EXECUTIVE SUMMARY

ES.1 INTRODUCTION

The Yolo County Central Landfill (YCCL or landfill) is a municipal solid waste (MSW) facility located in unincorporated Yolo County about two miles northeast of Davis, and five miles southeast of Woodland, near the intersection of County Roads 28H and 104. The site covers 725 acres. The YCCL is owned by Yolo County and operated by the County's Department of Community Services, Division of Integrated Waste Management (DIWM); it has been in operation since 1975. The landfill is open seven days per week and accepts non-hazardous MSW, green waste and food waste, construction and demolition debris, liquid waste, and recyclables. The origin of most of the MSW is from incorporated and unincorporated areas of Yolo County. YCCL is permitted to accept up to 1,800 tons per day (TPD) of waste. In recent years, average daily throughput has exceeded 1,000 TPD.

The landfill site sits on a 725-acre property (identified by Assessor's Parcel Numbers 042-140-001, 042-140-002, and 042-140-006) and includes several discrete areas, totaling 473 acres, that are permitted for disposal. These include seven Class III landfill areas for disposal of MSW (designated as Waste Management Units [WMUs] 1 through 7) and four Class II surface impoundments for holding liquid wastes. The site also includes one existing composting facility and one under development, a construction, demolition and inerts debris (CDI) recycling facility, areas for metal, wood, and inert material (concrete, rock, etc.) recovery and recycling, and a permanent household hazardous waste collection facility. Five of the Class III landfill areas (WMUs 1-5) have undergone final closure. WMU 6 is operational now and includes eight 20-acre modules (100 acres are active, and 60 acres remain to be developed). WMU 7 is approved for future development and consists of eight modules (160 acres total).

ES.2 PURPOSE AND NEED FOR THE PROJECT

The project evaluated in this Environmental Impact Report (EIR) consists of several changes to YCCL's existing operations and permits. The County is proposing these changes to achieve the following objectives:

1. To decrease adverse environmental impacts of landfill development, operations, and final closure, and increase the environmental benefits that can be derived from certain aspects of YCCL operations;

2. To increase the County's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in AB 1383, other state-mandates to reduce waste from landfill (AB 341), and reduce greenhouse gas (GHG) emissions (AB 32);

3. To increase efficiency, diversify operations, and operate more economically; and

4. To extend the overall site life of the existing YCCL through new operational methodologies.

ES.3 PROJECT DESCRIPTION/ELEMENTS

The Project evaluated in this EIR consists of several changes to YCCL's existing operations and permits including but not limited to the Solid Waste Facility Permit (SWFP), Yolo-Solano Air Quality Management District (YSAQMD) Permits, and Waste Discharge Requirements (WDRs). These changes would be undertaken to allow the County greater flexibility in developing and implementing processes and operations that would reduce waste from the landfill, reduce environmental impacts of landfill operations, decrease GHG emissions, increase the recovery of materials and energy from waste, operate more efficiently and economically, and extend the facility's lifespan.

While some of the Project elements, such as construction and operation of a waste gasification facility, are entirely new, many of the Project elements are revisions or improvements to existing designs and operations. The following proposed changes to the design and operation of the YCCL constitute the Project proposed for evaluation in this EIR. The proposed increased daily permitted tonnage is reflective of additional waste streams that can benefit from new processing elements, effects of population increases and/or accommodations for peak days/months that have higher tonnage of certain waste streams that can be processed at YCCL (not increased landfill disposal). Some of the Project elements would potentially process out-of-County waste streams more efficiently than other options. Proposed changes to the design and operation of the YCCL that constitute the Project, and which are analyzed in this EIR, include the following:

1. Increased Daily Permitted Tonnage

The County is proposing to expand the overall permitted tonnage for the YCCL to a monthly average of 2,500 TPD with a daily peak of 3,000 TPD. Currently, the YCCL SWFP limits incoming waste tonnage (disposed and recycled) to a maximum of 1,800 TPD. The 1,800 TPD includes various waste streams, including waste for landfill disposal, organics (yard waste, food waste), wood waste, CDI, liquid waste and recyclables. The current average daily waste disposed in the landfill at the YCCL is about 500 tons. The County intends to increase the overall tonnage of waste processed at YCCL (recycling, composting, gasification, etc.) and expand construction of various waste conversion technologies to extend landfill life and reduce landfill disposal of wastes, reducing landfill gas methane GHG emissions. The current TPD limit also does not distinguish between a monthly average and "peak" daily. YCCL currently has days when waste tonnage would exceed 1,800 tons if not for the daily limit. Such peak days are typically the result of heavy vehicles delivering liquid wastes to the Class II surface impoundments or seasonal peaks for yard waste collection (i.e., leaf fall season). YCCL is currently limited to a maximum of 1,047 waste hauling vehicles per day. To accommodate the increased daily permitted tonnage and other Project elements that require truck trips to export products generated from waste, YCCL proposes to limit waste hauling vehicles to 1,305 waste hauling vehicles per day.

2. Wood Pellet Facility

The County is proposing to develop a wood pellet facility that would utilize biomass fuel (e.g., wood, woody fraction of green waste, compost overs) to create pellets as an energy source that could be sold. The facility would be sited within an approximately five-acre portion in the approximately 41-acre north central area at the YCCL identified for future facility development. Much of the facility's operations would be in a building and/or under a covered awning and would also include outdoor storage. The facility would generate up to 50,000 tons of pellets per year, which would require approximately 100,000 tons of incoming biomass feedstock per year. The facility would include conveyors, debarkers, shredders/chippers, dryers/ovens, mixer/agitators, pelletizers, screeners/sifters, coolers, baghouses/cyclones, storage silos, and other necessary material handling and storage equipment. Wood pellet facilities currently operate in California in Stockton, Rocklin and Mendocino County (Capella).

3. Large Scale Floating Solar Photovoltaic System

The County is proposing the installation of a Floating Solar Photovoltaic (PV) System to address energy usage and demand on-site as well as selling electrical power off-site. The proposed system design would include a floating PV array that would tie into seven PG&E meters for on-site use and off-site sale through County-owned power poles along County Road 29 and pole-mounted transformers at the intersection of County Road 28H and County Road 102. The floating PV panels would cover a large portion of the existing Water Storage Reservoir and would be part of a public-private partnership by the County to generate renewable energy locally, such as sale to the local Community Choice Aggregator (CCA), Valley Clean Energy (VCE).

4. Solar Photovoltaic System on Closed Landfill Units

The County is proposing the installation of a Solar PV System on closed landfill units to address current and future energy usage and demand on-site. The proposed system design would include ground mounted PV panels on closed landfill modules 1-5 and would be part of a public-private partnership by the County to generate renewable energy locally, such as sale to the local CCA, VCE.

5. Waste Gasification Facility

The County is proposing to develop a waste gasification facility to produce either hydrogen that would be sold and exported, or electricity that would be used onsite and sold when more electricity is produced than needed. Initially, the facility would utilize YCCL's CDI waste wood and compost overs as a feedstock, but could move towards MSW in the future if other Project elements prove to be more efficient or cost-effective in treating CDI waste wood and compost overs. The facility would be sized to process 200 TPD of feedstock, which would produce approximately 11 TPD of hydrogen that would be compressed, stored, and regularly collected, requiring up to approximately 15 tractor-trailer trips per day to export the hydrogen to local filling stations. The facility would also produce approximately 6 TPD of inert slag/aggregate co-product that could be used on-site for all weather road construction or would be exported from the site requiring approximately 3 tractor-trailer trucks per week. Alternatively, if the facility is

designed to generate electricity, the 200 TPD could approximately 5 megawatts (MW) of power. The facility would be integrated with the electrical grid, which would allow the YCCL to sell excess power when more electricity is produced than needed.

6. Expanded Biogas Utilization Options

The County is proposing expanded biogas uses. Currently, landfill gas (LFG) is entirely dedicated to the landfill gas to energy facility (LFG to Energy Facility), with the electricity going to SMUD. Additional biogas sources (not dedicated to producing electricity for SMUD) could include the biogas produced from City of Davis WWTP digester that is just east of the landfill, the anaerobic compost facility (Compost Facility #1), and the existing In-Vessel Digester (IV Digester). The IV Digester is a covered pond that digests slurry food wastes to generate biogas.

