

MITIGATION MONITORING PROGRAM

INTRODUCTION

This document describes the County Mitigation Monitoring Program (MMP) for the 2001 Kirkwood Specific Plan (Specific Plan), the Mountain Master Development Plan (MMDP), and the wastewater treatment plant upgrade (WWTP). [Kirkwood Recirculated Revised Final Environmental Impact Report (Alpine County et al, 2002) (FEIR)]. Pursuant to 14 C.C.R. § 15367, Alpine County was the lead agency for the Environmental Impact Report (EIR) that analyzed the impacts of the Specific Plan, the MMDP, and the WWTP.

Since the FEIR's certification, KMR has requested that Alpine County approve the Specific Plan as modified by Alternative E in the FEIR. Alternative E reduces the Specific Plan's proposed development in Kirkwood North, Ski-In/Ski-Out, as well as the overall population growth in the valley. [FEIR at page 5-11]. As a result, the Specific Plan, as modified by Alternative E, would result in less environmental impacts than would the Specific Plan as it was first defined in the FEIR's "Proposed Project." [FEIR at pages 5-37 to 5-39].

Given KMR's request that Alpine County consider approval of the Specific Plan as modified by Alternative E, the Proposed Project that is the subject of this MMP includes:

- (1) The 2001 Kirkwood Specific Plan as modified by Alternative E of the FEIR;
- (2) The Mountain Master Development Plan (MMDP); and
- (3) The wastewater treatment plant upgrade (WWTP).

The MMP is presented pursuant to California Public Resources Code § 21081.6(a), which requires public agencies to "adopt a reporting and monitoring program for the changes made to the project or conditions of project approval adopted in order to mitigate or avoid significant effects on the environment." [See also 14 C.C.R. § 15091(d)]. A MMP is required for the Proposed Project because the EIR has identified potentially significant adverse impacts, and mitigation measures have been identified to mitigate or avoid those impacts. The numbering of the individual mitigation measures follows the numbering sequence as found in the Kirkwood Recirculated Revised Final Environmental Impact Report (FEIR, Alpine County et al, 2002). All revisions to mitigation measures resulting from public comment and staff review of prior drafts of the environmental document have been incorporated into this MMP. The MMP includes, and identifies, those mitigation measures that Alpine County found to be within the responsibility and jurisdiction of a public agency other than Alpine County, and that can and should be adopted by such other agency. 14 C.C.R. § 15091(a)(3).

In accordance with state statutes, adoption of the MMP will occur prior to, or concurrently with, adoption of the Proposed Project for which the program has been developed.

PURPOSE AND STRUCTURE OF THE MMP

An MMP is intended to serve the following functions:

- Ensure that mitigation measures are implemented.
- Provide feedback to agency staff and decision makers about the effectiveness of the mitigation measures.
- Provide learning opportunities for improving mitigation measures on future projects.
- Identify the need for enforcement action before irreversible environmental damage occurs.

The table that follows this introductory text is the body of the MMP. For each mitigation measure required as a condition of project adoption, the following information is provided in the table.

Impact and Mitigation Measures

The MMP follows the organization of the FEIR's impact analysis.

Action Required

For every mitigation measure, one or more actions are described. These are the heart of the MMP as they define the means for implementing mitigation measures and, in many cases, the criteria for determining whether measures have been implemented. In some cases, the mitigation measure itself provides adequate detail, so the information under Action Required is merely a summary. In other cases, substantial new information regarding how a measure is to be implemented is provided.

Timing Requirement

Each action must take place during or prior to some element of the Proposed Project or project development or approval. Some measures will be applied through the entire term of the Proposed Project, some will be applied at specific junctures, and others will be necessary only if certain circumstances arise.

Responsible Party

This is the entity responsible for actual, on-the-ground implementation of the mitigation measure. In most instances, the "project proponent" is identified as the Responsible Party. This could be KMR for activities they undertake at the community level, KMPUD for the WWTP, or individual developers for specific residential or commercial projects. In some cases, the Responsible Party is a governmental entity or agency (e.g., creation of an ordinance).

