County of Yolo

PLANNING AND PUBLIC WORKS DEPARTMENT

John Bencomo
DIRECTOR

292 West Beamer Street
Woodland, CA 95695-2598
(530) 666-8775 FAX (530) 666-8728
www.yolocounty.org

PLANNING COMMISSION STAFF REPORT **APRIL 14, 2011**

FILE #2010-005: Amend the zoning regulations in the County Code (Title 8, Chapter 2) by adding Section 8-2.2420 (Solar Facilities); and amending all other sections to allow small, medium, large, and very large solar facilities with either a Zoning Clearance, Site Plan Review, a Minor Use Permit, or a Major Use Permit.	
APPLICANT: Yolo County	
LOCATION: All parcels in the unincorporated Yolo County area zoned for all uses **ZONING:** All zones **GENERAL PLAN:** All land use designations	**SUPERVISOR:** all districts **FLOOD ZONE**: various **SOILS**: various **FIRE ZONE:** various
ENVIRONMENTAL DETERMINATION: Negative Declaration	
REPORT PREPARED BY: Eric Parfrey, Principal Planner	**REVIEWED BY:** David Morrison, Assistant Director

RECOMMENDED ACTION

That the Planning Commission recommends the Board of Supervisors take the following actions:

1. Hold a public workshop hearing, and consider public comments on the Solar Facilities Ordinance (Attachment A);

2. Certify that the Initial Study/Negative Declaration is the appropriate level of environmental document for this project, and that it has been completed in accordance with the California Environmental Quality Act (CEQA) and CEQA Guidelines (Attachment C); and

3. Adopt the Solar Facilities Ordinance, adding Section 8-2.2420 to the County Code (Title 8, Chapter 2).

AGENDA ITEM 7.1

REASONS FOR RECOMMENDED ACTION

In October, 2010, the Board of Supervisors requested that the Planning and Public Works Department prioritize the adoption of updated zoning regulations for solar facilities, based on several discussions of tentative proposals for solar projects in the unincorporated area. In addition, the 2030 Yolo Countywide General Plan and accompanying draft Climate Action Plan (CAP) include numerous policies and measures to reduce fossil fuel reliance and greenhouse gas emissions by strongly encouraging and, in some cases, requiring, conversion to solar energy sources.

BACKGROUND

The Planning Commission considered the issue at their last three meetings on January 13, February 10, and March 10, 2011. At each meeting, the Commission heard from members of the public and gave further directions to staff regarding the draft ordinance. At the last meeting, the Planning Commission directed staff to make several changes to the draft ordinance for final consideration.

STAFF ANALYSIS

At the last meeting the Commission took "straw votes" to recommend the following:

Prime farmland: Agreed to add language in Section 8-2.24020.6, which would require an alternative site analysis and developer agreement for projects proposed on prime lands.

Percentage to define "predominantly": The consensus was to define the word "predominantly" in the ordinance as at least 60%, as currently written.

Yolo Bypass: The consensus was to keep the language regarding solar projects in the Yolo Bypass as is, in the event that someone figures out how to actually make that work, it may be something worth looking at.

Ag mitigation, in lieu fees: The consensus was to keep the language allowing payment of in lieu fees to mitigate for parcels under 20 acres as is, since finding conservation easements under 20 acres is difficult and does not promote consistency with other mitigation requirements.

Surety bond: The commission took a straw vote with the consensus to maintain the ordinance language requiring a surety bond for larger solar projects.

In addition, since the last meeting, Chair Reed has raised the issue with staff of characterizing the size of solar facilities by acreage instead of, or in addition to, the amount of energy generated (number of megawatts). Staff is proposing an edit to the ordinance that would incorporate a maximum acreage for each solar size category.

Based on the previous Planning Commission discussion, the following changes summarized below have been incorporated into the ordinance in Attachment A (edits are shown in strikeout and underline):

- "Small solar energy system" is defined to include a system with a rated capacity of up to 0.5 megawatts (MW), "occupying no more than 2.5 acres of land, and that will be used to produce utility power primarily to on-site users or customers";

- "Medium-sized solar energy system" is defined to include a system with a rated capacity of over 0.5 and up to 5.0 megawatts (MW), "occupying no more than 30 acres of land," and that will be used to produce utility power primarily to on-site users or customers";
- "Large solar energy system" is defined to include a system with a rated capacity of over 5.0 and less than 20.0 megawatts (MW), "occupying no more than 120 acres of land,…";
- "Very large solar energy system" is defined to include a system with a rated capacity of over 20.0 megawatts (MW), "or occupying more than 120 acres of land,…";
- "Predominantly" non-prime or poorer quality soils continues to be defined as "(more than 60 percent)" (Sections 8-2.2420.5(b) and 8-2.2420.6(f)(1);
- Sections 8-2.2420.6(d) and (e) have been reformatted as separate subsections and edited to separate the standards for Williamson Act compatibility and the standards for projects located on prime lands;
- The edit in Section 8-2.2420.6(d)(2) proposed by the Department of Conservation in their e-mail of March 10, 2011 has been included;
- The requirement for a study to prove there is no proximate non-prime land available to accommodate the project has been added to Section 8-2.2420.6(e)(2);
- Section 8-2.2420.6(d)(5) related to projects in the Yolo Bypass has been edited to simply require conformance with FEMA and other flood standards.

OTHER AGENCY INVOLVEMENT

County Counsel has reviewed this staff report, and has provided comments to the draft ordinance. The draft ordinance has also been circulated for review to representatives of several local and regional solar energy companies.

An Initial Study/Negative Declaration has been prepared and circulated for a 30-day period beginning February 28, 2011 and ending March 29, 2011. The Initial Study has been circulated through the State Clearinghouse to State agencies, including the Department of Conservation and the Department of Fish and Game. No comments have been received to date, except for the clarifying letter from the Department of Conservation.

ATTACHMENTS

A: Draft Solar Facilities Ordinance
B: News Article, Davis Solar Site Plan, PG&E Map
C: Initial Study/Negative Declaration

ATTACHMENT A

DRAFT 4-7-11
(most recent edits are shown in ~~strikethrough~~ and underline)

ORDINANCE NO. 2011-_____

(An Ordinance Adding Provisions to the Yolo County Code
Relating to Solar Facilities)

The Board of Supervisors of the County of Yolo hereby ordains as follows:

Section 1. Purpose.

The purpose of this Ordinance is to add provisions to the Yolo County Code to address the permitting of small to very large solar energy systems. The Ordinance is consistent with adopted State laws that encourage the construction of small solar systems to conserve energy. These changes are also necessary and appropriate to improve and enhance public welfare and safety, and to implement the Yolo County General Plan.

Section 2. Revisions to Title 8, Chapter 2, of the Yolo County Code.

A. New Definitions. The following definitions shall be added to Article 2 of Chapter 2 of Title 8 of the Yolo County Code, together with appropriate revisions to the table of contents to Chapter 2 of Title 8 to reflect the inclusion of new definitions:

Sec. 8-2.299.x Small solar energy system.
"Small solar energy system" shall mean a single residential or small business-scale solar energy conversion system consisting of roof panels, ground–mounted solar arrays, or other solar energy fixtures, and associated control or conversion electronics, which have a rated capacity of up to 0.5 megawatts (MW), occupying no more than 2.5 acres of land, and that will be used to produce utility power primarily to on-site users or customers.

Sec. 8-2.299.x Medium-sized solar energy system.
"Medium-sized solar energy system" shall mean a private on-site or utility-scale solar energy conversion system consisting of many ground–mounted solar arrays in rows or roof-panels, and associated control or conversion electronics, which have a rated capacity of over 0.5 and up to 5.0 megawatts (MW), occupying no more than 30 acres of land, and that will be used to produce utility power to on-site uses and off-site customers.

Sec. 8-2.299.x Large solar energy system.
"Large solar energy system" shall mean a utility-scale solar energy conversion system consisting of many ground–mounted solar arrays in rows, and associated control or conversion electronics, which have a rated capacity of over 5.0 and less than 20.0 megawatts (MW), occupying no more than 120 acres of land, and that will be used to produce utility power to off-site customers.

Sec. 8-2.299.x Very Large solar energy system.
"Very large solar energy system" shall mean a utility-scale solar energy conversion system consisting of many ground–mounted solar arrays in rows, and associated control or conversion electronics, which have a rated capacity of 20.0 megawatts (MW) or greater, occupying more than 120 acres of land, and that will be used to produce utility power to off-site customers.

Section 3. Addition of Section 8-2.2420 to Title 8, Chapter 2, of the Yolo County Code.

Section 8-2.2420 shall be added to Chapter 2 of Title 8 of the Yolo County Code, and shall read in full as follows:

8-2.2420.1 Purpose

The purposes of this section are as follows:

(a) To provide for the placement of small to very large solar energy systems to enable generation of electricity from the sun, for on- and off-site uses, thereby reducing the consumption of electricity supplied by utility companies.

(b) To minimize potential adverse impacts associated with solar energy systems on area residents, historic sites, agricultural and biological resources through careful siting, design and operation, consistent with State law.

(c) To avoid or minimize public health and safety risks associated with solar energy systems by providing standards for the placement, design, construction, modification and removal of such systems, consistent with Federal, State and local regulations.

8-2.2420.2 Applicability.

The provisions of this section apply to small, medium-sized, large, and very large solar energy systems. These solar energy systems require the issuance of either a Building Permit, a Site Plan Review, a Minor Use Permit, or Major Use Permit, as set forth below. Any solar systems installed following the issuance of appropriate County permits prior to the effective date of this section shall be treated as a prior legal nonconforming use pursuant to Article 26 of this Chapter unless, through the issuance of a permit pursuant to this section, they are subsequently made conforming.

8-2.2420.3 Locations and Approvals Required

(a) Permitted Locations. Solar facilities, depending on their size, may be located in the following zoning districts:

(1) Small and medium-sized solar energy systems may be installed and operated in the following districts, provided the systems meet setback and other standards, as provided in this Section: all agricultural districts (the Agricultural Preserve (A-P) Zone, the Agricultural General (A-1) Zone, and the Agricultural Industry (AGI) Zone); all residential districts (the Rural Residential (RRA) Zone, the Residential Suburban (R-S) Zone, the Residential One Family (R-1) Zone, the Residential One Family or Duplex (R-2) Zone, the Multiple- Family Residential (R-3) Zone, and the Apartment-Professional (R-

4) Zone); all commercial districts (the Neighborhood Commercial (C-1) Zone, the Community Commercial (C-2) Zone, the Downtown Mixed Use (DMX) Zone, the General Commercial (C-3) Zone, and the Highway Commercial (C-H) Zone); all industrial districts (the Limited Industrial (M-L) Zone, the Light Industrial (M-1) Zone, and the Heavy Industrial (M-2) Zone; and all public and open space districts (the Public Open Space, Park and Recreation, Open Space, Waterfront, and Airport zones).

