

SECTION 4: PROJECT AND CUMULATIVE IMPACTS

This section of the ~~Draft~~ Final SEIR describes the environmental setting, project impacts, cumulative impacts, mitigation measures, and level of significance after mitigation for the construction and operation of the proposed Walmart. The environmental setting includes a description of the physical environmental conditions on the project site and in the vicinity of the project, as they exist at the time of the publication of the Notice of Preparation for the proposed Walmart. The proposed project is the addition of 12,000 square feet to the approved 158,000 square foot “Large Box Retail” use as well as a change in the use to a Walmart, which includes a 24-hour a day operation. The evaluation of the project and cumulative effects addresses potential environmental effects associated with the development of the entire proposed Walmart to address all potential impacts. In addition, the mitigation measures that are identified to reduce potential significant environmental effects of the proposed Walmart to less than significant are separated into two categories. One category of mitigation measures includes those mitigation measures that are applicable from the approved MND for the Wasco Center, which includes the approved 158,000 square foot “Large Box Retail” use. The second category of mitigation measures includes mitigation measures that are not identified in the approved Wasco Center MND. A summary of the mitigation measures from the approved MND for the Wasco Center is provided in Appendix B. As described in this section, all of the environmental effects, except for transportation/traffic, evaluated for the proposed Walmart can be reduced to less than significant after the implementation of mitigation measures.

4.1 - Aesthetics

4.1.1 - Introduction

This section provides an evaluation of aesthetics, including impacts related to light and glare. The analysis for the proposed Walmart concludes that there are no mitigation measures required because similar to the approved 158,000 square foot “Large Box Retail” use, the 170,000 square foot proposed Walmart will result in less than significant impacts related to aesthetics, including light and glare. The following is a list of information reviewed in preparation of this section:

- City of Wasco General Plan. June 2010. City of Wasco. This document is not contained in the EIR appendices but is instead available for review at the City of Wasco Community Development Department at 764 E Street, Wasco, California, 93280. Pursuant to CEQA Guideline § 15150, the City of Wasco General Plan is hereby incorporated by reference.
- City of Wasco Municipal Code. Updated September 2010. This document is not contained in the EIR appendices but is instead available for review at the City of Wasco Community Development Department at 764 E Street, Wasco, California 93280. Pursuant to CEQA Guideline § 15150, the City of Wasco General Plan is hereby incorporated by reference.

- Exterior Lighting: Glare and Light Trespass. January 2000. International Dark-Sky Association. This information is located in this ~~Draft~~ [Final](#) SEIR Appendix C.
- Photometrics Plan for Wasco Center Walmart. November 2010. Eda, Inc. This information is located in this ~~Draft~~ [Final](#) SEIR Appendix C.

4.1.2 - Environmental Setting

The project site comprises approximately 17 acres of the 112-acre Wasco Center. The 17-acre site is located on the west side of Central Avenue, has relatively flat terrain, and currently contains walnut orchards. The area surrounding the 17-acre site contains fallow agriculture land to the north, and walnut orchards to the west, south, and east. In addition, southeast of the site is a developed commercial center. This combination of land uses provides an irregular viewshed that lacks unity. Based on a review the City of Wasco General Plan, there are no federal, state, or locally designated scenic corridors or roadways adjacent to or near the project site. Distant views from the project site are limited due to the existing orchard trees within the site and the considerable distance to areas of higher elevations, including the Sierra Mountains foothills, which are more than 15 miles to the east, and the Coastal Range foothills, which are more than 20 miles to the west.

Light and Glare

Typically, there are two types of light intrusion. First, light emanates from the interior of structures and passes through transparent surfaces such as windows. Second, light emanates from exterior sources such as street lighting, safety and security lighting, and landscape lighting. Introducing new light sources into an undeveloped area could be considered a nuisance to adjacent residential uses and diminish the view of the clear night sky. Glare mainly results from sunlight reflection off building surfaces, with glass typically contributing the highest degree of reflectivity. Glare effects are associated with various building materials and vehicles during the daylight hours.

