

CHAPTER 9

Mitigation Monitoring and Reporting Plan

9.1 Introduction

The purpose of this Mitigation Monitoring and Reporting Program (MMRP) is to describe the roles and responsibilities in the mitigation monitoring process for the proposed development associated with the Nut Tree Airport Master Plan update (Proposed Project), pursuant to CEQA Guidelines §15097.

A reporting and monitoring program ensures that measures adopted to mitigate or avoid significant environmental impacts are implemented. It is a working guide to facilitate not only the implementation of mitigation measures, but also the monitoring, compliance, and reporting activities.

The following is the MMRP for the Proposed Project. The MMRP includes a description of the requirements of CEQA and a compliance checklist. The project as approved includes mitigation measures. The intent of the MMRP is to prescribe and enforce a means for properly and successfully implementing the mitigation measures as identified within the Environmental Impact Report (EIR) for this project.

9.2 Compliance Checklist

The MMRP contained herein is intended to satisfy the requirements of CEQA as they relate to the Nut Tree Airport Master Plan Update EIR prepared by Solano County. This MMRP is intended to be used by County staff and mitigation monitoring personnel to ensure compliance with the approved mitigation measures during all phases of project implementation. Mitigation measures identified in this MMRP were developed in the EIR prepared for the proposed project. The EIR presents a detailed set of mitigation measures that will be implemented throughout the lifetime of the project. Mitigation is defined by CEQA as a measure which:

- Avoids the impact altogether by not taking a certain action or parts of an action.
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifies the impact by repairing, rehabilitating, or restoring the impacted environment.
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project.
- Compensates for the impact by replacing or providing substitute resources or environments.

The intent of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMRP will provide for monitoring of construction activities as necessary and in-the-field identification and resolution of environmental concerns.

Monitoring and documenting the implementation of mitigation measures will be coordinated by the Solano County. **Table 4-1** identifies the mitigation measure, the monitoring action for the mitigation measure, the responsible party for the monitoring action, and timing of the monitoring action. Solano County will be responsible for fully understanding and effectively implementing the mitigation measures contained within the MMRP.

9.3 Mitigation Monitoring and Reporting

As the Lead Agency, Solano County is responsible for ensuring full compliance with the mitigation measures adopted for the Proposed Project. Solano County will monitor and report on all mitigation activities, which shall be implemented at different stages of development throughout the project area. As such, the responsibilities for implementation shall be assigned to the Solano County, a Contractor, or a combination thereof.

