To: Longboat Key Mayor and Town Commission (c/o Office of the Town Clerk)
Town Hall
Commission Chamber
501 Bay Isles Road
Longboat Key, FL 34228

cc: Kathy Dyer 316-1999 (Ext. 224)
Laura Adams 316-1999 (Ext. 221)

From: Longboat Key Turtle Watch

Date: April 11, 2016

Subject: April 18, 2016 Goals & Objectives Meeting

Thank you for once again extending the invitation to our organization to participate in the upcoming meeting regarding the Town of Longboat Key's Goals and Objectives for 2016 in support of the "Community Vision Plan." This letter provides some background information regarding the Longboat Key Turtle Watch (LBKTW; lbkturtlewatch.com), a discussion of our comments regarding Goals and Objectives, and related attachments. While we presented some of this information at last year's meeting, it is relevant to the ongoing ordinance discussion.

As background, the LBKTW, a Florida Non-Profit Corporation, has been a part of the Longboat Key community since 1969, when it was founded. We represent one of oldest, continuously active, local community-based sea turtle conservation programs in the state of Florida. LBKTW affiliated with Mote Marine Laboratory in 2005 and we continue to be an integral part of their Sea Turtle Conservation & Research Program (https://mote.org/research/program/sea-turtle-conservation-research). Our focus and mission, consistent with Mote Marine Laboratory, is to monitor the habitat and hatching of sea turtles on Longboat Key and to educate the community regarding the protection activities needed to promote the continuation of the species. However, we also embrace Mote Marine Laboratory's broader endeavors to apply science-based methods as a catalyst to help, in a sustainable manner, manage the ocean's natural resources and ecology. This broader mission is fundamental to both protecting the environment and maintaining people's right to enjoy and benefit from it. We would like to support the Town of Longboat Key's implementation of the Vision Plan in this manner.

As indicated in the Town of Longboat Key's Vision Plan, the natural environment, such as the beaches and Sarasota bay, are a key factor in making Longboat Key a unique community. As stated as part of "Goal 6" of the Vision Plan, i.e., "Protect and conserve the natural environment and maintain the beauty of the Key," strategy 15 is to "Continue to protect endangered species including, but not limited to, sea turtles." Obviously, the LBKTW enthusiastically supports this goal and strategy, and importantly, we hope to work the Town of Longboat Key staff, and collaboratively with Mote Marine Laboratory and the Florida Wildlife Conservation Commission

(FWC), to raise public awareness and support the engagement of our community in balancing environmental protection with public access, enjoyment and benefit from our natural environment. In this regard, we have the following comments for your consideration and discussion.

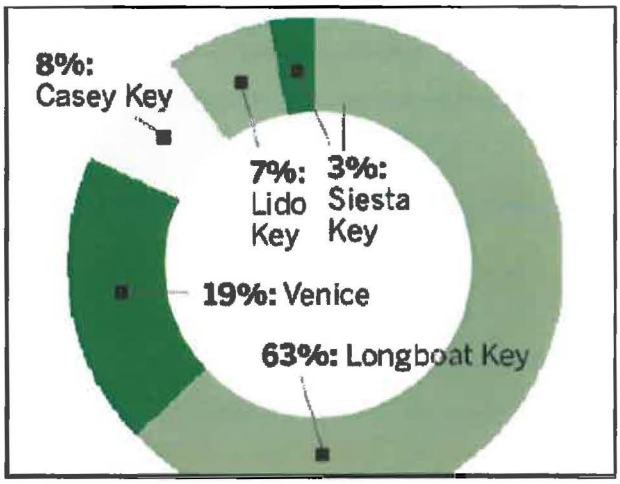
Updating Ordinance 87-16 (Chapter 100 of the Town Code)

The Town of Longboat Key was one of the first communities to establish a lighting ordinance (see map of State ordinances – Attachment A) to protect sea turtles and we enthusiastically support the Town's ongoing re-examination of this ordinance. Relevant guidance for designing a modern ordinance includes 1) the Model Lighting Ordinance for Marine Turtle Protection (http://www.dep.state.fl.us/legal/Rules/marine/62b-55.pdf) and 2) the University of Florida's Levin College of Law, "Sea Turtle Friendly Lighting" (STFL) policy analysis report (http://www.law.ufl.edu/_pdf/academics/clinics/conservation-clinic/SeaTurtleFriendlyWholeReport.pdf).

The above references have been recommended by the Florida Fish and Wildlife Conservation Commission (FWC) and provide the basis for the ordinances that have been adopted by The City of Venice (http://www.venicegov.com/Files/Misc/Sea_turtle_lighting.pdf; Attachment C) and Sarasota County (http://library.municode.com/HTML/11511/level3/PTIICOOR_CH54ENNARE_ARTXXIIIMATUPR.html). The importance of lighting ordinances and frequency asked questions by residences and organizations is provided as Attachment B. This represents a science-based dialogue recommended by Mote Marine Laboratory that we hope will be informative for the Town of Longboat Key.

As stated in the STFL policy analysis report, eighty-two local governments in Florida have adopted beach lighting ordinances, with most of them based on the 1993 DEP Model Lighting Ordinance. Yet, there are still high numbers of disorientation events throughout the state. For example, according to the Florida Fish and Wildlife Conservation Commission (FWC) in 2008 (the last year FWC published disorientation reports), Palm Beach County reported over 9,000 disoriented turtles, Franklin County in the Panhandle reported 1,506, and Sarasota County in Southwest Florida reported 3,279.

Exemplary disorientation rate data compiled by Mote Marine Laboratory are being provided to the Longboat Key Town Commission by Kristen Mazzarella (see graph below). These are based on the number of nests that disoriented using only those that hatched (i.e., one's that don't hatch can't disorient), and use weekly sampled nests to make it comparable across years.



These data suggest that even with enforcement efforts, artificial beachfront lighting (e.g., reflective light, pool lights and interior lights) remains one of the major threats to Florida's sea turtles, and that current state and local laws have not been adequate to address this threat. As shown in the graph above, these data indicated Longboat Key's disorientation incidence is the highest in the 35-mile area patrolled by Mote Marine Laboratory.

The lighting industry has changed dramatically and now offers many new designs of fixtures and bulbs that are both turtle friendly and people safe. This technology is also available for lighting the streets and sidewalks. In addition, we believe a natural resource associated with barrier islands is the night sky and we should look to keep the light where it is needed throughout the year, and not in the sky.

Beach Furniture & Recreational Items

Beach furniture and other items left on the beach overnight during sea turtle nesting season pose a serious entanglement hazard or obstacle for nesting and hatchling sea turtles. This has been observed on Longboat Key (http://www.lbknews.com/2014/07/06/lbk-sea-turtles-ensnared-in-left-behind-beach-furniture/).

The Marine Turtle Protection Code (relevant to Sarasota County) requires nightly removal of recreational beach items (https://www.scgov.net/EnvironmentalPlanning/Pages/SeaTurtle.aspx). However, qualified properties may apply for a Recreational Use Agreement (RUA) that allows for storage of beach furniture, tents, cabanas and other recreational items on the beach overnight during the sea turtle nesting season (May 1 – Oct. 31). Anna Maria Island (AMI) has three municipalities which all have ordinances, and we recommend consideration by the Town of Longboat Key. Specifically, we suggest consideration of an exemplary program / ordinance implemented in Panama City, FL. It is referred to as the "Leave No Trace" initiative (http://www.visitpanamacitybeach.com/beaches/leave-no-trace/).

