

**TAOS COUNTY ORDINANCE
2006-9
NIGHT SKY PROTECTION ACT**

**AN ORDINANCE OF THE BOARD OF COMMISSIONERS OF THE COUNTY OF TAOS
CREATING AN ORDINANCE REGARDING OUTDOOR LIGHTING ON PUBLIC AND
PRIVATE PROPERTY – A NIGHT SKIES PROTECTION ACT.**

WHEREAS, This new Ordinance will promote energy efficiency and reduce or prevent light pollution;

WHEREAS, This Ordinance will protect a historical legacy and provide enjoyment of the night sky of Taos County for future generations;

WHEREAS, This Ordinance follows and complements the New Mexico Night Sky Protection Act approved April 16, 1999 and can be more restrictive but not less restrictive in its implementation;

WHEREAS, The Board of Taos County Commissioners desires to provide an Ordinance for the preservation and enhancement of the night sky of Taos County while promoting safety, conservation of energy and environmental preservation concerns.

NOW, THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF TAOS COUNTY, meeting in Regular Session, and after having held a public hearing on the matter, that the following Ordinance is hereby adopted:

**Chapter I
OUTDOOR LIGHTING**

CHAPTER I, ENTITLED "Outdoor Lighting on Public and Private Property – A NIGHT SKIES PROTECTION ACT" is hereby created as part of Taos County Code.

Sections:

- I Purpose**
 - II Definitions**
 - III Applicability**
 - IV Exemptions**
 - V Submittals**
 - VI General Standards**
 - VII Enforcement and Penalties for Violation**
 - VIII Severability**
 - IX Effective Date**
- TABLES 1-5 ATTACHED**

I Purpose.

The purpose of the Night Skies Protection Act is to regulate outdoor lighting in order to reduce or prevent light pollution. This means, to the extent reasonably possible, the reduction or prevention of glare and light trespass, the conservation of energy, and promotion of safety and security. This Ordinance will ensure aesthetically appropriate outdoor lighting in keeping with the historic character and night-sky beauty of Taos County.

II Definitions. As used in this section:

1. **Lamp or Bulb** means the light-producing source installed in the socket portion of a luminaire.
2. **Luminaire or Fixture** means a complete lighting unit including the lamps or bulbs, together with the parts required to distribute the light, to position and protect the lamps, and to connect the lamps to the power supply.
3. **Light pollution** means general sky glow caused by the scattering of artificial light in the atmosphere resulting in decreased ability to see the natural night sky.
4. **Glare** means the brightness of a light source that causes eye discomfort.
5. **Disabling glare** means lighting that impairs visibility and creates a potentially hazardous situation for either pedestrians or motorists.
6. **Light trespass** means light emitted by a luminaire that shines beyond the property on which the luminaire is installed.
7. **Shielding** means that no light rays are emitted by a fixture above the horizontal plane running through the lowest point of the fixture where light is emitted.
8. **Accent lighting** means any directional lighting which emphasizes a particular object or draws attention to a particular area.
9. **Spotlight or Floodlight** means any lamp that incorporates a reflector or a refractor to concentrate the light output into a directed beam in a particular direction

III Applicability

- A. This Ordinance is in addition to and supplements the State Night Sky Protection Act which, among other things, outlawed the sale and/or use of mercury vapor outdoor lighting and required shielding of outdoor lighting fixtures installed after January 1, 2000, (except specified low wattage lighting that is to be shielded with this Ordinance for Taos County).
- B. All outdoor lighting fixtures installed on private and public property in Taos County after the effective date of this Ordinance shall be shielded. This Ordinance does not apply to interior lighting.
- C. All outdoor lighting fixtures existing and legally installed and operative before the effective date of this Ordinance are exempt from these requirements. When

existing lighting fixtures become inoperable, their replacements are subject to all the provisions of this Ordinance and the State Night Sky Protection Act.