Review Authority

This is the agency or individual with oversight of the mitigation measures' implementation. The Review Authority will oversee the Responsible Party's efforts to implement the mitigation measure and determine whether the effort is adequate to meet the intent of the mitigation measure. Because the Tri County Technical Advisory Committee (TC-TAC) will play the central oversight role in insuring that mitigation measures are implemented and effective (see Overall Mitigation Monitoring/Project Review below), the TC-TAC is most often identified as the Review Authority. For measures involving the ski area special use

permit area or other National Forest System resources, the Forest Service is often listed with TC-TAC. In a few instances, other state or federal agencies will have an active oversight role and are also listed as Review Authorities.

Enforcement Authority

This is the entity, typically a regulatory agency, with the legal authority to assure that the required mitigation measure has been applied and that the intended reduction in impacts has occurred. This is typically not TC-TAC, because of that committee's advisory role. Where enforcement will ultimately be a county function, the appropriate county official or office is identified. For impacts to National Forest System resources, the Forest Service is included in this role. In instances where other state or federal agencies have enforcement authority for a particular measure, they are also identified.

OVERALL MITIGATION MONITORING/PROJECT REVIEW

Biennial Review

Every 2 years KMR or its successor will provide a report on development progress to date, and projected development for the next 2 years. The report will contain information on the following:

- Status of total development within the resort.
- Construction and phasing of necessary infrastructure and utilities.
- Status of any required off-site improvements necessary to support development of the resort.
- Compliance with required mitigation monitoring and conditions of approval for the Proposed Project.

The report will be reviewed at a regular meeting of the TC-TAC. Copies of the report, along with the comments of TC-TAC, will be forwarded to the planning commissions and boards of supervisors of all three counties and will be made available to the public. KMR will provide a summary of the report to all property owners within the resort.

Biennial Fiscal Impact Analysis Review:

A. KMR has provided the County with an analysis entitled the Kirkwood Mountain Resort Kirkwood Specific Plan Fiscal Impact Analysis and dated April 2003 ("2003 Fiscal Impact Analysis"). The 2003 Fiscal Impact Analysis describes the fiscal impacts on Alpine County of the development contemplated under the Kirkwood Specific Plan. The 2003 Fiscal Impact Analysis indicates that for the budget year 2001/02, Kirkwood produced a surplus of County revenues over the costs of County Services in the approximate amount of \$714,588.00. [2003 Fiscal Impact Analysis page ii, Table ES-19]. The 2003 Fiscal Impact Analysis further indicates that, at complete build-out of the Specific Plan, the County's annual revenues from future development under the Specific Plan will exceed the expected County costs of services by \$2,024,181.00. [April 2003 Fiscal Impact Analysis page iv, Table ES-2].

B. During the required biennial review of the project impacts, KMR and the County will evaluate the cost of the County's services resulting from development under the revised Specific Plan.

C. If the conclusions provided in that evaluation differ by more than thirty (30%) from the corresponding conclusions of the 2003 Fiscal Impact Analysis, then KMR shall submit a revised fiscal report for County review and approval. If the evaluation indicates that the County's actual cost of service exceeds the projected annual revenues from taxes, fees and assessments plus any cumulative surplus of revenues, then the County and KMR agree to jointly evaluate mechanisms for increasing County revenues or reducing County expenses so that there is not a net negative number. If after approval of the revised Specific Plan, actual annual County expenses exceed taxes, fees and assessments plus any cumulative surplus of revenues, the County shall have no obligation to approve further development under the revised Specific Plan.

D. KMR and the County shall resolve any controversy or claim related to this Fiscal Review Requirement pursuant to this provision, which shall survive the expiration or termination of the Fiscal Review Requirement.

- (i) In the event of a dispute involving the cost or level of County services provided, KMR and the County shall provide each other documentation justifying their respective positions.
- (ii) KMR and the County shall first seek to resolve any dispute by negotiations between authorized representatives.
- (iii) If the dispute has not been resolved by negotiations within thirty days of it having been raised by either KMR or the County, either KMR or the County may initiate mediation of the dispute by sending the other entity a written request that the dispute be mediated.
- (iv) Should the mediation not result in a settlement of any or all issues, either KMR or the County may request declaratory relief as to the responsibilities of the parties in a court of competent jurisdiction. The prevailing party in any such action shall be entitled to recover its reasonable attorney's fees, expert witness fees, and costs.