We commend the Town of Longboat for using broadcast voice mail to residents and businesses to alert them to the importance of compliance with the lighting ordinance, as well as the daily removal of beach furniture and other items. It is noteworthy that ordinances regarding the

overnight storage of beach furniture and recreational items during sea turtle nesting season have been adopted by other communities and should be considered by the Town of Longboat Key. We also would like to reiterate our thanks to the Town of Longboat for changing out most of the Florida Power and Light (FPL) flood lights and installing "Cobrahead" lighting fixtures with shields. This addressed concerns expressed by residents regarding visibility when they were driving or walking. The FPL lights are assisting residents and are turtle-friendly.

Last year, the Town Commission approved of a voluntary citizen's committee to work with the code enforcement office in drafting a new "beach" ordinance for Longboat Key. Over the past year this committee has been working closely with Town staff, especially, Chris Elbon, scientists and subject matter experts at Florida Fish and Wildlife Conservation Commission (FWC) and Mote Marine Laboratory, local business representatives, and other members of our community to create an ordinance that will reflect various important considerations including:

1) Precedence in the form of other successful Florida ordinances;

2) Scientific data regarding factors that positively impact sea turtle conservation and, of course, reduce the number of hatchling disorientations and other issues we are experiencing here on our key;

3) Advances in lighting technology that address human safety, ecological impact and cost effectiveness;

4) Practical implementation and effective enforcement considerations; and

5) Educational outreach programs that our local businesses can embrace and help implement.

The goal is to update our existing ordinance and continue to provide natural beach areas that we can all enjoy, while remaining both business friendly, and ecologically sustainable.

As you know, a draft ordinance has been prepared by Town staff. Our committee is recommending the adoption of this ordinance as soon as possible, following completion of review by the Town Commission. The committee intends to continue to serve as a resource to support and facilitate your decision-making and implementation of the ordinance. Thus, we also recommend that the Town Commission continue to allow the committee to function, in conjunction with Chris Elbon, and in liaison with experts (e.g., FWC, Mote Marine Laboratory). The committee's purpose would be to continue to monitor what other communities are doing successfully to protect their natural environment, and to recommend educational outreach mechanisms regarding the implementation of and compliance with the Town's new lighting ordinance. In this manner, the appointed group could provide recommendations to the Commission on how we can continue to protect our environment without compromising the enjoyment of that environment by our citizens.

Thank you again for the opportunity to share our thoughts and recommendations. We sincerely appreciate all the work that the town staff does to enforce the current ordinances. The Public

Works, Code Enforcement, and Police Department provide exceptional services. The LBKTW wishes to express our commitment to work with the Town of Longboat Key in maintaining and advancing our communities environmental and ecological stewardship efforts.

Sincerely,

Longboat Key Turtle Watch

Tim Thurman
President

Cyndi Seamon
Vice President

Dr. Jeffrey Driver
Corporate Secretary

Attachment A – Summary Proposal

Attachment B – Slide Presentation

Attachment C – Citizens Committee Membership List

Attachment D – FWC Sea Turtle Lighting Ordinances Map*

Attachment E – Mote Marine Frequently Asked Questions on Lighting Ordinances*

Attachment F – Venice FL Lighting Ordinance*

**provided as separate electronic files*

ATTACHMENT A

To: Longboat Key Mayor and Town Commission (c/o Office of the Town Clerk)
Town Hall
Commission Chamber
501 Bay Isles Road
Longboat Key, FL 34228

cc: Kathy Dyer 316-1999 (Ext. 224)
Laura Adams 316-1999 (Ext. 221)

From: Longboat Key Turtle Watch
Date: April 10, 2016
Subject: April 18, 2016 Goals & Objectives Meeting

SUMMARY PROPOSAL

Vision

One of the Town's vision objectives is "the protection and conservation of the natural environment." This not only includes the protection of endangered species like sea turtles but also of our nesting sea birds and the protection of our pristine beaches and Sarasota Bay.

Challenges

Often times there is a conflict between what is best for the natural environment and what is best for the humans that reside in and around that environment. The greatest challenge to protecting and conserving our natural environment is finding solutions that meet both the needs of our environment and the concerns of our residents.

Proposed Action

Many of the Town's ordinances which protect the environment are twenty or more years old. At the time, these ordinances were considered models for many communities. Since then, however, new science, technologies and new methods of implementation have emerged. The Town is in the process of updating the lighting ordinance, consistent with many of Florida's communities, to take advantage of this new information in an effort to benefit all.

We propose the Town Commission re-appoint a group of interested citizens, who liaison with experts (e.g., FWC, Mote Marine Laboratory) to continue to consider and advise activities and programs that encourage compliance with existing ordinances and encourage the sustainable protection and enjoyment of our natural environment. For example, educational outreach to encourage compliance with ordinances. The appointed group could provide recommendations to the Commission on how our community can protect the environment without compromising the enjoyment of that environment by our citizens.

ATTACHMENT B

THE VISION OF
THE TOWN OF LONGBOAT KEY

Numerous factors make Longboat Key a special place including…

"the natural environment such as its beaches and the bay, warm weather, barrier island status with limited access, and a location near to, but separated from more urban areas"

How we get there includes…

"Protect, preserve and improve the natural environment."

GOAL 6-
PROTECT & CONSERVE THE NATURAL ENVIRONMENT

STRATEGY 15-
CONTINUE TO PROTECT ENDANGERED SPECIES

CHALLENGES IN ACHIEVING THE TOWN'S VISION

CONFLICTS BETWEEN WHAT IS BEST FOR THE ENVIRONMENT VERSUS WHAT IS BEST FOR HUMAN ENJOYMENT OF THAT ENVIRONMENT

CONFLICTS IN LIGHTING ISSUES BETWEEN TURTLES AND HUMANS

- SEA TURTLE MORTALITY
- HUMAN SAFTEY AND SECURITY

CONFLICT OF VACATIONERS HAVING A GOOD TIME ON THE BEACH VERSUS BEING GOOD STEWARDS OF OUR BEACH

- CLEAN, SAFE, SECURE BEACH
- CONVENIENCE OF LEAVING FURNITURE, TOYS, COOLERS OVERNIGHT
- DISPOSAL OR LACK THEREOF OF TRASH AND LITTER

PROPOSED ACTION TO ACHIEVE TOWN'S VISION

RE-APPOINT/SANCTION A CITIZEN COMMITTEE WHICH INCLUDES THE TOWN'S CODE ENFORCEMENT OFFICER

INCLUDE LIASON WITH FWC, MOTE MARINE LABORATORY & SUBJECT MATTER EXPERTS

COMMITTEE CHARGED WITH PROVIDING COMMISSION RECOMMENDATIONS REGARDING INFORMATION & ACTIVITES, SUCH AS EDUCATIONAL OUTREACH, TO FACILITATE COMPLIANCE WITH ORDINANCES AIMED AT SUSTAINABLE PROTECTION AND ENJOYMENT OF OUR NATURAL RESOURCES & ENVIRONMENT

ATTACHMENT C

Committee Members

Chris Elbon, Code Enforcement Officer

Jeffrey and Terri Driver - public & environmental health scientists & local business owners*

Jack and Nancy Rozance – Rotary Club representatives*

Richard Perlman – local attorney and local real estate agent*

Mark Meador – General Manager Casa Del Mar Beach Resort

Cyndi Seamon – active member of LBK community, including the Longboat Key Turtle Watch*