Analysis of potential light and glare impacts with regard to visual resources considers the following:

- Glare: Light that causes visual discomfort or disability, or a loss of visual performance. Glare is the annoyance resulting from high output luminaries or insufficiently shielded light sources in the field of view.
- Spill Light: Light from an installation that falls outside of the boundaries of the property on which the installation is located.
- Luminaire (light fixture): A complete lighting unit consisting of one or more electric lamps, the lamp holder, reflector, lens, diffuser, ballast, and other components and accessories.
- Shielding:
 - Fully shielded - A luminaire emitting no light above the horizontal plane.
 - Shielded - A luminaire emitting less than 2 percent of its light above the horizontal plane.

- Partly shielded - A luminaire emitting less than 10 percent of its light above the horizontal plane.
- Unshielded - A luminaire that may emit light in any direction.
- Footcandle: A footcandle is a measure of light intensity widely used in the lighting industry. The unit is defined as the amount of illumination the inside surface of an imaginary 1-foot radius sphere would receive if there were a uniform point source of one candela in the exact center of the sphere.

Onsite Light and Glare

Due to the undeveloped nature of the project site, there is no light or glare from project site.

Offsite Light and Glare

Light and glare emanates from the land uses surrounding the project site. The primary sources of light in the project vicinity are the commercial uses south and southeast of the project site. Lighting from these commercial uses originates from the approximately 40 foot light standards that illuminate the parking areas, from automobiles traveling to and from these uses, and from the structures themselves. In addition, illumination from the approximately 35 foot light standards along SR-46, which runs parallel to the project site to the south, spills onto the site. Furthermore, headlight glare associated with vehicular travel along SR-46 projects onto the project site.

4.1.3 - Regulatory Setting

City of Wasco Municipal Code

The City of Wasco ordinances relating to light and glare are as follows:

Title 17: Zoning

Section

17.51.020.G No on-site lighting shall directly or indirectly illuminate adjacent properties or the public street which provides access. The lights and standards to be used shall be approved by the planning director.

17.51.020.K.8 All exterior lighting shall be directed away from adjacent properties.

4.1.4 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to aesthetics are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a) Have a substantial adverse effect on a scenic vista? (Refer to Section 7, Effects Found Not To Be Significant.)

- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway? (Refer to Section 7, Effects Found Not To Be Significant.)
- c) Substantially degrade the existing visual character or quality of the site and its surroundings? (Refer to Section 7, Effects Found Not To Be Significant.)
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The evaluation of aesthetic impacts can be characterized as a subjective exercise due to widely varying personal perceptions. In particular, light pollution and obtrusive light are the issues that come under particular scrutiny because the level of impacts of such light pollution can be interpreted relatively. Thus, a relative scale to quantify light pollution is employed, not only because of the variable nature of light, but also because its impact is highly subjective. Accordingly, in order to address growing concerns with light pollution, obtrusive light, and artificial sky glow, the International Dark-Sky Association (IDA) and the Illuminating Engineering Society of North America (IESNA) are currently developing a joint Model Lighting Ordinance (MLO). This document is intended for adoption by municipalities interested in regulating outdoor lighting.

The IDA and IESNA are currently defining quantitative limits for the prescriptive and performance requirements. However, in 2000, the IDA published Information Sheet 76, which provided a recommended standard for exterior lighting. The following standard for exterior lighting originating on a property and projecting onto an adjacent property is the threshold of significance that is used for the proposed project.

- Limit the exterior lighting originating on a property to a maximum of 0.5 footcandle at a distance of 25 feet beyond the property lines.

For the purpose of the proposed Walmart, the following threshold has been added to evaluate Walmart's consistency with applicable policies or ordinances related to light and glare.

- Conflict with any applicable local policy or ordinance?