Options for utilizing non-landfill biogas sources include producing Renewable Compressed Natural Gas (RCNG) vehicle fuel or injection of RCNG gas into a pipeline (PG&E or SMUD high pressure gas line). A PG&E gas line is located directly next to the LFG to Energy Facility and a SMUD gas line runs past YCCL along County Road 29 just south of the landfill main entrance. Biogas would be cleaned and conditioned to meet the applicable standards for vehicle fuel and pipeline RCNG. Removal of biogas contaminants such as volatile organic compounds (VOC's), hydrogen sulfide (H2S) and other contaminants would be required.

7. Peaking Power Plant

The County is proposing a peaking power plant that would replace the existing LFG to Energy Facility. As addressed above, LFG is dedicated to the LFG to Energy Facility, with the electricity going to SMUD. The peaking power plant would treat and compress LFG, which would then be stored during off-peak hours in underground storage tanks underneath the Plant. Stored LFG would be dispatched daily during peak hours to six 4.4 megawatt (MW) internal combustion (IC) engines for electricity generation for sale, such as to the local CCA, VCE.

8. New Class 2 Surface Impoundments

The County is proposing to develop a new Class 2 liquid surface impoundment to store and treat leachate and liquid waste received at the YCCL. The pond would be a Class 2 double lined liquid surface impoundment. The surface impoundment would be approximately 10 acres and located directly south of the existing WMU H3 surface impoundment. This impoundment would include treatment of the liquids (i.e., more aeration) that could then be sent to Davis WWTP.

9. Organic Waste Fertilizer Facility

The County is proposing to develop an organic fertilizer facility that utilizes organic waste (compost, compost feedstock, liquid waste, and animal manures) and converts it into fertilizer. The facility would be sited in an approximately five-acre portion of the approximately 41-acre north central area at the YCCL identified for future facility development. The facility would be sized to handle up to 50,000 tons to 100,000 tons of organic waste per year. Digestate would be removed from the Compost Facility #1 (anaerobic composter) and transported to the fertilizer

facility to be processed. Digestate would be heated to dry, sorted by size, and mixed with other products to produce a specific organic fertilizer for sale.

10. Stormwater Treatment System and Discharge

The County is proposing to develop a storm water treatment system to treat collected storm water that would meet EPA benchmarks for discharge into Willow Slough bypass. The system would be sized in conjunction with storage capacity to manage the 100-year, 24-hour storm, as required by the facility's WDRs. The proposed discharge point would be at an existing pump station located on YCCL's existing soil borrow site west of the landfill and County Road 104. The proposed storm water treatment would be upstream of the discharge point and could consist of passive floc logs that are used to clarify storm water removing turbidity such as sediment, heavy metals, and inanimate nutrients reducing the total suspended solids.

11. Additional Groundwater Pumping (Possible Treatment and Discharge)

The County is proposing to increase groundwater pumping at the YCCL. The YCCL area has naturally high groundwater. The landfill also has an existing groundwater extraction and treatment system to lower groundwater under several modules and treat volatile organic compounds (VOC's) detected in several wells. Currently this water is retained on-site due to naturally occurring boron and selenium. Recent groundwater readings indicate that this system is not completely effective at lowering groundwater under several of the closed landfill units and the Central Valley Regional Water Quality Control Board (CVRWQCB) has directed the County to address the issue. The County proposes to increase the groundwater pumping to address this and there may not be space to retain this water on-site. Currently, plant production (growing fescue for phytoremediation on 45 acres each year) is used to treat groundwater because of the high levels of naturally occurring boron and selenium. Additional treatment options may be necessary to allow this water to be discharged off-site. Various treatment options will be reviewed in the EIR as well as the relevant agency performance-based standards.

12. Transfer Station

The County is proposing to develop a transfer station to transfer solid waste to an off-site landfill in approximately ten years. The transfer station would be sited within an approximately 15-acre portion of the 41-acre north central area at the YCCL identified for future facility development. The transfer station would be sized to handle the landfill's current and future waste flow and the reductions of landfill disposal as required by the regulatory agencies. The transfer station is estimated to have a design capacity of 500 TPD, which would require an approximately 40,000 SF transfer building (U.S. EPA, 2002). Transfer stations are typically quite tall to accommodate several levels of traffic and transfer trailer loading, therefore the proposed transfer station building would be approximately 50 feet tall. The transfer station is being analyzed due to the increased soil needs and cost to develop new landfill modules as well as the associated air pollution and GHG emissions.

Incoming materials now generally go to the organics recycling area or directly to landfill disposal. Materials going directly to landfill disposal are wastes that are low in organics content

and low in recoverable recyclable materials. These loads would be directed to the transfer station, where they would be consolidated for transport into a transfer trailer and exported to an off-site landfill in the region.

13. Non-Specific Future Off-Site Borrow Area

The County may need to purchase a new off-site borrow area for its soil needs. YCCL has a shortage of soil for daily, intermediate, and final cover material, and DIWM imports soil from off-site sources for these purposes. Soil will also be needed to develop future landfill modules. The County may need to purchase additional property for development of an off-site borrow area that would supply soil to the facility. In 2014 the DIWM purchased a 320-acre parcel directly to the west of the landfill as a soil borrow source [EIR SCH # 2014102015] (Yolo County, 2015). No additional parcel of land has yet been identified for this purpose, but DIWM estimates that up to an additional 640-acre parcel would be needed. Ideally, the parcel would adjoin or be near the existing landfill property. Candidate properties would be surveyed for any important biological, archaeological, or historical resources, and appropriate mitigation measures would be developed and employed prior to commencement of borrow operations. This aspect of the Project may require additional or future environmental, land use and zoning considerations to allow soil borrow operations, including a mining permit.

14. Thermal Pressure Hydrolysis System

The County is proposing a Thermal Pressure Hydrolysis (TPH) system. TPH is a two-stage process combining high-pressure steaming of waste (organic and sludge) followed by a rapid decompression. This combined action sterilizes the waste and makes it more biodegradable, which improves digestion performance. Sterilization also destroys pathogens. This increases biogas production from anaerobic digestion (AD) of such waste. In a semi-continuous process, mechanized movements along with the pressure and temperature break down the most complex molecules to sanitize and homogenize the entire organic fraction of the waste. The product from this pre-treatment process is a bio-thermal-stabilized biomass with <70% moisture content and organic matter content >90%. TPH pretreatment can help to overcome the challenges of viability of AD as it has shown promising increase in efficacy of AD (~20% increase in biogas).

15. Biogas to Methanol Pilot Facility

The County is proposing a Biogas to Methanol Pilot Facility. Traditionally, natural gas is reformed into syngas, and then further converted into methanol and other liquid chemicals or fuels. The process is complex and requires high-maintenance catalysts and massive economies of scale to be profitable. Most natural gas sources are simply too small to apply syngas technologies.

The facility would use a process that eliminates the syngas step and associated catalyst by converting methane directly into methanol via a patented direct homogenous partial oxidation process. The process features an energy-neutral recycle loop where unreacted methane is scrubbed and recycled until the desired conversion is achieved. The carbon and thermal efficiencies of the resulting process are comparable to syngas-based technologies.

The process is a closed loop system with purge gas being sent back to a flare or power generation. The facility would result in a significant reduction in flaring emissions at YCCL and would produce renewable methanol that can be converted into electricity and/or low carbon transportation fuels.

ES.4 PROJECT IMPACTS AND MITIGATION MEASURES

The potentially significant adverse effects of the Project are described in Chapters 3 and 4. Mitigation measures have been identified that would reduce all the specific Project significant impacts to a level of insignificance except for the impact related to the conversion of farmland to a non-agricultural use (see Impact 3.2.2 and Mitigation Measure 3.2.2). Furthermore, as indicated in Chapter 4, since most of the non-urban land within the radius of the Project site is agricultural land, the off-site borrow area would most likely result in conversion of prime or non-prime agricultural farmland to a non-agricultural use. Therefore, this would be a significant and unavoidable cumulative impact of the Project.