- D. When an existing fixture is replaced, the replacement fixture shall meet the requirements of this article. More stringent modifications to nonconforming fixtures in historic districts shall also apply where mandated.
- E. Compliance with this Ordinance shall be administered by the County Planning Department.
- F. In the event of a conflict with any other section of this article, the more stringent requirement shall apply.
- G. All governmental agencies, federal, state or county – including their security facilities – which operate within the limits of Taos County should experience no difficulty meeting the requirements of this Ordinance and are encouraged by the County to comply with its provisions.

IV Exemptions.

The following lights that exceed the brightness limitations contained herein are exempt from the provisions of this Ordinance:

- A. All existing lights as of the date of this Ordinance.
- B. Traffic control signals and devices.
- C. Street and road lights installed prior to the effective date of this Ordinance.
- D. Temporary emergency lighting (i.e. fire, police, repair workers).
- E. Moving vehicle lights.
- F. Navigation lights (i.e. airports, heliports, radio/television towers).
- G. Seasonal decorations with individual lights in place no longer than 60 days.
- H. Sports-field outdoor lighting sites existing at the date of passage of this Ordinance (i.e. ball fields, football, soccer, ice rink, etc.). Any new County sports lighting installations (or any over-all, complete replacement of *luminaires or fixtures*¹ at existing sites) are to be shielded or hooded within the spirit of this Ordinance.
- I. Other special situations approved by the County for temporary or periodic events (i.e. rodeos, revivals, fairs, fiestas, carnivals, night-time construction).
- J. Security lights of any wattage that are controlled by a motion-sensor switch and which do not remain on longer than 12 minutes after activation.

¹ See definitions section on page 2 of Ordinance Draft

- K. Existing industrial, mining or rural agricultural compounds that require adequate lighting for safety, security or to discourage theft of property. They should be hooded or shielded when possible. When new compounds are lighted the fixtures are to be hooded or shielded.
- L. State highway high-mast tower lighting should adhere to the same standards identified in paragraph A of **General Standards** Section VI.

V. Submittals

- A. Applications for building permits or applications for review by the County Planning Department, which includes the installation of outdoor lighting fixtures for new construction, shall provide evidence of compliance with the requirements of this Ordinance. The submittal shall contain the following information and be provided as part of the site plan to the County Planning Department for approval:
 - (1) Plans indicating the location, type, and height of luminaries including both building and ground-mounted fixtures,
 - (2) A description of luminaires, including lamps, poles or other supports and shielding devices, which may be provided as catalogue illustrations from the manufacturer,
 - (3) Ganging of individual luminaires to achieve more than allowed lumens in a specific area is prohibited. They may be ganged on a single standard only if focused downward on different surfaces,
 - (4) Fixture photometric data, such as that furnished by the manufacturer, showing the downward angle of light emission,
 - (5) Additional information as may be required by the County Planning Department in order to determine compliance with this Ordinance.

To help assure compliance with this Ordinance the following Certification will be executed on submittals to the County Planning Department for all commercial, residential, and multi-family projects:

Engineer's, Architect's or Licensed Contractor's Certification, Date _____

I, _____, a Registered Professional Engineer, Architect or Licensed Contractor, number _____ under the Laws of The State of New Mexico, hereby certify that the Outdoor Lighting Plan on this drawing was prepared under my direction and conforms to the County of Taos Lighting Ordinance _____ and is true and correct to the best of my knowledge and belief.

Signed by Registered Professional Engineer, Architect, Licensed Contractor or individual Home Builder.

- B. Requests for any lighting deviation from the requirements of this Ordinance are to be submitted in writing to the Taos County Planning Department. It shall be approved only when it is determined that a deviation is warranted in order to provide even more security for personal property, business inventory, agricultural produce or livestock.