If, during the course of project implementation, any of the mitigation measures identified herein cannot be successfully implemented, Solano County shall be immediately informed, and Solano County will then inform any affected responsible agencies. Solano County, in conjunction with any affected responsible agencies, will then determine if modification to the Proposed Project is required and/or whether alternative mitigation is appropriate.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
3.2 Air Quality				
<p>3.2-2a: The following BMPs will be implemented during the construction process:</p> <ul style="list-style-type: none"> • All active construction sites shall be watered at least twice daily. Frequency shall be based on the type of operation, soil, and wind exposure and the ability to eliminate visible fugitive dust. • Haul trucks shall maintain at least 2 feet of freeboard. • Cover all trucks hauling dirt, sand, or loose materials. • Between the time of completing construction and the onset of winter rains, reinstate typical agricultural irrigation practices as a means to wet soils so they do not generate dust, as feasible. • Cover inactive storage piles. • Sweep streets if visible soil material is carried out from the construction site. • Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel. • The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities in the same area at any one time shall be limited. 	Prior to contract issuance	Contractor	Solano County	This measure shall be added to general notes on construction specifications, plans, and bid documents.
<p>3.2-2b: The following measures will be implemented during the construction process:</p> <ul style="list-style-type: none"> • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 	Prior to contract issuance	Contractor	Solano County	This measure shall be added to general notes on construction specifications, plans, and bid documents.
3.3 Biological Resources				
<p>3.3.1-1: Use of BMPs for stormwater control as part of Project-specific and site-specific SWPPP implementation is expected to reduce the potential for preserved and avoided habitat for vernal pool species to be indirectly affected by sediment-laden discharges from construction sites. The performance and effectiveness of these BMPs would be determined either by visual means, where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where the verification of containment reduction or elimination is required to determine the adequacy of the measures. BMPs to be implemented would include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • All disturbed surfaces or stockpile areas would be protected with erosion control measures in place during the period of October 1 through April 30. • BMPs for temporary erosion control (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary 	Prior to contract issuance	Contractor	Solano County	This measure shall be added to general notes on construction specifications, plans, and bid documents.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
<p>revegetation or other ground cover) would be employed per the product specifications for disturbed areas, stockpiled soil, and along culverts and drainage ditches on active construction sites and in downstream areas that may be affected by construction activities. Requirements for the placement and monitoring of the BMPs would be part of the contractor's project specifications. Performance and adequacy of the measures would be determined visually by site construction management and verified by the County Department of Water Resources and Central Valley Regional Water Quality Control Board as appropriate.</p> <ul style="list-style-type: none"> • Dirt and debris would be swept from paved areas in construction zones on a daily basis as necessary to remove excessive accumulations of silt, mud or other debris. Sweeping and dust removal would be implemented by the contractor and oversight of these operations the responsibility of the construction site superintendent. • All exposed/disturbed areas, left barren of vegetation due to project related activities, would be stabilized with mulch, tackifier, or other appropriate cover that is compatible with airport safety requirements; hydroseeding is not appropriate as seed may attract birds thereby increasing the risk of bird strikes • If discharges of sediment or hazardous substances to drainage ways are observed, construction would be halted until the source of contamination is identified and remediated. Visual indications of such contamination include an oily sheen or coating on water, and noticeable turbidity (lack of clarity) in the water. <p>3.3.1-1b: A Worker Environmental Awareness Program (WEAP) training for construction crews and construction forepersons would be conducted before any construction activities begin. The WEAP training would be conducted by a qualified wildlife biologist. The training would include a brief review of the special status species and other sensitive resources that could occur in the study area (including their life history and habitat requirements and where on the study area they may be found) and their legal status and protection. The program would also cover all relevant mitigation measures, permit conditions and BMP plans, such as the SWPPP and/or erosion control and sediment plan. During WEAP training, construction personnel would be informed of the importance of avoiding ground-disturbing activities outside of the designated work area. A designated environmental inspector would be responsible for ensuring that construction personnel adhere to the guidelines and restrictions and that all persons working on site have attended a WEAP training session. WEAP training sessions would be conducted as needed for new personnel brought onto the job throughout the duration of construction.</p> <p>3.3.1-1c: The total number of access routes, number and size of staging areas, and the total area of construction activity would be limited to those areas identified in the approved construction drawings and/or plans or as otherwise approved per permit conditions. Access routes and project boundaries would be clearly marked at all times. Access routes for heavy equipment to and from the study area would be restricted to established roadways to minimize habitat disturbance. The storing of construction equipment, vehicles, and supplies would be restricted to the designated construction staging areas outside of designated avoided</p>	Prior to and during construction	Solano County	Solano County	Training certification document submitted to Lead Agency.