(2) Large and very large utility scale solar energy systems used to produce electricity for off-site customers may be installed and operated in the following districts, provided the systems meet all the standards and requirements, as provided in this Section: agricultural districts (the Agricultural Preserve (A-P) Zone, the Agricultural General (A-1) Zone, and the Agricultural Industry (AGI) Zone), and public and open space districts (the Public Open Space, Park and Recreation, Open Space, Waterfront, and Airport zones).

(b) Approvals Required. The following types of approvals are required:

(1) Small solar energy systems may be approved through the issuance of a Building Permit and a Zoning Clearance, provided the application meets setback and other standards, as provided in this Section. However, consistent with Section 65850.5 of the California Government Code, if the Chief Building Official has a good faith belief that the solar energy system could have a specific, adverse impact upon the public health and safety, the Official may require the applicant to apply for a Use Permit. Such a Use Permit shall be considered by the Zoning Administrator according to the requirements of Section 65850.5.

(2) Medium-sized solar energy systems may be approved through the issuance of a Site Plan Review, consistent with Section 8-2.2701, provided the application meets the specific standards set forth in Section 8-2.2420.5, below. The Site Plan Review approval is ministerial (not discretionary) and does not require a public hearing. If the application fails to meet any of the standards, the application must be approved through the issuance of a Minor Use Permit by the Zoning Administrator, consistent with Section 8-2.3203.

(3) Large solar energy systems may be approved through the issuance of a Major Use Permit by the Planning Commission, consistent with Section 8-2.2804, provided the application is consistent with conditions and standards set forth in Section 8-2.2420.6, below.

(4) Very large solar energy systems may be approved through the issuance of a Major Use Permit by the Board of Supervisors, following a recommendation from the Planning Commission, provided the application is consistent with conditions and standards set forth in Section 8-2.2420.6, below.

8-2.2420.4 Height and Setback Standards for Small Solar Energy Systems

Applications for small solar energy systems shall meet all of the following standards and any permit issued for such a system shall be conditioned to meet the standards:

(a) Photovoltaic solar energy systems may extend up to five (5) feet above the roof surface even if this exceeds the maximum height limit for the principal structure for the district in which it is located, or if this exceeds the height limit of an accessory structure (15 feet).

(b) Solar water or swimming pool heating systems may extend up to seven (7) feet above the roof surface even if this exceeds the maximum height limit for the principal structure for the district in which it is located, or if this exceeds the height limit of an accessory structure (15 feet).

(c) Excluding solar collection panels, solar energy system equipment may be installed within the required side and rear yard, but shall not be closer than two (2) feet from any property line.

(d) Pole mounted solar collection panels shall comply with existing regulations for accessory structures (Article 34 of Chapter 2, Title 8 of the County Code), i.e., the panels may not exceed ten (10) feet in height in residential zones and must meet a rear yard setback of five (5) feet.

(e) Solar facilities proposed on a property or structure that is a designated Historic Landmark or is located within a designated Historic District may be permitted provided that the design of the facilities is consistent with the purposes of the Landmark or District designation.

8-2.2420.5 Design Standards for Medium-Sized Solar Energy Systems

Design Standards. Applications for medium-sized solar energy systems shall meet all of the following standards. If the application does not meet one or more of the standards, a Minor Use Permit shall be required and shall be conditioned to meet the standards, unless findings of fact to justify a waiver of any of the standards are adopted by the Zoning Administrator. A waiver may be granted only if the Zoning Administrator concludes that it is consistent with the purposes of this Section and that, due to unusual circumstances or other considerations, it is not reasonable to require compliance with one or more of the standards.

(a) Medium-sized solar energy systems shall comply with subsection~~s~~ (a) ~~through (c)~~ of Section 8-2.2420.4, above.

(b) Medium-sized solar facilities <u>proposed in agricultural and open space zones</u> shall be located on predominantly (more than 60 percent) non-prime lands and located on non-Williamson Act contracted land. If the facility is located on predominantly prime soils, a Minor Use Permit shall be required and shall include conditions for mitigation for the permanent loss of agricultural land, according to subsection (h), below. If the facility is located on lands under a Williamson Act contract, a Minor Use Permit shall be required and shall include findings that the proposed facility is a compatible use under the Williamson Act or, if the project cannot be found to be a compatible use, then a condition of the Minor Use Permit shall require cancellation of the contract.

(c) Ground-mounted solar facilities shall meet the following setback standards:

(1) In agricultural and open space zones: setbacks of at least 50 feet from all property lines, and setbacks of at least 150 feet from the nearest occupied residence in a residential zone.
(2) In industrial and commercial zones: setbacks of at least 20 feet from all property lines that abut a residential zone.

(d) Ground-mounted solar facilities shall meet a height limit of no more than ~~twenty (20)~~ thirty-five (35) above the ground in the agricultural and open space zones, and no more than ~~fifteen (15)~~ twenty five (25) feet above the ground in the industrial and commercial zones.

(e) The proposed solar facility shall be designed to minimize any glare or lighting on adjacent neighbors.

(f) The proposed solar facility shall be designed to minimize any identified impacts to adjacent agricultural operations, such as ~~orchards~~ crops that require aerial application of chemicals, which may require greater setbacks than those required in subsection (c), above.

(g) The proposed solar facility shall be designed to avoid any identified significant environmental resources, such as sensitive and listed wildlife species and habitat, wetlands and water courses, or heritage trees. If for any reason, in the independent judgment of Zoning Administrator, there is a reasonable possibility that the proposed project may have a significant effect on the environment, an Initial Study shall be prepared and the project shall be required to undergo discretionary review as a Minor (or Major) Use Permit.

(h) If the proposed solar facility will impact less than 2.5 acres of Swainson's hawk foraging habitat, no mitigation is required for the permanent loss of agricultural land or Swainson's hawk foraging habitat. If more than 2.5 acres of foraging habitat is affected, a Minor Use Permit shall be required and shall include conditions for mitigation for the permanent loss of agricultural land and Swainson's hawk foraging habitat, at a ratio of 1:1 (one acre mitigated for one acre lost). The amount of permanent loss shall be determined by an analysis of such impacts, prepared by licensed professional(s). Mitigation for the permanent loss of agricultural land and Swainson's hawk foraging habitat may be satisfied by payment of an in-lieu fee for both resources up to a total of twenty (20) acres for each resource, dedication of easements either on-site or off-site, or other arrangements satisfactory to the County and the County's Natural Heritage Program. Easements for agricultural land and Swainson's hawk foraging habitat may not be "stacked" on the same land.

8-2.2420.6 Design Standards for Large and Very Large Solar Energy Systems

Design Standards. Applications for large and very large solar energy systems shall meet all of the following standards and any Major Use Permit issued for such systems shall be conditioned to meet the standards, unless findings of fact to justify a waiver of any of the standards are adopted by the Planning Commission or the Board of Supervisors. A waiver may be granted only if the approving authority concludes that it is consistent with the purposes of this Section and that, due to unusual circumstances or other considerations, it is not reasonable to require compliance with one or more of the standards:

(a) Large and very large solar energy systems shall comply with subsections (e) through (h) of Section 8-2.2420.5, above.

(b) Ground-mounted solar facilities shall meet setback standards of at least 100 feet from all property lines, and setbacks of at least 250 feet from the nearest occupied residence.

(c) Ground-mounted solar facilities shall meet a height limit of no more than ~~twenty-five (25)~~ thirty-five (35) feet above the ground.

~~(d) The footprint of solar facilities in contact with the ground should generally not exceed five percent (5%) of the total property involved in the application. The total surface area of the array and any roads and ancillary equipment shall not exceed thirty five percent (35%) of the total property.~~

~~(e)~~(d) If the project is located on lands under Williamson Act contract, ~~Large and very large solar facilities may be~~ the project has been found to be a compatible use under the Williamson Act~~, and approved with all necessary conditions, if~~ after the Planning Commission or the Board of Supervisors has determine~~s~~d ~~that~~ the project meets ~~all of~~ the following criteria:

(1) The proposed project would not significantly interfere with the underlying agricultural operation, and

(2) The proposed project would displace a very small percentage of ~~the overall agricultural operation~~ current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels.

(e) If the project is located on lands under Williamson Act contract, and the project cannot been found to be a compatible use under the Williamson Act, the applicant has filed for a cancellation of the Williamson Act contract and the findings for the cancellation can be met.

~~(3)~~(f)(1) Most or all of the facilities have been located on predominantly (more than 60 percent) poorer quality soils within the project property (i.e., non-prime Class ~~2 or~~ 3, 4, or lesser soils), or

~~(4)~~ (2) Most or all of the facilities have been located on prime soils but the project has provided a study that proves no other proximate non-prime lands are available to accommodate the project, and the project has been designed to conserve existing soils permanently, and/or enhance or create additional agricultural and habitat value. This could include incorporating design features and other measures such as, but not limited to:

(i) Dedication of additional conservation easements beyond a 1:1 ratio for permanent agricultural land and/or foraging habitat;

(ii) Solar arrays have been designed to be widely-spaced (i.e. with a minimum of 35 feet between structures) to allow maximum agricultural production and encourage Swainson's hawk and other raptor foraging between the arrays.

(iii) Solar panels are designed to rotate on at least one axis - preferable vertical - to provide sunlight below the panels to accommodate plant growth and to avoid a “scorched earth” appearance.

(iv) Lands within the solar array (i.e. between panels) are designed to be managed to accommodate grazing for livestock production where crop production cannot be accommodated.

(v) At least 25 percent of non-crop areas would remain un-mowed or un-grazed to provide refuge to prey species for raptor foraging

(vi) Orchards or vineyards would be removed to create appropriate row crop for Swainson’s hawk foraging habitat.

(vii) Crops such as alfalfa and other low row crops would be planted in place of poor foraging crops such as corn, safflower, etc.

~~(5)~~(g) Solar facilities proposed in the Yolo Bypass, in rice growing areas, or in areas within the floodplain, may be considered compatible only if the solar equipment ~~can be installed between the cultivated fields or along irrigation dikes, and~~ meets all FEMA requirements and other provisions of federal, state, and local laws concerning activities in floodplains.

(h) Reclamation plans shall be approved for the project to ensure that, following termination of solar operations, the soils and agricultural capability of the site will be restored to pre-existing conditions, or better than pre-existing conditions, if required by a Development Agreement and/or Condition of Approval.