- (1) The lighting deviation application shall contain a detailed site plan showing the location and type of lighting fixtures and the lumens/wattage deviations for each fixture sought by the applicant. In addition, the site plan shall show the locations of all buildings, public streets and roadways and other structures located within two hundred (200) feet of the property.
- (2) The requested deviation shall be reviewed by the Planning Director. The Planning Director may grant the application, with or without conditions, if the Director determines that the General Standards of Section VI, are met. Determinations of the Planning Director may be appealed by the applicant to the Planning Commission by written notice of appeal filed with the Planning Director within ten (10) calendar days following written notification to the applicant of the Director's determination. Appeals from determinations of the Planning Commission shall follow the appeal procedure of the County's Zoning Ordinance as amended from time to time.
- (3) On change of use of the property, any permitted deviations are automatically terminated.

VI General Standards.

The following general standards shall apply to all outdoor lighting installed after the effective date of this Ordinance, which are not exempted in Section IV above:

- A. Outdoor lighting must be hooded, shielded and aimed downward. Examples of acceptable and unacceptable light shielding and hooding are shown in Tables 1-5, attached.
- B. The hood or shield must mask the direct horizontal surface of the light source. The light must be aimed to insure that the illumination is only pointing downward onto the ground surface, with no escaping light permitted to contribute to sky glow by shining upward into the sky.
- C. Any bright light shining onto adjacent property or streets which would result in a disabling glare shall not be permitted. Light trespass beyond property boundaries or above the horizontal plane shall be considered non-compliant.
- D. Existing fixtures may be adapted to comply with this Ordinance by adding a properly designed hood or shield, or by pointing any upward-mounted, shielded fixture downward toward the ground surface.
- E. All outdoor lighting fixtures shall be designed, installed, located and maintained such that glare onto adjacent properties or streets shall be minimized and all direct illumination kept within the boundaries of the fixture owner's property.
- F. Accent lighting, when so approved, shall be directed downward onto the building or object and not toward the sky or onto adjacent properties. Direct light emissions shall not be visible above the roof line or beyond the building edge.
- G. Agricultural or government installation light fixtures are limited to 50,000 lumens and must be hooded or shielded from dispersing upward rays.
- H. Lumen/wattage limitations by light-source type are shown on Table 5, attached.

VII. Enforcement and Penalties for Violation.

This Ordinance will be enforced when any citizen complains in writing to the County Manager or Planning Director and the complaint is determined to be legitimate within the spirit of this Ordinance. The County Code Enforcement Officer will contact the offender.

A. Penalties for Commercial and Non-Residential Lighting Violations

Any violation of the provisions of this Ordinance shall constitute a petty misdemeanor, and upon conviction thereof, shall be punishable by a fine not to exceed one hundred dollars (\$100.00) for the first violation; three hundred dollars (\$300.00) for the second violation; and five hundred dollars (\$500.00) for the third violation.

B. Penalties for Residential Violations

Any violation of the provisions of this Ordinance shall constitute a petty misdemeanor, and upon conviction thereof, shall be punishable by a fine not to exceed twenty-five dollars (\$25.00) for the first violation; seventy-five dollars (\$75.00) for the second violation; and one hundred twenty-five dollars (\$125.00) for the third violation.

VIII. Severability

The provisions of this Ordinance are severable and if any paragraph, section, subsection, or part of this Ordinance is held to be invalid, unenforceable, unconstitutional, or inapplicable to any person or circumstance, such illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair the remainder of this Ordinance.

IX. Effective date

The provisions of this Ordinance shall become effective thirty (30) days after published unless otherwise provided by law.

After passage and at least annually thereafter, presentations of this Ordinance will be made through Kit Carson Electric to registered County electricians, builders, architects, developers and any other groups that should be interested in the preservation of Taos County's dark skies beauty.

TABLES 1 – 5, ATTACHED

PASSED, ADOPTED AND APPROVED THIS 20th DAY OF November, 2006.

BOARD OF COUNTY COMMISSIONERS
OF TAOS COUNTY, NEW MEXICO

Emanuel B. Pacheco, MSW
Emanuel B. Pacheco, MSW, Chairman

Nicklos Jaramillo
Nicklos Jaramillo, Vice Chairman

Gabriel Romero
Gabriel Romero, Commissioner

Don Francisco R. Trujillo II
Don Francisco R. Trujillo II, Commissioner

Virgil Martinez
Virgil Martinez, Commissioner

RECORDED

ATTEST:

Elaine S. Montaño
Elaine Montaño, Taos County Clerk

Approved as to legal form:

Christine Anaya Esq., Robles, Rael & Anaya, P.C.

