01 pm. He announced that the meeting is being recorded and those who could not attend are welcome to use the above link to watch the recording. He also announced that, to avoid conflicts with the Open Meeting Law, there would be no discussion of the Nantucket Town small area plan because members of that working group are in attendance at today's meeting and no agenda for it has been posted.

II. Approval of minutes of the Meeting of January 24, 2023.

Henry Terry asked for approval of the minutes of the meeting of January 24, 2023 as amended; Paula Williams moved approval of the minutes, Anne Terry seconded them, and the vote to approve was unanimous.

III. Treasurer's Report.

Mary Longacre, Treasurer, gave the Treasurer's report, attached. She noted that this is the time that dues for the year 2023 should be paid and that she has received 26 payments so far; in all of

last year there were 48 paid memberships. Thus, there were dues payments of \$450.00 minus PayPal fees of \$5.95; donations to the Nantucket Atheneum of \$500.00 and to the Nantucket Food, Fuel, and Rental Assistance program of \$300.00 and the annual payment to the Nantucket Civic League, based on membership, of \$240.00 left a new balance of \$3,654.37. Paula Williams asked about PayPal and Mary Longacre replied that only a small number used it and the fee was not significant. A motion to approve was made by Paula Williams, seconded by Anne Terry, and approved unanimously.

IV. Old Business.

None.

V. New Business.

Charley Walters, referring to the earlier announcement that, owing to the Open Meeting Law, there would be no discussion of the work of the Town Area Plan Work Group, asked how the Town Association could get a progress report on it. Mary Longacre suggested that, if a joint meeting of the Town Association and the Work Group were posted, then there could be open discussion. Henry Terry noted that this arrangement was certainly do-able.

VI. Guest Speaker, Gail Walker, Founder, Nantucket Lights.

Henry Terry introduced Gail Walker, Founder, Nantucket Lights, who talked about her Warrant Article (# 76) for the forthcoming Annual Town Meeting that proposes replacing the Town's existing outdoor lighting bylaw, originally passed in 2005, with a new one that is consistent with current best practices, with the goal of minimizing the harm from light pollution, reducing energy consumption, and preserving the historic character and charm of the island. She reported that the Finance Committee, on a positive vote of seven to one, recommended passage of the proposed new bylaw but with the enforcement provisions that they felt would create a substantial administrative burden removed. FinCom felt that a robust educational campaign should be tried first and, if unsuccessful, the "enhanced" enforcement provisions could be pursued at a future town meeting.

To begin her presentation, she shared her screen so as to show an outline of the proposed new bylaw with the suggested FinCom deletions. Her presentation then followed closely the attached text in summarizing the provisions of the proposed bylaw, pointing out the most significant changes from the existing bylaw, and addressing some topics that have come up in previous presentations. The warrant article itself, as revised by FinCom, will be included in the Inquirer and Mirror insert. She then happily responded to questions.

Mary Longacre asked if a light fixture is underneath an overhang, such as a porch roof, would it be exempt from the proposed bylaw. The answer is no because horizontally spread light contributes to skyglow. Bill Seay asked for advice on how best to approach a non-compliant neighbor. Even under the existing bylaw, said Gail Walker, this is a problem. While enforcement is complaint-based, turning in a neighbor to the Lighting Enforcement Officer should be avoided, if possible. Better to first try to educate the neighbor and she can help come up with an approach, possibly help mediate. She has done this in some situations but knows that she cannot reach everyone. If the proposed bylaw passes, she will be creating brochures and written materials that one can give to a neighbor. The Maria Mitchell Association has indicated that it may be willing to fund a bulb-

giveaway program, to supply free, compliant lightbulbs and that may solve some problems. Town-sponsored education would also result in more people being compliant. Nantucket Lights also intends to give out “good neighbor lighting awards” to businesses and organizations if they install compliant lighting; each awardee would get a decal to put in their window and these will hopefully help encourage compliance by others.

