Frequently Asked Questions regarding Outdoor Lighting

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What does that Deschutes County Outdoor Lighting Ordinance require?

The County's "good neighbor lighting" ordinance requires that:

- all private and commercial outdoor lighting fixtures
- installed after August 10, 1994 or replacing a fixture installed before that date
- 120 or brighter watt incandescent bulb (1,800 lumens)
- located in the County and outside of Bend, Redmond and Sisters
- must be shielded by design or modification that directs light downward, and
- must limit direct line-of-sight of the fixture's lamp to the property on which the fixture is installed.

See the text of the ordinance for details, including tables relating to shielding and brightness.

The ordinance does not regulate retailers of lighting fixtures.

The Community Development Department has brochures and other information about the ordinance and enforcement. Call 388-6575.

Exceptions:

Motion-sensitive lights which shine for not longer than 20 minutes.

Decorative holiday lighting which shines for not more than 45 days.

See the text of the ordinance for other exemptions which apply in certain circumstances.

Why did Deschutes County adopt this outdoor lighting ordinance?

A citizens committee originated this ordinance, which is based on a similar one in Arizona. The testimony was that outdoor lighting which is properly designed and installed

- puts the light on the ground where it's needed
- improves visibility and safety
- · eliminates dark shadows and glare
- keeps your light on your property, it's good-neighbor lighting
- helps to keep our rural skies sparkling with stars and planets
- minimizes energy use and operating cost.

The ordinance received broad-based support in testimony to the County Commissioners in 1994. The date for compliance on "existing" lighting was extended to August 31, 2000 to allow rural residents and the lighting industry time for voluntary compliance with the ordinance. During this time, the three electric utilities have brought into compliance their 4,000-plus utility-owned outdoor fixtures.

For many persons, the biggest part of the problem is the familiar "yard light" mounted on a pole or building wall. This is a mercury vapor fixture with the bulb surrounded by a semi-transparent acrylic lens. It directs 45% of its light into the sky and outward as "glare," and only 55% of its light onto the ground. In the lighting industry, these are called "NEMA head" lights. There are standard "utility grade" NEMA fixtures sold by major lighting distributors. There are also non-standard, smaller, low-cost NEMA fixtures sold through many consumer outlets. In Deschutes County, most of these smaller, non-standard NEMA fixtures are made by Regent Lighting.

What is a "Good" outdoor lighting fixture?

A good outdoor lighting fixture costs more than a poor one and lights your area much better and more cheaply than a low-end fixture.

The best outdoor lighting fixtures which comply with the ordinance use low- or highpressure sodium instead of mercury vapor or incandescent bulbs. They may also have lenses inside the hood. These fixtures cast the light evenly and clearly over the area you intend to light, and limit the light to that area.

Low- or high-pressure sodium lamps give a clearer light, produce more light per watt of electricity than mercury vapor or incandescent lamps, and last ten times as long as a regular incandescent household light bulb.

The best fixtures cost the least to operate, so they "pay for themselves." They give much better light, and within 3 to 6 years they make up their higher cost by their lower electricity consumption.

A 70 watt high-pressure sodium (HPS) lamp in a fixture which complies with the County's ordinance puts more useable light on the ground than a 175 watt mercury vapor lamp in a NEMA fixture. The first five years' electricity savings pay you back for the new fixture.

What is high-output outdoor lighting?

Often referred to as yard or barn lighting, high output lights are typically used for security and area lighting. In recent years, wall-mounted lights for garages, driveways and porches have increased enough in wattage to be considered high-output lighting. High-output lighting also includes parking lot and billboard lighting.

The most popular type of high-output lighting is the common mercury vapor lamp. Other types of high-output lights include halogen lamps and high pressure sodium lamps.

How bright does a light have to be before it is considered a "high output" light?

The Outdoor Lighting Ordinance specifies that a light that produces more than 1,800 lumens (lumens are a measure of light intensity) must be shielded or modified to prevent spill onto neighboring properties. The lumen rating of light can be found on most boxes. Generally, a 120-watt incandescent light produces about 1,800 lumens. A typical mercury vapor light produces about 6,000 lumens and a high pressure sodium yard light about 10,000 lumens.