	Prior to contract issuance	Contractor	Solano County	This measure shall be added to general notes on construction specifications, plans, and bid documents.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
<p>areas. All fueling, cleaning and maintenance activities of vehicles and other equipment would be performed only in designated areas and at least 250 feet away from avoided/preserved habitats. As part of WEAP training, all workers would be informed of the importance of preventing spills and appropriate measures to take in the event of a spill. All spills would be cleaned up immediately.</p> <p>3.3.1-1d: Avoided and preserved habitat, including habitat within designated Preserve and Riparian Buffer areas, would be protected at all times from construction activities. Habitat protection measures would include the following:</p> <ul style="list-style-type: none"> • A USFWS-approved biologist (monitor) would inspect all construction-related activities at the study area to ensure that no unauthorized take of listed species or destruction of their habitat occurs. The biologist would have the authority to stop any activities that may result in such take or destruction until appropriate corrective measures have been completed. The biologist also would be required to report immediately any unauthorized impacts to the USFWS and the CDFW. • Adequate fencing would be placed and maintained around all avoided (preserved) habitat for vernal pool species to prevent direct impacts from construction. <p>3.3.1-2a: Pre-construction surveys for burrowing owls shall be conducted within 30 days prior to the start of any construction activities occurring in suitable habitat (i.e. annual grassland with burrows). The project proponent shall conduct preconstruction surveys in suitable nesting habitat for burrowing owls within 250 feet of project activities prior to construction that will occur between February 1 and August 31 (breeding season), and within 165 feet of project activities that will occur between September 1 and March 31 of any given year (non-breeding season). If construction activities are delayed for more than 30 days after the initial pre-construction surveys, then a new survey shall be required. Surveys shall conform to Appendix C and D of CDFW's <i>Staff Report on Burrowing Owl Mitigation (Appendix F)</i> (CDFG, 2012c) or as otherwise approved by CDFW.</p> <p>If active burrows are recorded within 250 feet of project activities, the following measures will apply:</p> <ol style="list-style-type: none"> 1. No disturbance should occur within a 250-foot buffer around each active owl burrow during the breeding season and a 165-foot buffer during the non-breeding season or as otherwise approved by CDFW. Occupied burrows shall not be disturbed during the breeding season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through noninvasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival 2. If owls must be moved away from the disturbance area; passive relocation techniques in accordance with CDFW's Staff Report on Burrowing Owl Mitigation (CDFG, 2012c) shall be used. Passive relocation shall take place outside of the breeding season (February 1 to August 31). 	Prior to and during construction	Solano County and Contractor	Solano County	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
	Thirty (30) days prior to construction	Solano County	Solano County; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
<p>3.3.1-2b: Pre-construction surveys for tree-nesting raptors and migratory songbirds shall be conducted within 30 days prior to any construction that will occur between March 15 and September 15 of any given year. Pre-construction surveys shall be conducted by a qualified biologist. All suitable nesting habitat for tree nesting raptors and migratory songbirds shall be surveyed within 0.5-mile radius of the Proposed Project impact area.</p> <p>1. If active nests are found during pre-construction surveys, a no-disturbance buffer (acceptable in size to CDFW) shall be created around active raptor nests and nests of other special-status birds during the breeding season, or until it is determined that all young have fledged. Typical buffers include 500 feet for raptors and 250 feet for other nesting birds. The size of these buffer zones and types of construction activities restricted in these areas could be further modified during construction in coordination with CDFW and shall be based on existing noise and human disturbance levels in the study area. Input shall also be sought from the Nut Tree Airport Operations Safety Officer concerning the hazards posed by wildlife nesting in proximity to an active airport.</p> <p>2. If pre-construction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation shall be required. Trees and shrubs within the construction footprint determined to be unoccupied by special-status birds, or that are outside the no-disturbance buffer for active nests, could be removed.</p>	Thirty (30) days prior to construction	Solano County	Solano County; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
<p>3.3.1-3 and 3.3.1-4: Construction activities under the Proposed Project would result in the loss of annual grassland habitat suitable for foraging by sensitive or special-status bird species, including ferruginous hawk, burrowing owl, northern harrier, and Swainson's hawk. Although grassland habitats are regionally abundant in central California, CDFW has developed mitigation guidance in the <i>Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California</i> (CDFG, 1994) (Appendix G, Survey Protocols and Mitigation Guidelines), which recommends a foraging habitat mitigation ratio that is dependent upon the development's distance to the nearest known Swainson's hawk nest site. An appropriate mitigation ratio will be developed in coordination with CDFW prior to project implementation. A typical mitigation ratio may consist of a ratio ranging from 0.5:1 to 1:1.</p>	Prior to construction	Solano County	Solano County, CDFW	Proof of purchase of mitigation credits or recordation of mitigation easement.