Tracy Hodges – local early childhood educator

Rick Magee – Venice ordinance representative

Advisors

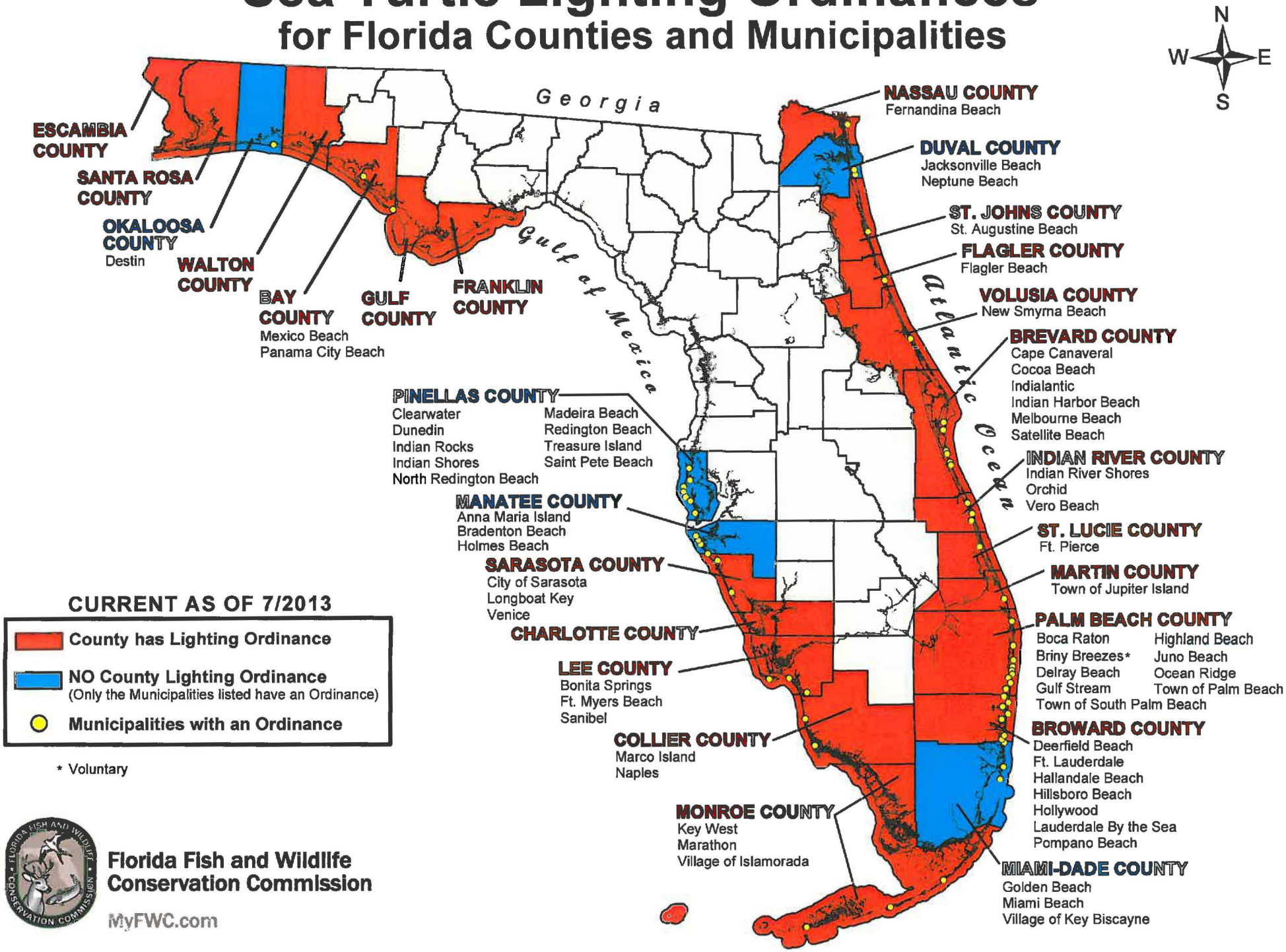
Tonya Long – Florida Fish and Wildlife Conservation Commission

Kristen Mazzarella – Mote Marine Laboratory

Ralf Brookes – local attorney & University of Florida, Levin College of Law

**Longboat Key residents*

Sea Turtle Lighting Ordinances
for Florida Counties and Municipalities



Mote Marine Laboratory Sea Turtle Conservation and Research Program

Memo

To: Venice Lighting Ordinance Environmental Task Force

From: Mote Marine Laboratory – Sea Turtle Conservation and Research Program

CC:

Date: February 9, 2010

Re: Marine Turtle Lighting Ordinance

The following is a Lighting Question and Answer document designed to address frequently asked questions and concerns raised by residents/organizations during the development of a marine turtle lighting ordinance (author: Dr. Blair Witherington). The document was written in regards to a new marine turtle lighting ordinance in Brevard county Florida. In this document you will find scientifically based discussions and associated references. In addition, community based concerns are addressed and answered by the most accurate means possible. We anticipate that this will assist you with some questions/concerns that may be raised during today's meeting.

1. Why does artificial lighting cause sea turtle mortality?

Hatchlings ready to emerge wait just beneath the sand surface until conditions become cool. This temperature cue prompts them to emerge mostly at night. Emerging sea turtle hatchlings have an inborn tendency to move in the brightest direction. On a natural beach, the brightest direction is most often the open view of the night sky over, and reflected by, the ocean. Hatchlings also tend to move away from darkly silhouetted objects associated with the dune profile and vegetation. This sea-finding behavior can take place during any phase and position of the moon, which indicates that hatchlings do not depend on lunar light to lead them seaward.

Hatchlings that crawl toward artificial light sources are following the same instinctive response that leads them seaward on naturally lighted beaches. The apparent brightness and glare of artificial lighting is what often leads hatchlings astray. To a hatchling on a beach, an artificial light source appears bright because it is relatively close by, yet it is not intense enough to brighten the sky and landscape. The resulting glare makes the direction of the artificial source appear overwhelmingly bright -- so much brighter than the other directions that hatchlings will ignore other visual cues and move toward the light. Even small or dim lights can lure hatchlings away from the ocean.

Artificial lighting produces highly directed (anisotropic) artificial light fields that are not produced by distant celestial sources, which brighten the entire sky. Neither the moon nor other celestial sources has ever been observed to lead hatchlings away from the ocean. Hatchlings that are drawn by artificial lighting away from the ocean are not likely to survive. Hatchlings disoriented by lights have been found dead in parking lots, roadways, storm drains, lawns, swimming pools, and on the beach. Disoriented hatchlings are commonly taken by predators or succumb to dehydration.

These references summarize the effects of artificial lighting on sea turtle hatchlings and provide additional background. Each reference is a technical report, book chapter, or journal article that has received extensive scientific peer review prior to publication. Given the preponderance of evidence, there has been no challenge in the scientific literature to the lethal effects of artificial lighting on sea turtles:

Adamany, S. L., M. Salmon, and B. E. Witherington. 1997. Behavior of sea turtles at an urban beach III. costs and benefits of nest caging as a management strategy. Florida Scientist Vol. 60, No. 4, pp. 239-253.