Table ES-1, at the end of this chapter, presents a summary of potential environmental impacts, their level of significance before mitigation, mitigation measures, and the level of significance after mitigation.

ES.5 ALTERNATIVES TO THE PROJECT

The California Environmental Quality Act (CEQA) requires an EIR to describe and evaluate the comparative merits of a range of reasonable alternatives to the project, or to the location of the project, that would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the project's significant effects (CEQA Guidelines Section 15126.6). Chapter 5 (Alternatives to the Project) of this EIR provides an analysis of the impacts anticipated from three alternatives to the Project. The Project alternatives considered in this EIR include (1) No Project Alternative; (2) Reduced Tonnage Alternative; and (3) Reduced Footprint Alternative. The following provides a summary of each alternative and the EIR conclusions pertaining to it.

1. No Project Alternative

If the Project is not approved, the YCCL would continue to operate under its current Solid Waste Facilities Permit (SWFP) and the various Project elements would not have an approved California Environmental Quality Act (CEQA) review or Project approval from the County. The YCCL would continue to operate with a permitted tonnage of 1,800 tons per day and permitted traffic volume of 1,047 vehicles per day. The YCCL would continue to operate like the existing operations, including a continuation of challenges related to:

- Acquisition of soil to maintain current operations,
- Processing organic materials to meet state requirements, and
- Processing wood.

Under the No Project Alternative, minor operational changes could occur within the existing SWFP, but the scale of the changes would be limited compared to the various Project elements proposed by the Project. The No Project Alternative would continue to operate under the current SWFP limits. Therefore, under the No Project Alternative, the YCCL would have to reject loads that put daily totals above 1,800 tons per day or permitted traffic volume of 1,047 vehicles per day.

2. Reduced Tonnage Alternative

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased daily permitted tonnage and the resulting increase in the facility's permitted traffic volume compared to the Project. Under the Reduced Tonnage Alternative, the County would expand the overall permitted tonnage for the YCCL to a monthly average of 1,800 tons per day with a daily peak of 2,400 tons per day, which would limit waste hauling vehicles to 1,253 vehicles per day.

The Reduced Tonnage Alternative could meet each of the Project objectives because all the Project elements would still be developed, but the Reduced Tonnage Alternative would be limited in increasing the County's ability to divert waste (including organics) from the landfill compared to the Project because the YCCL would have to reject loads that put daily totals above 2,400 tons per day (or the monthly average of 1,800 tons per day) or the permitted traffic volume of 1,253 vehicles per day.

3. Reduced Footprint Alternative

The Reduced Footprint Alternative would include most of the elements of the Project and there would be a reduction in the developmental footprint compared to the Project, specifically in the 41-acre north central area at the YCCL identified for future facility development (see **Figure 2-3**). Under the Reduced Footprint Alternative, the County would limit development in this area to 30 acres to avoid the potential wetland area to the northeast and limit potential impacts to biological resources. It is important to note that the north central area at the YCCL identified for future facility development was originally planned to be 80 acres, but the County reduced the footprint to 41-acres to avoid potential impacts to biological resources.

The Reduced Footprint Alternative could partially meet each of the Project objectives because most of the Project elements would likely still be developed. However, the Reduced Footprint Alternative would not meet each of the Project objectives as effectively as the Project because the Project elements proposed to be developed in the north central area at YCCL identified for future facility development (i.e., transfer station, waste gasification facility, organic waste fertilizer facility and wood pellet facility) would be unable to fit within a 30-acre area. Therefore, for the purposes of this alternatives analysis it is assumed that the organic waste fertilizer facility and wood pellet facility would not be developed under the Reduced Footprint Alternative.

ES.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The EIR must assess the identified alternatives and determine which among the alternatives is the environmentally superior alternative. One of the alternatives to be assessed is the "No Project" alternative. If the No Project alternative is identified as the environmentally superior alternative, then another of the remaining alternatives must also be identified as the environmentally superior alternative.

Chapter 5 includes a comparison of each of the three alternatives to the proposed Project with regard to impacts for each of the resource areas in the EIR (see Table 5-1). Chapter 5 also assesses the ability of each of the three alternatives to meet the four Project objectives (see Table 5-2).

Since the Reduced Tonnage Alternative substantially meets Project Objectives 1, 3 and 4 and partially meets Objective 2, while reducing impacts to air quality and transportation and having no impacts greater than the Project, the Reduced Tonnage Alternative is the environmentally superior alternative. However, the proposed Project meets all the objectives and could accept additional loads for processing (above the limit of the Reduced Tonnage Alternative).

ES.7 EIR PROCESS AND SCOPE

Based on a preliminary review of potential Project impacts, the County determined that an EIR would be the appropriate level of environmental review for the Project. In August 2020, the County prepared and circulated a Notice of Preparation (NOP) for this EIR (**Appendix A**), in accordance with CEQA Guidelines §15082, to seek comments from affected agencies and the public regarding the scope of the EIR. To avoid a public gathering during the COVID-19 crisis, the County held a virtual scoping meeting via Zoom Webinar on September 16, 2020. One oral comment was received at the virtual scoping meeting and four comment letters were received during the scoping period from governmental responsible agencies (see **Appendix B**).

The County will circulate this Draft EIR for review by public agencies and interested persons and organizations for a 45-day public review period, in accordance with CEQA Guidelines §15105, extending from Friday July 30, 2021 to Monday, September 13, 2021. Written comments will be accepted at the Yolo County Department of Community Services until 4 p.m. on Monday, September 13, 2021. Oral and written comments will be accepted at the special virtual public meeting via Zoom Webinar on Wednesday, August 18, 2021 at 10:00 a.m. Connection information is provided below:

> https://us02web.zoom.us/j/82777037287?pwd=d2pWUkhMUzdsSlVjUDZuWTNFQ1h0QT09
>
> Webinar ID: 827 7703 7287
>
> Passcode: 2021
>
> Or One tap mobile:
>
> +16699006833,,82777037287#,,,,*2021# US (San Jose)
> +13462487799,,82777037287#,,,,*2021# US (Houston)

Or join by phone:

Dial (for higher quality, dial a number based on your current location):

US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 929 205 6099 or +1 301 715 8592 or +1 312 626 6799

Webinar ID: 827 7703 7287

Passcode: 2021

International numbers available: https://us02web.zoom.us/u/kdWBNwSPnV

Written comments should be emailed to Stephanie.Cormier@yolocounty.org or submitted to: Stephanie Cormier, Yolo County Department of Community Services, 292 West Beamer Street, Woodland, California, 95695. At the close of the public review period, the County will evaluate the comments received on the environmental issues and prepare written responses, as required by CEQA Guidelines §15088. The comments and responses will be included in the Final EIR as a separate chapter, along with any revised EIR text necessitated by the response to comments.

This EIR evaluates the potential environmental impacts of the various Project elements that make up the proposed Project, and not on approved and permitted existing operations of YCCL or of already-approved projects. While the Project described and analyzed in this EIR is distinct from the projects that were subject of the certified 1992 YCCL EIR (Yolo County, 1992) and 2005 YCCL EIR (Yolo County, 2005), much of the information in those earlier documents are germane to this EIR. The certified 2015 YCCL EIR for the YCCL Soil Borrow Site Project (Yolo County, 2015) also contains information germane to this EIR. The analysis in this EIR therefore relies to a considerable extent on the background and analysis contained in the certified 1992, 2005 and 2015 EIRs. This EIR provides summary information from those previous EIRs when it is helpful for the evaluation or understanding of this Project,

ES.8 AREAS OF CONTROVERSY

There are no known areas of controversy with the Project. One oral comment was received at the virtual NOP scoping meeting and four comment letters were received during the NOP scoping period from governmental responsible agencies (see **Appendix B**). No major concerns were raised in the one oral comment or four comment letters.

ES.9 REFERENCES

Yolo County. 2020. *Notice of Preparation Environmental Impact Report (EIR) & Notice of Public Scoping Meeting*. August 28, 2020.