<p>3.3.1-5: The applicant shall conduct a survey for roosting bats and evidence of historic use of buildings and trees on the study area. The survey shall be conducted by a USFWS-qualified biologist. This survey shall include, at a minimum, a visual inspection of potential bat roosting sites, and may include an evening or night survey using electronic bat detectors. If occupied bat roosts are detected, the applicant shall consult with CDFW regarding suitable measures to avoid impacting roosts. Measures may include, but are not limited to:</p> <p>1. Maintaining a 100-foot buffer around each roost; no construction activities shall be permitted within this buffer except as described in Mitigation Measure 3.3.1-5 (2). This buffer may be reduced in consultation with CDFW.</p> <p>2. Exclusion of bats from roosts (ensuring that no bats are trapped in the roost). For maternity roosts, this measure may only be implemented once young have been reared</p>	Thirty (30) days prior to construction	Solano County and Contractor	Solano County; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
<p>and are able to freely leave the roost (typically before March and after August). Exclusion plans must be approved by CDFW prior to implementation.</p> <p>3.3.1-7: Prior to construction, a qualified biologist would conduct a survey for western pond turtles within 24 hours of the start of construction activities within 500 feet of streams, ditches, and other watercourses located within the proposed construction areas. If no individuals are identified then no additional measures are required. If a turtle is found in a proposed construction area, the biologist would move the turtle from the area to suitable habitat within the vicinity.</p>	Twenty-four (24) hours prior to start of construction	Solano County	Solano County	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
<p>3.3.1-8a: Prior to construction, vegetated portions of the study area including wetland habitats would be surveyed by a qualified botanist for special-status plants following established CDFW Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities (CDFG, 2009) (Appendix G, Survey Protocols and Mitigation Guidelines), which calls for protocol-level surveys during the appropriate flowering/identification period for each potentially affected species.</p>	Thirty (30) days prior to construction	Solano County and Contractor	Solano County; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
<p>3.3.1-8b: If the Proposed Project would directly impact known populations of special-status plants, the project proponent shall compensate for the loss of special status species through the following measures:</p> <ul style="list-style-type: none"> • Avoid existing, known populations where possible; • Minimize impacts by restricting removal of plants to a few individuals of a population where possible; • Prepare a Mitigation and Monitoring Plan to relocate plants and/or seed banks or reintroduce new populations in suitable habitat and soil types at a CDFW or USFWS-approved off-site location; • Monitor affected populations to document potential project-related impacts; • Restore or enhance occupied habitat at another regional location; and • Protect occupied habitat for the species at another regional location. 	Thirty (30) days prior to construction	Solano County and Contractor	Solano County; CDFW; USFWS	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
<p>3.3.1-9: The project proponent would purchase habitat creation credits at an USFWS approved mitigation bank and/or restore/enhance habitat within the designated Preserve areas upon USFWS approval to fully compensate for direct and indirect effects to habitat for federally listed vernal pool species. Compensation would be at a 2:1 preservation ratio and 1:1 creation ratio for direct effects to habitat for vernal pool species. Options for habitat compensation are described below.</p> <p>Option 1: Purchase Habitat for Vernal Pool Species Credits. Prior to the initiation of project construction, the project proponent would purchase the required acreage of vernal pool creation and preservation credits at a USACE and USFWS-approved mitigation bank at a 1:1 ratio. The project proponent would provide the USACE proof of the purchase prior to project construction.</p> <p>Option 2: Restore or Enhance Habitat within a Designated Preserve Area. Direct effects to habitat for vernal pool species would be compensated through the restoration and/or enhancement of habitat for vernal pool species within off-site USFWS-approved Preserve areas at a 2:1 ratio. The restoration goal would be to restore and enhance habitat for vernal pool species such that their ultimate functions and services are equal to or greater than the wetland features affected by the implementation of the Preferred Alternative. This effort could include restoring vernal pools and/or other suitable aquatic features that have been damaged by prior activities. The plan would include monitoring requirements to ensure the long term success of restored and enhanced habitats.</p>	Prior to construction	Solano County	Solano County; USFWS	Proof of purchase of mitigation credits or recordation of mitigation easement.
<p>3.3.3a: The Proposed Project will impact potential waters of the U.S., including 0.01 acres of stream channel (riverine) and 0.04 acres of seasonal wetland (Table 3.3-3). The project applicant would obtain all required permit approvals from the USACE, RWQCB, CDFW and any other agencies with permitting responsibilities for construction activities within jurisdictional features. Permit approvals and certifications would likely include the following:</p> <ul style="list-style-type: none"> • Clean Water Act Section 404. Permit approval from the USACE shall be obtained for the placement of dredge or fill material in waters of the U.S. pursuant to Section 404 of the federal Clean Water Act. The Section 404 permit application would require a delineation of wetlands and other waters of the U.S., a jurisdictional determination from the USACE, and preparation of a Pre-Construction Notification (PCN) and supporting documentation. A PCN outlines project activities, areas of impact, construction techniques, and methods for avoiding and reducing impacts to jurisdictional features. State and federal regulations require that the project applicant avoid or minimize impacts to wetlands and waters and develop appropriate protection for wetlands. Wetlands that cannot be avoided must be compensated to result in "no net loss" of wetlands to ensure that the project would maintain the current functions and values of onsite wetland habitats. • Clean Water Act Section 401 Water Quality Certification/Porter-Cologne Act. Approval of Water Quality Certification (WQC) under the CWA and/or Waste Discharge Requirements (WDRs) under the Porter-Cologne Act shall be obtained from the RWQCB for work within jurisdictional waters. Application for a WQC requires an application and supporting materials, including construction techniques, areas of impact, mitigation 	Project design	Solano County	Solano County; USACE; RWQCB; CDFW	Solano County will obtain the appropriate permits from the USACE, RWQCB, or CDFW during the project design review process.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