Susan Renzulli asked if the state energy program called MassSave would be able to help home owners to change fixtures. Unfortunately, not, said Gail Walker, because their goal is to have people convert to LED to save energy and what they recommend is not always consistent with dark sky principles. Charley Walters asked how much time would need to be spent to enforce the proposed bylaw, if the “enhanced” enforcement provisions were not included. Gail Walker responded by saying she thought that even 8 hours per week spent investigating complaints would make a huge difference. Barbara von der Groeben asked if she and Nantucket Lights had reached out to landscape architects about uplighting of trees. “Not yet,” was the reply because she felt that the bylaw needed to be updated first. If the new rules are adopted, she plans to offer webinars and seminars for architects, builders, landscape architects, and electricians to try to get them on board so that they can convince their clients to do the right thing.

Bill Seay asked how one might volunteer to help the effort. Gail Walker said that Nantucket Lights has a listserv and the first step would be to join that list to receive updates and specific calls to action. Volunteers are needed, she added, to help promote the article before Town meeting. She can be reached at nantucketlights@gmail.com and the Nantucket Lights website has a webpage devoted to the proposed new bylaw (<https://nantucketlights.org/proposed-new-bylaw>) that has much more information about it and a list of ways to help get it passed.

She ended by encouraging the Nantucket Town Association to publicly endorse the proposed new bylaw.

VII. Adjournment.

Henry Terry thanked Gail Walker for her presentation and said that if there were no other business, he would call for a motion to adjourn. Barbara von der Groeben made the motion, Paula Williams seconded, and it passed unanimously. Before actually adjourning, Susan Renzulli introduced herself. She said that her home was at 5 Step Lane and had been destroyed in the Veranda House fire. She and her neighbors have an invigorated interest in the health of the Town. She was welcomed and consoled on her loss. The meeting adjourned at 4:51 pm.

***Next meeting is March 28, 2023, and will be hybrid with an in-person meeting in the Atheneum and a virtual one via Zoom; if one uses Zoom, the address is <https://us02web.zoom.us/j/87455121153>.**

Lee W. Saperstein, Secretary, saperste@mst.edu.

Nantucket Town Association, February 28, 2023

TREASURER’S REPORT

Balance at last report: \$ 4,250.32 on 1/24/23

Dues Received \$125.00 through Paypal
\$325.00 in checks

Total Income \$450.00

Expenses: -\$500.00 donation to Nantucket Atheneum
-\$300.00 donation to Nantucket Food Fuel & Rental Assistance
-\$240.00 to Nantucket Civic League

Paypal Fees: -\$5.95

Balance as of 02/28/23: \$3,654.37

2022 had 48 paid memberships
2023 has 26 paid memberships so far, including some new members

Respectfully submitted,

Mary Longacre, NTA Treasurer

**Nantucket Town Association
Meeting Tuesday February 28, 2023**

Proposed New Outdoor Lighting Bylaw (2023 ATM Article

#76)

Prepared Remarks by Gail Walker

INTRODUCTION

My proposal, to put it simply, is to replace the existing outdoor lighting bylaw with a new and improved bylaw, one that's consistent with what's currently considered best practices for outdoor lighting.

The goal is to minimize the harm from light pollution, reduce energy consumption, and preserve the historic character and charm of the island --- all while still allowing for adequate lighting for outdoor activities, safety, and security.

I'm happy to report that the **Finance Committee voted last Thursday (Feb. 23), 7 to 1, to recommend passage of the substantive part of my proposal** – the new lighting requirements. On the enforcement side, they recommended striking the additional enforcement provisions I had proposed out of concern for the administrative burden they would place on the Town. I agreed to not pursue those at Town Meeting, to see if a robust education campaign would lead to enough voluntary compliance to make those unnecessary, as FinCom members advised.

Time doesn't allow me to show you all the materials and info I provided to FinCom over the 4-5 weeks that they deliberated but I thought it would be helpful to briefly walk you through what I've proposed, as endorsed by FinCom; point out what I think are the most significant changes from the existing bylaw; and then discuss a few topics that I suspect are on everybody's mind.