Yolo County. 2018. *Joint Technical Document, Yolo County Central Landfill, Yolo County, California*. June 2018.

Yolo County. 2015. *Final Environmental Impact Report Yolo County Central Landfill Soil Borrow Site Project.* April 2015.

Yolo County. 2005. *Yolo County Central Landfill Permit Revisions Final Subsequent Environmental Impact Report SCH No. 1991073040*. May 2005.

Yolo County. 1992. *Final Environmental Impact Report Yolo County Central Landfill State Clearinghouse No. 91123015*. October 1992.

United States Environmental Protection Agency (U.S. EPA). 2002. *Waste Transfer Stations: A Manual for Decision-Making*. June 2002.

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.1 AESTHETICS/VISUAL			
Impact 3.1.1: The Project could affect views from Vantage Point 1, views from Wildhorse Golf Course and adjacent recreational use path on the outskirts of the City of Davis, approximately 1.5 miles southwest of the southern edge of the YCCL, looking northeast.	None required.	LS	LS
Impact 3.1.2: The Project could affect views from Vantage Point 2 and Vantage Point 3, views from the intersection of Road 27 and Road 104, approximately 1 mile north of the northern boundary of the YCCL, looking southeast.	None required.	LS	LS
Impact 3.1.3: The Project could affect views from Vantage Point 4, views from Road 103, approximately 1 mile west of the western edge of the YCCL, looking east.	None required.	LS	LS
Impact 3.1.4: The Project could affect views from Vantage Point 5, views from south of Willow Slough Bypass, approximately 600 feet south of the southern edge of the YCCL, looking north.	None required.	LS	LS
Impact 3.1.5: The Project could affect views from Vantage Point 6, views from Road 30B, approximately 1.5 miles south of the southern boundary of the YCCL, looking north.	None required.	LS	LS
Impact 3.1.6: The Project activities at the YCCL could result in creation of increased amounts of windblown litter leaving the site.	None required.	LS	LS
Impact 3.1.7: The Project elements at the YCCL could result in creation of a new sources of light and glare.	**Mitigation Measure 3.1.7:** New lighting for Project Elements shall be arranged and controlled so as not to illuminate public rights of way or adjacent properties (i.e., downward facing lighting fixtures, dark sky friendly lighting fixtures, etc.).	S	LSM
Impact 3.1.8: Development of a non-specific off-site soil borrow area could degrade the visual character of the vicinity near the selected site.	**Mitigation Measure 3.1.8a:** Consistent with 2030 Yolo County General Plan Policy CC-1.8, development of the future off-site borrow area shall include visual screening along highways, freeways, roads, and trails. Visual screening could include retaining existing trees and vegetation, new landscaping or screen trees, or another option approved by the County. **Mitigation Measure 3.1.8b:** The off-site borrow area shall implement hours of operation that reduce or eliminate adverse effects of the off-site borrow area nighttime activities on nearby sensitive receptors, or operations controls such as directed lighting.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.2 LAND USE, PLANNING AND AGRICULTURE			
Impact 3.2.1: Development of an off-site borrow area could result in conflicts with agricultural uses or Williamson Act contract.	**Mitigation Measure 3.2.1a:** The County shall site the off-site borrow area in a location not zoned or designated as agriculture land to the extent feasible. In the event that the only feasible off-site borrow area is zoned or designated as agricultural land, the County shall re-zone and re-designate the off-site borrow area site (to PQP and PQ, respectively) so the use of the site would not conflict with the land use designation.	S	LSM
Impact 3.2.2: Development of an off-site borrow area could result in conversion of farmland (including Prime Farmland, and non-prime farmland mapped as Unique Farmland or Farmland of Statewide Importance) to non-agricultural use.	**Mitigation Measure 3.2.2:** The County shall not locate the off-site borrow area or areas on agriculture farmland identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, to the extent feasible. The California Department of Conservation's "important farmlands" designation shall be used to identify the areas mapped as Prime, Unique, or Farmland of Statewide Importance. If the off-site borrow area includes Prime, Unique, or Farmland of Statewide Importance, then the County shall comply with the Agricultural Conservation and Mitigation Program, which requires up to three (3) acres of agricultural land shall be preserved for each acre of prime farmland converted to a predominantly non-agricultural use or zoning classification (3:1 ratio), or up to two (2) acres of agricultural land shall be preserved for each acre of non-prime farmland converted to a predominantly non-agricultural use or zoning classification (2:1 ratio). If the Project is determined exempt per Yolo County Code Sec. 8-2.404(c)(2)(ii), a minimum of one (1) acre of agricultural land shall be preserved for each acre of prime or non-prime farmland converted at the off-site borrow area to a predominantly non-agricultural use (1:1 ratio).	S	LSM
3.3 AIR QUALITY			
Impact 3.3.1: Project construction activities could result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors.	**Mitigation Measure 3.3.1:** The following shall be implemented during Project construction ground disturbing activities: • Active construction sites shall be watered at least twice daily. • Vehicles on unpaved roads shall be limited to 15 mph.	S	LSM
Impact 3.3.2: Project-related mobile sources during operation could result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors.	**Mitigation Measure 3.3.2:** For Project elements planned to be operational before year 2030 (i.e. construction permits are approved) an updated emissions inventory shall be performed prior to operation in order to determine if NOx emissions from implemented Project element mobile sources exceed the YSAQMD's annual NOx threshold of significance. If the updated emissions inventory concludes that NOx emissions from Project mobile sources exceed the YSAQMD annual NOx threshold of significance, the County shall decrease annual NOx emissions from Project mobile sources to below the YSAQMD's threshold of significance. Methods to decrease annual NOx emissions from Project mobile sources include but are not limited to: • Use of alternatively fueled (electric, natural gas, etc.) off-road equipment and on-road heavy trucks. • Replacement of older vehicles and heavy equipment at YCCL with newer vehicles and heavy equipment with lower NOx emissions.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.3 AIR QUALITY (cont.)			
Impact 3.3.2 (cont.)	• Replacement of older vehicles or heavy equipment at other locations in the County to offset NOx emissions below the YSAQMD's threshold of significance. • Another method approved by the County that would reduce annual NOx emissions in the YSAQMD such as purchasing offsets.		
Impact 3.3.3: Project operation of stationary sources could result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors, and/or could expose sensitive receptors to substantial concentrations of TACs.	None required.	LS	LS
Impact 3.3.4: Project-related on-road heavy trucks could expose sensitive receptors to substantial concentrations of TACs.	None required.	LS	LS
Impact 3.3.5: Project operations could generate odors that could adversely affect a substantial number of people.	None required.	LS	LS
3.4 BIOLOGICAL RESOURCES			
Impact 3.4.1: Temporary disturbance of potential giant garter snake habitat.	**Mitigation Measure 3.4.1a: Install and Maintain Exclusion and Construction Barrier Fencing between the Construction Area and Suitable Giant Garter Snake Habitat** The construction specifications shall require that YCCL retain an agency-approved biologist to identify the suitable giant garter snake aquatic and upland habitat that are to be avoided during construction. To reduce the likelihood of giant garter snakes entering the construction area, YCCL shall install exclusion fencing to the extent practicable along the boundary of the Project area and around the proposed staging area. The exclusion fencing shall be installed during the active period for giant garter snakes (May 1–October 1) to reduce the potential for injury and mortality during construction activities. Where access is required into and out of the Project area and staging areas the fencing shall be opened to allow traffic in and out but shall be closed at the end of each workday. The exclusion fencing shall be installed the maximum distance practicable from the aquatic habitat areas and shall be in place before construction activities (including any vegetation removal or equipment staging) are initiated. The exclusion fencing shall consist of 3-foot-tall silt fencing buried 4–6 inches below ground level. The exclusion fencing shall ensure that giant garter snakes are excluded from the construction area and that suitable upland and aquatic habitat is protected throughout construction. In addition to the exclusion fencing, orange construction barrier fencing shall also be installed that is commercial-quality, 4-foot-high, woven polypropylene (Tensor Polygrid or equivalent) or signs indicating a sensitive resource area placed approximately every 10 feet along exclusion fencing. The construction barrier fencing shall be tightly strung on posts with a maximum of 10-foot spacing. The orange construction barrier fencing can be attached to the exclusion fencing or the exclusion fencing can double as construction barrier fencing if it is orange in color and at least 4 feet tall.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.1 (cont.)	The fencing requirements shall be included in the construction specifications, and an agency-approved biological monitor shall be onsite to direct and monitor exclusion fence installation. The biological monitor shall be responsible for ensuring that the contractor maintains the protective fencing around giant garter snake habitat throughout construction. Weekly monitoring summary reports shall be provided to YCCL and applicable wildlife agencies, as necessary. **Mitigation Measure 3.4.1b: Conduct Environmental Awareness Training for Construction Employees** YCCL shall retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training shall be provided to all construction personnel and shall brief personnel on the need to avoid effects on sensitive biological resources (i.e., non-wetland waters, giant garter snake and other special-status species habitats in and adjacent to the construction area, and active bird nests). The education program shall include a brief review of the special-status species with the potential to occur in the Project area (including their life history, habitat requirements, and photographs of the species). The training shall identify the portions of the Project area in which the species may occur, as well as their legal status and protection. The program also shall cover the relevant permit conditions and mitigation measures that must be followed by all construction personnel to reduce or avoid effects on these resources during project implementation through completion. The training shall emphasize the role that the construction crew plays in identifying and reporting any special-status species observations to the onsite biologist. Training shall identify the steps to be taken if a special-status species is found within the construction area (i.e., notifying the crew foreman, who would call the designated biologist). An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions shall be provided to each crew member. The crew foreman shall be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs shall be conducted for appropriate new personnel as they are brought on the job. **Mitigation Measure 3.4.1c: Minimize Potential Impacts of Dewatering on Giant Garter Snake** YCCL shall implement the following measures to minimize potential impacts from dewatering aquatic giant garter snake habitat. • Areas with sufficient standing water shall be inspected for the presence of giant garter snakes by the agency-approved biologist immediately prior to dewatering. The approved biologist shall monitor the dewatering activity until the biologist determines that monitoring is no longer needed (e.g. once the work area is fully dewatered and once exclusion fencing has been installed).		