<p>measures, project schedule, and proof of CEQA compliance. Application for a WDR requires an application and supporting materials, including a characterization of the discharge which includes but is not limited to: design and actual flows; a list of constituents and the discharge concentration of each constituent; a list of other appropriate waste discharge characteristics; a description and schematic drawing of all treatment process; a description of any BMPs used; and a description of disposal methods. Proof of CEQA compliance is also required.</p> <ul style="list-style-type: none"> • <u>California Fish and Game Code Section 1602</u>. CDFW requires a Streambed Alteration Agreement for activities that result in alteration of the bed or bank of a stream (typically the top of bank or edge of riparian habitat, whichever is greater), or that adversely impact fish or wildlife resources. The notification package must be submitted by the project proponent to CDFW and shall include supporting materials, including construction techniques, areas of impact, mitigation measures, project schedule, and proof of CEQA compliance. An application fee shall be submitted with the completed application. The project proponent shall comply with all mitigation measures within the Streambed Alteration Agreement with CDFW, including mitigation for any loss of riparian habitat (typically 1:1 ratio). <p>3.3.5a: Sensitive tree resources adjacent to construction activities may require protection during the implementation of the Proposed Project. The following measures shall protect trees to be retained onsite during project implementation:</p> <ul style="list-style-type: none"> • A Tree Protection Zone (TPZ) shall be established around any tree or group of trees to be retained. The formula typically used is defined as 1.5 times the radius of the dripline or 5 feet from the edge of any grading, whichever is greater. The TPZ may be adjusted on a case-by-case basis after consultation with a certified arborist. • The TPZ of any protected trees shall be marked with permanent fencing (e.g., post and wire or equivalent), which shall remain in place for the duration of construction activities in the area. Post "keep out" signs on all sides of fencing. • Construction-related activities, including grading, trenching, construction, demolition, or other work shall be prohibited within the TPZ. No heavy equipment or machinery shall be operated within the TPZ. No construction materials, equipment, machinery, or other supplies shall be stored within a TPZ. No wires or signs shall be attached to any tree. Any modifications must be approved and monitored by a certified arborist. • Prune selected trees to provide necessary clearance during construction and to remove any defective limbs or other parts that may pose a failure risk. All pruning shall be completed by a certified arborist or tree worker and adhere to the <i>Tree Pruning Guidelines</i> of the International Society of Arboriculture. • The TPZs of protected trees shall be monitored on a weekly basis. • A certified arborist shall monitor the health and condition of the protected trees and, if necessary, recommend additional mitigations and appropriate actions. This shall include the monitoring of trees adjacent to project facilities in order to determine if construction activities (including the removal of nearby trees) would affect protected trees in the future. 	Prior to and during construction	Solano County; Contractor	Solano County	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified arborist.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
<ul style="list-style-type: none"> Provide supplemental irrigation and other care, such as mulch and fertilizer, as deemed necessary by a certified arborist. Any injuries shall be treated by a certified arborist. 				
Cumulative Impacts to Biological Resources Implement Measures 3.3.1-1 through 3.3.3a described above.	See previous measures	See previous measures	See previous measures	See previous measures
3.4 Cultural Resources				
3.4-1: Discovery of Archaeological Resources. In the event that previously unidentified archaeological, Native American, or paleontological resources are uncovered during project implementation, all work should cease within 100 feet of the find until it can be evaluated by a qualified archaeologist, as defined as one meeting the Secretary of the Interior's Professional Qualification Standards for archaeology, or paleontologist (U.S. Department of the Interior, 2012). If the find is determined to be potentially significant, the archaeologist, in consultation with the lead agency and appropriate Native American group(s) (if the find is prehistoric or Native American in nature) or paleontologist should develop a treatment plan with an emphasis towards preservation in place. If resources are encountered, avoidance, or preservation in an undisturbed state is the preferable course of action. CEQA §21083.2(b) provides that preservation methods may include: <ul style="list-style-type: none"> Planning construction to avoid archaeological sites. Deeding sites into permanent conservation easements. Capping or covering sites with a layer of soil before building on the sites. Planning parks, green space, or other open space to incorporate archaeological sites. 	During construction process	Solano County and Contractor	Solano County; NAHC	The NAHC shall be contacted by the Solano County in the event potential resources are discovered, who will in turn contact appropriate Tribal authorities. A letter of compliance shall be submitted to Solano County as proof of compliance with this measure.
3.4-2: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who will then participate in consultation with the landowner to determine the appropriate future disposition of the remains.	During construction process	Solano County and Contractor	Solano County; Solano County Coroner; NAHC	The NAHC shall be contacted by the Riverside Solano County Coroner kin the event potential resources are discovered, who will in turn contact appropriate Tribal authorities. A letter of compliance shall be submitted to March JPA Solano County as proof of compliance with this measure.
Cumulative Impacts to Cultural Resources Implement Measures 3.4-1 and 3.4-2.	See previous measures	See previous measures	See previous measures	See previous measures