10-Year Review

During the tenth year following approval of the Proposed Project, KMR or its successor will retain a qualified consultant to review the development for compliance with the mitigation requirements in this MMP and any other conditions of approval of the Proposed Project. The selection of the consultant will be mutually agreed to by TC-TAC. The consultant will identify any shortcomings and make recommendations for adjustment to mitigation measures or conditions of approval to overcome those shortcomings. Additionally, the consultant will identify any new circumstances or unanticipated impacts that were not foreseen when the FEIR was certified and the Proposed Project approved. The consultant will recommend whether or not a supplemental EIR may be necessary.

The consultant's report and recommendations will be reviewed at a regular meeting of TC-TAC. Prior to the meeting, the report will be made available to the public. TC-TAC will consider the report and forward recommendations, along with the consultant's report, to the planning commissions and boards of supervisors of all three counties.

It will be clear that a decision regarding preparation of a supplemental EIR will be made by the lead agency subject to the requirements of CEQA. Further action, including additional mitigation measures, adjustments

to the Proposed Project and additional conditions of approval may be considered and imposed in accordance with the requirements of CEQA and other applicable laws, ordinances, and regulations.

KIRKWOOD SPECIFIC PLAN MITIGATION MONITORING PLAN					
Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
4.1 GEOLOGY, SOILS, AND GEOLOGIC HAZARDS					
Soil disturbance and erosion.					
COA 3 - Mitigation Measure 4.1 (a). Construction will comply with the requirements of the Kirkwood erosion control ordinance, which includes, but is not limited to measures (b) through (h) below. Prepare a plan for individual development projects that demonstrates compliance with the provisions of the Kirkwood erosion control ordinance.	Prepare a plan for individual development projects that demonstrates compliance with the provisions of the Kirkwood erosion control ordinance.	Prior to construction.	Project proponent.	TC-TAC.	County Engineer.
COA 4 - Mitigation Measure 4.1 (b). Practice selective soil exposure by removing soil only in areas of immediate development/ construction; coordinate erosion and sedimentation control with grading, development, and construction practices. Implement Best Management Practices (BMPs) to regulate construction activities.	Implement BMPs to regulate construction activities.	During construction.	Project proponent.	TC-TAC, FS.	County Engineer, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 5 - Mitigation Measure 4.1 (c). Stockpile topsoil for usage as a revegetative media on disturbed areas and restore sites with topsoil placed over subsoil fill; control runoff from these stockpiled areas to minimize erosion and sedimentation.	Separate top soil for site restoration.	During construction.	Project proponent.	TC-TAC, FS.	County Engineer, FS.
COA 6 - Mitigation Measure 4.1 (d). Utilize sediment basin and retention structures when other control measures are unacceptable.	Use sediment basin and retention structures as required.	During construction.	Project proponent.	TC-TAC, FS.	County Engineer, FS.
COA 7 - Mitigation Measure 4.1 (e). Preserve floodplains and riparian areas adjacent to natural drainages and streams.	Avoid construction activities in floodplains and riparian areas.	During construction.	Project proponent.	County Planning, County Engineer, CDFG, FS, COE.	County Planning, County Engineer, FS, COE.
COA 8 - Mitigation Measure 4.1 (f). Design runoff control to fit the hydrologic setting of the area and to be in compliance with County Subdivision, Parcel Map and Site Improvement Standards.	Comply with the County Subdivision, Parcel Map and Site Improvement Standards.	Prior to construction.	Project proponent.	County Engineer.	County Engineer.
COA 9 - Mitigation Measure 4.1 (g). Preserve natural features (e.g., existing vegetation, wetlands) to the extent practicable through effective construction-site management. Manage construction activities so as to minimize impacts.	Manage construction activities so as to minimize impacts.	During construction.	Project proponent.	County Engineer, FS.	County Engineer, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 10 - Mitigation Measure 4.1 (h). KMR will coordinate phasing with El Dorado National Forest (FS) and TC-TAC in order to preclude having the amount of concurrent construction so great that a torrential storm or other high-runoff event could cause significant erosion	Coordinate timing of construction projects with TC-TAC and Forest Service.	As part of biennial review of MMRP.	Project proponent.	TC-TAC, FS.	County Engineer, FS.
COA 11 - Mitigation Measure 4.1 (i). Utilize construction roads only where and when necessary.	In site improvement plans, incorporate existing road network into plans for project-specific construction roads to result in as few construction road miles as possible.	Prior to construction.	Project proponent.	County Engineer, FS.	County Engineer, FS.
COA 12 - Mitigation Measure 4.1 (j). Limit soil disturbance and vegetation removal to only permanent disturbance locations and those areas necessary for access to construction zones.	In site improvement and grading plans, emphasize reduction of disturbance area rather than simply providing optimal site access.	Prior to construction.	Project proponent.	County Engineer, FS.	County Engineer, FS.
COA 13 - Mitigation Measure 4.1 (k). Construction roads and road beds will require water bars, mulching, and other erosion control techniques.	Include construction roads in plans for compliance with the Kirkwood erosion control ordinance and plans for rehabilitation of on-mountain construction sites.	During construction.	Project proponent.	County Engineer, FS.	County Engineer, FS.
Mitigation Measure 4.1 (l). KMPUD will include sedimentation monitoring as a component of water quality monitoring	Add total suspended solids (TSS) to ongoing water quality monitoring program.	Monthly, or as routine KMPUD monitoring is	KMPUD.	County Engineer, ENF	County Engineer, ENF