~~(e)~~(i) Mitigation for the permanent loss of agricultural land or Swainson’s hawk and other habitat shall be provided according to Section 8-2.2420.5(h), above.

8-2.2420.7 Abandonment, Financial Surety, and Other Violations.

(a) A solar energy system, other than a small system, that ceases to produce electricity on a continuous basis for eighteen 18 months shall be considered abandoned. Facilities deemed by the County to be unsafe and facilities erected in violation of this section shall also be subject to this Section 8-2.2420.7. The code enforcement officer or any other employee of the Planning and Public Works Department shall have the right to request documentation and/or affidavits from the system owner/operator regarding the system’s usage, and shall make a determination as to the date of abandonment or the date on which other violation(s) occurred.

(b) Upon a determination of abandonment or other violation(s), the County shall send a notice hereof to the owner/operator, indicating that the responsible party shall remove the solar energy system and all associated facilities, and remediate the site to its approximate original condition within ninety (90) days of notice by the County, unless the County determines that the facilities must be removed in a shorter period to protect public safety. Alternatively, if the violation(s) can be addressed by means short of removing the solar energy system and restoring of the site, the County may advise the owner/operator of such alternative means of resolving the violation(s).

(c) In the event that the responsible parties have failed to remove the solar energy system and/or restore the facility site or otherwise resolve the violation(s) within the specified time period, the County may remove the solar energy system and restore the site and may thereafter initiate judicial proceedings or take any other steps

authorized by law against the responsible parties to recover costs associated with the removal of structures deemed a public hazard.

(d) Financial Surety. Prior to the issuance of a building permit authorizing installation of a solar energy system, other than a small system or medium-sized system approved through a Site Plan Review, the applicant shall provide a demolition surety, or other form of legally binding guarantee, in a form and amount deemed by the County to be sufficient to remove and dispose of the ~~wind~~ solar energy system and restore the site to its approximate preconstruction conditions or better conditions, if required by a Development Agreement and/or Condition of Approval. The County shall draw upon this surety, or enforce the guarantee, in the event the responsible party fails to act in accordance with the provisions of this section within ninety (90) days of termination of operations, or upon determination by the County that the solar energy system is unsafe, has been abandoned, or is in violation of this chapter. The surety or guarantee shall remain in effect until the solar energy system is removed.

Section 4. Revisions to Articles 4, 6, 6.1, 7, 7.1, 8, 9, 19, 11, 12, 12.1, 13, 14, 15, 16, 17, 18, 19, 19.1, 19.2, and 24 of Title 8, Chapter 2, of the Yolo County Code.

1. Accessory Use, Building Permit Required and Height Regulations Amended. A small solar energy system shall be an allowed accessory use and a Building Permit, as the term is defined in Yolo County Code Title 7, shall be required for any small solar energy system, and the existing height regulations shall be amended accordingly, for each of the residential zones below. Accordingly, the following sections of the Yolo County Code shall be amended to include these requirements by adding an appropriately-lettered subsection followed by the words "Small solar energy system, consistent with Section 8-2.2420", and the height regulations in each zone shall be amended by adding the reference "…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter":

- Sections 8-2.703 Accessory Uses (R-S, Residential-Suburban) and 8-2.705 Height regulations (R-S)
- Section 8-2.713 Accessory Uses (RRA, Residential, Rural, Agricultural) and 8-2.715 Height regulations (RRA)
- Sections 8-2.803 Accessory Uses (R-1, Residential One-Family) and 8-2.805 Height regulations (R-S)
- Section 8-2.903 Accessory Uses (R-2, Residential, One-Family or Duplex) and 8-2.905 Height regulations (RRA)
- Sections 8-2.1003 Accessory Uses (R-3, Multiple-Family Residential) and 8-2.1005 Height regulations (R-S)
- Section 8-2.1103 Accessory Uses (R-4, Apartment-Professional) and 8-2.1105 Height regulations (R-4)

2. Accessory Use, Building Permit, Site Plan Review, or Minor Use Permit Required, and Height Regulations Amended. A Building Permit, Site Plan Review or Minor Use Permit, as those terms are defined in Yolo County Code Title 7 and Title 8, Sections 8-2.299.4 or 8-2.270.9, shall be required for any small or medium-sized solar energy system, and the existing height regulations shall be amended accordingly, for each of the zones below. Accordingly, the following sections of the Yolo County Code shall be amended to include these requirements by adding an appropriately-lettered subsection followed by the words "Small or medium-sized solar energy system,

consistent with Section 8-2.2420", and the height regulations in each zone shall be amended by adding the reference "…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter":

- Section 8-2.1203 Accessory Uses (C-1, Neighborhood Commercial) and 8-2.1205 Height regulations (C-1)
- Section 8-2.1213 Allowed Uses (DMX, Downtown Mixed Use) (with "P or C* if doesn't meet standards of Sec. 8-2.2420" added to table) and 8-2.1216(a) Height and Minimum Retail Floor Space regulations (DMX)
- Section 8-2.1303 Accessory Uses (C-2, Community Commercial) and 8-2.1305 Height regulations (C-2)
- Section 8-2.1403 Accessory Uses (C-3, General Commercial) and 8-2.1405 Height regulations (C-3)
- Section 8-2.1503 Accessory Uses (C-H, Highway Service Commercial) and 8-2.1505 Height regulations (C-H)
- Section 8-2.1603 Accessory Uses (M-L, Limited Industrial) and 8-2.1605 Height regulations (M-L)
- Section 8-2.1703 Accessory Uses (M-1, Light Industrial) and 8-2.1705 Height regulations (M-1)
- Section 8-2.1803 Accessory Uses (M-2, Heavy Industrial) and 8-2.1805 Height regulations (M-2)

3. Accessory Use, Building Permit, Site Plan Review, Minor or Major Use Permit Required, and Height Regulations Amended. A Building Permit, Site Plan Review Minor or Major Use Permit, as those terms are defined in Yolo County Code Title 7 and Title 8, Sections 8-2.299.4 8-2.270.9, or 8-2.2703, shall be required for any small, medium-sized, or large solar energy system, and the existing height regulations shall be amended accordingly, for each of the zones below. Accordingly, the following sections of the Yolo County Code shall be amended to include these requirements by adding an appropriately-lettered subsection followed by the words "Small or medium-sized solar energy system, consistent with Section 8-2.2420" and "Large or very large solar energy system, consistent with Section 8-2.2420", as noted below, and the height regulations in each zone shall be amended by adding the reference "…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter":

- Section 8-2.403 Accessory Uses (A-P, Agricultural Preserve), add "Small or medium-sized solar energy system, consistent with Section 8-2.2420"
- Sections 8-2.404.5 Conditional Uses, Major Use Permit (A-P, Agricultural Preserve), add "Large or very large solar energy system, consistent with Section 8-2.2420"
- Section 8-2.405 Height regulations (A-P, Agricultural Preserve), add "…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter"

- Section 8-2.603 Accessory Uses (A-1, Agricultural General), add "Small or medium-sized solar energy system, consistent with Section 8-2.2420"
- Section 8-2.604.5 Conditional Uses, Major Use Permit (A-P, Agricultural General), add "Large solar energy system, consistent with Section 8-2.2420"
- Section 8-2.605 Height regulations (A-P, Agricultural General), add "…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter"

- Section 8-2.613 Accessory Uses (AGI, Agricultural Industry), add “Small or medium-sized solar energy system, consistent with Section 8-2.2420”
- Section 8-2.614.5 Conditional Uses (AGI, Agricultural Industry). Major Use Permit. Upon review and approval “Large solar energy system, consistent with Section 8-2.2420”
- Section 8-2.615 Height regulations (AGI, Agricultural Industry), add “…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter”

- Section 8-2.1903 Accessory Uses (PR, Park and Recreation), add “Small or medium-sized solar energy system, consistent with Section 8-2.2420”
- Sections 8-2.1904 Conditional Uses, Major Use Permit (PR, Park and Recreation), add “Large solar energy system, consistent with Section 8-2.2420”
- Section 8-2.1905 Height regulations (PR, Park and Recreation), add “…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter”

- Section 8-2.1913 Accessory Uses (POS, Public Open Space), add “Small or medium-sized solar energy system, consistent with Section 8-2.2420”
- Section 8-2.1914 Conditional Uses, Major Use Permit (POS, Public Open Space), add “Large solar energy system, consistent with Section 8-2.2420”
- Section 8-2.1915 Height regulations (POS, Public Open Space), add “…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter”

- Add Section 8-2.1922.2 Accessory Uses (OS, Open Space), “Small or medium-sized solar energy system, consistent with Section 8-2.2420”
- Add Sections 8-2.1922.4 Conditional Uses, Major Use Permit (OS, Open Space), “Large solar energy system, consistent with Section 8-2.2420”
- Section 8-2.1923 Height regulations (OS, Open Space), add “…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter”

- Add Section 8-2.2012.5 Accessory Uses (WF, Waterfront), “Small or medium-sized solar energy system, consistent with Section 8-2.2420”
- Add Sections 8-2.2012.7 Conditional Uses, Major Use Permit (OS, Open Space), “Large solar energy system, consistent with Section 8-2.2420”
- Add Section 8-2.2015 Height regulations (OS, Open Space), “Structures in the WF zone shall be limited to heights not greater than those allowed for similar uses in other zones, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter.”