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
3.7 Hazards and Hazardous Materials				
3.7-1: Prior to the start of constructing activities, a Phase I environmental site assessment shall be conducted to determine the presence and extent of lead-based paint. The assessment shall be in accordance with Title 17, Division 1, Chapter 8 of the California Code of Regulations. Should this assessment determine that lead-based paint is present; a lead-based paint abatement plan shall be prepared to remove all lead-based paint prior to demolition activities. A health and safety plan shall be developed by a certified industrial hygienist for potential lead-based paint present during demolition of existing structures. The health and safety plan shall then be implemented by a licensed contractor for all phases of remodeling activities.	Prior to construction	Solano County; Contractor	Solano County	Solano County shall submit documented resolution of all issues and concerns, to include compliance with applicable state and local regulations, and any environmental restrictions, shall be submitted to Solano County as proof of compliance.
3.8 Hydrology and Water Quality				
3.8-1: In order to reduce potential impacts associated with all phases of development, the Applicant shall prepare and submit a Drainage Plan to the City engineer and the Central Valley Regional Water Quality Control Board for approval. The Drainage Plan shall include design/plan level depiction of all proposed stormwater drainage facilities such as vegetated swales, and/or detention basins. The following measures shall be implemented within the Drainage Plan, based on modeled runoff volumes and flow rates specific to with-Project conditions: <ul style="list-style-type: none"> The applicant shall design, implement, and maintain a stormwater retention and/or detention feature(s) such that there would be no net increase in project condition peak flows; and/or, with respect to the additional impervious surface area proposed for the project, the [applicant] shall design and implement volume- and/or flow-based Treatment Control Best Management Practices (BMPs) as defined in Attachment 4 (pages 5-6) of the State Water Resources Control Board (SWRCB) small municipal separate storm sewer systems (MS4s) General Permit (Small MS4 General Permit) (SWRCB Order 2003-0005-DWQ). Prior to implementation, design drawings and any related documents or specifications with respect to these required mitigation measures shall be submitted to the City of Vacaville and the Central Valley Regional Water Quality Control Board. 	Project design	Solano County	Solano County; RWQCB	Prior to issuance of permits, Solano County shall submit a drainage plan to the City of Vacaville and RWQCB for review and approval.
Cumulative Impacts to Hydrology and Water Quality Implement Measure 3.8-1.	See previous measures	See previous measures	See previous measures	See previous measures
3.9 Land Use				
3.9-1a: Prior to construction of non-aviation development on Nut Tree Airport property, project details shall be submitted to the ALUC for consistency review. Unless the lead agency overrules the ALUC's determination, only upon issuance of a consistency determination by the ALUC shall the development of proposed non-aviation land uses be allowed.	Project design	Solano County	Solano County; Solano County ALUC	Prior to issuance of a development permit, the Solano County ALUC shall review specifications of non-aviation uses for consistency with adopted ALUCP policies.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
3.9-1b: Prior to construction of the remodel and expansion of Nut Tree Airport's multi-use arrival and departure facility, project details shall be submitted to the ALUC for consistency review. Unless the lead agency overrules the ALUC's determination, only upon issuance of a consistency determination by the ALUC shall the remodel and expansion of the multi-use facility be allowed.	Project design	Solano County	Solano County; Solano County ALUC	Prior to issuance of a development permit, the Solano County ALUC shall review specifications of the expansion of the existing multi-use arrival/departure facility for consistency with adopted ALUCP policies.
3.10 Noise				
3.10-1: Construction noise exposure may be mitigated to comply with the established City of Vacaville Municipal Code requirements with implementation of the following.	Prior to contract issuance	Contractor	Solano County	This measure shall be added to general notes on construction specifications, plans, and bid documents.
<ul style="list-style-type: none"> • Confirm that all heavy construction equipment include factory approved/supplied mufflers and other standard noise-reducing engine devices. • Minimize heavy equipment engine idling whenever possible. • Stage all heavy construction away from noise sensitive uses. • Limit construction operations to between the hours of 7 am and 5 pm, Monday thru Saturday. Construction shall not be conducted on Sundays or federal holidays. 				
Cumulative Noise Impacts Implement Measure 3.10-1.	See previous measures	See previous measures	See previous measures	See previous measures
3.11 Utilities and Service Systems				
3.11-1: Prior to approval of Phase II development projects, or when Master Plan development exceeds 10 acres, the County shall undertake a wastewater study to determine existing and future flows, and identify sewer line improvements required to provide necessary capacity. In order to gather information for this study, a flow meter will be installed at the Airport by no later than 2016 (one year before the end of Phase I development). Data will be collected by the County and shared with the City for a minimum of one year in order to provide the City with current information regarding wastewater generation. The study shall be submitted to the City of Vacaville for review and approval.	Prior to issuance of connection allowances	Solano County	Solano County; City of Vacaville	Prior to issuance of connection allowances for Phase II development, or when Master Plan development exceeds 10 acres, Solano County will prepare a flow demand study and submit it to the City of Vacaville for review and approval.