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
efforts, including tests for total suspended solids.		scheduled.			
COA 14 - Mitigation Measure 4.1 (m). Construction activities will be monitored by a qualified monitor to ensure compliance with soil erosion prevention practices and mitigation measures, outlined above.	Monitor construction activities using outside inspectors.	During construction.	Project proponent.	County Engineer, FS.	County Engineer, FS.
COA 15 - Mitigation Measure 4.1 (mm). Utilities (power, phone, water, sewer, cable) for new projects will be placed in a common trench whenever feasible.	Coordination from utility providers during planning.	During planning.	Project proponent.	County Engineer, FS.	County Engineer, FS.
Decreased soil productivity.					
COA 16 - Mitigation Measure 4.1 (o). Promptly revegetate all disturbed ground immediately following construction. This revegetation effort will be supplemented by the placement of erosion matting during seeding to preserve topsoil and prevent erosion if an unforeseen runoff event occurs. Temporarily disturbed areas will be reseeded to re-establish the vegetation type and density comparable to native vegetation surrounding the disturbed area.	Reclaim disturbed areas to conditions similar to those in adjacent areas of native vegetation.	Following final shaping and grading, but no later than October 15.	Project proponent.	County Engineer, FS.	County Engineer, FS.
COA 17 - Mitigation Measure 4.1 (p).	Use mulching techniques to	Within 72 hours of	Project proponent.	County Engineer,	County Engineer,