- Add Section 8-2.2102.5 Accessory Uses (AV, Airport), “Small or medium-sized solar energy system, consistent with Section 8-2.2420”
- Add Section 8-2.2102.5 Conditional Uses, Major Use Permit (AV, Airport), “Large solar energy system, consistent with Section 8-2.2420”

- Section 8-2.2104 Height regulations (AV, Airport), add "…, except as provided in Section 8-2.2605 and Section 8-2.2420, and Article 34 of this Chapter"

4. Major Use Permit Required, and Height Regulations Amended. A Major Use Permit, as that term is defined in Yolo County Code Section 8-2.270.3, shall be required and be issued by the Board of Supervisors, for any very large solar energy system, for each of the zones below. Accordingly, the following sections of the Yolo County Code shall be amended by adding an appropriately-lettered subsection labeled by the words "Conditional Uses, Major Use Permit, Very Large Solar Energy Systems" and followed by the words "Upon review and approval, or conditioned approval by the Board of Supervisors, the following conditional use shall be authorized by Major Use Permit: Very large solar energy system, consistent with Section 8-2.2420", as noted below:

- Add Section 8-2.404.7: "Section 8-2.404.7. Conditional Uses (A-P). Major Use Permit, Very Large Solar Energy Systems." and followed by the words "Upon review and approval, or conditioned approval by the Board of Supervisors, the following conditional use shall be authorized by Major Use Permit: Very large solar energy system, consistent with Section 8-2.2420"

- Add Section 8-2.604.7: "Section 8-2.604.7. Conditional Uses (A-1). Major Use Permit, Very Large Solar Energy Systems." and followed by the words "Upon review and approval, or conditioned approval by the Board of Supervisors, the following conditional use shall be authorized by Major Use Permit: Very large solar energy system, consistent with Section 8-2.2420"

- Add Section 8-2.614.5: "Section 8-2.614.5. Conditional Uses (AGI). Major Use Permit, Very Large Solar Energy Systems." and followed by the words "Upon review and approval, or conditioned approval by the Board of Supervisors, the following conditional use shall be authorized by Major Use Permit: Very large solar energy system, consistent with Section 8-2.2420"

- Add Section 8-2.1904.5: "Section 8-2.1904.5. Conditional Uses (PR). Major Use Permit, Very Large Solar Energy Systems." and followed by the words "Upon review and approval, or conditioned approval by the Board of Supervisors, the following conditional use shall be authorized by Major Use Permit: Very large solar energy system, consistent with Section 8-2.2420"

- Add Section 8-2.1914.5: "Section 8-2.1914.5. Conditional Uses (POS). Major Use Permit, Very Large Solar Energy Systems." and followed by the words "Upon review and approval, or conditioned approval by the Board of Supervisors, the following conditional use shall be authorized by Major Use Permit: Very large solar energy system, consistent with Section 8-2.2420"

- Add Section 8-2.1922.5: "Section 8-2.1922.5. Conditional Uses (OS). Major Use Permit, Very Large Solar Energy Systems." and followed by

the words “Upon review and approval, or conditioned approval by the Board of Supervisors, the following conditional use shall be authorized by Major Use Permit: Very large solar energy system, consistent with Section 8-2.2420”

- Add Section 8-2.2012.5: “Section 8-2.2012.5. Conditional Uses (WF). Major Use Permit, Very Large Solar Energy Systems.” and followed by the words “Upon review and approval, or conditioned approval by the Board of Supervisors, the following conditional use shall be authorized by Major Use Permit: Very large solar energy system, consistent with Section 8-2.2420”

- Add Section 8-2.2103.5: “Section 8-2.2103.5. Conditional Uses (AV). Major Use Permit, Very Large Solar Energy Systems.” and followed by the words “Upon review and approval, or conditioned approval by the Board of Supervisors, the following conditional use shall be authorized by Major Use Permit: Very large solar energy system, consistent with Section 8-2.2420”

5. Revisions to Section 8-2.2416 of Title 8, Chapter 2, of the Yolo County Code.

The following provisions contained in the current version of Section 8-2.2416 of Chapter 2 of Title 8 of the Yolo County Code shall be revised as follows (new language indicated in underlined font; deleted language indicated in strikethrough font):

Sec. 8-2.2416.

2. Definitions

(c) Agricultural use. Those primary and accessory uses and structures defined in Sections 8-2.208, 8-2.208.3, 8-2.208.4, and those specific principal, accessory, and conditional uses listed in Sections 8-2.402, 82.403, 8-2.404, 8-2.404.5, 8-2.502, 8-2.503, 82.504, 8-2.504.5, 8-2.602, 8-2.603, 8-2.604, and 8-2.604.5 of the Yolo County Code, including the restoration or conversion to habitat, so long as the restoration or conversion is incidental to or ancillary to the agricultural uses on the parcel, and excluding medium-sized, large, and very large solar energy systems, which are subject to Section 8-2.2420.

6. Revisions to Section 8-2.2416 of Title 8, Chapter 2, of the Yolo County Code.

The following provisions contained in the current version of Section 8-2.2416 of Chapter 2 of Title 8 of the Yolo County Code shall be revised as follows (new language indicated in underlined font; deleted language indicated in strikethrough font):

Sec. 8-2.3403. Amend Table 8-2.3403 to add footnote (2) to “Solar ~~panel, freestanding~~ energy systems”, and renumber remaining footnotes. Add footnote (2) to state: “All solar energy systems in all zoning districts are subject to Section 8-2.2420.”

Sec. 8-2.3403 Development standards for accessory structures.

(b)(18) Solar ~~panel, freestanding household~~ energy systems:

(i) ~~Building height: A freestanding household solar panel may not exceed 10 feet in height in residential zones.~~ All solar energy systems in all zoning districts are subject to Section 8-2.2420.

Section 6. Severability.

If any section, subsection, sentence, clause or phrase of this Ordinance is held by court of competent jurisdiction to be invalid, such decision shall not affect the remaining portions of this ordinance. The Board of Supervisors hereby declares that it would have adopted this Ordinance and each section, sentence, clause or phrase thereof irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases be declared invalid.

Section 7. Effective Date.

This Ordinance shall take effect and be in force thirty (30) days following its adoption and, prior to the expiration of fifteen (15) days after its adoption, it shall be published once in the Davis Enterprise, a newspaper of general circulation, printed and published in the County of Yolo, with the names of the Board members voting for and against the Ordinance.

PASSED AND ADOPTED by the Board of Supervisors of the County of Yolo, State of California, this __ day of _____, 2011, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

By_____
Matt Rexroad, Chair
Yolo County Board of Supervisors

Attest:
Julie Dachtler, Deputy Clerk
Board of Supervisors

By:_____
Deputy (Seal)