3.3.1-2a: Pre-construction surveys for burrowing owls shall be conducted within 30 days prior to the start of any construction activities occurring in suitable habitat (i.e. annual grassland with burrows). The project proponent shall conduct preconstruction surveys in suitable nesting habitat for burrowing owls within 250 feet of project activities prior to construction that will occur between February 1 and August 31 (breeding season), and within 165 feet of project activities that will occur between September 1 and March 31 of any given year (non-breeding season). If construction activities are delayed for more than 30 days	Thirty (30) days prior to construction	Solano County	Solano County; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
<p>after the initial pre-construction surveys, then a new survey shall be required. Surveys shall conform to Appendix C and D of CDFW's <i>Staff Report on Burrowing Owl Mitigation</i> (Appendix F) (CDFG, 2012c) or as otherwise approved by CDFW.</p> <p>If active burrows are recorded within 250 feet of project activities, the following measures will apply:</p> <ul style="list-style-type: none"> 3. No disturbance should occur within a 250-foot buffer around each active owl burrow during the breeding season and a 165-foot buffer during the non-breeding season or as otherwise approved by CDFW. Occupied burrows shall not be disturbed during the breeding season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through noninvasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival 4. If owls must be moved away from the disturbance area; passive relocation techniques in accordance with CDFW's <i>Staff Report on Burrowing Owl Mitigation</i> (CDFG, 2012c) shall be used. Passive relocation shall take place outside of the breeding season (February 1 to August 31). <p>3.3.1-2b: Pre-construction surveys for tree-nesting raptors and migratory songbirds shall be conducted within 30 days prior to any construction that will occur between March 15 and September 15 of any given year. Pre-construction surveys shall be conducted by a qualified biologist. All suitable nesting habitat for tree nesting raptors and migratory songbirds shall be surveyed within 0.5-mile radius of the Proposed Project impact area.</p> <ul style="list-style-type: none"> 3. If active nests are found during pre-construction surveys, a no-disturbance buffer (acceptable in size to CDFW) shall be created around active raptor nests and nests of other special-status birds during the breeding season, or until it is determined that all young have fledged. Typical buffers include 500 feet for raptors and 250 feet for other nesting birds. The size of these buffer zones and types of construction activities restricted in these areas could be further modified during construction in coordination with CDFW and shall be based on existing noise and human disturbance levels in the study area. Input shall also be sought from the Nut Tree Airport Operations Safety Officer concerning the hazards posed by wildlife nesting in proximity to an active airport. 4. If pre-construction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation shall be required. Trees and shrubs within the construction footprint determined to be unoccupied by special-status birds, or that are outside the no-disturbance buffer for active nests, could be removed. 				avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
	Thirty (30) days prior to construction	Solano County	Solano County; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
3.3.1-7: Prior to construction, a qualified biologist would conduct a survey for western pond turtles within 24 hours of the start of construction activities within 500 feet of streams, ditches, and other watercourses located within the proposed construction areas. If no individuals are identified then no additional measures are required. If a turtle is found in a proposed construction area, the biologist would move the turtle from the area to suitable habitat within the vicinity.	Twenty-four (24) hours prior to start of construction	Solano County	Solano County	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
3.3.1-8a: Prior to construction, vegetated portions of the study area including wetland habitats would be surveyed by a qualified botanist for special-status plants following established CDFW Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities (CDFG, 2009) (Appendix G, Survey Protocols and Mitigation Guidelines), which calls for protocol-level surveys during the appropriate flowering/identification period for each potentially affected species.	Thirty (30) days prior to construction	Solano County and Contractor	Solano County; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
3.3.1-8b: If the Proposed Project would directly impact known populations of special-status plants, the project proponent shall compensate for the loss of special status species through the following measures: <ul style="list-style-type: none">• Avoid existing, known populations where possible;• Minimize impacts by restricting removal of plants to a few individuals of a population where possible;• Prepare a Mitigation and Monitoring Plan to relocate plants and/or seed banks or reintroduce new populations in suitable habitat and soil types at a CDFW or USFWS-approved off-site location;• Monitor affected populations to document potential project-related impacts;• Restore or enhance occupied habitat at another regional location; and• Protect occupied habitat for the species at another regional location.	Thirty (30) days prior to construction	Solano County and Contractor	Solano County; CDFW; USFWS	Results of the survey and any recommended avoidance measures must be provided to the appropriate Solano County planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
Cumulative Impacts to Utilities and Service Systems Implement Measure 3.11-1.	See previous measures	See previous measures	See previous measures	See previous measures