Vote Record:

E. Pacheco	<input checked="" type="radio"/> yes	<input type="radio"/> no	<input type="radio"/> abstain	<input type="radio"/> absent
N. Jaramillo	<input checked="" type="radio"/> yes	<input type="radio"/> no	<input type="radio"/> abstain	<input type="radio"/> absent
G. Romero	<input checked="" type="radio"/> yes	<input type="radio"/> no	<input type="radio"/> abstain	<input type="radio"/> absent
DF Trujillo II	<input checked="" type="radio"/> yes	<input type="radio"/> no	<input type="radio"/> abstain	<input type="radio"/> absent
V. Martinez	<input checked="" type="radio"/> yes	<input type="radio"/> no	<input type="radio"/> abstain	<input type="radio"/> absent

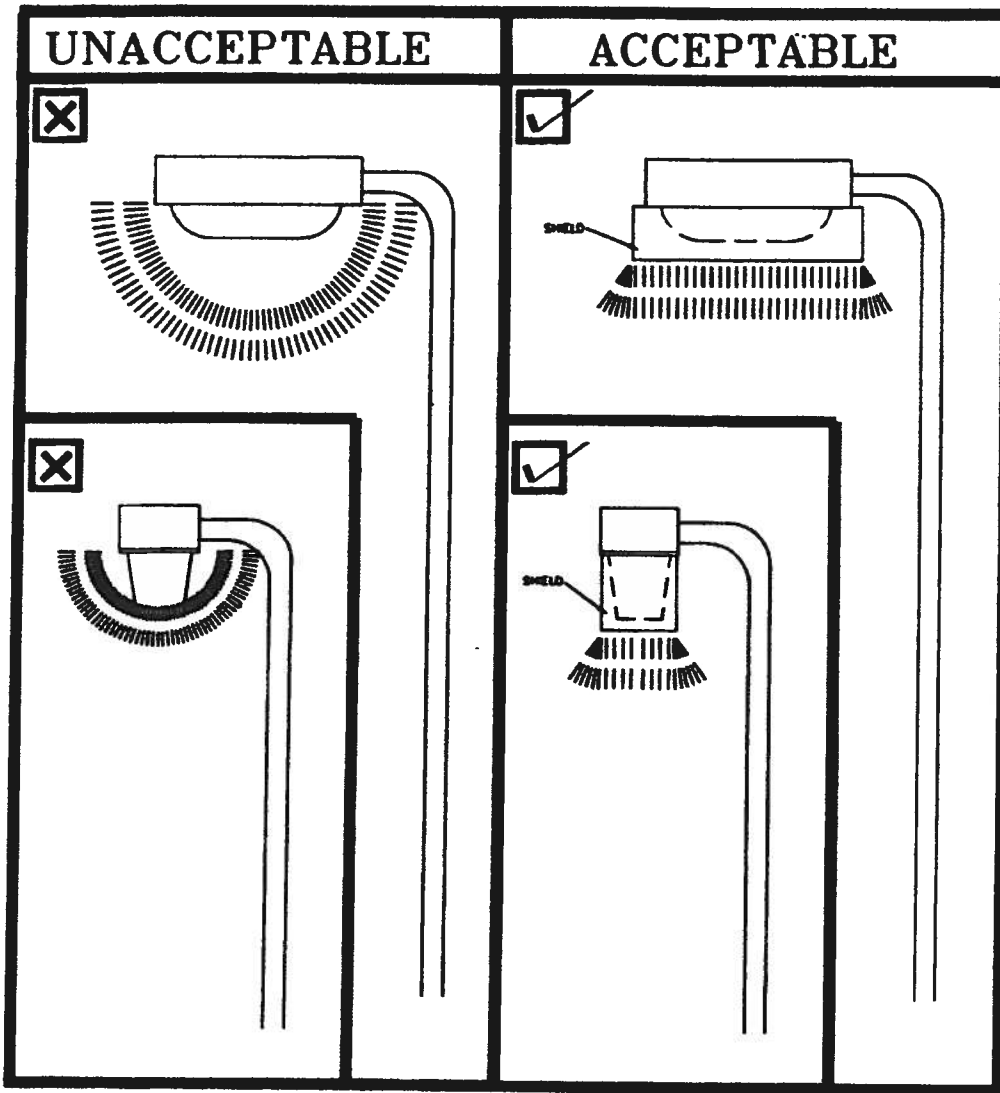
TABLES 1 - 5
ACCEPTABLE SHIELDING, HOODING AND AIMING OF OUTDOOR LIGHT FIXTURES

