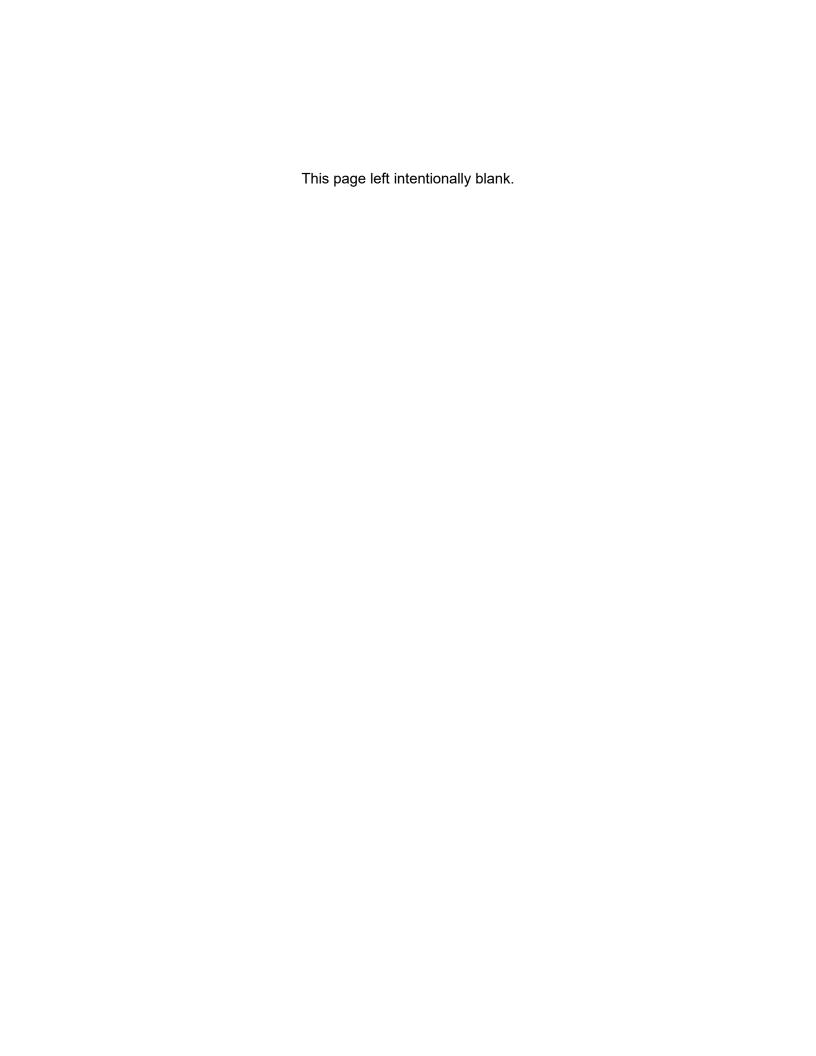




<b>Facilitator Notes</b>	
□ Purpose	This presentation provides participants with an quick overview of the challenges we face with light at night and an understanding of the realities of Dark Sky practices.
□ Preparation	<ul> <li>Complete these tasks in preparation for delivering this presentation:</li> <li>Review the suggested Facilitator Notes and presentation slides. The following design mechanisms are used in this Guide: <ul> <li>Notes marked SAY include the suggested key points you should make, but you are free to personalize them.</li> <li>Suggested questions to ask to improve interaction are preceded by the word ASK.</li> <li>Suggested things to DO are represented in orange bold face type inside brackets.</li> </ul> </li> <li>Communicate with the liaison for the group to which you are presenting to determine presentation logistics: <ul> <li>Time allowed for the presentation</li> <li>Location of the presentation</li> <li>Expected arrival time</li> <li>Characteristics of the audience</li> <li>Presentation equipment available.</li> </ul> </li> <li>Monitor your email for any changes and confirm with the liaison 1-2 days before the presentation.</li> <li>Check your presentation equipment beforehand. Take extra connection cords or your own projection device. Some sites provide a computer and prefer that you bring the presentation on a USB.</li> </ul>
□ Time	This presentation requires approximately <b>10 minutes</b> to complete.