After that, I'd be happy to answer any questions you have.

OVERVIEW OF PROPOSED NEW BYLAW

A. GENERAL REQUIREMENTS

The **four general requirements** basically reflect the fundamental

principles for responsible outdoor lighting agreed on by the International Dark Sky Association and the Illuminating Engineering Society – the society that represents the lighting industry.

- First, lighting above 600 lumens would have to be “**fully shielded.**”

“Fully shielded” means that no light can be emitted above the horizontal plane where the light is emitted from a fixture.

This is to minimize the amount of light that shines up into the sky where it serves no purpose, as well as the amount of light that creates unsafe glare or shines onto the property of others, adversely affecting their ability to enjoy their own property.

There are lots of fixtures commercially available now that would meet this requirement.

The ubiquitous onion light, which by design is not fully shielded, could still be used, it would just need a bulb that is 600 lumens or less.

- Second, the **color temperature of the lighting would have to be 2700K or lower** unless that isn’t commercially available for a particular application.

This is to minimize the emission of blue light that has been found to adversely affect the circadian rhythms of all living things, from humans to insects and plants.

The International Dark Sky Association now recommends 2200K or lower for outdoor lighting but that’s aspirational – fixtures and bulbs are not yet readily available at that color temperature, whereas 2700K is common now and that’s the color temperature that the Massachusetts Medical Society recently decided to advocate for, for outdoor lighting.

- The third general requirement would be that lighting can’t exceed **specified limited on brightness.**

The proposed limits on lumens is a new approach that should be easier to follow than the approach used in the existing bylaw, which is based on measurements called “foot candles.”

Measuring foot candles requires a special meter that is tricky to use, whereas **lumen output** is generally included in product specifications.

While many still gauge brightness by wattage, wattage is actually how much energy a bulb uses and now that there are more energy efficient alternatives to incandescent bulbs, wattage is no longer an accurate way to gauge brightness. A 9-watt LED could be as bright as a 60-watt incandescent bulb.

So, the best way now to judge the brightness of a fixture or bulb is based on its lumen output, which is a measurement of the amount of light that the fixture or bulb emits. The higher the lumen value, the brighter the light.

- Finally, the proposed bylaw would **restrict the hours during which outdoor lighting could be on** – with some exceptions, most notably for safety and security lighting.

The existing bylaw has a curfew but only for sports lighting used for competitions on nonresidential properties (or at least that's the way the relevant provision has been construed by the Town).

B. REQUIREMENTS FOR SPECIFIC TYPES OF LIGHTING

Beyond the general requirements, there are requirements for some specific applications that need special provisions, either because an exception to one or more of the general requirements has been made for them or because they otherwise warrant special treatment. Most notable:

- Unshielded string lights
- lighting of flags
- lighting of signs
- non-residential sports lighting
- streetlights
- luminaires owned, leased, operated, maintained, or controlled by the Town of Nantucket or another governmental entity

C. PROHIBITIONS

Turning to the section on Prohibitions, a few things would be prohibited.

Most importantly, **light trespass** and **glare** that rises to the level of a **public safety hazard or a public nuisance** would be prohibited. That means that

- (1) this kind of lighting must be abated regardless of the grace period, which I'll get to in a minute; and
- (2) the property owner might have to take actions beyond what is otherwise required to eliminate the hazard and/or nuisance.

D. EXEMPTIONS

Then there are some general exemptions, meaning some kinds of light wouldn't be subject to any of the regulations. The most notable are the exemptions for:

- lighting needed by public safety personnel in emergency situations
- temporary lighting required to save life, limb, or property from imminent peril, which would include security lighting controlled by a motion sensor and is on for a short time
- lighting approved in conjunction with a special event permit issued by the Select Board
- lighting mandated by a higher authority

E. APPLICABILITY

Turning to applicability --

- **Lighting installed before the new regulations become effective** could be used for 5 years, with a possible extension up to 10 years in some circumstances. The big exception to this "grace period" is for lighting that constitutes a public safety hazard or a lighting nuisance (light trespass and glare), as just discussed. That would have to be abated within 90 days of being notified of the problem *[I had originally proposed 30 days but FinCom asked for me to change that to 90 days]*
- **Waivers:** If compliance with the new regulations would constitute an unreasonable hardship or would be detrimental to health, safety, or welfare, an administrative waiver could

be sought.