Approved as to Form:
Robyn Truitt Drivon, County Counsel

By:_____
Philip J. Pogledich, Senior Deputy

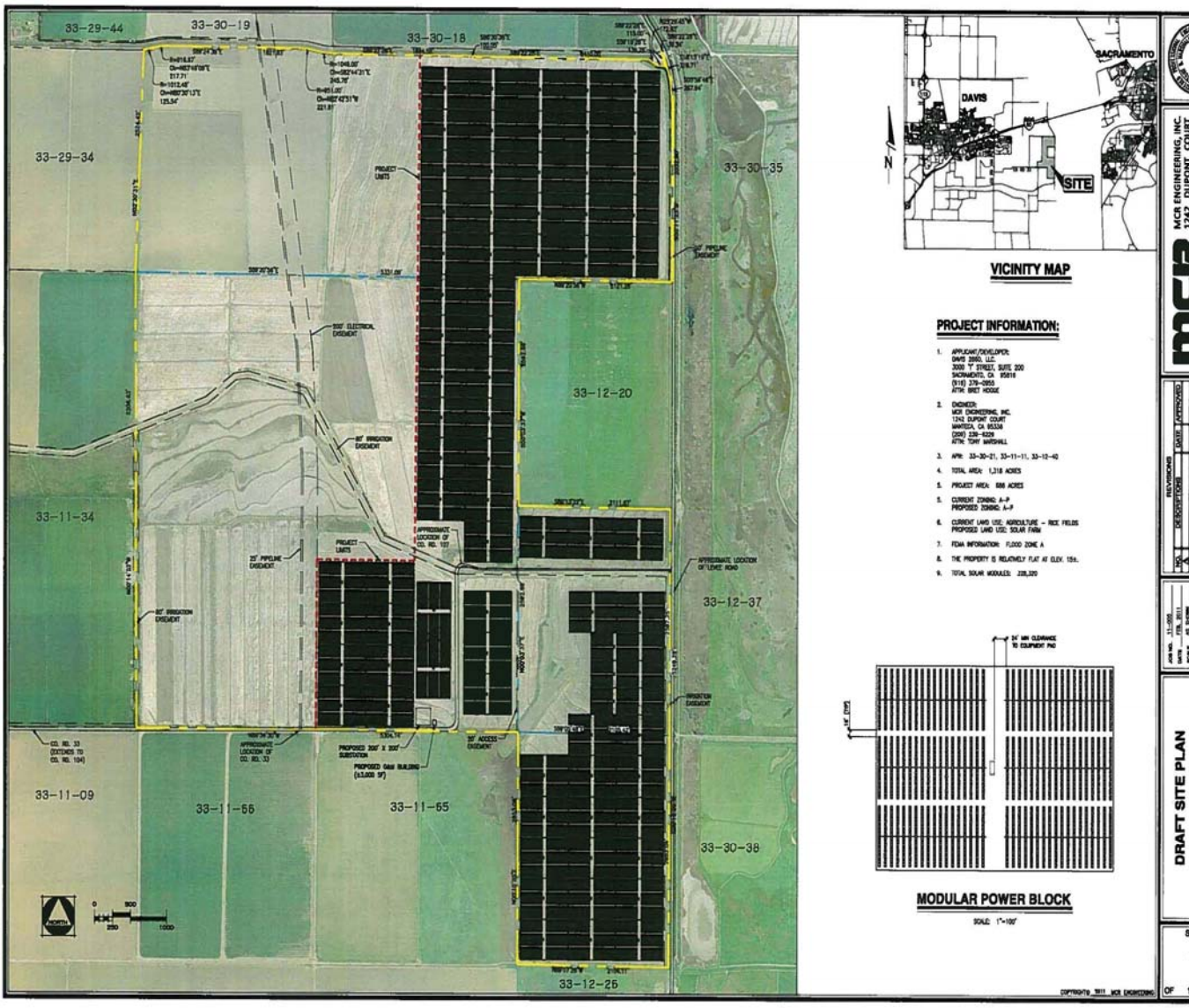
ATTACHMENT B

NEWS ARTICLE, DAVIS SOLAR PROJECT, AND PG&E MAP

Solar panels power Central Valley pistachio farm
LA Times
April 1, 2011

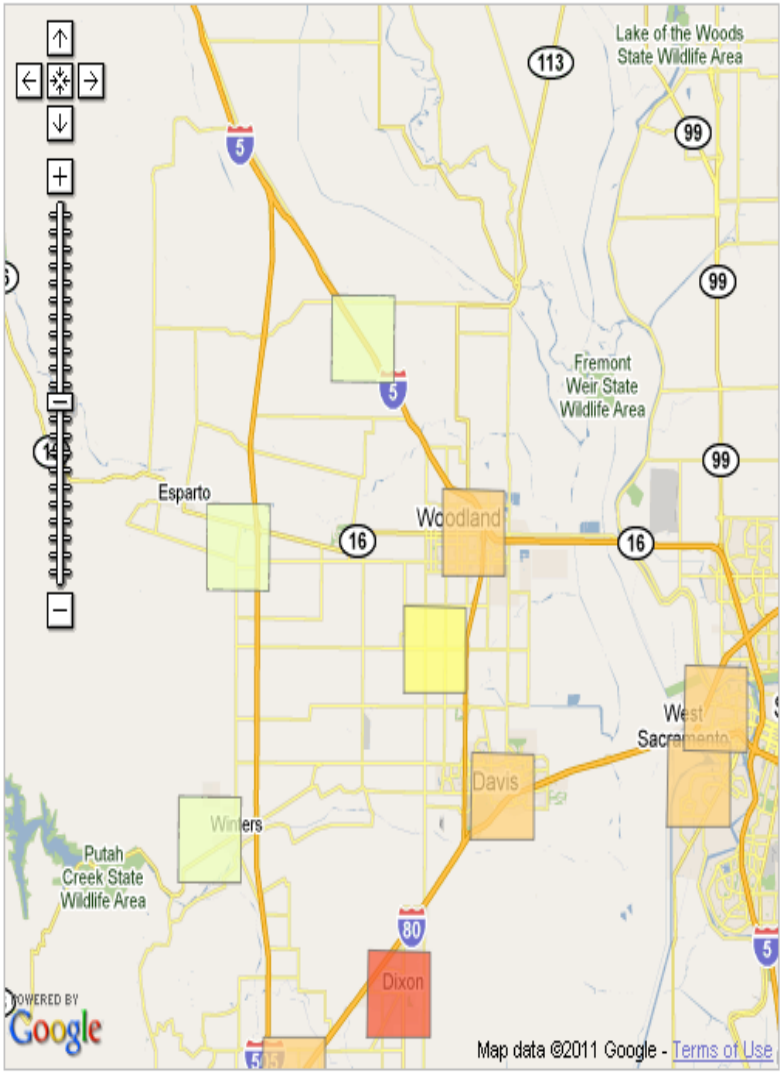
Alongside the sprawling grove of pistachio trees at Nichols Farms near Fresno, a 6-acre solar-panel installation is now up and running. The 1-megawatt concentrating photovoltaic project is connected to the Southern California Edison grid and will produce enough electricity to cover 70% of the 50-year-old pistachio farm's demand.

The system uses no water and doesn't create permanent shadows, SolFocus said.



Site Plan for the proposed 80 MW solar project on 688 acres of AKT lands east of El Macero.

Any application for interconnection to PG&E's distribution system must be directed to our Generation Interconnection at gen@pge.com.



PV Map Legend

- Show All Locations
- Area with 10 MVA to 20 MVA
- 12kV area with 20 MVA to 30 MVA
- 12kV area with 30 MVA to 45 MVA
- 12kV area with > 45 MVA
- 21kV area with 20 MVA to 30 MVA
- 21kV area with 30 MVA to 45 MVA
- 21kV area with > 45 MVA

Google Earth Mapping Data

ATTACHMENT C

YOLO COUNTY
PLANNING & PUBLIC WORKS DEPARTMENT

INITIAL STUDY/ NEGATIVE DECLARATION
ZONE FILE # 2010-005

SOLAR FACILITIES ORDINANCE

February, 2011

Initial Environmental Study/Negative Declaration

1. **Project Title:** Zone File #2005-005

2. **Lead Agency Name and Address:**
   Yolo County Planning and Public Works Department
   292 West Beamer Street
   Woodland, CA 95695

3. **Contact Person, Phone Number, E-Mail:**
   Eric Parfrey, Principal Planner
   (530) 666-8043 eric.parfrey@yolocounty.org.

4. **Project Location:** The project would apply to all unincorporated properties in the agricultural, residential, commercial, industrial, and open space zoning districts in Yolo County

5. **Project Sponsor's Name and Address:**
   Yolo County Planning and Public Works Department
   292 West Beamer Street
   Woodland, CA 95695

6. **General Plan Designation(s):** Applies in unincorporated Yolo County within all of the land use designations

7. **Zoning**: Applies in unincorporated Yolo County within all zoning districts

8. **Project Summary:** The Solar Facilities Ordinance would amend the Yolo County Zoning Ordinance to provide an updated set of procedures and standards for the review and permitting of solar energy systems located on unincorporated lands.

9. **Surrounding Land Uses and Setting:** Not applicable (applies to many of the unincorporated properties in Yolo County)

10. **Other public agencies whose approval is required:** None

11. **Other Project Assumptions:** The Initial Study assumes compliance with all applicable State, Federal, and Local Codes and Regulations including, but not limited to, County of Yolo Improvement Standards, the California Building Code, the State Health and Safety Code, and the State Public Resources Code.

Project Description

Need for Project

In October, 2010, the Yolo County Board of Supervisors requested that the Planning and Public Works Department prioritize the adoption of updated zoning regulations for solar facilities, based on several discussions of tentative proposals for solar utility-scale projects in the unincorporated area. Two formal applications for one medium-sized, and one large, solar project have already been received by the department in the last year.

Existing Regulations and Laws

The existing zoning regulations for Yolo County currently allow "freestanding household solar panels," defined as "photovoltaic structures erected on a permanent foundation." as an allowed "by right" accessory use in the agricultural and residential zones (Article 34 in Title 8, Chapter 2 of the Yolo County Code). The only other references in the County Code that apply to solar facilities are in the agricultural zones. In the Agricultural Preserve (A-P), Agricultural Exclusive (A-E), and Agricultural General (A-1) zones, "electrical distribution and transmission substations" are allowed through the issuance of a Minor Use Permit by the Zoning Administrator. The Zoning Administrator has interpreted this section to mean that solar facilities larger than "household solar panels" could be approved with a Use Permit since such facilities are substantially similar to an "electrical substation." In the Agricultural Industrial (AGI) zone, electrical substations are allowed as a principal use without a Use Permit. There are no other standards or development criteria for larger solar facilities in the County Code. The only solar systems that have been approved by Yolo County until recently are small solar panels placed on private residences or public buildings.

Previously enacted State law (Section 65850.5 of the Government Code) encourages the installation of solar energy systems in order to reduce demands on public utilities, and restricts the ability of local jurisdiction from placing onerous conditions on their approval in some circumstances. Section 65850.5 does not apply, however, to solar facilities that provide power for offsite uses (including commercial sale). In addition, another State law, the Williamson Act, requires the County to make certain determinations and adopt findings that a proposed solar facility is a compatible use with the Williamson Act for lands under contract.

The 2030 Yolo Countywide General Plan and the draft Climate Action Plan (CAP) include numerous policies and measures to reduce fossil fuel reliance and greenhouse gas emissions by strongly encouraging and, in some cases, requiring, conversion to solar energy sources. For example, the draft CAP calls for establishment of a Community Choice Aggregation program where 50% of overall County purchases are from 50% renewable sources, and 25% of all County energy purchases are 100% renewable. The draft CAP also assumes that all new homes approved by the County would be required to install solar water heaters and photovoltaic systems.

Proposed Solar Facilities Ordinance

The proposed Yolo County ordinance for solar energy systems has been drafted to be consistent with State law, the Yolo County General Plan and the Climate Action Plan. Table 1 on the following page summarizes the proposed permitting and mitigation requirements for solar facilities in the draft ordinance.

Solar facilities vary dramatically in size, depending on whether the system is generating electricity primarily for on-site uses such as a house or farm, or whether the project is a "utility size" project that feeds power into the statewide power grid.

The proposed Solar Facilities Ordinance requires a graduated review process for small, medium-sized, large, and very large solar energy systems., based on the size of the system (the amount of electricity generated), the zone district where it is to be located, and whether the solar system conforms to a list of design standards.

In terms of zoning, small solar systems would be allowed in all zoning districts in the unincorporated area, including agricultural, residential, commercial, industrial, and open space/park zones. Medium-sized solar facilities would be allowed in all zoning districts, except for the residential zones. Large and very large solar energy systems would be allowed only within agricultural and public/quasi-public zoning districts.

Small residential photovoltaic systems in the range of about 300 to 400 kilowatts (kw) are mounted on roofs or pole mounted in back yards. Under the proposed ordinance, these small systems would continue to be subject only to building permit requirements, with an over-the-counter "Zoning Clearance" review by planners to ensure that the project conforms to required property line setbacks, height limits, and other standards. The size threshold for small systems is defined as up to 0.5 megawatt (MW, or 500 kilowatts).

Industry representatives use the following "rule of thumb" to estimate the land needed for medium-sized and large commercial solar facilities: five or six acres of land for each megawatt generated. This rule assumes a typical site plan of flat, open land devoted to closely spaced rows of panels on a single axis poles that can rotate to maximize solar collection. This rule of thumb means that a small solar facility of 0.5 MW could take up approximately two or three acres of land.

The "medium-sized" category for regulating solar projects has been defined to include those generating between 0.5 MW and 5.0 MW of power. Projects in this range can be commercial or utility-sized, in contrast to small home or farm systems. However, facilities in this size may also be designed to serve primarily on-site uses, including providing electricity for large agricultural pumping operations. Using the land requirements noted above, a medium-sized solar facility of 5.0 MW could take up approximately 25 or 30 acres of land.

Medium-sized solar facilities would be allowed through the issuance of either a non-discretionary (no public hearing) Site Plan Review, or a discretionary Minor Use Permit approved by the Zoning Administrator following a public hearing. A Site Plan Review would normally be required if the project conforms to all standards, and the project is

TABLE 1

PROPOSED PERMITTING REQUIREMENTS FOR SOLAR FACILITIES

Small solar systems (up to 0.5 megawatt (MW))

Building Permit and Zoning Clearance required, for projects that meet the following criteria:

- meets all Building Code and zoning standards
- will impact less than 2.5 acres of prime agriculture soils or Swainson's hawk foraging habitat

Medium-sized solar systems (over 0.5 and less than 5.0 MW)

Site Plan Review (non-discretionary permit, but standard regulations attached) required for projects that meet the following criteria:

- meets all Building Code and zoning standards
- located on predominantly non-prime soils
- located on non-Williamson Act contracted land
- will impact less than 2.5 acres of Swainson's hawk foraging habitat
- no mitigation is required for permanent loss of agricultural land/soils or Swainson's hawk foraging habitat

Minor Use Permit (discretionary permit, with CEQA review and Conditions of Approval attached) required for the following projects:

- meets all Building Code and zoning standards
- located on predominantly prime soils and/or located on Williamson Act contracted land
- will impact more than 2.5 acres of Swainson's hawk foraging habitat
- mitigation required for permanent loss of agricultural land/soils and for Swainson's hawk foraging habitat, to be determined by a study and type of system, in-lieu fee option available for both

Large solar systems (5.0 to 20.0 MW)

Major Use Permit approved by the Planning Commission required with conditions:

- meets all Building Code and zoning standards
- findings of Williamson Act compatibility for contracted lands
- if project found not to be compatible with Williamson Act, cancellation required
- mitigation required for permanent loss of agricultural land/soils or Swainson's hawk foraging habitat, determined by a study, in-lieu fee option available for both for up to 20 acres of impact, on-site or off-site easements required for over 20 acres of impact (no "stacking" of agricultural and Swainson's hawk easements allowed on the same land)

Very Large solar systems (over 20.0 MW)

Major Use Permit approved by the Board of Supervisors, following a recommendation of the Planning Commission, required, with more conditions and more mitigation than specified above

located on non-prime agricultural lands and disturbs less than 2.5 acres of Swainson's hawk foraging habitat. Among other things, a Minor Use Permit would be required if the medium-sized solar facility is located on prime land, is incompatible with the Williamson Act, if it affects more than 2.5 acres of habitat, or if health and safety issues are raised.