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
Mulching, hydromulching, landscape netting, sterile straw, or other protective materials will be used to maintain soil moisture. This will enhance revegetation efforts.	conserve soil moisture and enhance revegetation efforts.	seeding of disturbed areas.		FS.	FS.
COA 18 - Mitigation Measure 4.1 (q). Fill placed in areas to be revegetated will be compacted to a bulk density and porosity similar to adjacent native soils.	Restore soil characteristics in filled areas to be similar to adjacent undisturbed soils.	During site reclamation.	Project proponent.	County Engineer, FS.	County Engineer, FS.
Shrink/swell potential of soils.					
COA 19 - Mitigation Measure 4.1 (r). If shrink/swell soils are discovered at proposed building sites they should be avoided by relocating the proposed facility, or the material should be removed and replaced with non-expansive soils.	Avoid construction on shrink/swell soils through relocating building or replacing susceptible soils.	Prior to issuing building permits.	Project proponent.	County Engineer, County environmental health or building official.	County Engineer, County environmental health or building official.
Seismic hazards.					
COA 20 - Mitigation Measure 4.1 (s). Plans and specifications for structures should integrate engineering and design standards appropriate to UBC Seismic Zone III to minimize structural effects.	Developers (proponent, commercial, or private) will prepare building plans incorporating appropriate design standards.	Prior to issuing building permits.	Project proponent.	County building official.	County building official.
COA 21 - Mitigation Measure 4.1 (t). Specific building sites will be evaluated by a geotechnical or soils engineer to determine the level of liquefaction hazard.	Site inspection and any required soil analysis will be conducted by a qualified engineer prior to development	Prior to issuing building permits.	Project proponent.	County building official.	County building official.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
The factors to consider include: soil density, porosity, moisture content, water table, gradation, and depth.	of building plans.				
COA 22 - Mitigation Measure 4.1 (u). In areas of high liquefaction potential, engineering will include standard measures (e.g., increasing the density of foundation soils, employing larger foundations, and site drainage) to increase stability.	Incorporate appropriate site preparation requirements into development plans.	Prior to issuing building permits.	Project proponent.	County building official.	County building official.
Rockfall and unstable slopes.					
COA 23 - Mitigation Measure 4.1 (v). During excavation, remove loose sediments and large boulders by scaling to minimize the hazard.	Perform site preparation appropriate to the existing site conditions.	Prior to issuing building permits and during construction.	Project proponent.	County building official , FS.	County building official, County Engineer, FS.
COA 24 - Mitigation Measure 4.1 (w). If appropriate, install temporary barricades and/or wire mesh fencing on unstable slopes.	Install stabilizing materials within 24 hours of site shaping and grading.	Prior to issuing building permits and during construction.	Project proponent.	County building official, FS.	County building official, FS.
COA 25 - Mitigation Measure 4.1 (x). A professional engineer or engineering geologist should certify that slopes associated with excavation are designed to ensure stability.	Contract qualified engineer to review site plans and perform site inspections as necessary.	Prior to issuing building permits or concurrent with site improvement plans.	Project proponent.	County Engineer or County building official, FS.	County Engineer or County building official, FS.
Ground settlement.					
COA 26 - Mitigation Measure 4.1 (y).	Contract qualified engineer to	Prior to issuing	Project proponent.	County Engineer	County Engineer