F. ENFORCEMENT

Turning to enforcement, the new bylaw I proposed had a number of provisions to improve enforcement, but these have been stricken in the version recommended by FinCom. These included:

- A **duty to investigate** by the Lighting Enforcement Officer – an existing position -- when someone complains of a suspected violation – with **formal appeal rights** for those who want to challenge the inaction or enforcement decision of the lighting enforcement officer.
- An **outdoor lighting permit requirement** so that outdoor lighting plans are reviewed for compliance before the lighting is installed — this would have applied to any construction project that required a building permit and/or review by the HDC. (Many people think outdoor lighting plans are reviewed as part of the building permit process, but that’s not true because the outdoor regulations are not part of the Zoning Bylaw.)

In recommending that these “enhanced” enforcement provisions be stricken, FinCom members felt that they would be too burdensome for the Town to implement and that before going that route, an educational campaign should first be conducted to see if that would result in enough voluntary compliance to make them unnecessary.

I agreed that a phased approach made some sense and that I wouldn’t pursue the provisions they struck at Town Meeting.

The only substantive change on the enforcement side in the revised version endorsed by FinCom is to the amount of the fines that can be imposed for violations. The proposal is to change this from \$100 per violation to \$100 for the first violation, \$200 for the second violation, and \$300 for the third and any subsequent violation. The idea behind “step-up” civil penalties is to provide more financial incentive to comply.

NOTABLE CHANGES

Now, for the biggest changes from the existing bylaw.

It's hard to limit these to just a few since there are so many changes and ALL are important in terms of reducing light pollution, but here's what I'd say are the Top Ten.

1. Clearer rules about uplighting and shielding
2. Color temperature would now be regulated
3. There would be a general curfew instead of just one for nonresidential sports lighting (but with an exception for safety and security lighting and streetlights)
4. There would be a better approach for regulating brightness (lumen limits instead of "foot candles")
5. There would be better regs for nonresidential sports lighting (because of complaints about NPS sports lights)
6. There would be better regs for streetlights, which can become big contributors of light pollution if they don't meet certain criteria when they are converted to LED, which is just a matter of time
7. Illumination of signs would now be regulated
8. Flagpoles higher than 20 ft would have to be lit from above, instead of with ground-mounted spotlights
9. Updated metrics for determining conditions of light trespass.
10. Waivers and an extension of the grace period would be available based on hardship.

Before the FinCom vote, I would have added "Stronger enforcement provisions" but, again, I have agreed not to continue to pursue the enhanced enforcement provisions that I had originally proposed.

So, that's a high-level summary of my proposal. Let me now address some things that I suspect are on your mind.

FIRST, WHAT ABOUT SAFETY AND SECURITY?

The most common objection to outdoor lighting regulations, generally, is that light at night is needed to avoid bodily harm and to keep property secure.

Here's why nothing about the proposed bylaw would compromise safety and security.

- A property owner could still follow the illuminance levels

recommended by the Illuminating Engineering Society (the society that represents lighting professionals) and be in compliance with the proposed new rules.

- The restriction on hours of illumination would not apply to streetlights (section 102-4Dbi).
- Safety and security lighting could be on all night on residential properties, without restriction (section 102-4Dbi).
- For nonresidential properties, safety and security lighting could be on until one hour after closing of the business or operations, and after that, it could still be on as long as it was dimmed to at least 50% when activity isn't detected (section 102-4Dbi).
- There would be a general exemption for "temporary lighting required to save life, limb, or property from imminent peril," which covers lighting that is turned on for a short time for safety and security purposes (section 102-7c).
- And, finally, as mentioned before, if any property owner felt that any of the restrictions would be detrimental to safety and security given their particular circumstances, they could request an **administrative waiver** (section 102-8).