Lohmann, K., B. Witherington, C. Lohmann, and M. Salmon. 1996. Orientation, navigation, and natal beach homing in sea turtles. Chapter 5 in: P. Lutz and J. Musick (eds.), The Biology of Sea Turtles. CRC Press, Boca Raton. Pp. 107-135.

Lutcavage, M., P. Plotkin, B. Witherington, and P. Lutz. 1996. Human impacts on sea turtle survival. Chapter 15 in: P. Lutz and J. Musick (eds.), The Biology of Sea Turtles. CRC Press, Boca Raton. Pp. 387-409.

Salmon, M. and B. E. Witherington. 1995. Artificial lighting and seafinding by loggerhead hatchlings: Evidence for lunar modulation. Copeia 1995: 931-938.

Salmon, M., B. E. Witherington, and C. D. Elvidge. 2000. Artificial lighting and the recovery of sea turtles. In: Pilcher, N. and G. Ismail (eds.). Sea turtles of the Indo-Pacific. ASEAN Academic Press, London.

Witherington, B. E. 1997. The problem of photopollution for sea turtles and other nocturnal animals. Chapter 13 in: J. R. Clemmons and R. Buchholz (eds.), Behavioral Approaches to Conservation in the Wild. Cambridge University Press, Cambridge. Pp. 303-328.

Witherington, B. E. 1995. Hatchling orientation. In: K. A. Bjorndal (ed.), Biology and Conservation of Sea Turtles, Revised Edition. Smithsonian Institution Press, Washington, D.C. Pp. 577-588.

Witherington, B. E. and R. E. Martin. 2000. Understanding, assessing, and resolving light-pollution problems on sea turtle nesting beaches. Florida Marine Research Institute Technical Reports TR-2, 71 pp.

Witherington, B. E. 1999. Reducing threats to nesting habitat. In: Eckert, K., K. Bjorndal, A. Abreu-Grobois, and M. Donnelly (eds.) Research and Management Techniques for the Conservation of Sea Turtles. The Marine Turtle Specialist Group of the IUCN. Publication #4. Pp. 179-183.

Witherington, B., and N. Frazer. 2003. Social and economic aspects of sea turtle conservation. In: P. L. Lutz, J. Musick, and J. Wyneken (eds.). Biology of Sea Turtles Volume II. CRC Press, Boca Raton. Pp. 355-384.

Witherington, B. E. 2003. The biological conservation of loggerheads: Challenges and opportunities. In: A. B. Bolten and B. E. Witherington (editors), Biology and Conservation of the Loggerhead Sea Turtle. Smithsonian Institution Press, Washington DC. Pp. 295-311.

Witherington, B. E., and K. A. Bjorndal. 1991a. Influences of wavelength and intensity on hatchling sea turtle phototaxis: implications for sea-finding behavior. Copeia 1991:1060-1069.

Witherington, B. E., and K. A. Bjorndal. 1991b. Influences of artificial lighting on the seaward orientation of hatchling loggerhead turtles (*Caretta caretta*). Biological Conservation 55:139-149.

Witherington, B. E., K. A. Bjorndal, and C. M. McCabe. 1990. Temporal pattern of nocturnal emergence of loggerhead turtle hatchlings from natural nests. Copeia 1990:1165-1168.

2. Why does Brevard County need an effective ordinance protecting sea turtles from artificial beach lighting?

Brevard County has about 40% of all the sea turtle nesting in Florida. The vast majority of this nesting takes place on the beaches south of Port Canaveral. Because Florida itself has 90% of the Nation's sea turtle nesting, protecting Florida beaches, especially Brevard, has become one of the highest priorities for sea turtle recovery. Brevard County serves as one of very few sites in the world where loggerhead sea turtles still nest in moderately dense assemblages. Outside Florida, loggerhead nesting is rare, except for a small island called Masirah off the tip of Arabia near the Persian Gulf.

Specific Florida data come from Index and Statewide Nesting Beach Survey Programs of the Florida Marine Research Institute. These additional references summarize Florida's role in worldwide loggerhead sea turtle nesting. Each reference is a book chapter that has received extensive scientific peer review prior to publication:

Ehrhart, L.M., D. A. Bagley, and W. E. Redfoot. 2003. Geographic distribution, abundance and population status of loggerheads in the Atlantic Ocean. In: A. B. Bolten and B. E. Witherington (editors), Biology and Conservation of the Loggerhead Sea Turtle. Smithsonian Institution Press, Washington DC. Pp. 157-174.

Witherington, B. E. 2003. The biological conservation of loggerheads: Challenges and opportunities. In: A. B. Bolten and B. E. Witherington (editors), Biology and Conservation of the Loggerhead Sea Turtle. Smithsonian Institution Press, Washington DC. Pp. 295-311.

3. How can one tell whether a light would harm sea turtles?

Unfortunately, no simple measure of light intensity can reveal whether a light source will be a problem. The effects of artificial lighting on sea turtles may actually increase as ambient light-levels decrease on darker, moonless nights. Because any visible light from an artificial source can cause problems, the most reliable "instruments" to use when making judgments about problem lighting are the eyes of a human observer on the nesting beach. Any light source producing light that is visible from the beach is likely to cause problems for nesting sea turtles and their hatchlings.

Salmon, M. and B. E. Witherington. 1995. Artificial lighting and seafinding by loggerhead hatchlings: Evidence for lunar modulation. Copeia 1995: 931-938.

Witherington, B. E. and R. E. Martin. 2000. Understanding, assessing, and resolving light-pollution problems on sea turtle nesting beaches. Florida Marine Research Institute Technical Reports TR-2, 71 pp.

4. Why not use a light meter to measure compliance of a light visible from the beach?

Because science is a method rather than instrumentation, technological advances do not always lead to better scientific assessment. There are four principal problems in relying on light meters to measure the compliance of a light source that might affect sea turtles.

A. Light meters (illuminance meters) collect light over a broad area and cannot distinguish between adjacent lights, sky, or whatever might be within its hemisphere of acceptance.

B. A different style of light meter, a luminance meter, has optics that allow focusing on individual lights. However, the instrument measures luminance, which does not vary with distance from a light. Thus, a distant light may register the same level as a nearby light.

C. An illuminance meter has some potential for assessing the effect of a light on sea turtles if only one light is detectable and it is measured under standard conditions. The instrument would need to be sensitive to nighttime light levels (such detectors typically cost $10,000-30,000 and are not constructed to be used out in the elements) and surveys could only be conducted on nights with relatively constant ambient light (e.g., clear moonless nights). Background light recorded by the instrument could be expected to vary by a factor of 10,000 between nights throughout the lunar month. A typical illuminance meter selling for $700 will read only as low as 0.01 Lux. Full moonlight is about 1Lux and starlight clearly visible to humans and sea turtles is about 0.00005 Lux. A typical light meter would need to be approximately 100-1000 times more sensitive to measure nighttime lighting that could harm sea turtles.

D. The digital readout of a light-measuring instrument does not provide a human assessment of what type of lights are present and how light management solutions might be applied to the lights.