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
Alluvial soils at the site of specific structures should be evaluated by a geotechnical or soils engineer to determine if the risks associated with ground settlement are significant.	review site plans and perform site inspections as necessary.	building permits or concurrent with site improvement plans.		or County building official, FS.	or County building official, FS.
COA 27 - Mitigation Measure 4.1 (z). Where feasible, remove susceptible soils to eliminate risk.	Remove unstable soils during site preparation.	Prior to issuing building permits or concurrent with site improvement plans.	Project proponent.	County Engineer or County building official, FS.	County Engineer or County building official, FS.
COA 28 - Mitigation Measure 4.1 (aa). Incorporate accepted engineering controls to minimize effects on the structure, or avoid problematic sites.	Incorporate design measures into site plans.	Prior to issuing building permits or concurrent with site improvement plans.	Project proponent.	County Engineer or County building official, FS.	County Engineer or County building official, FS.
COA 29 - Mitigation Measure 4.1 (ab). Note water table elevations and identify active springs at each site and adjust designs or preventative measures per accepted engineering standards.	Incorporate design measures into site plans.	Prior to issuing building permits or concurrent with site improvement plans.	Project proponent.	County Engineer or County building official, FS.	County Engineer or County building official, FS.
Avalanches.					
COA 30 - Mitigation Measure 4.1 (ac). In accordance with the Specific Plan, avoid residential development, or development that concentrates human activity (ticket areas, parking lots, trailheads, etc.) in areas designated as high avalanche hazard [2002	Incorporate avalanche hazard concerns into proposed development plans.	Submitted with tentative maps, use permit, or equivalent application for development.	Project proponent.	County Planning, FS.	County Planning, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
Final EIR, Figure 4.3]. Limited road construction in these zones is acceptable					
COA 31 - Mitigation Measure 4.1 (ad). Construction of private buildings may be acceptable in zones of moderate avalanche hazard [See 2002 Final EIR, Figure 4.3]. However, reinforcement or protection for design avalanche loads is necessary. Incorporation of Mears's (1997) four structural types of avalanche mitigation is recommended: (1) direct protection structures; (2) deflecting structures; (3) retarding mounds; or (4) catchment dams. [2002 Final EIR at page 4-30]	Incorporate avalanche resistant structures into final subdivision plans or building plans as necessary.	Submitted with building permit application or site improvement plans.	Project proponent.	County Engineer or County building official, FS	County Engineer or County building official, FS.
COA 32 - Mitigation Measure 4.1 (ae). To minimize hazards, the current avalanche forecasting and control program carried out within the ski area boundaries at Kirkwood should continue, with annual evaluation of the program's effectiveness.	Submit an annual report to TC-TAC.	Annually, prior to September 30.	KMR.	TC-TAC, FS.	TC-TAC, FS.
COA 33 - Mitigation Measure 4.1 (af). Properties located adjacent to the boundaries of mapped avalanche hazard zones should display signs identifying the potential for this hazard.	Post signs warning of avalanche danger where hazard zones encroach on roads or private property boundaries. Signs along roads should prohibit stopping or parking in these zones during avalanche prone seasons.	Following grading and surfacing of subdivision access roads and prior to residential construction.	Project proponent.	TC-TAC.	TC-TAC.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
4.2 WATER RESOURCES					
Increased surface runoff volumes and erosion.					
COA 34 - Mitigation Measure 4.2 (a). Implement grading measures to retard and reduce runoff, e.g., minimize slopes, construct detention basins, and design swales to diffuse runoff and absorb excessive energy.	Incorporate runoff-reducing design elements in final construction and grading plans.	Submit with site improvement plans or grading plans.	Project proponent.	County Engineer, FS.	County Engineer, FS.
COA 35 - Mitigation Measure 4.2 (b). Use vegetation, geotextiles, rock, gravel, and other surface treatments to retard and absorb runoff.	Incorporate runoff-reducing design elements in final construction plans.	Submit with site improvement plans or grading plans.	Project proponent.	County Engineer, FS.	County Engineer, FS.
COA 36 - Mitigation Measure 4.2 (c). Avoid creation of future flow barriers, obstructions and constrictions in streams and gullies.	Incorporate appropriate design elements and site building envelopes as necessary to avoid streams and gullies.	Review with site improvement plans or grading plans.	Project proponent.	County Engineer or County building official, FS.	County Engineer or County building official, FS.
COA 37 - Mitigation Measure 4.2 (dd). Implement grazing management practices outlined in the grazing plan, such as fencing livestock out of the riparian area of Kirkwood Creek. [2002 Final EIR, Appendix B].	Follow grazing management guidelines outlined in the Grazing Management Plan for Kirkwood Meadow (in RRFEIR Appendix B).	Ongoing, during grazing season.	KMR and stable concessionaire.	County Planning.	County Planning.
Increased future water demands and resultant consumptive use.					
COA 38 - Mitigation Measure 4.2 (e). Implement maximum water conservation	Practice water conservation techniques through use of	Concurrent with submittal of	Project proponent.	County Planning.	County Planning.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
and xeriscape landscaping measures, such as limited yard watering and use of drought resistant native plants.	drought tolerant plant species.	landscaping plans.			
COA 39 - Mitigation Measure 4.2 (f). Reclaim wastewater if necessary to help meet future water supply demands.	Implement waste water reclamation technology as necessary.	As needed, based on findings of biennial review.	KMPUD, Project proponent.	TC-TAC, County Planning.	County Planning.
Reduced infiltration rates and recharge of the Kirkwood Valley groundwater basin.					
Mitigation Measure 4.2 (g). To avoid sustained drawdown of the Kirkwood Valley watertable, KMPUD will develop and implement a Water Stage Alert System establishing a sliding scale from voluntary to required water conservation measures based on their ongoing monitoring of aquifer levels, coupled with their projections of water supply (based on precipitation data) and water demand. This system would be triggered when aquifer levels fall to less than 40 feet above the top of well pumps. Specific water conservation measures may include restrictions on vehicle washing, landscape watering, and household consumption.	Develop and implement Water Stage Alert System based on similar systems in similar communities. Monitor water levels over well pumps.	Develop system by summer 2003, implement as needed.	KMPUD.	County Planning.	County Planning.
Mitigation Measure 4.2 (h). To assist in minimizing impacts to instream flows in	Implement Mitigation Measure 4.2 (g) and	Develop system by summer 2003,	KMPUD.	County Planning, Division of Water	County Planning, Division of Water