How do I know if my light needs modification?

A simple test is to walk the property line of the parcel on which the light is located. If the light bulb within the light fixture is visible from any location or if part of the light's output shines upward into the night sky, then the light needs to be modified.

Who is responsible for changing or modifying my light?

- 1. You can choose to replace the fixture. This will cost you between \$35 and \$135 to do, but it will pay for itself within 5 years in electricity savings and will give you much better lighting for your needs.
 - See, above: "What is a "good" outdoor lighting fixture?"
- 2. You can replace your existing fixture with one controlled by a motion sensor.
- You can adapt your existing fixture in several ways, depending on the fixture, its location and its purpose. This may cost you about \$40 to do, it will make your light comply with the ordinance, and it may give you somewhat better lighting for your needs.
 - A. Retrofit your light with a reflector that will direct the light onto the ground. The reflector should have a wide-enough opening facing the ground (14 inches or more) to give the light the horizontal coverage you need on the ground. See that your light is mounted high enough off the ground get the coverage you need, but not so high that your light is extending beyond your property.

See, below: "Where do I buy an outdoor lighting fixture, reflector or shield which complies with the ordinance?"

- B. If your light is mounted against a wall, you can retrofit a half-round shield to your existing fixture that will restrict the light so it shines downward onto the area you want to light. This may not leave you enough horizontal coverage if the lens you are covering is the typical 8 inches.
 - See, below: "Where do I buy an outdoor lighting fixture, reflector or shield which complies with the ordinance?"
- C. Figure out an ingenious way to get the right result, and be careful you don't hurt yourself doing it! Persons have tried spray paint, rubber sheeting, etc. These measures may not stand up to the effects of sun, water and wind. This would be a "band-aid," not a cure. Why not do it right and be done with it?

Many types of new lights are available that feature "cutoff" styling. This means that light coming from the fixture is directed downward and "cutoff" by built-in shielding.

Additionally the placement of a light fixture, relative to height, can control how far light reaches. By varying the height the light can be confined to a desired area.



Typical "Cut Off" style light

Some older installed lights can be shielded. Shielding can be metal, wood, or painted glass which is placed around the fixture in such a way as to control where the light goes. Some commercial products are available for shielding "drop globe" fixtures. For other types of lighting, custom shields may need to be manufactured.



Older non-shielded style of light

It is recommended that you check with an electrician, the Deschutes County Building Department or your local utility company before making any modifications to an existing light.

Where do I buy an outdoor lighting fixture, reflector or shield which complies with the ordinance?

There are several <u>retail locations</u> that sell approved lighting fixtures.

DESCHUTES COUNTY DOES <u>NOT</u> ENDORSE ANY PRODUCTS SHOWN ON THIS WEBSITE. THIS IS RESOURCE INFORMATION ONLY AND AS WE OBTAIN ADDITIONAL INFORMATION, WE WILL ADD IT TO THE WEBSITE.

Where can I get more information?

On the internet, go to the website of the International Dark-Sky Association, at www.darksky.org for a wealth of information about good lighting, good lighting fixtures and accessories, and many related matters, some of which we have shared here.

How do I get my neighbor to make their outdoor lighting comply with the county ordinance?

- 1. If you live in Bend, Redmond or Sisters, the County ordinance does not apply. You have other choices:
 - A. You can talk with your neighbor and you can try mediation the same as you could if the County ordinance did apply. Look ahead for some suggestions about how to do this.
 - B. You may have a homeowner association or "CC&R's" which regulate outdoor lighting for you and your neighbor.
 - C. You can organize a citizens' group and ask your city council to adopt an outdoor lighting ordinance.
- 2. You can be sure your own outdoor lighting complies with the ordinance and is a good example of how good outdoor lighting works.
- 3. You may live in an area which has a homeowner association or "CC&R's."