An online article should help with background on light measurement:

http://www.crompton.com/wa3dsp/light/lumin.html

5. Shouldn't surveyors be at "turtle-eye" level to assess lighting compliance?

Lights that could harm sea turtles are either visible or invisible depending on where an observer is on the beach. Typically, two generalities hold true. One is that dune lights (or building lights) become more visible the taller the observer is. Another generality is that the same lights become more visible the farther out on the beach the observer is positioned. This means that in an ideal assessment of the visibility of light sources to sea turtles, an observer would need to make observations at turtle-eye level (head on sand) throughout the beach, including the lower wave-washed beach. Thankfully, lights visible to a turtle on the lower beach will also be visible to an observer standing comfortably on the upper dry beach. So, an observer walking on the upper beach seems to be the most practical way to assess lighting compliance. The visible-from-the-beach criterion of the Brevard County ordinance is in concordance with this practicality.

6. Why should distant or dim light sources be considered by an ordinance?

The greater the distance a light is from the beach, the easier it is to hide the light. In terms of physics, as distance between a light and the beach increases, the beach subtends an increasingly small angle of the point source's light field and would require an increasingly small shield to hide it. In short, distant point source lights are the easiest to manage. However, most distant sources will not matter to sea turtles. Nearly all light sources more than a few hundred feet from the beach will be invisible because of buildings and dune, but those that can be seen can generally be fixed easily. As for dim sources near the beach, the dimmest among them are likely to be decorative, provide little light for safety and security, and could well be unnecessary. Clearly minor light sources that are needed (e.g., LED indicators on security keypads, distant traffic signals, blinking lights on distant radio towers, specks of interior light peeking through drawn

curtains) can be reasoned by code enforcement to be insignificant. But by the same ability to reason, an officer finding multiple dim light sources at a site where a hatchling disorientation has occurred, might decide that the many dim light sources have made a cumulative threat to sea turtles.

A great benefit of relying on a human observer rather than an instrument readout is that humans have brains connected to their light detectors. Human judgment in enforcing the law seems commonplace. Nearly every traffic law requires an officer's judgment on the nature of an event (when and where was it observed, whether it was flagrant or reckless). It may be prudent to trust code enforcement on beaches in the same way they are trusted with other aspects of enforcing county codes.

Attraction of sea turtle hatchlings even to dim light was observed early on:
Hooker, D. 1908. Report on the instincts and habits of newly hatched loggerhead turtles. Carnegie Institute Washington Yearbook 7:124.

Since then, many examples of distant and dim lighting have been observed to misdirect hatchlings:
Witherington, B. E. and R. E. Martin. 2000. Understanding, assessing, and resolving light-pollution problems on sea turtle nesting beaches. Florida Marine Research Institute Technical Reports TR-2, 71 pp.

7. Why should building marker lights required by the FAA be considered under an ordinance?

Buildings less than 200 feet in height (about 16 stories) are not generally required to have aircraft warning lighting unless they are near airport flight paths. Should Brevard County have any such buildings near the beach in the future, the lights (commonly point strobes) could easily be positioned to be most conspicuous from the air and invisible from the beach. Building occupants and neighbors would benefit from this sort of shielding and positioning.

The regulation covering obstruction lighting is Title 14 Code of Federal Regulations, Part 77, Objects Affecting Navigable Airspace. That regulation is online at
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?&c=ecfr&tpl=/ecfrbrowse/Title14/14tab_02.tpl

8. Crime will increase if the beach is not lighted.

Generally, beaches are not areas where criminal activity is high. Little or no valuable property is stored on beaches and there is seldom much nighttime human activity to require security. Fortunately, areas adjacent to nesting beaches where people reside, work, recreate, and store valuables can be lighted for protection without affecting turtles on the nesting beach. Where this type of light management was legislated in Florida coastal communities, the Florida State Attorney's Office has found no subsequent increase in crime. After extensive study of the relationship between lighting and crime, most published studies find no effect. Interestingly, there may be a relationship between poorly used lighting (with uncontrolled glare) and increased crime.

An extensive summary of the literature can be found at
http://www.darksky.org/links/seculigh.html

9. How one justify the sacrifice of human safety and security to save sea turtles?

Thankfully, no such choice is necessary. The safety and security of humans can be preserved without jeopardizing sea turtles. The goal of any program to reduce sea turtle harassment and mortality caused by lighting is to manage light so that it performs its necessary function without reaching the nesting beach. This is the theme of Brevard's sea turtle protection ordinance. Still, some may contend that any inconvenience at all is too much and that the concerns of humans should always outweigh those for turtles. Insistence on this generalization risks ignoring a large and resolute constituency that values sea turtles. It is human judgment that reasons sea turtles to be a valuable resource to the citizens of Brevard. In many ways, the protection of sea turtles is arguably in our own best interests. Thus, a people-versus-turtles argument may well present a false choice. Although the debate may evoke a high emotional response from either

side of the issue, it is likely to be both unproductive and distracting. It is also unnecessary, especially given that the rational compromise of light management is at hand.

This view comes largely from my experiences in discussing the issue of light management and sea turtle conservation with stakeholders throughout Florida and in six countries.

10. The Brevard Sea Turtle Protection Ordinance requires modification in order to reduce burdens on the citizenry.

Brevard County passed the first light management ordinance to protect sea turtles in 1985. Nineteen years have passed to allow expression of the ordinance's success or failure. In success, hatchling mortality has been kept at bay despite a profound increase in development of Brevard's most densely nested beaches. Concurrently, no increase in crime attributable to darkened beaches has become evident. Since this pioneering ordinance was promulgated, 14 other coastal counties and 40 municipalities have followed Brevard's lead. None has seen fit to weaken their ordinance.

Information on sea turtle lighting ordinances is in a database kept by the Bureau of Protected Species, Florida Fish and Wildlife Conservation Commission.

Prepared by: Engineering Department and City Clerk

ORDINANCE NO. 2010-10

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF VENICE, FLORIDA CHAPTER 106, NATURAL RESOURCES, ARTICLE II, BEACH AREA OUTDOOR LIGHTING RESTRICTIONS FOR PROTECTION OF SEA TURTLES, PROVIDING FOR A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Florida, as a peninsular state, has a delicately balanced ecological system of aquatic life, wildlife, coral reefs, beaches, wetlands, bays, estuaries and marshes; and

WHEREAS, preservation and conservation of Florida's natural resources are critical to its environmental and economic future; and

WHEREAS, the marine turtle population has been declining and sea turtles are an endangered species; and

WHEREAS, Venice has experienced a large number of disorientations and false crawls of marine turtles and their hatchlings; and

WHEREAS, Venice desires to protect threatened and endangered marine turtles that nest along the beaches of Venice, by safeguarding nesting female and hatchling marine turtles from the adverse effects of artificial light and by protecting adult and hatchling marine turtles from injury or harassment by prohibiting activities disruptive to marine turtles; and

WHEREAS, the Environmental Task Force has held a public workshop on the ordinance and has considered the information received at said public workshop and are recommending adoption of the ordinance; and

WHEREAS, City council has received and considered the report of the Environmental Task Force recommending approval.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VENICE, FLORIDA:

SECTION 1. Chapter 106, Natural Resources, Article II, Beach Area Outdoor Lighting Restrictions for Protection of Sea Turtles, is amended as follows.

CHAPTER 106
NATURAL RESOURCES
ARTICLE II. ~~BEACH AREA OUTDOOR LIGHTING RESTRICTIONS FOR PROTECTION OF SEA TURTLES~~

The City of Venice Code of Ordinances is amended as follows with ~~strike through text~~ identifying deletions and <u>underlined text</u> indicating additional language.

MARINE TURTLE PROTECTION

Sec. 106-31. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Artificial light or "artificial lighting" means any source of light emanating from a manmade device. ~~including but not limited to incandescent mercury vapor, metal halide or sodium lamps, flashlights, spotlights, streetlights, vehicular lights and construction or security lights~~.