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
Kirkwood Creek and downstream waterways, KMPUD will limit or cease pumping from Well 2, which taps the shallow aquifer and is indirectly associated with the creek, when the Water Stage Alert System is in effect.	incorporate this stipulation.	implement as needed.		Resources.	Resources
COA 40 - Mitigation Measure 4.2 (i). Minimize the extent of impervious surfaces and disturbed soils to those that are absolutely necessary for implementation of the Proposed Project.	Develop grading plans that minimize soil disturbance. Develop site plans that minimize impervious surfaces.	Evaluate concurrent with tentative maps, use permit, or equivalent application for development.	Project proponent.	County Engineer, County Planning, TC-TAC, FS.	County Engineer, County Planning, FS.
COA 41 - Mitigation Measure 4.2 (j). Avoid soil compaction in disturbed areas by limiting use of heavy equipment, stockpiling and re-spreading of forest duff and topsoils, and use of geotextiles.	Incorporate this stipulation into site improvement and grading plans.	During construction.	Project proponent.	County Engineer, FS.	County Engineer, FS.
COA 42 - Mitigation Measure 4.2 (k). Install low-slope permeable swales, porous dams, such as hay bales, earthen benches, and infiltration basins to retard and capture runoff from impermeable surfaces.	Incorporate this stipulation into site improvement and grading plans.	During construction.	Project proponent.	County Engineer, FS.	County Engineer, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
Groundwater contamination from poor quality groundwater seepage.					
COA 43 - Mitigation Measure 4.2 (l). Use sealed well casings and other wellhead protection measures to preclude any movement of poor quality groundwater (and surface water) into pumped aquifers.	Use sealed well casings and other wellhead protection measures when installing culinary water wells.	In conjunction with new well installation.	KMPUD.	County Health Department, Regional Water Quality Control Board.	County Health Department, Regional Water Quality Control Board.
Leakage or spillage of untreated wastewater.					
COA 44 - Mitigation Measure 4.2 (m). Install sewage spill catch basins at vulnerable locations located outside the flood plain.	Install sewage spill catch basins as appropriate.	Concurrent with WWTP expansion.	KMPUD.	Regional Water Quality Control Board.	Regional Water Quality Control Board.
COA 45 - Mitigation Measure 4.2 (n). Use accepted engineering design and construction features at flood-prone locations, particularly stream crossings.	Design structures in flood-prone locations to withstand 100-year flood events.	Submitted with site improvement plans.	Project proponent, KMPUD.	County Engineer, KMPUD, FS.	County Engineer, KMPUD, FS.
Mitigation Measure 4.2 (o). Install backup pump systems, auxiliary power sources, and system failure alarms.	Install appropriate back-up technology to manage potential system failures.	Concurrent with WWTP expansion.	KMPUD.	Regional Water Quality Control Board.	Regional Water Quality Control Board.
Groundwater contamination from the routine discharge of treated wastewater.					
COA 46 - Mitigation Measure 4.2 (p). Avoid infiltration areas underlain by impermeable or poorly permeable soils.	Site absorption beds in areas where absorption capacity meets or exceeds demand.	Concurrent with wastewater treatment plant expansion.	KMPUD.	Regional Water Quality Control Board.	Regional Water Quality Control Board.
Mitigation Measure 4.2 (q). Pressure	Monitor system pressure and	Ongoing.	KMPUD	KMPUD,	KMPUD,