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.1 (cont.)	• Work areas shall be sufficiently dry (no standing water) prior to excavating or filling of the dewatered habitat. Dewatered habitat must remain dry, with no water puddles remaining, for at least 15 consecutive days prior to excavating or filling of the habitat. If a site cannot be completely dewatered, netting and salvage of giant garter snake prey items may be necessary to discourage use by snakes. • If the work areas are not fully drained prior to construction due to existing site conditions (e.g., low water table that causes infiltration back into the work area), the approved biologist shall survey the work area for snakes each morning prior to construction activities in the channel. **Mitigation Measures 3.4.1d: Minimize Potential Impacts on Giant Garter Snakes and their Habitat** YCCL shall implement the following measures to minimize potential impacts on giant garter snakes and their habitat. These measures are consistent with the avoidance and minimization measures (AMMs) identified in the Yolo HCP/NCCP. • All construction activities that involve disturbance within giant garter snake habitat shall be confined to the snake's active season, May 1 through October 1. During this period, the potential for direct mortality is reduced because snakes are expected to move and avoid danger. • Construction vehicles shall observe the posted speed limit on hard-surfaced roads and a 10-mile-per-hour speed limit on unpaved roads during travel in the Project area. • Construction vehicles and equipment shall restrict off-road travel to the designated construction areas. • Construction vehicles and equipment left onsite overnight shall be thoroughly inspected each day for snakes (both underneath the vehicles and in open cabs) before they are moved. • All food-related trash shall be disposed of in closed containers and removed from the construction area daily during the construction period. Construction personnel shall not feed or otherwise attract fish or wildlife to the construction site. • No pets or firearms shall be allowed in the construction area. • To avoid entrapment of wildlife, all excavated steep-walled holes or trenches more than one foot deep shall either be properly covered or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday. If left open overnight, the hole or trench shall be inspected by the onsite biological monitor prior to it being backfilled. • To prevent possible resource damage from hazardous materials such as motor oil or gasoline, construction personnel shall not service vehicles or construction equipment within 200 feet of wet canals. If servicing is required, the area shall be properly contained to prevent runoff of contaminants.		

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.1 (cont.)	• Maintain water quality and limit construction runoff into wetland areas through the use of hay bales, filter fences, vegetative buffer strips, or other accepted practices. No plastic, monofilament, jute, or similar erosion-control matting that could entangle snakes or other wildlife shall be permitted. **Mitigation Measure 3.4.1e: Conduct Preconstruction Surveys and Monitoring for Giant Garter Snake** YCCL shall conduct preconstruction surveys and monitoring for giant garter snake and shall implement the following measures: • Within 24 hours prior to ground-disturbing activities within suitable giant garter aquatic and upland habitat (undeveloped areas within 200 feet of suitable aquatic habitat), an agency-approved biologist shall conduct a preconstruction clearance survey for giant garter snake. If construction activities stop for a period of two weeks or more, conduct another preconstruction clearance survey within 24 hours prior to resuming construction activity. • A USFWS-approved biologist shall be onsite during initial ground disturbing activities within suitable aquatic and upland habitat to monitor construction activities and ensure that giant garter snake protection measures are being implemented properly. Once the Project area has been graded and ground disturbance has been completed, monitoring shall continue on a weekly basis, unless otherwise specified by project permits. • YCCL shall prepare a giant garter snake relocation plan which must be approved by the appropriate resource agencies prior to work in giant garter snake habitat. If a live giant garter snake is encountered during construction activities, immediately notify the project's biological monitor and USFWS and CDFW. The monitor shall stop construction in the vicinity of the snake, monitor the snake, and allow the snake to leave on its own. The monitor shall remain in the area for the remainder of the workday to ensure the snake is not harmed or, if it leaves the site, does not return. If the giant garter snake does not leave on its own, the qualified biologist shall relocate the snake consistent with the relocation plan described above. • The biological monitor shall prepare daily monitoring logs that include a description of construction activities; areas surveyed and monitored; communication with construction personnel, YCCL, and wildlife agencies; noncompliance issues and resolutions; and a list of all wildlife species observed during monitoring activities. The biological monitor shall also record all observations of Federally and State-listed species on CNDDB field sheets and submit to CDFW.		