4.1.5 - Impact Analysis and Mitigation Measures

Light or Glare

Impact AES-1: **The proposed Walmart would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

Project Specific Impact Analysis

Light Impacts

Development of the proposed Walmart would create a new source of light similar to the lighting that would occur with the approved, but not yet constructed, "Large Box Retail" use. The proposed Walmart will operate 24-hours per day, thus potentially resulting in a greater illumination of lighting

than the nighttime security lighting levels that would occur with the approved “Large Box Retail” use. As part of the proposed Walmart, new sources of lighting would be introduced into the project area, including light illuminating from within the Walmart retail space, safety and security lights on the exterior of the structure, parking lot lighting, streetlights, and signage. These onsite light sources could create spill light impacts on surrounding uses, including sensitive uses.

Based on a review of the current photometrics plan (Eda, Inc. 2011), lighting for the parking lot consists of 1000-watt metal halide luminaires mounted on twenty-five 42 foot high poles. These parking lot light standards would be mounted in configurations of one, two, and three luminaires per pole. The three-luminaire configuration would primarily be used within the interior portions of the parking lot and along the structure’s frontage. The one and two luminaire configurations would be used within the perimeter areas. Metal halide luminaires ranging from 75-150 watts will be mounted to the exterior of the structure at a height of 10 feet to provide additional lighting.

Metal halide fixtures are specifically used to illuminate parking areas because their light source provides a clean white light, allowing for increased visibility and color recognition. The white light also provides a sense of safety and security for consumers and employees. For these reasons, metal halide fixtures are commonly used in parking lot applications where safety and visibility are primary concerns.

Development of the Wasco Center includes 64 high-density residential units directly across from the 17-acre project site on the east side of Central Avenue. At roughly 178 feet away, this residential area constitutes a sensitive use and requires special attention regarding light impacts. Based on a review of the current photometrics plan, light illuminating from the project site would be less than 0.5 footcandle at a distance of 25 feet from the northern and eastern property lines. Luminaires located along the eastern property line of the project site would utilize shielding to prevent excessive light from spilling onto nearby sensitive uses. In addition, the Wasco Center project includes a proposed extension of Central Avenue, consisting of a 110-foot right-of-way that would serve as an additional separation between the project site and the adjacent residential uses to the east by increasing the distance from the source to the receiver.

Likewise, similar shielding will be used in the luminaires along the northern portion of the project site to prevent excessive light from spilling onto adjacent land uses. Currently, the property located to the north of the project site consists of fallow land and other agricultural uses, but is zoned for residential (R-1-6) with development anticipated in the future. This planned land use would be considered a sensitive use. To ensure that light illuminating from the project site would be limited to a maximum of 0.5 footcandle at a distance of 25 feet from the northern property line, luminaires located along this portion of the project site would utilize shielding to prevent excessive light from spilling onto adjacent land uses. Moreover, future expansion of Margalo Street, which would run parallel to the project site directly to the north, would consist of a 58-foot right-of-way that would serve as an additional separation between the project site and the adjacent residential uses to the north. As shown

in the photometrics plan, lighting levels north of the project boundary would not exceed 0.5 footcandle.

Directly to the south and west of the project site are proposed commercial uses included in the Wasco Center. Since these land uses are commercial, they would not be considered sensitive uses and lighting levels would not be required to be reduced to less than 0.5 footcandle.

Overall, the utilization of light shielding and the separation between light sources and sensitive uses along the eastern and northern portions of the project site ensure that lighting impacts would be less than significant.

Glare Impacts

Implementation of the proposed Walmart would potentially create a new source of glare similar to the glare that may have occurred with the approved, but not yet constructed, "Large Box Retail" use. Based on a review of current design plans of the proposed Walmart retail space, a limited quantity of glass, metal, and other reflective surfaces will comprise the exterior of the structure. The majority of the structure would be comprised of painted stucco, concrete, stone veneer, and other non-reflective surfaces incapable of creating glare. Of the reflective surfaces proposed onsite, the majority are proposed on the southern facade of the structure, facing the parking lot and commercial uses. Although some glare would be produced by the reflective surfaces onsite, the proposed landscaping (i.e., trees) would impede substantial glare from being conveyed offsite. No substantial source of onsite glare will be adjacent to sensitive uses. Therefore, the potential glare that may be created by the proposed Walmart would result in less than significant impacts on day and nighttime views in the area.