NEXT, WHAT ABOUT THE BURDEN AND EXPENSE FOR HOMEOWNERS?

- First, in most cases, just changing bulbs and/or adding shielding would bring lighting into compliance. If a fixture needs to be replaced, the fully shielded fixtures are not expensive.
- Second, there's a five-year grace period, which can be extended to up to 10 years in some circumstances to give folks time to prepare.
- Third, again, when compliance would create an unreasonable hardship, an administrative waiver could be sought.
- To the extent anyone finds the technical terminology and requirements hard to understand, if the proposed bylaw passes, I'll be undertaking an educational campaign and providing resources to help people comply.

- I'll also work with lighting suppliers on Nantucket to make sure they stock the right bulbs and fixtures.

NEXT, IS LIGHT POLLUTION SUCH A PROBLEM ON NANTUCKET THAT ALL THESE REGULATIONS ARE NEEDED?

- In some areas, YES.

Complaints about light trespass, glare, and not being able to see the stars at night are increasing across the island.

And satellite data confirms that the night sky has gotten brighter – that data says it's about 25% brighter today than just ten years ago. And it's probably even worse than that because satellites are blind to much of the blue light that's emitted by LEDs, which many people are using now.

I'll also note that Nantucket Lights has been monitoring the brightness of the night sky by taking Sky Quality Meter readings in eight areas of the island since last May and the area near the Wharf consistently ranks as the brightest or next to the brightest.

- To be sure, the light pollution on Nantucket isn't nearly as bad as in many other places. We are fortunate to be among the few places in the United States where the Milky Way can still be seen, at least in some places on the island. Astonishingly, 80% of Americans can no longer see the Milky Way where they live. But if we want to preserve our special status, we need better regulation of outdoor lighting.
- Other things to consider:
 - 1) Over-lighting is a waste of energy.
 - 2) So many bright lights are **starting to reduce the historic charm of Nantucket.**
 - 3) There is a lot of evidence that artificial light at night is harmful to **wildlife and human health.**

NEXT, WHY SHOULD WE HAVE CONFIDENCE IN WHAT YOU HAVE PROPOSED?

- I've been researching light pollution for 5-6 years now, first as a member of the Sconset Civic Association board, then on behalf of the Nantucket Civic League, and more recently as the founder of Nantucket Lights, a citizen advocacy group exclusively dedicated to combatting light pollution on Nantucket.
- I spent 3-4 months working with outdoor lighting experts to draft the proposed bylaw and I looked at what other communities have done.
- I was a career litigator for the U.S. Department of Justice for about 15 years. I applied the high standards I was held to then to this.
- I've been coming to Nantucket for 37 years and have only its best interests at heart.

FINALLY, HOW MUCH SUPPORT WITHIN THE COMMUNITY IS THERE FOR THE PROPOSED BYLAW?

- The **Nantucket Civic League**, which has members in 25 neighborhoods around the island and rarely takes a position on warrant articles, has endorsed it.
- The proposed bylaw has also been endorsed by the **Nantucket Historical Commission**, which agrees that light pollution is starting to erode the historic character of the island.
- It's also been endorsed by the boards of 6 neighborhood associations: Brant Point Association
Madaket Conservation Association
Naushop HOA
Polpis Association
Sconset Civic Association
Shimmo Area

Association

CONCLUSION

Obviously, the more groups that publicly endorse my article before Town Meeting on May 6, the more likely it will pass, so I hope the Nantucket Town Association will decide to endorse it as well and do two things:

- Write a letter to Nantucket Lights that I can make public.

Let all your members know about the vote to endorse and encourage them to vote in favor of it at Town Meeting.

DRAFT