 Outdoor lighting may already be regulated. There may be a process for enforcement. Or, you can raise the subject of outdoor lighting to the association.
- 4. You can talk with your neighbor. Look ahead for some suggestions about how to do this.
- 5. You and your neighbor can go to mediation. Mediators assist persons to achieve their own mutually satisfying solutions. For information, call the Community Dispute Resolution Program at 383-0187.
- 6. You can call the County Code Enforcement Officer at 385-1707.

How do I talk to my neighbors about their outdoor lighting?

1. First, assume they have not given any thought to whether their outdoor lighting affects anyone else, including you, nor how it affects you.

- 2. Second, try to put yourself in their place. Ask yourself, why have they put that light, that kind of light, out there and why do they have it turned on when they do? Consider possibilities like these:
 - A previous owner or a builder chose the light and put it there. Your neighbor hasn't really paid much attention to it.
 - This was the least expensive outdoor lighting, the kind they are accustomed to seeing, the kind that's most available in the stores.
 - They haven't thought nor inquired about other kinds of lighting, which directs the light down or turns on only when it detects motion, or is high pressure sodium instead of a standard incandescent bulb or mercury vapor.
 - They are not bothered by other outdoor lights or by their own outdoor light. Maybe outdoor lights do not shine into or around their house in unwelcome places at unwelcome times. Maybe they do not look at the sky or notice the effect of outdoor lighting on the night sky.
 - Your neighbor has some fears about darkness, and what animals or persons might be lurking in darkness. Maybe they lived in a city. Maybe they're just that way.
 - Your neighbor wants their entrance to be well lighted so they and others can walk there safely without the risk of tripping or falling, or so visitors who are welcome can find the entrance.
 - Your neighbor associates outdoor lighting with security. They feel that the lighting helps protects them from strangers who might come under cover of darkness to steal or vandalize their property, trespass, look in their windows, or to do them harm. Maybe they think the lighting deters the strangers because they will be seen, or causes the strangers to stay away because they think someone is home. Maybe they think the lighting enables them to see the intruder outside.
 - Your neighbor wants to be able to see at night if one of their animals has gotten out of an enclosure, or is acting strangely, or to see that everything appears to be in order.
- 3. Consider how to talk with your neighbor.
 - A. Remember that your feelings about their lighting have been building up for some time before you've finally decided to talk with your neighbor. Practice talking with a friend. You want to explain how your neighbor's outdoor lighting has been affecting you. You want to have helpful things to say about getting the lighting changed. You want your neighbor to hear you with good will and an open mind. What you want,

- above all, is to get the neighbor's outdoor lighting changed. Most neighbors do want to be on neighborly terms.
- B. Look for an opening when you and your neighbor encounter each other outside one day. Maybe you can bring up the lighting during a talk "over the back fence." Maybe you and your neighbor have some common interest or concern as neighbors you can talk about at the same time.
- C. Talk in the first person. That is, start your sentences with "I," not "you." Tell your own story about the lighting, and what you've found out about outdoor lighting, and what you are asking them to consider doing, and how you could be helpful with the solution.
- D. Take along the brochures available from the County. They refer to this website.
- E. Tell your neighbor about a place where they can see good outdoor lighting in place.
- 4. Anticipate some things you might want to say. Here are some possible talking points:
 - A. Good outdoor lighting makes good neighbors.
 - B. Good outdoor lighting does the best job of lighting the area your neighbor wants lighted.
 - C. Good outdoor lighting saves money.
 - D. Good outdoor lighting gives more safety and security.
 - E. Good outdoor lighting helps to keep the sky dark.
- 5. Anticipate some difficult things your neighbor might say:
 - A. Denial and resistance: "I don't live out here in the country to be told how to light my place." OR "I don't want anybody telling me what to do about my lighting." OR "I believe people should be able to do whatever they want with their lighting on their property." OR "My lighting isn't bothering anyone." OR "If you don't like it you can move further out into the boonies, or put up blinds."
 - B. Cost and inconvenience.

What parts of Deschutes County does the Covered Lighting Ordinance affect?

The Covered Lighting Ordinance applies to all lands in Deschutes County that are outside the limits of established Urban Growth Boundaries and incorporated Cities of Bend, Redmond and Sisters.