The following 5 tables of schematics show what is acceptable and what is unacceptable in the County of Taos.

TABLE 1: WALL-MOUNTED LIGHTS

UNACCEPTABLE	ACCEPTABLE
<p>WRAP AROUND LENSES</p> <p>FRONT</p> <p>SIDE</p>	<p>SHIELD</p> <p>FRONT</p> <p>SIDE</p> <p>SHIELD</p>
<p>OPEN FIXTURES</p>	<p>SHIELD</p> <p>FRONT</p> <p>SIDE</p> <p>SHIELD</p>
<p>EXPOSED BULBS</p>	<p>CLOSED TOP</p> <p>SHIELD</p>
<p>OPEN TOP</p> <p>SHIELD</p>	<p>PORCH OR OVERHANG</p> <p>SHIELD</p>

TABLE 2: FREE STANDING LIGHTS



Street and Parking Lot Pole Lights

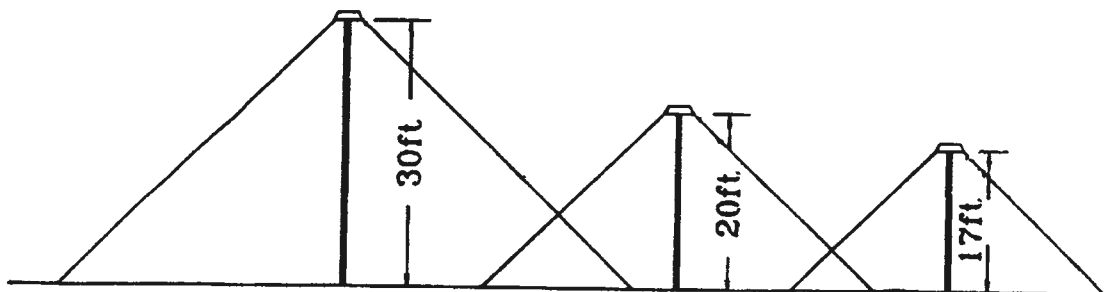


TABLE 3: WALL, BUILDING, FOLIAGE, SIGN AND ESCARPMENT LIGHTS


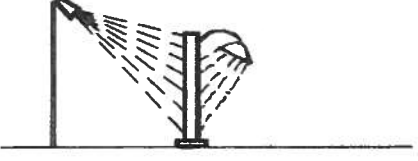
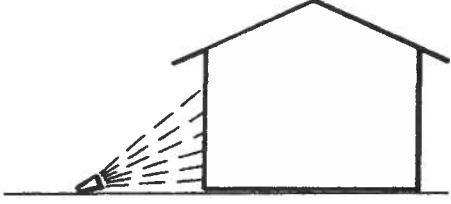
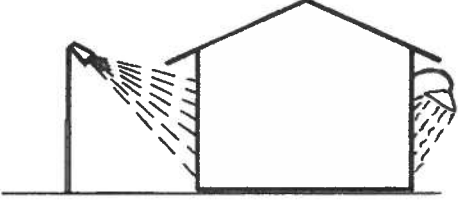