For large solar energy systems generating between over 5.0 MW and up to 20.0 MW, all applications would be subject to a Major Use Permit issued by the Planning Commission. Very large solar facilities in excess of 20 MW in size would be referred to the Board of Supervisors for approval of a Major Use Permit. Large and very large solar energy systems, and those medium-sized systems that are required to undergo discretionary review through a Use Permit, would be required to conform to setback and other environmental regulations, and to mitigate for loss of agricultural and habitat lands.

Environmental Effects of Proposed Solar Facilities Ordinance

This Initial Study/Negative Declaration analyzes the potential environmental impacts of the proposed ordinance. As noted above, the existing Yolo County zoning regulations currently allow mounted solar panels as a "by right" accessory use in the agricultural and residential zones, and "electrical distribution and transmission substations"—the regulatory analog for larger solar facility projects—are allowed through the issuance of a Minor Use Permit by the Zoning Administrator in the main agricultural zones (A-P and A-1). The proposed ordinance would continue to allow small solar facilities "by right" in all zones through the issuance of a building permit, if specific setback, height, and other standards are met. This change for small facilities represents a slight tightening of regulations, i.e., applying more specific development criteria, such as height and setback requirements, which should have a beneficial environmental impact.

For medium-sized solar facilities, the ordinance would allow certain projects to be approved with a non-discretionary Site Plan Review if the use was located on non-prime farmlands and on non-Williamson Act contracted lands, if Swainson's hawk foraging habitat impacts were less than 2.5 acres, if all other standards were met, and if no potentially significant environmental impacts would be caused by the project. This represents a streamlining of the current zoning regulations, which would normally be interpreted by staff to require a Minor Use Permit for any medium-sized facilities. Medium-sized solar facilities that meet the criteria cited above would not require discretionary and public review through the Zoning Administrator. This change would serve as an incentive for applicants to propose medium-sized solar projects on non-prime and non-contracted lands.

However, medium-sized facilities that do not meet the criteria above, i.e., the facilities are proposed on prime and/or Williamson Act contracted lands, or disturb more than 2.5 acres of foraging habitat, would continue to require a Minor Use Permit, similar to the current zoning requirements. In addition, the ordinance requires that any medium-size solar facility be designed to avoid any identified significant environmental resources. As is the case now, if, in the independent judgement of the Planning Director, the proposed project could cause a potentially significant environmental impact as defined under the California Environmental Quality Act, the ordinance requires that an Initial Study be prepared and that the project undergo discretionary review as a Minor (or Major) Use Permit.

The proposed Solar Facilities Ordinance would create the greatest change to the existing zoning regulations for large and very large solar systems. Currently, there are no development standards and defined mitigation requirements that could be applied to large and very large solar facilities in the unincorporated areas. Under existing regulations, large and very large solar projects could be required to mitigate for loss of Swainson's hawk foraging habitat, but the projects would be automatically exempted from mitigation for farmland loss. The proposed ordinance sets detailed standards and requirements, and requires mitigation for farmland loss, which should serve to reduce potential environmental impacts on resources in the rural and agricultural areas.

Under the existing zoning, large and very large solar facilities zones would be required by staff to submit an application for a Minor Use Permit, and staff would have the discretion to determine whether the project should be heard at the Zoning Administrator level or whether the complexity or controversial nature of the application warranted a hearing before the Planning Commission. With adoption of the proposed ordinance, large and very large solar facilities would be required to apply for a Major Use Permit, with large facility applications heard at the Planning Commission, and very large project applications heard at the Planning Commission, followed by a final hearing and decision at the Board of Supervisor. This means that all large and large solar systems would undergo more review, and in some cases, a higher level of review, than under current regulations and mitigation requirements

In addition to standards and requirements included within the ordinance that will reduce potential impacts, other parts of the Yolo County Code and the 2030 Countywide General Plan contain additional regulations, policies, and programs that also address and reduce impacts related to solar development. These additional regulations and policies are identified under the respective topic sections in the following analysis.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is still "Potentially Significant Impact" (after any proposed mitigation measures have been adopted) as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation / Traffic
☐ Utilities / Service Systems	☐ Mandatory Findings of Significance	

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to the earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Planner's Signature Date

PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the project as described herein may have a significant effect upon the environment.

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5. A determination that a "Less Than Significant Impact" would occur is appropriate when the project could create some identifiable impact, but the impact would be less than the threshold set by a performance standard or adopted policy. The initial study should describe the impact and state why it is found to be "less than significant."

6. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration, pursuant to Section 15063 (c)(3)(D) of the California Government Code. Earlier analyses are discussed in Section XVII at the end of the checklist.

7. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

8. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

I. AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion of Impacts

(a, (b), (c) Less than Significant Impact. The proposed Solar Facilities Ordinance would allow the construction of solar energy systems in residential, commercial, and rural agricultural areas which could affect scenic resources. However, the ordinance sets specific height and setback standards that must be met, which would help to avoid or mitigate potential impacts upon scenic vistas or visual resources. For example, Section 8-2.2420.4(a) of the ordinance limits small photovoltaic solar panels mounted on private homes in residential zones from extending more than five (5) feet above the roof surface, thereby reducing potential visual impacts to adjacent neighbors.

Similarly, Sections 8-2.2420.5 and 8-2.2420.6 include design standards that require medium-sized, large and very large solar systems to meet height, setback, and lot coverage standards that would reduce impacts to scenic vistas and other visual resources. Ground mounted solar arrays must meet a height limit of either 15 feet in commercial areas, or 25 feet in the agricultural areas, and must be set back from property lines 50 or 100 feet. The actual "footprint" of large and very large solar facilities should be nor more than 5 percent of the property, with the total amount of the lot covered by all solar uses (roads, buildings) limited to 35% of the total area.

Sections 8-2.2420.5 and 8-2.2420.6 require that medium-sized, large, and very large solar facilities "shall be designed to minimize any identified impacts to natural features, e.g., sensitive and listed wildlife species and habitat, water courses, or heritage trees."

In addition, the 2030 Yolo Countywide General Plan contains the following policies related to protection of visual resources which must be applied when considering any solar development project:

> Policy CC-1.5 Significant site features, such as trees, water courses, rock outcroppings, historic structures and scenic views shall be used to guide site planning and design in new development. Where possible, these features shall become focal points of the development.
>
> Policy CC-1.12 Preserve and enhance the scenic quality of the County's rural roadway system. Prohibit projects and activities that would obscure, detract from, or negatively affect the quality of views from designated scenic roadways or scenic highways.
>
> Policy CC-1.16 The following features shall be stringently regulated along designated scenic roadways and routes with the intent of preserving and protecting the scenic qualities of the roadway or route:

- Signage
- Architectural design of adjoining structures
- Construction, repair and maintenance operations
- Landscaping
- Litter control
- Water quality
- Power poles, towers, above-ground wire lines, wind power and solar power devices and antennae

Policy CC-1.17 Existing trees and vegetation and natural landforms along scenic roadways and routes shall be retained to the greatest feasible extent. Landscaping shall be required to enhance scenic qualities and/or screen unsightly views and shall emphasize the use of native plants and habitat restoration to the extent possible. Removal of trees, particularly those with scenic and/or historic value, shall be generally prohibited along the roadway or route.

Policy CC-1.18 Electric towers, solar power facilities, wind power facilities, communication transmission facilities and/or above ground lines shall be avoided along scenic roadways and routes, to the maximum feasible extent.

(d) Less than Significant Impact. Solar energy systems may be designed with outdoor lighting. If outdoor lighting is included in a project, standard conditions would be attached to the approval which require any lighting to be designed so that illumination is directed downward and shielded from spilling onto adjacent properties. Sections 8-2.2420.5 and 8-2.2420.6 specifically require that "The proposed solar facility shall be designed to minimize any glare or lighting on adjacent neighbors."

II. AGRICULTURAL RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to nonforest use?	☐	☐	☐	☒

Discussion of Impacts

(a) *Less than Significant Impact.* The proposed ordinance would continue to allow small solar facilities "by right" in all zones through the issuance of a building permit, if specific setback, height, and other standards are met. This change represents a slight tightening of regulations, i.e., applying more specific development criteria, which should have a beneficial environmental impact. In particular, the proposed ordinance would require medium, large, and very large solar facilities built on prime and non-prime farmland to comply with the Agricultural Conservation Easement Program and provide mitigation on at least a 1:1 basis. No such mitigation is required under the current regulatory scheme, since solar facilities are considered an allowed use under agricultural zoning and are exempt from mitigation requirements.

The ordinance would allow certain medium-sized facilities to be approved with a non-discretionary Site Plan Review if the use was located on non-prime and non-Williamson Act contracted lands, if biological resource impacts were less than 2.5 acres, if all other standards were met. This represents a streamlining of the current zoning regulations, which would normally be interpreted by staff to require a Minor Use Permit for any medium-sized facilities. Medium-sized solar facilities that meet the criteria cited above would not require discretionary and public review through the Zoning Administrator. This change would serve as an incentive for applicants to propose medium-sized solar projects on non-prime lands. However, medium-sized facilities that do not meet the criteria, i.e., the facilities are proposed on prime and/or Williamson Act contracted lands, or would disturb more than 2.5 acres of habitat, would continue to require a Minor Use Permit and, as discussed further below, will be required to mitigate the loss of farmland.

The biggest changes to existing zoning regulations by the proposed Solar Facilities Ordinance involve large and very large solar systems. Currently, there are no adopted development standards and few mitigation requirements that are applied to large and very large solar facilities. The proposed ordinance sets detailed standards and requirements, which should serve to reduce potential environmental impacts on resources in the rural and agricultural areas.