Beach means ~~that~~ the area ~~whether public or private, lying between the low-water line of the Gulf of Mexico and the inshore grass line, boulders or seawall.~~ of unconsolidated material that is contiguous with the waters of the Gulf of Mexico and extends landward from the mean low water line to the place where there is a marked change in material or physiographic form, or to the line of permanent vegetation.

Beach access point means any path through or over the dune used by the general public or private property owners for the purpose of gaining access to the beach.

Beachfront properties with seawalls means beachfront properties having protective seawalls and protective boulders (on the gulf side of seawalls) and not more than five feet of sandy beach.

Coastal construction means the carrying out of any activity on the beach or within direct line-of-sight of the beach to modify or improve site conditions including, but not limited to, building, clearing, filling, excavation, or the presence of equipment or materials.

Cumulatively illuminated means illuminated by multiple artificial light sources that as a group illuminate any portion of the beach.

~~*Diffused light* means low-intensity light which spreads on seawalls and boulder areas only.~~

Directly illuminated means illuminated as a result of a glowing element(s), lamp(s), globe(s), or reflector(s) of an artificial light source which is visible from the beach.

Dune means a mound or ridge of loose sediments, usually sand-sized, lying landward of the beach and deposited by a natural or artificial mechanism.

Existing development means a building or structure for which a building permit has been issued prior to the adoption of this article.

FDEP means the Florida Department of Environmental Protection or successor agency.

Floodlight means a reflector-type light fixture which is free standing or attached directly to a building or other structure and which is unshielded.

Frontal dune means the first natural or manmade mound or bluff of sand which is located landward of the beach and which has sufficient ground vegetation, height, continuity, and configuration to offer protective value.

FWC means the Florida Fish and Wildlife Conservation Commission or successor agency.

FWS means the United States Fish and Wildlife Service or successor agency.

Ground level barrier means any vegetation, natural feature or artificial structure rising from the ground which prevents beachfront lighting from shining directly onto the beach or dunes.

Hatchling means any species of marine turtle, within or outside of a nest, that has recently hatched from an egg.

Illuminated means exposed to light from an artificial light source that does not meet the approved specification of this article in a way that produces brightness visible from the beach.

Indirectly illuminated means illuminated as a result of the glowing element(s), lamp(s), globe(s) or reflector(s) of an artificial light source which is not visible from the beach.

Inspector means a designated city employee or an inspector that has been designated through an agreement with another entity to perform inspections required pursuant to this article.

Light emitting diode (LED) means miniature lamps that emit pure red or amber light that do not vary in color over the life of the lamp. These lamps may be used in multiples to form strips of small lamps within a light fixture.

Light fixture means the structural mechanism which, or within which, the point source of light is attached.

Low-pressure sodium (LPS) luminaire means an electric discharge lamp, containing sodium, neon and argon that when illuminated appears amber-yellow.

Low-profile luminaire means a light fixture set on a base which raises the source of the light no higher than 48 inches off the ground and designed in such a way that light is directed downward from a hooded light source.

Low wattage means no greater than 25 watt incandescence.

Luminaire means a complete lighting system, including a lamp or lamps and a fixture.

Marine turtle means any marine-dwelling reptile of the families Cheloniidae or Dermochelyidae found in Florida waters or using the beach as nesting habitat, including the species: *Caretta caretta* (loggerhead), *Chelonia mydas* (green), *Dermochelys coriacea* (leatherback), *Eretmochelys imbricata*

(hawksbill), and *Lepidochelys kempii* (Kemp's ridley). For purposes of this article, marine turtle is synonymous with sea turtle.

Motorized vehicle means, but is not limited to, any self-propelled, wheeled, tracked or belted conveyance.

Nest means an area where marine turtle eggs have been naturally deposited or subsequently relocated.

Nesting season means the period from May 1 through October 31 of each year.

New development includes new construction and remodeling of existing structures when such remodeling includes the alteration of exterior lighting or the repair or replacement of any glass or glazing.

Nighttime means the locally effective time period between sunset and sunrise.

Outdoor lighting means the nighttime illumination of an outside area or object by any fixed luminaire. Vehicle lights and flashlights are not included in this definition.

Person means any individual, firm, association, joint venture, partnership, estate, trust, syndicate, fiduciary, corporation and all other groups or combinations.

Point source of light means the actual light source such as the bulb, fluorescent tube, lamp, etc., from which light emanates.

Pole lighting means a light fixture set on a base or pole which raises the source of the light higher than 48 inches off the ground.

Shield means a non-reflective covering, canopy or other such device fitted over, around and extended below a light source preventing light from illuminating the beach.

Shielded means fitted with a non-reflective opaque hood, or other covering or device, which prevents the light fixture and luminaire from producing direct or indirect illumination visible from the beach.

Temporary structure means any manmade structure or object with a location or arrangement that is temporary or transient in nature.

Tinted or filmed glass means any glass treated to achieve an industry-approved, inside-to-outside light transmittance value of 45 percent or less. Such transmittance is limited to the visible spectrum (400 to 700 nanometers) and is measured as the percentage of light that is transmitted through the glass.

True red neon means a tubular lamp containing neon gas that emits pure red light. True red neon does not include tubular fluorescent lamps, which may appear as various colors.

Visible from the beach means visible to a person standing on the beach.

Sec. 106-32. Purpose of article.

The purpose of this article is to protect ~~the~~ threatened and endangered ~~sea~~ marine turtles ~~which~~ that nest along the beaches of the city, by safeguarding the nesting female and hatchlings ~~from sources of~~ marine turtles from the adverse effects of artificial light and from injury or harassment by prohibiting activities disruptive to marine turtles.

Sec. 106-32 3. ~~Penalty; jurisdiction of code enforcement board~~. Civil and administrative enforcement powers; criminal penalties.

~~Any private property owner who has violated or who has been cited for a violation of any of the provisions of this article shall be punished in accordance with all provisions regarding the enforcement of ordinances contained in this Code, including but not limited to referring the violation to the code enforcement board~~.

(a) The city shall have the power to enforce the provisions of this article by administrative proceedings, including code enforcement proceedings in accordance with chapter 2 article VI of the Code of Ordinances, City of Venice, Florida, and by equitable or legal judicial proceedings. Each day of any such violation shall constitute a separate and distinct offense.

(b) A violation of any of the provisions of this article shall be punishable as a misdemeanor of the second degree and subject to the penalty provided by Florida Statute 775.082 and the fine provided by Florida Statute 775.083. Each day of any such violation shall constitute a separate and distinct offense.

(c) No permit shall be issued by the city for any property which is in violation of this article or for which a fine imposed in accordance with this article remains unpaid.