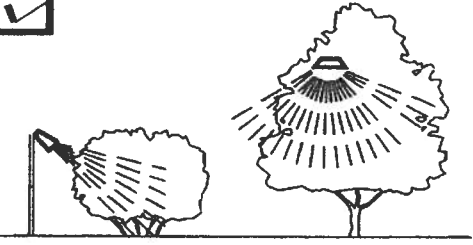

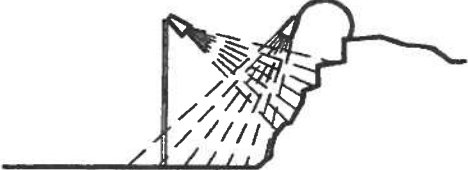
UNACCEPTABLE	ACCEPTABLE
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<input checked="" type="checkbox"/>  <p data-bbox="532 982 669 1012">BUILDING</p>	<input checked="" type="checkbox"/>  <p data-bbox="1075 982 1214 1012">BUILDING</p>
<input checked="" type="checkbox"/>  <p data-bbox="539 1264 613 1293">SIGN</p>	<input checked="" type="checkbox"/>  <p data-bbox="1075 1264 1149 1293">SIGN</p>
<input checked="" type="checkbox"/>  <p data-bbox="539 1591 662 1621">FOLIAGE</p>	<input checked="" type="checkbox"/>  <p data-bbox="1084 1591 1208 1621">FOLIAGE</p>
<input checked="" type="checkbox"/>  <p data-bbox="516 1885 711 1915">ESCARPMENT</p>	<input checked="" type="checkbox"/>  <p data-bbox="1068 1885 1263 1915">ESCARPMENT</p>