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.1 (cont.)	**Mitigation Measure 3.4.1f: Restore Temporarily Disturbed Aquatic and Upland Habitat to Pre-project Conditions** Upon completion of proposed project, YCCL shall restore temporarily disturbed habitat for giant garter snake to pre-project conditions. Habitat shall be restored within one construction season.		
Impact 3.4.2: Disturbance to special-status species and removal of their suitable habitat from development of a new off-site borrow site.	**Mitigation Measure 3.4.2: Conduct biological and wetland surveys of off-site borrow area and apply mitigation measures based on survey results.** YCCL County shall conduct a biological resource survey of any Project area to be disturbed and nearby areas (e.g., including a 250-foot. buffer surrounding proposed borrow site), and/or enlarged buffer sufficient to comply with survey protocols (0.5-mile buffer for Swainson's hawk) that may be affected by the construction. At a minimum, each survey shall include the following: • A database search for occurrence of special status species within a 5-mile radius of the borrow site, • A site reconnaissance by a qualified biologist to identify occurrence or potential occurrence of special-status species and habitats on and around the development site, and • Consultation, as appropriate, with regulatory agencies regarding the results and incorporation of appropriate mitigation measures identified in this section for impacts to those sensitive resources.	S	LSM
Impact 3.4.3: Loss of western pond turtle habitat.	**Mitigation Measure 3.4.3: Conduct Preconstruction Surveys for Western Pond Turtle and Allow Turtles to Leave Work Area Unharmed** To avoid potential injury to or mortality of western pond turtles, YCCL shall retain a qualified biologist to conduct a preconstruction survey for western pond turtles immediately prior to construction activities (including vegetation removal) along suitable habitat and adjacent uplands. The biologist shall survey the aquatic habitat, canal banks, and adjacent upland habitat within the construction area immediately prior to disturbance. If a western pond turtle is found within the immediate work area during the preconstruction survey or during project activities, work shall cease in the area until the turtle is able to move out of the work area on its own. If the turtle does not move out of the area, the biologist shall coordinate with YCCL and CDFW to create and implement a live trapping plan and relocation effort. Information about the location of turtles seen during the preconstruction survey shall be included in the environmental awareness training (Mitigation Measure 3.4.1b) and provided directly to the construction crew working in that area to ensure that areas where turtles were observed are inspected each day prior to the start of work to ensure that no turtles are present. If a western pond turtle nest is discovered during the preconstruction survey or during project construction, YCCL's biologist would coordinate with CDFW to determine whether additional avoidance measures (e.g., no-disturbance buffer or monitoring) is prudent.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.4: Disturbance of nesting Swainson's hawks, white-tailed kite, tricolored blackbird, and other protected birds and raptors.	**Mitigation Measure 3.4.4: Conduct Vegetation Removal during the Non-Breeding Season and Conduct Pre-Construction Surveys for Nesting Migratory Birds and Raptors** Where vegetation removal is required to construct project features, YCCL shall conduct this activity during the non-breeding season for birds and raptors (generally between September 1 and February 28), to the extent feasible. If construction activities are planned during the nesting season (March 1– August 31), prior to the start of construction activities (including equipment staging and site preparation), YCCL shall retain a qualified wildlife biologist with knowledge of the relevant bird species to conduct nesting bird surveys. The surveys shall include a minimum of two separate surveys to look for active bird and raptor nests. Surveys shall include a search of all trees, shrubs, wetlands, and grassland vegetation that provide suitable nesting habitat in the Project area. In addition, nesting habitat within 1,320 feet from the Project area shall be surveyed for Swainson's hawk and a 500-foot radius around the Project area shall be surveyed for other nesting raptors, and a 100-foot radius around the Project area shall be surveyed for passerines. One survey should occur within 15 days prior to construction and the second survey should occur within 48 hours prior to the start of construction or vegetation removal (including grubbing). If no active nests are detected during these surveys, no additional measures are required. If an active nest is found in the survey area, a no-disturbance buffer shall be established around the nest site to avoid disturbance or destruction of the nest until the end of the breeding season (August 31) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the Project area (this date varies by species). The extent of the nesting buffers shall be 1,300 feet for active tricolored blackbird colonies, 500-feet for Swainson's hawk, 300 feet for nesting raptors and 50-feet for passerine birds. The buffers may be adjusted based on environmental factors through coordination between the YCCL biologist and CDFW. Factors that may influence an adjusted buffer shall include the bird species, level of construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of preexisting noise and other disturbances, and other topographical or artificial barriers.	S	LSM
Impact 3.4.5: Removal of suitable foraging habitat for Swainson's hawk.	**Mitigation Measure 3.4.5:** Prior to commencing any phase involving ground disturbance for facilities developed in Swainson's hawk foraging habitat as shown on Figure 3.4-3, YCCL shall compensate for the loss of Swainson's hawk foraging habitat through the preservation of appropriate acreage of suitable Swainson's hawk foraging habitat for that phase by participating in the Yolo HCP/NCCP. Solar panel development of the three sites may reduce the value of the areas for foraging potential by Swainson's hawk, however there would still be some habitat value to the sites for Swainson's hawks. The YCCL will work with CDFW and the administrator of the Yolo HCP/NCCP to identify the appropriate acreage based on the value of the grassland habitat after placement of the solar panels.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

<table>
<tr><th rowspan="2">Impact</th><th rowspan="2">Mitigation Measure</th><th colspan="2">Impact Significance</th></tr>
<tr><th>Before Mitigation</th><th>After Mitigation</th></tr>
<tr><td colspan="4">3.4 BIOLOGICAL RESOURCES (cont.)</td></tr>
<tr><td>Impact 3.4.6: Disturbance of nesting and wintering burrowing owls.</td><td>Mitigation Measure 3.4.6: Conduct Pre-Construction Surveys for Burrowing Owl and Establish Exclusion Zones, if Necessary

YCCL shall retain a qualified biologist to conduct two separate pre-construction surveys for burrowing owl: no more than 30 days prior to initiating ground-disturbing activities (including grubbing and grading) within grassland habitat and then again within 3 days prior to construction. The preconstruction burrowing owl surveys shall be conducted in conjunction with the nesting bird surveys described under Mitigation Measure-3.4-3a and shall encompass the designated work area and a 500-foot buffer around this area where access is permitted. Areas where access is not permitted or is not accessible shall be surveyed using binoculars or a spotting scope.

If burrowing owls are identified during the survey area, YCCL shall minimize activities that shall affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint does not impinge on a non-disturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this non-disturbance buffer could range from 150 to 1,500 feet (Table 3.4-3, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls), depending on the time of year and the level of disturbance, based on current guidelines (California Department of Fish and Game 2012).

TABLE 3.4-3. RECOMMENDED RESTRICTED ACTIVITY DATES AND SETBACK DISTANCES BY LEVEL OF DISTURBANCE FOR BURROWING OWLS
<table><tr><th rowspan="2">Time of Year</th><th colspan="3">Level of Disturbance (feet) from Occupied Burrows</th></tr><tr><th>Low</th><th>Medium</th><th>High</th></tr><tr><td>April 1–August 15</td><td>600</td><td>1,500</td><td>1,500</td></tr><tr><td>August 16–October 15</td><td>600</td><td>600</td><td>1,500</td></tr><tr><td>October 16–March 31</td><td>150</td><td>300</td><td>1,500</td></tr></table>SOURCE: Yolo Habitat Conservancy 2018

The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

• Low: Typically, 71-80 decibels, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high-tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.</td><td>S</td><td>LSM</td></tr>
</table>

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.6 (cont.)	• **Moderate:** Typically, 81-90 decibels, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category. • **High:** Typically, 91-100 decibels, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance. The buffer size may be reduced based on existing vegetation, human development, and land use, as determined during coordination with CDFW. If the biologist finds the site to be occupied by western burrowing owls during the breeding season (February 1 to August 31), the project proponent shall avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and the YCCL develops an avoidance plan that is approved by all applicable resource agencies (i.e., Yolo Conservancy, CDFW) prior to project construction, based on the following criteria: • The avoidance plan is approved by all applicable resource agencies (i.e., CDFW, Yolo Conservancy). • A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction). • The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities. • If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist shall have the authority to stop all construction related activities within the non-disturbance buffers described above. The qualified biologist shall report this information to YCCL and the applicable resources agencies within 24 hours, and the Conservancy shall require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the Project area.		

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.6 (cont.)	• If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, YCCL may remove the non-disturbance buffer, only with concurrence from applicable resource agencies. If the burrow cannot be avoided by construction activity, the biologist shall excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies. If evidence of western burrowing owl is detected outside the breeding season (September 1 to January 31), the project proponent shall establish a non-disturbance buffer around occupied burrows, consistent with Table 3.4-3, as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites: • A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction). • The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities. • If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities shall cease within the buffer. • If the owls are gone for at least one week, YCCL may request approval from the applicable resource agencies for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist shall install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer shall be removed, and construction may continue. Monitoring must continue as described above for the nonbreeding season if the burrow remains active. A qualified biologist shall monitor the site, consistent with the requirements described above, to ensure that buffers are enforced, and owls are not disturbed. Exclusion and burrow closure shall not be conducted during the breeding season for any occupied burrow. If YCCL determines that passive relocation is necessary, they shall develop a burrowing owl exclusion plan in consultation with CDFW and Yolo Conservancy, as applicable. The methods shall be designed as described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors shall be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist shall collapse the burrow to prevent reoccupation.		