Sec. 106-34. Lighting standards for ~~N~~ new development

~~It is the policy of the city that no artificial light illuminate any area of the incorporated beaches of the city. Therefore, building and electrical plans for construction of single family or multifamily dwellings, commercial structures or other structures, including electrical plans associated with parking lots, dune walkovers or other outdoor lighting for real property, if lighting associated with such construction or development can be seen from the beach, shall be in compliance with the following:~~

~~(1) Beach-aimed floodlights are prohibited. Wall-mounted light fixtures shall be fitted with hoods so that no light illuminates the beach.~~

~~(2) Pole lighting shall be shielded in such a way that light will be contained within an area of three to 73 degrees on the land side of the pole. Outdoor lighting shall be held to the~~

~~minimum necessary for security and convenience.~~

~~(3) Low-profile luminaries shall be used in parking lots, and such lighting shall be positioned so that no light illuminates the beach.~~

~~(4) Dune crosswalks, if lighted, shall utilize low-profile shielded luminaires.~~

~~(5) Temporary security lights at construction sites shall not be mounted more than 15 feet above the ground. Illumination from the lights shall not spread beyond the boundary of the property being developed, and in no case shall these lights illuminate the beach.~~

In order to provide the highest level of protection for nesting marine turtles and their hatchlings, the following standards are adopted for artificial light sources on all new coastal construction:

(1) Exterior artificial light fixtures shall be designed and positioned so that:

(a) The point source of light or any reflective surface of the light fixture is not directly visible from the beach.

(b) Areas seaward of the frontal dune are not directly, indirectly or cumulatively illuminated.

(2) Exterior artificial light fixtures within direct line-of-sight of the beach are considered appropriately designed if:

(a) Completely shielded downlight-only fixtures or recessed fixtures having low wattage bulbs and non-reflective interior surfaces are used. These fixtures must have LPS, LED or true red neon light sources. Other fixtures that have appropriate shields, louvers, or cut-off features may also be used if they are in compliance with paragraphs 1(a) and (b), above or approved by FWC; and

(b) All fixtures are mounted as low in elevation as possible through use of low-mounted wall fixtures, step lights, low bollards, low-profile luminaires and ground-level fixtures.

(3) Floodlights, up-lights, or spotlights for decorative, recreational and accent purposes that are directly or indirectly visible from the beach, or which directly, indirectly or cumulatively illuminate the beach, are prohibited.

(4) Exterior lights used expressly for safety or security purposes shall be limited to the minimum number and configuration required to achieve their functional role(s). The use of motion detector switches that keep lights off except when approached and that switch lights on for the minimum duration possible are required for any exterior lights used expressly for safety or security. Lights incorporating motion detector switches shall be downward directed, shielded and utilize low wattage LPS, LED or true red neon light sources.

(5) Dune crosswalks may be lighted. If lighted, dune crosswalks shall utilize low-profile shielded luminaires directed and positioned so that the point source of light or any reflective surface of the light fixture is not directly visible from the beach. All light fixtures on dune crosswalks must utilize low wattage LPS, LED or true red neon light sources. Dune crosswalk lighting seaward of the frontal dune, or on beach areas where the frontal dune no longer exists, shall be turned off during nesting season.

(6) Parking areas within direct line-of-sight of the beach shall be designed with the minimum lighting necessary to provide safety and security and lighting shall be:

(a) Downward directed, shielded and utilize low wattage LPS, LED or true red neon light sources; and

(b) Utilize low-profile luminaires and bollards to the maximum extent possible. Any pole lights determined to be necessary to provide safety and security shall be fully shielded and installed at a maximum height of 15 feet in travel ways and 12 feet in other areas; or

(c) Included in a lighting plan approved by FWC to minimize the impacts to nesting marine turtles.

(7) Parking areas and roadways, including any paved or unpaved areas upon which motorized vehicles will park or operate, shall be designed and located to prevent vehicular headlights from directly or indirectly illuminating the beach.

(8) Vehicular lighting, parking area lighting, and roadway lighting shall be cut-off, downward shielded from the beach through the use of ground-level barriers. Ground-level barriers must not interfere with marine turtle nesting or hatchling emergence, or cause short- or long-term damage to the beach/dune system.

(9) Tinted or filmed glass shall be installed on all windows and glass doors of single or multi-story structures within line-of-sight of the beach.

(10) Use of appropriately shielded low LPS, LED lights and fixtures shall be required for high-intensity lighting applications such as parking areas and travel ways, providing security and similar applications.

(11) Lights illuminating signs and internally illuminated signs shall be shielded or screened such that they do not directly, indirectly or cumulatively illuminate the beach and that the light shall not be visible from the beach.

(12) Temporary lighting of construction sites during nesting season shall be restricted to the minimal amount necessary and shall incorporate the standards of this section. Said lighting shall be:

(a) Mounted no more than eight feet above existing grade;

(b) Positioned or shielded so that the light is cast downward and the source of light or any reflective surface of the light fixture is not visible from the beach; and

(c) Positioned or shielded to not directly, indirectly or cumulatively illuminate the beach.

(13) Upon completion of the construction activities and prior to issuing a certificate of occupancy for any new development within direct line-of-sight of the beach, compliance with the beachfront lighting standards set forth in this article shall be inspected as follows:

(a) An inspector shall conduct a site inspection which includes a night survey with all exterior lighting turned on.

(b) The inspector shall prepare and report the inspection finding in writing, identifying;

1. The date and time of initial inspection;

2. The extent of compliance with the lighting standards;

3. All areas of observed noncompliance, if applicable;

4. Any action(s) taken to remedy observed noncompliance, if applicable.

The inspector, in cases where remedial action is necessary, shall notify the owner or developer of the results of the inspection and shall schedule a date and time for a subsequent inspection.

Sec. 106-35. Lighting standards for ~~E~~existing development.

~~It is the policy of the city that no artificial light illuminate any area of the incorporated beaches of the city. Therefore, lighting of structures existing on February 9, 1988, which can be seen from the beach, shall be in compliance with the following:~~

~~(1) Lights illuminating buildings or associated grounds for decorative or recreational purposes shall be shielded or screened in such a way as not to project a beam of light directly onto the beach area, or turned off between sunset and sunrise during the period of May 1 to October 31 of each year.~~

~~(2) Security lighting, including parking area lighting, shall be permitted throughout the night, so long as low-profile luminaires are used and screened in such a way that those lights do not illuminate the beach.~~

~~(3) Lights illuminating dune crosswalks of any area ocean-ward of the dune line shall be turned off between sunset and sunrise during the period of May 1 and October 31 of each year.~~

~~(4) Beachfront properties with seawalls and protective boulders on the gulf side of seawalls with~~

~~less than five feet of sandy beach will be permitted to have diffused light extending on the seawall and protective boulders for the protection and security of people.~~

Upon the date of the adoption of this ordinance all light sources or reflective surfaces illuminated by such sources that are visible from the beach shall be brought into compliance with the following:

(1) Existing artificial light fixtures shall be repositioned, modified, replaced, or removed so that:

a. The point source of light or any reflective surface of the light fixture is not directly visible from the beach;

b. Areas seaward of the frontal dune, or the beach in areas where the frontal dune no longer exists, are not directly or indirectly illuminated; and

c. Areas seaward of the frontal dune, or the beach in areas where the frontal dune no longer exists, are not cumulatively illuminated.

(2) Internally illuminated signs and lights illuminating signs shall be shielded or screened such that they do not directly, indirectly or cumulatively illuminate the beach and the light shall not be visible from the beach.