TABLE 4: STREET AND LOT LIGHT CUT-OFF AT PROPERTY LINE

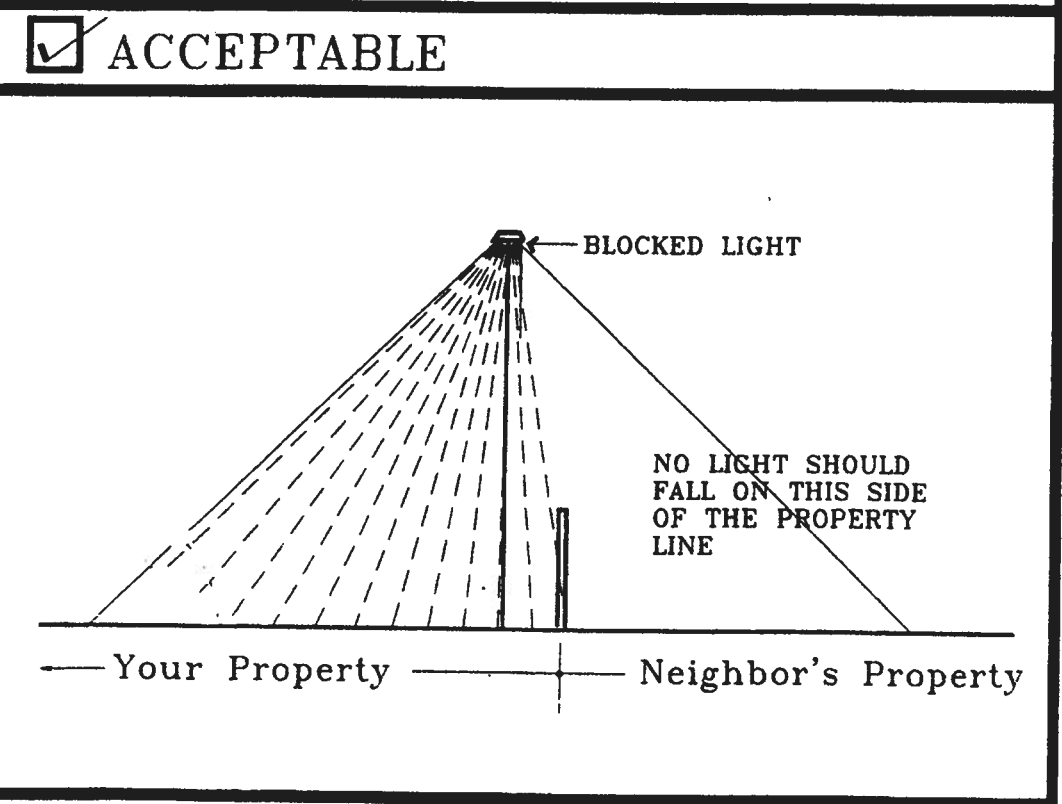
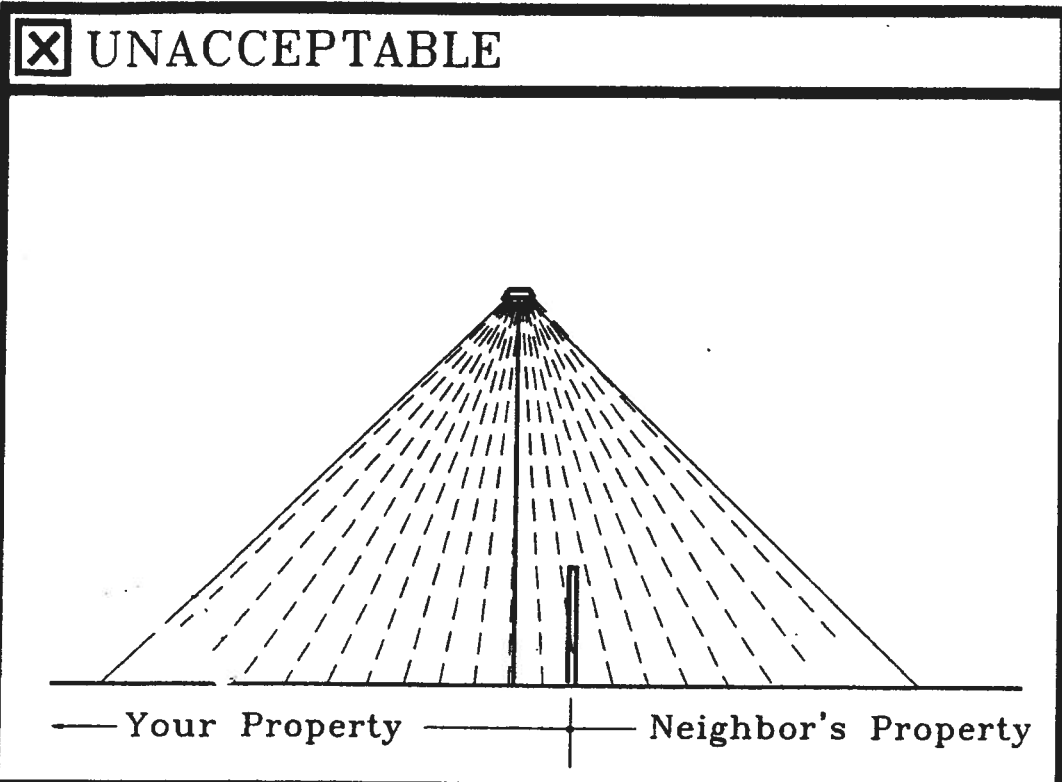


TABLE 5: LIGHT-TYPE WATTAGE COMPARISONS

Bulbs Lawful In Taos County	Wattage of Bulb Allowed (At or Below the 2,200 Lumens Limit for Residential and Commercial Lights)*
Incandescent	150 watts
High Pressure Sodium	35 watts
Low Pressure Sodium	18 watts
Metal Halide	39 watts
Halogen	100 watts
Quartz	100 watts
Florescent	30 watts

Bulbs Unlawful In State of New Mexico
Mercury Vapor**

*** Agricultural and Government lights are limited to 50,000 lumens.**

**** Grandfathered in New Mexico until the bulb/luminare must be replaced. See State of New Mexico, 44th Legislature, 1st Session, Laws 1999, Chapter 197, House Bill 39, as amended, Signed April 6, 1999.
Bill 39, as amended, Signed April 6, 1999.**