Cumulative Impact Analysis

Development of the proposed Walmart and cumulative projects would potentially create new sources of light or glare in the area. The proposed Walmart would utilize shielding on parking lot luminaires to ensure that lighting originating from the project site would be limited to a maximum of 0.5 footcandle at a distance of 25 feet beyond the northern and eastern property lines in areas planned for future light-sensitive land uses. In addition, the proposed expansion of Central Avenue to the east and Margalo Street to the north would increase the distance to the future light-sensitive uses, and therefore, would reduce fugitive light from spilling onto adjacent uses, including those considered sensitive uses. The adjacent Wasco Center's impact relating to light and glare has been determined in a previously approved MND to be less than significant. As for all other cumulative projects, they would be required to comply with the City of Wasco Zoning Code standards to reduce lighting impacts. Since the proposed Walmart utilizes light shielding and buffering to reduce lighting originating on the project site to less than 0.5 footcandle at a distance of 25 feet beyond the property line and limits the amount of reflective surfaces on the exterior of the proposed structure, Walmart's cumulative impacts on day and nighttime views in the area from light and glare would not be cumulatively considerable, and therefore, less than significant.

Mitigation Measures

Project Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Level of Significance After Mitigation

Project Specific

Less than significant impact.

Cumulative

Less than significant impact.

Policies or Ordinances Related to Light and Glare

Impact AES-2 The proposed Walmart would not conflict with local policies or ordinances regarding light and glare.

Project Specific Impact Analysis

Table 4.1-1 provides a discussion of Walmart’s consistency with the ordinances and policies contained in the City of Wasco Municipal Code pertaining to light and glare. As discussed in Table 4.1-1, the proposed Walmart would be consistent with all of the relevant light and glare ordinances and polices set forth in the Municipal Code. Therefore, no impacts associated with the light and glare ordinances or policies would occur with implementation of the proposed Walmart.

Table 4.1-1: Consistency of the Proposed Walmart with the City of Wasco Municipal Code

Ordinances and Policies	Project Consistency
<i>Title 17: Zoning (Design Districts)</i>	
Section 17.51.020. G. No on-site lighting shall directly or indirectly illuminate adjacent properties or the public street which provides access.	Lighting used at the proposed Walmart would not exceed 0.5 horizontal footcandle (HFC) at a distance of 25 feet beyond the property line in areas with light-sensitive land uses. Lighting fixtures employed on-site would be designed to direct light onto the proposed Walmart and away from adjacent properties or the public. Adjacent properties will be using their own lighting for general exterior and parking illumination during the nighttime and would be unaffected by lighting used at the proposed Walmart. The adjacent Central Avenue will also use its own lighting and would remain unaffected. Therefore, the proposed Walmart is consistent with this code.

**Table 4.1-1 (cont.): Consistency of the Proposed Walmart
with the City of Wasco Municipal Code**

Ordinances and Policies	Project Consistency
Section 17.51.020.K.8. All exterior lighting shall be directed away from adjacent properties.	Lighting used at the proposed Walmart would not exceed 0.5 horizontal footcandle (HFC) at a distance of 25 feet beyond the property line in areas with light-sensitive land uses. Lighting fixtures employed on-site would be designed to direct light onto the proposed Walmart and away from adjacent properties. Adjacent properties will be using their own lighting for general exterior and parking illumination during the nighttime and would be unaffected by lighting used at the proposed Walmart. The adjacent Central Avenue will also use its own lighting and would remain unaffected. Therefore, the proposed Walmart is consistent with this code.
Source: City of Wasco. September 2010. City of Wasco Municipal Code.	

Cumulative Impact Analysis

Based on the above consistency analysis, the proposed Walmart would not contribute to the potential cumulative impact on the local ordinances or policies related to light and glare.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Level of Significance After Mitigation

Project-Specific

No impact.

Cumulative

No impact.