(3) One or more of the following measures shall be taken to reduce or eliminate the negative effects of existing exterior artificial lighting so that all existing development is in full compliance with subsection (1) of this section;

(a) Reposition fixtures so that the point source of light or any reflective surface of the light fixture is not visible from the beach;

(b) Replace fixtures having an exposed light source with fixtures containing recessed light sources or shields;

(c) Replace nondirectional fixtures with directional fixtures that point down and away from the beach;

(d) Replace fixtures having transparent or translucent coverings with fixtures having opaque external shields designed to be in compliance with subsection (1) of this section and extending an appropriate distance below the bottom edge of the fixture on all visible sides so that the light source or any reflective surface of the light fixture is not visible from the beach;

(e) Replace pole lamps with low-profile, low-level luminaires so that the light source or any reflective surface of the light fixture is not visible from the beach;

(f) Replace incandescent, fluorescent, and high intensity lighting with low wattage LPS, LED or true red neon;

(g) Exterior lights used expressly for safety or security purposes shall be limited to the minimum number and configuration required to achieve their functional role(s). The use of motion detector switches that keep lights off except when approached and that switch lights on for the minimum duration possible are required for any exterior lights used expressly for safety or security. Lights incorporating motion detector switches shall be downward directed, shielded and utilize low wattage LPS, LED or true red neon light sources;

(h) Plant or improve native vegetation buffers between the light source and the beach sufficient to screen light from the beach;

(i) Construct a ground level barrier to shield light sources from the beach. Ground-level barriers must not interfere with marine turtle nesting or hatchling emergence or cause short- or long-term damage to the beach or dunes; and

(j) Permanently remove, disable or lock in the off position during nesting season any fixture which cannot be brought into compliance with the provisions of this article.

(4) One or more of the following measures shall be taken to reduce or eliminate the negative effects of interior light emanating from doors and windows within direct line-of-sight of the beach:

(a) Upgrade windows within line-of-sight of the beach to tinted or filmed glass;

(b) Rearrange lamps and other moveable fixtures away from windows;

(c) Use window treatments (e.g. blinds, curtains) to shield interior lights from the beach;

(d) Turn off unnecessary lights; and

(e) Provide educational materials to renters stating the importance of closing the window treatments at night during nesting season, if the windows do not have tinted or filmed glass.

(5) Lights illuminating buildings or associated grounds for decorative or recreational purposes shall be shielded or screened in accordance with subsections (1) and (2) above or turned off between sunset and sunrise during nesting season.

(6) If existing dune crosswalks are lighted, replace existing lighting with low-profile shielded luminaires directed and positioned so that the point source of light or any reflective surface of the light fixture is not visible from the beach and that utilize low wattage LPS, LED or true red neon light sources or turn off lighting during nesting season. Dune crosswalk lighting

seaward of the frontal dune or on beach areas where the frontal dune no longer exists shall be turned off during nesting season.

(7) Beachfront properties with seawalls and protective boulders on the gulf side of seawalls with less than five feet of sandy beach will be permitted to have diffused light extending on the seawall and protective boulders for the protection and security of people.

(8) City council is authorized to grant variances to the date of compliance where lighting installed before the adoption of this ordinance would be in violation of this article. Requests for variances must be submitted in writing to the city clerk. The variance will be considered by city council at a regularly scheduled meeting. Such variances may be granted only where the applicant has demonstrated that the application of these standards to lighting will cause such an undue and unique hardship to the property and that more time is needed to amortize the owner's reasonable investment in the lighting. In granting a variance, city council shall specify a schedule to attain compliance. Violation of the terms of the schedule shall constitute a violation of this article.

Sec. 106-36. ~~Streetlights and lighting at parks and beach access points.~~ Standards for publicly owned lighting.

~~Streetlights and lighting at parks and other publicly owned beach access areas shall be subject to the following:~~

~~(1) Whenever possible, streetlights shall be located so that the bulk of their illumination will travel away from the beach. These lights shall be equipped with shades or shields that will minimize backlighting and reduce their visibility from the beach.~~

~~(2) Lights at gulf shore parks or other public beach access points shall be shielded or shaded during nesting season.~~

All publicly owned lighting with light sources that are visible from the beach or that illuminate reflective surfaces that are visible from the beach, including but not limited to streetlights, parking lot lights, and beach access lighting, shall be:

(1) Fitted with a shield or positioned so that the light source or any reflective surfaces illuminated by such sources are not visible from the beach and do not directly or indirectly illuminate the beach; or

(2) Extinguished between sunset and sunrise from May 1 to October 31 of each year; or

(3) Included in a lighting plan approved by FWC to minimize the impacts to nesting marine turtles.

Sec. 106-37. Compliance inspections.

Periodic nighttime lighting inspections will be performed during nesting season from the beach to determine the extent of compliance with all sections of this article. These inspections will be conducted as needed until existing beachfront lighting has been brought into compliance.

Sec. 106-38. Prohibition of activities disruptive to marine turtles.

The following activities and situations are prohibited on the beach from sunset to sunrise during nesting season:

(1) The operation of all motorized vehicles, except emergency and law enforcement vehicles or persons who have authorization or a permit to engage in marine turtle conservation or research issued by FWS, FDEP, FWC or the city, and who are acting in conformance with such authorization or permit.

(2) Horseback riding.

(3) The building of campfires or bonfires.

(4) Any transient lighting which purposely and flagrantly illuminates nesting sea turtles or hatchlings. This prohibition does not apply to persons who have authorization or a permit to engage in marine turtle conservation or research issued by FWS, FWC, FDEP or the city, and who are acting in conformance with such authorization or permit.

(5) Any temporary structures, including but not limited to beach chairs, umbrellas and cabanas which have the potential for entrapment of marine turtles and which may interfere with the use of the natural beach environment for nesting habitat. All temporary structures shall be removed from the beach nightly or stored in areas situated to minimize interference with marine turtles.

Sec. 106-39. Education and information.

The city and/or a private not-for-profit organization shall prepare and distribute brochures to coastal establishments and residents and make presentations about the effects of light on endangered sea turtle reproduction and about sea turtle biology generally. The city has the authority to notice first-time violators of this ordinance by sending a letter to the offender describing the violation and enclosing a brochure and summary of the ordinance. Subsequent offenses will be treated with enforcement measures as described in this article.

Sec. 106-40. Local approval not exclusive.

Approval required pursuant to this article shall be in addition to and not in lieu of any federal, state, regional or other local approvals which may be required for the same or similar activities.

Similarly, compliance with provisions of this article does not excuse any person from having to comply with other applicable federal, state, regional or local laws.

SECTION 2. Severability. If for any reason provisions of this ordinance or the application thereof to any person, group or persons, or circumstances are held invalid, the invalidity shall not affect other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and to this end the provisions of the ordinance are severable.

SECTION 3. This ordinance shall take effect immediately upon its approval and adoption, as provided by law.

PASSED BY THE CITY COUNCIL OF THE CITY OF VENICE, FLORIDA, THIS 8TH DAY OF JUNE 2010.

First Reading: May 25, 2010
Final Reading: June 8, 2010

Adoption:

Ed Martin, Mayor

Attest:

for Lori Stelzer, MMC, City Clerk

I, Lori Stelzer, MMC, City Clerk of the City of Venice, Florida, a municipal corporation in Sarasota County, Florida, do hereby certify that the foregoing is a full and complete, true and correct copy of an Ordinance duly adopted by the City of Venice Council, a meeting thereof duly convened and held on the 8th day of June 2010, a quorum being present.

WITNESS my hand and the official seal of said City this 9th day of June 2010.

Lori Stelzer, MMC, City Clerk

Approved as to form:

Robert Anderson, City Attorney

The City of Venice Code of Ordinances is amended as follows with ~~strike through text~~ identifying deletions and underlined text indicating additional language.

End of Agenda Item