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.6 (cont.)	Burrows shall be excavated using hand tools. During excavation, an escape route shall be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. Other methods of passive or active relocation may be used, based on best available science, if approved by the applicable resource agencies.		
Impact 3.4.7: Disturbance of nesting northern harrier and other protected ground-nesting birds and raptors.	**Implementation of Mitigation Measures 3.4.1b and 3.4.4.**	S	LSM
Impact 3.4.8: Potential adverse effects to special-status plants.	**Mitigation Measure 3.4.8a: Conduct appropriately timed floristic surveys** A qualified botanist shall conduct protocol-level floristic surveys of the Project area. The floristic surveys shall be appropriately timed to coincide with the blooming/identifiable period of the special status plants with potential to occur in the Project area and follow methods described in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018) and *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (USFWS 2002). **Mitigation Measure 3.4.8b: Avoid special-status plant populations, minimize and/or compensate for substantial impacts** If special-status plants are detected in the Project area, the YCCL shall identify the populations with orange fencing for avoidance and notify CDFW and USFWS as appropriate. If the special-status plants cannot be avoided, addition minimization and mitigation measures shall be developed by the applicant and CDFW and USFWS prior to construction. These measures may include, but would not be limited to: • Minimizing impacts to the population(s) by restricting impacts to a few individuals. • Developing a transplantation plan that involves relocating plants to suitable habitat approved by CDFW and/or USFWS. • Monitoring affected populations for a minimum of 3 years to document success of transplantation efforts. • Restoring or enhancing the occupied habitat onsite or in the project region. The seasonal wetlands and non-native annual grassland have potential to be restored and/or enhanced. If mitigation is required, the applicant shall consult with CDFW and/or USFWS on constraints and opportunities for appropriate on-site habitat enhancement and/or creation for the affected species. • Protecting occupied habitat at another location in the region.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.9: Potential inadvertent loss or disturbance of riparian habitat located near the Project area.	**Mitigation Measure 3.4.9: Avoid Willow Slough Bypass and obtain permits as needed and comply with permit requirements** Project activities shall be designed to avoid surface activities within 300 feet of Willow Slough Bypass. If pipeline activities cannot be avoided within 300 feet of Willow Slough Bypass, the riparian corridor shall be delineated by a qualified biologist and orange construction fencing shall be installed along the outline of the corridor. Impacts to the Willow Slough Bypass shall be avoided through directional boring beneath the bypass. Should directional bores bore under Willow Slough Bypass, consultation with CDFW shall be required and if necessary, a Lake or Stream Bed Alteration Permit would be obtained. The levee along Willow Slough Bypass is regulated by the Central Valley Flood Protection Board and any work within 300 feet of the levee of designated floodways or regulated streams would require an Encroachment Permit.	S	LSM
Impact 3.4.10: Placement of fill material into Waters of the U.S. or Waters of the State.	**Mitigation Measure 3.4.10: Conduct protocol aquatic resources delineation and compensate for substantial adverse effects on state or federally protected wetlands and non-wetland waters** Prior to construction, a delineation of aquatic resources shall be conducted and submitted to USACE along with a request for verification. The delineation shall follow routine methods described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual for the Arid West Region* (U.S. Army Corps of Engineers 2008), *A Field Guide to the Identification of the Ordinary High Water Mark* (OHWM) *in the Arid West Region of the Western United States* (Lichvar and McColley 2008), and the State Water Board's *Dredged and Fill Procedures* (State Water Resources Control Board 2019). The delineation shall be submitted to RWQCB if there are aquatic resources that are not waters of the United States, but still regulated by the State pursuant to the Porter Cologne Water Quality Control Act. If waters of the United States are determined to be present in the Project area and would be filled by the proposed project, the applicant shall be required to obtain a Section 404 permit from USACE and a Section 401 permit from RWQCB. If the project would impact aquatic resources that are not regulated by USACE, the applicant shall be required to obtain Waste Discharge Requirements from the RWQCB. The USACE and/or RWQCB may require compensatory mitigation for impacts to jurisdictional aquatic resources. Should compensatory mitigation be required, it could be achieved by wetland enhancement or restoration in the Project area, which could be done in combination with the upland enhancement for special-status plant habitat discussed in Mitigation Measure 3.4.6b. If onsite mitigation is not available or feasible, the applicant shall purchase mitigation credits from a USACE/RWQCB-approved mitigation bank that services project's region.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 BIOLOGICAL RESOURCES (cont.)			
Impact 3.4.11: Potential interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impediment of the use of native wildlife nursery sites.	None required.	LS	LS
Impact 3.4.12: Potential for conflicting with local policies or ordinances protecting biological resources.	None required.	LS	LS
Impact 3.4.13: Potential conflict with provisions of an adopted HCP/NCCP.	None required.	LS	LS
3.5 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES			
Impact 3.5.1: The Project could either directly or indirectly result in impacts to cultural resources or TCRs.	**Mitigation Measure 3.5.1a:** If cultural resources are encountered during Project implementation, construction (or Project actions) shall, in accordance with CEQA Section 15064.5, be halted or diverted to allow an archaeologist an opportunity to assess the resource. **Mitigation Measure 3.5.1b:** Section 7050.5 and 7052 of the California Health and Safety Code and Section 5097 of the Public Resources Code shall be implemented in the event that human remains, or possible human remains are located. **Mitigation Measure 3.5.1c:** Prior to Project ground disturbing activities, the County shall notify the Yocha Dehe Wintun Nation and arrange for a qualified personnel to conduct a cultural resources sensitivity training for all construction personnel who will be associated with the Project. The training shall be developed and conducted in coordination with a representative from the Yocha Dehe Wintun Nation. The training shall include relevant information regarding sensitive cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The cultural sensitivity training shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the Project site and shall outline what to do and whom to contact if any potential tribal cultural resources are discovered.	S	LSM
Impact 3.5.2: Excavation of the non-specific future off-site borrow area could disturb previously unknown cultural resources or TCRs.	**Mitigation Measure 3.5.2a:** A cultural resources survey of the site selected for the off-site borrow area, including a site survey and records search, shall be conducted by a registered archeologist prior to commencement of soil borrow activities. Any potential disturbance of identified cultural resources on the site shall be properly mitigated on-site or through proper recording and removal of the artifacts. **Mitigation Measure 3.5.2b:** If cultural resources are encountered during soil borrow activities, such activities shall, in accordance with CEQA Section 15064.5, be halted or diverted to allow an archaeologist an opportunity to assess the resource.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.5 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES (cont.)			
Impact 3.5.2 (cont.)	**Mitigation Measure 3.5.2c:** Section 7050.5 and 7052 of the California Health and Safety code and Section 5097 of the Public Resources Code shall be implemented in the event that human remains, or possible human remains are located at the site selected for the off-site borrow area. **Mitigation Measure 3.5.2d:** Prior to ground disturbance at the future off-site borrow area, the County shall notify the Yocha Dehe Wintun Nation and arrange for a qualified personnel to conduct a cultural resources sensitivity training for all construction personnel who will be associated with the Project. The training shall be developed and conducted in coordination with a representative from the Yocha Dehe Wintun Nation. The training shall include relevant information regarding sensitive cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The cultural sensitivity training shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the Project site and shall outline what to do and whom to contact if any potential tribal cultural resources are discovered.		
3.6 ENERGY			
Impact 3.6.1: Project construction or operation could result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.	None required.	LS	LS
Impact 3.6.2: The Project could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	None required.	LS	LS
3.7 GREENHOUSE GAS EMISSIONS			
Impact 3.7.1: Project construction or operation could conflict with CARB's 2017 Scoping Plan.	None required.	LS	LS
3.8 PUBLIC HEALTH AND SAFETY			
Impact 3.8.1: Operation of new Project element facilities (e.g., wood pellet facility, waste gasification facility, organic waste fertilizer facility, transfer station, thermal pressure hydrolysis system, peaking power plant, expanded biogas utilization options, and biogas to methanol pilot facility) could pose health and safety threats to workers at the YCCL.	**Mitigation Measure 3.8.1:** The Division of Integrated Waste Management (DIWM) (or the facility contractor) shall prepare a Health and Safety Plan (HASP) for all new Project Element facilities prior to commencement of new facility operations. Each HASP shall include staff training requirements, emergency procedures and equipment, personal protective equipment for facility staff, communications equipment and emergency contacts, hearing loss prevention, equipment maintenance, and other policies to ensure the protection of worker and public health and safety.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.8 PUBLIC HEALTH AND SAFETY (cont.)			
Impact 3.8.2: Implementation of new facilities and increasing the daily permitted tonnage at the YCCL could result in increases in gulls and other scavenging birds at the site, thus increasing the risk of bird strikes for aircraft approaching or departing from nearby airports.	None required.	LS	LS
3.9 GEOLOGY, SOILS AND SEISMICITY			
Impact 3.9.1: The Project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	None required.	LS	LS
Impact 3.9.2: During the development and operation of the non-specific future off-site borrow area, soil excavation could directly or indirectly cause substantial erosion or loss of topsoil.	None required.	LS	LS
Impact 3.9.3: The Proposed Project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction, landslides, or is the Project site 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.	None required.	LS	LS
Impact 3.9.4: Elements of the Project could be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.	None required.	LS	LS
Impact 3.9.5: During the development and operation of the non-specific future off-site borrow area, soil excavation could directly or indirectly destroy a unique paleontological resource.	**Mitigation Measure 3.9.5:** Prior to initiation of any future off-site borrow area excavation activities 8 feet or more below the ground surface, the County shall provide pre-construction briefing(s) to supervisory personnel of any excavation contractor to alert them to the possibility of exposing significant paleontological resources within the Project area. The briefing shall discuss any paleontological objects that could be exposed, the need to stop excavation at the discovery, and the procedures to follow regarding discovery protection and notification of the County. An "Alert Sheet" shall be posted in conspicuous locations at the future off-site borrow area to alert personnel to the procedures and protocols to follow for the discovery of potentially significant paleontological	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.9 GEOLOGY, SOILS AND SEISMICITY (cont.)			
Impact 3.9.5 (cont.)	resources. If unique and/or significant paleontological resources are discovered during soil management activities (as determined by a qualified paleontologist), the County shall allow excavation, identification, cataloging and/or other documentation by the qualified paleontologist. If appropriate, the County shall donate the resource to a local agency, state university, or other applicable institution, for curation and display for public education purposes.		
3.10 HYDROLOGY AND WATER QUALITY			
Impact 3.10.1: The Project could violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality.	**Mitigation Measure 3.10.1:** The YCCL shall complete the following actions to monitor and evaluate groundwater extraction and retention during and following its Phase 1 groundwater extraction program (10 extraction wells): I. During the implementation period of the Phase 1 groundwater extraction program, YCCL shall continue to conduct regular groundwater level monitoring throughout each water year to assess the separation distance between the top of the groundwater table and bottom extent of the waste prism (5-foot separation) in WMUs 1-5. These data shall be reviewed annually to gauge the effectiveness of the groundwater extraction program. As required, water level monitoring data shall be submitted to the RWQCB. II. Within one year following the completion of the Phase 1 groundwater extraction well program, acquired annual groundwater elevation and extraction rate data shall be applied, as appropriate, to determine whether the 5-foot separation is adequately maintained, and to update and refine the site groundwater model and YCCL facility water balance. III. Groundwater level monitoring data, results of the updated groundwater model, and facility water balance shall be used to (a) determine the necessity and optimal location for additional extraction wells, (b) project the rate and quantity of extracted groundwater that would be necessary to maintain the 5-foot groundwater separation, and (c) determine whether storage area for that volume is available onsite. IV. If results of the updated groundwater model and updated facility water balance determine that additional extraction wells are necessary and would generate groundwater discharges in excess of onsite facility storage infrastructure available at that time, the County shall develop and implement alternative water storage strategies prior to installing and operating additional extraction wells. These alternatives could include: • Arrangements with neighboring properties to purchase excess stormwater for irrigation uses. • Acquiring additional property for land application of stored water or for construction of additional storage basins. • Developing technologies to enhance evaporative capacity of surface water.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.10 HYDROLOGY AND WATER QUALITY (cont.)			
Impact 3.10.2: The Project could substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.	None required.	LS	LS
Impact 3.10.3: The Project could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site.	None required.	LS	LS
Impact 3.10.4: The Project could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.	None required.	LS	LS
Impact 3.10.5: The Project could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would 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.	None required.	LS	LS
Impact 3.10.6: The Project could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.	None required.	LS	LS
Impact 3.10.7: In flood hazard, tsunami, or seiche zones, the Project could risk release of pollutants due to inundation.	None required.	LS	LS
Impact 3.10.8: The Project could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	None required.	LS	LS