Yolo County has adopted the Agricultural Conservation Easement Program (Section 8-2.2416 of Title 8, Chapter 2, of the Yolo County Code), which requires that conversion of agricultural land to a non-agricultural use must mitigate for the loss at a ratio of one acre conserved for every acre lost (developed). Conversion from an agricultural use allowed under the agricultural zoning to another allowed agricultural use does not require mitigation. Solar facilities are an allowed or conditionally permitted use under the agricultural zoning, so mitigation for solar projects would not normally be required under the existing regulatory scheme. However, the proposed Solar Facilities Ordinance has been drafted to remove the exemption from mitigation for medium-sized (if built on prime and/or Williamson Act contracted lands), large, and very large solar projects, so that these projects would be required to mitigate for loss of agricultural land.

Under the proposed ordinance, medium-sized solar projects that impact less than 2.5 acres of Swainson's hawk foraging habitat will not be required to mitigate for loss of foraging habitat or agricultural land. This threshold corresponds to the County's existing "de minimus" finding for new rural residences that may be approved with a building permit with no mitigation requirement.

The proposed ordinance requires that other medium-sized solar projects that disturb over 2.5 acres of farmland or Swainson's hawk foraging habitat, as well as all large and very large solar facilities, must mitigate for the "permanent loss" of agricultural and/or habitat lands. The ordinance does not define "permanent loss." Rather, the loss of agricultural lands and habitat, whether "permanent" or temporary, is to be determined on a case-by-case basis by individual studies prepared by qualified professionals, including biologists. The design of individual

solar projects, including the spacing of the individual arrays, varies greatly and will determine the amount of mitigation that is required. Overall, the proposed ordinance ensures that the specific impacts of individual projects on these resources will be considered and appropriately mitigated.

Solar projects that include tightly clustered rows of solar panels would be required to mitigate for the total area of the solar arrays, while much larger systems that have widely spaced arrays may be able to design the project so that some form of agriculture (row crops or grazing) can continue (or be established) between the foundations.

The studies required by the ordinance will also address the issue of "permanent" versus temporary loss of agricultural productivity. Some, if not all, of the medium, large, and very large solar projects will sign 20- or 25-year "Power Purchase Agreements" with utilities, which must be approved by the California Public Utilities Commission. For these larger projects, the County must address through the Use Permit and environmental review process whether it is possible to "reclaim" agricultural and habitat values on the land if the solar facilities are removed after 25 years and the land is restored to its previous condition. A surety bond or similar financial guarantee will be required to ensure the appropriate reclamation of the site after the solar facilities are removed or become inoperative.

The proposed ordinance sets forth several types of mitigation that could be considered for loss of prime agricultural lands. The requirements included in the ordinance for mitigation of impacts to prime and non-prime agricultural lands would reduce the impact to a less-than-significant level.

(b) *Less than Significant Impact.* Construction of solar facilities could conflict with existing zoning for agricultural uses and with existing Williamson Act contracts. Solar facilities would not conflict with agricultural zoning per se, since solar systems are an allowed or conditionally permitted uses under the County's agricultural zoning. However, operation of solar facilities could cause land use conflicts with adjacent agricultural activities such as pesticide spraying and harvesting. To reduce the potential impacts to adjacent agricultural operations, Sections 8-2.2420.5 and 8-2.2420.6 require setbacks of 50 or 100 feet from all property lines. This section of the ordinance also requires that "The proposed solar facility shall be designed to minimize any identified impacts to adjacent agricultural operations, such as orchards that require aerial application of chemicals, which may require greater setbacks" than those required in the ordinance.

Regarding conflicts with the Williamson Act, all applications for medium-sized and large solar facilities that are proposed on lands under Williamson Act would be subject to a determination and finding by the County that the use is compatible with the Act, as required by State law. Since almost two-thirds of the agricultural land in Yolo County is under contract, it is assumed that a majority of medium, large, and very large solar facility applications that are proposed could fall into this category of review. Conversely, small systems would not be subject to this determination but would be assumed to be a compatible use with any existing Williamson Act contract.

According to the California Department of Conservation publication *Solar Power and the Williamson Act* (May, 2010), medium-sized to very large solar facilities may be found to be a compatible use under the Williamson Act if the project meets the following criteria:

- the proposed project would not significantly interfere with the underlying agricultural operation;
- the proposed project would displace a very small percentage of the overall agricultural operation.

This language has been incorporated into the proposed ordinance.

The determination of Williamson Act compatibility would be made on a case-by-case basis under the proposed ordinance, using the State guidelines and County policies and regulations. As noted above, the proposed ordinance includes several types of mitigation that are to be considered to address loss of prime agricultural lands and Swainson's hawk habitat. The ordinance would ensure that impacts to existing agricultural zoning and Williamson Act contracts are less-than-significant.

(c) and (d) *No impact.* The proposed ordinance would not conflict with existing zoning for, or cause rezoning of, or result in the loss or conversion of forest or timberland. There is very little forest in Yolo County and the remoteness of the few forested areas would not be attractive for solar development, since they are not adjacent to existing substations.

(e) *No impact.* The ordinance would not cause any other changes in the existing environment which could result in the conversion of farmland.

III. AIR QUALITY:

Where applicable, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

Discussion of Impacts

Thresholds of Significance:

The Yolo Solano Air Quality Management District (YSAQMD) has published a set of recommendations that provide specific guidance on evaluating projects under CEQA relative to the above general criteria (YSAQMD, 2002). The Guidelines identify quantitative and qualitative long-term significance thresholds for use in evaluating the significance of criteria air pollutant emissions from project-related mobile and area sources. These thresholds include:

Reactive Organic Gases (ROG)	82 pounds per day (ppd)
Oxides of Nitrogen (NOx)	82 ppd
Particulate Matter (PM_{10})	150 ppd
Carbon Monoxide (CO)	550 ppd

Development projects are considered cumulatively significant if:

1. The project requires a change in the existing land use designation (i.e., general plan amendment, rezone); and

2. Projected emissions (ROG, NOx, or PM_{10}) of the project are greater than the emissions anticipated for the site if developed under the existing land use designation.

Impact analysis:

(a) *No Impact.* The solar energy ordinance would not substantially conflict with or obstruct implementation of the Yolo Solano Air Quality Management District Air Quality Attainment Plan (1992), the Sacramento Area Regional Ozone Attainment Plan (1994), or the goals and objectives of the County's General Plan. Wind energy could have a beneficial impact by helping to reduce the County's and the state's reliance on power generation from polluting sources of energy such as natural gas or coal.

(b), (c) *Less than Significant Impact.* The Yolo-Solano Region is a non-attainment area for state particulate matter (PM_{10}) and ozone standards, and the Federal ozone standard. Development of solar energy systems would not contribute significantly to air quality impacts, but could generate some small amount of $PM_{10,}$ during grading of the site for the solar mounts and construction of access roads, etc. Standard dust and emissions control measures recommended by the YSAQMD would be attached to all Use Permits, Site Plan Reviews, and building permits issued for solar projects

(d) *No Impact.* Adoption of the recommended changes in the zoning regulations to allow permitting of solar energy systems would not have the potential to expose any sensitive receptors to any substantial increase in pollutant levels, since setback requirements would preclude any site clearing or grading within proximity of nearby homes.

(e) *No Impact*. The solar facilities would not generate any new odors.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native residents or migratory wildlife corridors or impede the use of native wildlife nursery sites?	☐	☐	☐	☒

e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Discussion of Impacts

(a), (b), (c) *Less than Significant Impact.* The proposed regulations include several development standards that would preclude the development of solar energy on sensitive lands with important biological resources and would require mitigation for any significant loss of habitat lands.

Section 8-2.2420.5(g) requires that "The proposed solar facility shall be designed to minimize any identified impacts to natural features, e.g., sensitive and listed wildlife species and habitat, water courses, or heritage trees." This section applies to all medium-sized, large, and very large solar systems.

Numerous policies and programs included in the 2030 Yolo Countywide General Plan also require that any development project approved by the County meet environmental goals, such as:

> Policy CO-2.9: Protect riparian areas to maintain and balance wildlife values.
>
> Policy CO-2.14: Ensure no net loss of oak woodlands, alkali sinks, rare soils, vernal pools or geological substrates that support rare endemic species, with the following exception. The limited loss of blue oak woodland and grasslands may be acceptable, where the fragmentation of large forests exceeding 10 acres is avoided, and where losses are mitigated.
>
> Policy CO-2.22: Prohibit development within a minimum of 100 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and perennial streams. A larger setback is preferred.
>
> Policy CO-2.30: Protect and enhance streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools in land planning and community design.
>
> Policy CO-2.41: Require that impacts to species listed under the State or federal Endangered Species Acts, or species identified as special-status by the resource agencies, be avoided to the greatest feasible extent. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State, and Federal requirements.

Section 8-2.2420.5(h) of the proposed Solar Facilities Ordinance specifies the type and amount of mitigation that is required to compensate for any loss of habitat. If the proposed solar facility will impact less than 2.5 acres of Swainson's hawk foraging habitat, no mitigation for the loss of foraging habitat is required. If more than 2.5 acres of habitat is affected, a Minor Use Permit is required, as well as mitigation for the permanent loss Swainson's hawk foraging habitat, at a ratio of at least 1:1 (one acre mitigated for one acre lost). This is consistent with existing County practices that require biological mitigation to be considered for all discretionary development projects, according to the Yolo County Natural Heritage Program based on discussions and prior agreements with the Department of Fish and Game.

Mitigation for the permanent loss of Swainson's hawk foraging habitat may be satisfied by payment of an in-lieu fee (for small projects only), dedication of conservation easements either

on-site or off-site, or other arrangements satisfactory to the County and the County's Natural Heritage Program.

Large and very large solar facilities would also be required to meet stronger development standards as set forth in Section 8-2.2420.6 of the ordinance. The development standards for large and very large projects could include designing projects so that habitat could be established or enhanced in the space between solar arrays; and replacing poor foraging crops with crops that accommodate better prey populations and foraging.

In addition, Section 8-2.2420.6(e)(4) specifically prohibits large projects in the most common wetlands areas of Yolo County including rice fields in or near the Yolo Bypass. The ordinance states that "Solar facilities proposed in rice growing areas may be considered compatible only if solar equipment can be installed between the cultivated fields or along irrigation dikes."

(d)(e) *Less than Significant Impact.* Application of adopted Yolo County General Plan policies to solar projects would reduce potential impacts to wildlife migration corridors. General Plan Policy CO-2.38 requires that all proposed projects comply with the following: "Avoid adverse impacts to wildlife movement corridors and nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds). Preserve the functional value of movement corridors to ensure that essential habitat areas do not become isolated from one another due to the placement of either temporary or permanent barriers within the corridors. Encourage avoidance of nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds) during periods when the sites are actively used and that nursery sites which are used repeatedly over time are preserved to the greatest feasible extent or fully mitigated if they cannot be avoided."