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
3.12 Transportation and Circulation <p>3.12-1: Pay Traffic Impact Fee towards traffic signal installation at East Monte Vista Avenue and County Airport Road and I-505 Westbound Off-Ramp / I-80 Eastbound On-Ramp. A traffic signal warrant analysis has been completed to determine whether the unsignalized study intersection may require or benefit from the installation of a traffic signal. The term "signal warrant" refers to any of the eight established methods used by Caltrans to quantify the need for a traffic signal at an unsignalized intersection, described in the latest edition of the <i>California Manual on Uniform Traffic Control Devices</i> (MUTCD) (Caltrans, 2012b). The California MUTCD indicates that the installation of a traffic signal should be considered only if one or more of the eight signal warrants are met. Based on MUTCD's peak-hour Warrant #3 criteria, this intersection would qualify for signalization with the projected Cumulative (Year 2035) and Cumulative plus Project traffic volumes during the p.m. peak hour. The City of Vacaville would continue monitoring operations at this intersection (to determine the timing of the signal installation) and would provide for signalization as part of the Traffic Impact Mitigation portion of Development Impact Fee Program. The City's Traffic Impact Fee provides for a number of traffic signals that are warranted as a result of cumulative conditions.</p> <p>Per Chapter 11.01 (Development Impact Fees) of the City Municipal Code, the purpose of a Traffic Impact Fee is to provide for costs of street widening and reconstruction, traffic signals, transit facilities, bike paths, bridge widenings, and freeway interchange improvements related to new development in accordance with the development forecast under the General Plan. The demand for the identified transportation improvements has been based on the development forecast and accepted traffic analysis methodology from the previously referenced documents. Without funding-identified capital improvements, there will be an unacceptable level of traffic congestion, delays, accidents and generally reduced public safety throughout the city. Based on the development potential of the General Plan as analyzed through the development forecast, engineering consultants and the city staff have utilized traffic studies including trip generation and intersection analysis models to indicate the impact of new development in terms of roadway capacities, signalization standards, and interchange requirements to develop the transportation capital improvements projects. The projects were refined to apportion the impacts and resulting share of improvements between various land uses in accordance with prior Major Streets and Interchange fee studies. The County would pay a Development Impact Fee as their fair share contribution (to be negotiated between the City of Vacaville and the Lead Agency) to mitigate their share of the need for a traffic signal at this intersection.</p> <p>With installation of traffic signal, the intersection would operate at LOS D (acceptable) during the p.m. peak hour.</p> <p>However, installation of a traffic signal at this intersection would require coordination with, and approval by, Caltrans. Because the mitigation measure is not in the control of the City to implement, the cumulative impact is considered to remain significant and unavoidable. However, in the event that Mitigation Measure 3.12-2 could be implemented, the impact would be less than significant.</p>		Solano County	Solano County; City of Vacaville; Caltrans	Proof of purchase of traffic impact fee provided by City of Vacaville.

TABLE 9-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsibility/Reporting Entity	Monitoring Agency	Method of Assurance
3.12-2: As described on page 3.12-Error! Bookmark not defined. (Table 3.12-6), the 25,000 square feet of office space on the planned 1.3-acre parcel for non-aviation development, used to estimate vehicle trip generation, was approximated from data in SANDAG Trip Generation Manual. By reducing the development capacity of office use to 21,000 square feet, the project (at full buildout) would result in fewer number of weekday and peak hour trips (i.e., 44 fewer daily trips, and eight and seven fewer trips during the a.m. and p.m. peak hours, respectively).	Project design	Solano County	Solano County	During project design, the applicable Solano County planner will coordinate with the project designer to ensure that the proposed use does not exceed 21,000 square feet.
Cumulative Traffic Impacts Implement Measures 3.12-1 and 3.12-2.	See previous measures	See previous measures	See previous measures	See previous measures