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.11 WILDFIRE			
Impact 3.11.1: The Project could result in an increased risk in wildfires.	None required.	LS	LS
Impact 3.11.2: The non-specific off-site borrow area Project element could create impacts related to wildfire.	None required.	LS	LS
3.12 NOISE			
Impact 3.12.1: New on-site Project elements that are proposed (including increased daily permitted tonnage, a peaking power plant, a wood pellet facility, a large scale floating solar photovoltaic system, a solar photovoltaic system on closed landfill units, a waste gasification facility, expanded biogas utilization options, a new class 2 surface impoundment, an organic waste fertilizer facility, development of a storm water treatment and drainage system, additional groundwater pumping with possible treatment and discharge, a transfer station, a thermal pressure hydrolysis system, and a biogas to methanol pilot facility) could increase noise levels at off-site residences on agriculturally-designated land.	**Mitigation Measure 3.12.1:** Construction activities for new facilities shall be limited to 6:00 a.m. to 9:00 p.m., Monday through Saturday, and 7:00 a.m. to 7:00 p.m. on Sunday.	S	LSM
Impact 3.12.2: Noise from activities at a future non-specific soil borrow site could affect sensitive receptors.	**Mitigation Measure 3.12.2a:** Soil borrow activities shall be located in areas with a buffer zone of 400 feet to the nearest residence on agriculturally-designated land. **Mitigation Measure 3.12.2b:** Soil borrow activities shall be limited to achieve a CNEL that does not exceed 75 dBA at the nearest residence on agriculturally-designated land. **Mitigation Measure 3.12.2c:** To avoid effects of nighttime operations, haul trips leaving the soil borrow area shall be limited to 6:00 a.m. to 9:00 p.m., Monday through Saturday, and 7:00 a.m. to 7:00 p.m. on Sunday.	S	LSM
Impact 3.12.3: Truck trips to and from the YCCL could increase noise levels at residences on agriculturally-designated land.	None required.	LS	LS
3.13 TRANSPORTATION			
Impact 3.13.1: The Project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	None required.	LS	LS

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.13 TRANSPORTATION (cont.)			
Impact 3.13.2: The Project could generate vehicle miles travelled (VMT) that could conflict or be inconsistent with State CEQA *Guidelines* §15064.3, subdivision (b).	None required.	LS	LS
Impact 3.13.3: The Project could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	None required.	LS	LS
Impact 3.13.4: The Project could result in inadequate emergency access.	None required.	LS	LS
3.14 PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS			
Impact 3.14.1: The increased daily permitted tonnage (TPD) could increase the risk of fire occurring at the YCCL.	None required.	LS	LS
Impact 3.14.2: The Project element facilities (e.g., waste gasification facility, thermal pressure hydrolysis system, transfer station, peaking power plant, wood pellet facility, organic waste fertilizer facility, biomass to methanol pilot facility, and expanded biogas utilization options) could increase the risk of fire occurring at the YCCL.	**Mitigation Measure 3.14.2:** As part of the standard review process, the County shall review and approve a *Fire Prevention Control and Mitigation Plan* that shall be developed for each applicable Project element, which shall include but not be limited to: • Description of the measures the operator will take to prevent fires and to control and extinguish fires. • Identification and description of the equipment the operator will have available (on-site) to control and extinguish fires. • Description of the measures the operator will take to mitigate the impacts of any fire at the site to the public health and safety and the environment. • Description of the arrangements the operator has made with the local fire control authority to provide fire prevention, control, and suppression in the event of a fire.	S	LSM
Impact 3.14.3: The Project facilities could have water demands greater than water supplies.	None required.	LS	LS
Impact 3.14.4: The Non-Specific Future Off-Site Soil Borrow Area could create impacts related to public services and utilities.	None required.	LS	LS

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

This page intentionally left blank