The proposed ordinance would not conflict with any other local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The County does not have any other conservation ordinances, except for a voluntary oak tree preservation ordinance that seeks to minimize damage and require replacement when oak groves are affected by development.

(f) The Yolo County Heritage Program, a Joint Powers Agency composed of the county, the cities, and other entities, is in the process of preparing a Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) for Yolo County. The NCCP/HCP will focus on protecting habitat of terrestrial (land, non-fish) species. In the interim, the program has implemented a mitigation program acceptable to the Department of Fish and Game for a main species of concern, the Swainson's hawk. The agreement requires that local agencies review all discretionary applications for potential impacts to the hawk or hawk habitat, and either pay a per-acre in-lieu fee or purchase a conservation easement to mitigate for loss of habitat. See ordinance mitigation requirements as specified above in (a).

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Discussion of Impacts

(a) *No impact.* The ordinance would preclude the placement of small solar systems on designated historical landmarks and structures in historical districts unless "the design of the facility is consistent with the purposes of the Landmark or District designation."

(b), (c), (d) *No impact.* The ordinance would allow construction of solar facilities which could require some amount of ground clearing. No impacts on archaeological, or paleontological resources, or on human remains, would be anticipated. Standard County conditions attached to all Site Plan Review and Use Permit approvals require construction to be halted, and appropriate authorities notified, if any resources or remains are discovered during excavation. Also, environmental review for medium, large and very large systems would routinely evaluate projects for the location and extent of any known archaeological resources, so they can be avoided.

VI. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known Fault? Refer to Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion of Impacts

(a) to (e) *No impact.* The proposed solar energy ordinance would not be expected to result in any new impacts related to geology, erosion, or soils. Existing requirements for erosion control, stability of the building site and building code compliance would remain in effect. The Use Permit approval process requires that any permitted solar facilities must comply with all building and electrical codes, and requires that applications for all large solar energy developments must submit detailed grading, geotechnical, erosion and sediment control plans.

VII. GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE.	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
c. Be affected by climate change impacts, e.g., sea level rise, increased wildfire dangers, diminishing snow pack and water supplies, etc.?	☐	☐	☒	☐

Environmental Setting

The issue of combating climate change and reducing greenhouse gas emissions (GHG) has been the subject of recent state legislation (AB 32 and SB 375). The Governor's Office of Planning and Research has recommended changes to the California Environmental Quality Act (CEQA) Guidelines, and the environmental checklist which is used for Initial Studies such as this one. The recommended changes to the checklist, which have not yet been approved by the state, are incorporated above in the two questions related to a project's GHG impacts. A third question has been added by Yolo County to consider potential impacts related to climate change's effect on individual projects, such as sea level rise and increased wildfire dangers. To date, specific thresholds of significance to evaluate impacts pertaining to GHG emissions have not been established by local decision-making agencies, the Yolo Solano Air Quality Management District, the state, or the federal government. However, this absence of thresholds does not negate CEQA's mandate to evaluate all potentially significant impacts associated with the proposed project.

The following discussion of GHG/climate change impact relies upon, and "tiers off" the analysis, conclusions, and measures included in the Final Environmental Impact Report (FEIR) of the 2030 Yolo Countywide General Plan. While the FEIR analysis concluded that the severity of impacts related to planned urban growth and GHG/climate change could be reduced by some policies and some available mitigation measures, the overall impact could not be reduced to a less than significant level. The impacts of countywide cumulative growth on GHG emissions, and the impacts of climate change on cumulative growth, are considered significant and unavoidable at this time.

The 2030 Yolo Countywide General Plan and accompanying draft Climate Action Plan (CAP) include numerous policies and measures to reduce fossil fuel reliance and greenhouse gas emissions by strongly encouraging and, in some cases, requiring, conversion to solar energy sources. For example, the CAP calls for establishment of a Community Choice Aggregation program where 50% of overall County purchases are from 50% renewable sources, and 25% of all County energy purchases are 100% renewable. The draft CAP also assumes that all new homes approved by the County would be required to install solar water heaters and photovoltaic systems.

Discussion of Impacts

a) No Impact. The proposed ordinance would regulate the construction of solar facilities, which could generate a small amount of GHG emissions due to operation of grading equipment and

vehicle employee trips generated during construction, however, these emissions would be more than offset by the beneficial effects of creating new sources of green energy to the local and state grid of electrical power.

b) No Impact. The proposed ordinance would not conflict with any applicable plan, policy or regulation adopted to reduce GHG emissions, including the numerous policies of the adopted 2030 Yolo Countywide General Plan and the pending Climate Action Plan. The proposed ordinance would help to implement many of the policies.

c) *Less than Significant Impact.* Solar projects approved under the ordinance would not be anticipated to be affected by certain identified climate change impacts, such as sea level rise and increased wildfire dangers. Individual projects would be evaluated for these impacts as a part of the normal project review process.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working within the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion of Impacts

(a) to (d) *No impact.* Solar facilities do not use or emit any hazardous materials, other than small amounts of lubricating oil. The proposed ordinance would allow solar facilities in primarily rural agricultural areas, and would involve minimal ground disturbance, so no buried hazardous materials would be encountered. Solar systems allowed in commercial and industrial urban areas

which could have hazards would be required to undergo environmental review as part of a Site Plan Review and Use Permit process, so identification and mitigation of potential impacts would occur.

(e), (f) *No impact.* The solar energy ordinance includes fairly low height limits for solar arrays, so no impacts to private airports would occur.

(g) *No Impact.* The location of solar energy systems should not affect any emergency response plan.

(h) *Less than Significant Impact.* Most applications for medium to very large solar systems are anticipated to be for projects in areas in close proximity to existing PG&E substations, which are in the irrigated farmlands of Yolo County, not in the un-irrigated hilly areas of the western County, with the most significant fire hazards

IX.HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Significantly deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion of Impacts

(a) to (f) *No impact.* The proposed solar energy ordinance would not allow any structures that could affect drainage patterns, increase runoff, and affect water quality. No major new areas of impervious surface would be constructed with the solar facilities.

(g), (h) *No impact.* No housing is proposed. The County has existing regulations that contain specific requirements for solar systems that may be proposed in flood prone areas, to mitigate flooding impacts.

(i), (j) *No impact.* Solar facilities would not be expected to be located in any areas affected by dam failure, seiche, tsunami, or mudflow. Solar projects could be sited on agricultural lands adjacent to sloughs or other waterways that may be subject to levee failure.

X. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐

Discussion of Impacts

(a) *No Impact.* Solar development would not divide any established community.

(b) No Impact. The proposed ordinance would add regulations involving solar facilities accessory structures in agricultural and other areas. The ordinance would add clarity and certainty to the zoning code.

(c) *Less Than Significant Impact.* The County does not have an adopted HCP or NCCP, although a draft plan is now being prepared by the Yolo Natural Heritage Joint Powers Agency. No conflicts with the developing plan are anticipated. See discussion in Section II, Biological Resources, above.

XI. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion of Impacts

(a), (b) No impact. The proposed ordinance changes would not affect areas designated as significant aggregate deposits, as classified by the State Department of Mines and Geology. Most aggregate resources in Yolo County are located along Cache Creek in the Esparto-Woodland area. Individual project evaluations would analyze any issues related to mineral resources.

XII. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion of Impacts

(a) to (f) *No Impact.* Solar facilities do not generate large amounts of noise when in operation, so no impacts are expected.

XIII. POPULATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through the extension of roads or other infrastructure)?	☐	☐	☐	☒
Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion of Impacts

(a) to (c) *No Impact.* The proposed ordinance would not result in increases in population and would not displace any existing housing or current residents.

XIV. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response time or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☐	☐	☒
b) Police Protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Discussion of Impacts

(a) to (e) *No Impact.* The proposed solar ordinance involves permitting of solar facilities that would not increase the need for any public services.

XV. RECREATION

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have been an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion of Impacts

(a) No Impact. The proposed ordinance would not require the construction of additional recreational facilities nor substantially increase the use of existing recreational facilities.

(b) *No Impact.* The proposed ordinance changes would not include nor require the construction of additional recreational facilities.

XVI. TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase on either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☒
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

(a) to (g) *No Impact.* The proposed ordinance would regulate the construction of solar facilities which could require a limited number of truck trips to deliver and assemble arrays and other parts to the site. A small number of employees could be involved in the construction of solar facilities, and for periodic maintenance. The number of trips generated during the construction period would not be expected to be substantial in relation to existing traffic loads, and would not exceed any levels of service standards of nearby roads or intersections. Solar development would not affect air traffic, access, or parking capacity.

XVII. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒

e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g)	Comply with federal, state, and local statutes and regulations related to solid waste.	☐	☐	☐	☒

Discussion of Impacts

(a) to (g*) No Impact***.** The proposed ordinance would have no new affects related to utilities or service systems because solar facilities do not rely on any of these services.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII.	**MANDATORY FINDINGS OF SIGNIFICANCE** --				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plan or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects)?	☐	☐	☐	☒
c)	Does the project have environment effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Discussion of Impacts

(a) *No Impact.* Based on the information provided in this Initial Study, no potential environmental impacts would result from the project. No important examples of major periods of California history or prehistory in California were identified; and the habitat and/or range of any special status plants, habitat, or plants would not be substantially reduced or eliminated.

(b) *No Impact.* Based on the analysis provided in this Initial Study, the project would have no significant cumulative impacts. As noted in the Project Description, solar energy development will play a key role in reducing the consumption of non-renewable energy in the County and in California, and solar development in Yolo County could contribute to that beneficial cumulative impact to reduce greenhouse gases.

(c) *No Impact*. Based on the analysis provided in this Initial Study, no impacts to human beings would result from the proposed project. The project as proposed would not have substantial adverse effects on human beings, either directly or indirectly.

REFERENCES

- OPDE Solar Farm Conditional Use Permit application materials, City of West Sacramento (June, 2010)
- OPDE West Sacramento Solar Voltaic Renewable Energy Project Swainson's Hawk Habitat Management and Monitoring Plan, December, 2010)
- California Department of Conservation, Solar Power and the Williamson Act (May, 2010)
- PG&E map of Solar Voltaic Program Map at http://www.pge.com/b2b/energysupply/wholesaleelectricsuppliersolicitation/PVRFO/pvmap/
- Staff experience and knowledge
- 2030 Yolo Countywide General Plan
- Yolo County Code, Title 8, Chapter 2 (the Zoning Ordinance)