# Slide **Facilitator** Slide 1 Do: [Welcome attendees. Introduce yourself.] [Tell attendees what you will accomplish in this time **Better Lights for** together.] **Better Nights!** Say: We all need light to see at night. You hear people say The Reality of "Dark Sky" Practices they want a "Dark Sky" ordinance. Cindy Luongo Cassidy **Ask:** What does that mean to our lighting? What is the reality of "Dark Sky" practices? Let's find out! Slide 2 Say: First let's look at the challenges we face with light at night. Does this Light Make You Feel Safe? Here's a typical "security" light. Do you feel safe? What if we could reduce that GLARE? Slide 3 **Ask:** What happens when we shield the source of the light? [Wait for attendees to notice the man.] creates dark shadows! Right! We shield the light to see better and now, do you Say: see that man standing in what was a dark shadow in the first photo? Go back - he was there all along! You are NOT secure when a light produces GLARE. Now, let's look at **GLARE** and **SAFETY**.

# Slide Facilitator

#### Slide 4



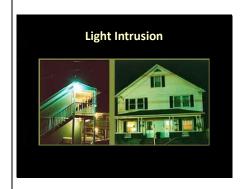
**Say:** See how the light on the left produces GLARE? Now look at the improvement on the right when the light is shielded.

The homeowner has taken a pineapple juice can, cut out the bottom and a small hole to fit over the fixture, painted it to match the house, and installed it around the bulb. This inexpensive homemade shield protects your eye from the source of the light and points the light down & out where it's needed. In doing so, visibility is improved, and you can see where you'll be walking.

**Ask:** Have you ever really looked at the lights around your home or business at night? Do they improve safety or blind you with glare? Do they waste your money by sending light where you do not need it?

Say: This little shielded fixture is a simple example of Dark Sky Lighting Practices!

#### Slide 5



**Say:** LIGHT TRESPASS occurs when the light source from one property may be seen from any other property. These two buildings are across the street from each other. The home on the right has NO OUTSIDE LIGHTS ON. All of the light is coming from the lights *across the street*. That would certainly make it tough to sleep in that home at night.

Natural light changes during the day, and at DUSK the change in the color (and reduction of what's called blue light) triggers our bodies to produce melatonin. In fact, almost every living thing on this planet produces melatonin at night.

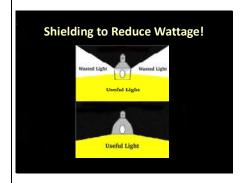
Artificial light at night - especially bright white looking light - suppresses that production of melatonin. Melatonin not only helps us sleep but it's key in rebuilding our immune systems. It even stops the growth of many cancer cells every night.

So, that intrusive white light coming into your home at night could damage your health.

Ask: How can we reduce light trespass? Shielding!

## Slide Facilitator

#### Slide 6



**Say:** A shielded light will allow the owner to reduce the wattage approximately in HALF and get the same amount of useful light. HALF!

That reduces the electrical cost in half. It cuts the amount of fuel needed to produce that energy in HALF. Plus, it puts the light where it's needed and reduces that GLARE that makes us less safe and secure.

**Ask:** Are you seeing the win-win here? There's more...

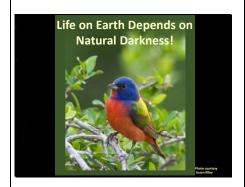
### Slide 7



**Say:** Too much light can detract from what we want tourists to be attracted to. Seeing the source of each light is BLINDING. We want everyone to be comfortable and see well at night – NOT be blinded by glare and ugly light clutter

And, here are even *more* reasons to put our light only where it's needed...

#### Slide 8



**Say:** Almost all living things – plants and animals – need natural darkness to thrive.

Our artificial lights disrupt the navigational systems of many animals, including our beautiful migratory birds.

They cause the disruption of reproductive processes, circadian rhythms, and yearly cycles. They alter when plants will bloom. They change the balance between predators and prey. Our artificial lights can cause habitat destruction just as surely as a bulldozer.

**Ask:** What can we do about that and about the other artificial light challenges we've talked about?

# Slide Facilitator

#### Slide 9



**Say:** Let's look at this. Here are some common styles for so-called "Security Lights" vs. a light shielded so that you don't see the source of the light.

We can have the outdoor lighting we need, and yet see *better* with shielded lighting. We can reduce glare, increase safety, reduce light intrusion, save money, have a more attractive community, and protect the night sky all at the same time.

That, my friends, is what Dark Sky Lighting is about!

#### Slide 10



Do: [Restate the Challenge.]

**Say:** Yes, you *can* light right for sight at night!

I challenge you to shield and reduce the amount of light in each fixture and see better at night!