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
transducers have been connected to the existing absorption bed monitoring system in selected monitoring wells to monitor the projected increases in groundwater surface elevations. KMPUD will take avoidance actions such as more rapid rotation of the discharge to alternate beds and/or abandonment of individual beds that may cause problems, if monitoring results indicate potential surfacing or near-surfacing of effluent.	implement avoidance actions as needed.			Regional Water Quality Control Board.	Regional Water Quality Control Board.
COA 47 - Mitigation Measure 4.2 (r). Prevention of excessive infiltration of sewage collection and disposal systems by storm water.	Design system in accordance with applicable standards.	Submitted with site improvement plans.	KMPUD.	KMPUD.	County Engineer, Regional Water Quality Control Board.
COA 48 - Mitigation Measure 4.2 (s). Police for and eradicate unauthorized discharges to the sewer system.	Monitor water users for unauthorized discharges and stop any such discharges detected.	Ongoing.	KMPUD.	KMPUD.	KMPUD.
Mitigation Measure 4.2 (t). Expand the wastewater absorption beds and construct new ones in suitable areas.	Monitor waste water disposal needs and bring new absorption beds on line prior to exceeding existing capacity.	Ongoing.	KMPUD.	Regional Water Quality Control Board..	Regional Water Quality Control Board.
COA 49 - Mitigation Measure 4.2 (u). Utilize low flow water conserving plumbing fixtures wherever possible.	Incorporate water conserving fixtures into new buildings, or when renovating existing	Submit fixture specifications with building permit	Project proponent.	County building official.	County building official.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
	structures.	application.			
Contamination from non-point source emissions in storm water runoff from impervious and disturbed areas.					
COA 50 - Mitigation Measure 4.2 (v). Conduct street sweeping twice-a-year and when build up of loose materials occurs on paved road ways.	Conduct street sweeping as necessary to prevent contamination of runoff.	Ongoing.	KMR, homeowner/condominium associations.	County Public Works.	County Public Works.
COA 51 - Mitigation Measure 4.2 (w). Develop drainage systems for parking lots which collect runoff from impermeable surfaces and channel it to settling basins or through drainage filter strips, grassy swales, sand traps, or alternative sediment-control features..	Design and implement runoff settling basins for new parking lots.	Submit with site improvement plans or grading plans.	Project proponent.	County Engineer.	County Engineer.
Mitigation Measure 4.2 (aa). KMPUD will monitor for total suspended solids in Kirkwood Creek, and ensure that construction activities are monitored so as to implement necessary sediment prevention measures.	As outlined under Mitigation Measures 4.1 (e) 4.1 (l).				
Mitigation Measure 4.2 (ab). Provide accommodations for wastewater storage or hauling in case of emergency situations.	Design emergency wastewater storage and hauling plan.	Concurrent with wastewater treatment plant expansion.	KMPUD	Regional Water Quality Control Board.	Regional Water Quality Control Board.
Mitigation Measure 4.2 (ac). Add additional nitrate removal to the advanced	Add additional nitrate removal to the advanced treatment	Concurrent with wastewater	KMPUD	Regional Water Quality Control	Regional Water Quality Control

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
treatment processes.	processes.	treatment plant expansion.		Board.	Board
4.3 BIOLOGICAL RESOURCES					
4.3.1 AQUATIC RESOURCES					
Kirkwood Creek short-term sedimentation impacts.					
COA 52 - Mitigation Measure 4.3.1 (b). Allow no heavy construction equipment to operate within the Kirkwood Creek floodplain or within 100 feet of the Kirkwood Creek stream channel during periods when soils are saturated from rain or snowmelt	Include this stipulation in project approvals.	During project review process and construction of project elements.	County building official, project proponent.	County Engineer, County building official.	County Engineer, County building official.
COA 53 - Mitigation Measure 4.3.1 (c). Implement Mitigation Measures 4.2 (k) and 4.2 (z). Sediment control structures will remain in place until vegetation has been established in disturbed areas.	As outlined under Mitigation Measures 4.2 (k) 4.2 (z), with this added stipulation.				
Kirkwood Creek long-term sedimentation impacts.					
COA 54 - Mitigation Measure 4.3.1 (e). Minimize salting and/or sanding of parking lots or other impervious surfaces within 100 feet of the floodplain.	Judicious use of salt or sand for snow and ice control within 100 feet of the Kirkwood Creek or Caples Creek floodplains.	Ongoing.	KMR, homeowner/condominium associations.	CDFG.	CDFG.
COA 55 - Mitigation Measure 4.3.1 (f).	Implement all site-specific	Submit with site	Project proponent.	County Engineer,	County Engineer,

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>Implement the following site-specific recommendations from the <i>Kirkwood Creek Floodplain Study</i> (EBCE 1996) prior to the initiation of any proposed construction in effected areas including but not limited to the following:</p> <p>1) Build a diversion structure to operate with the existing drain and inlet for diversion of surface water between Lifts 10 and 11; 2) prevent flooding in the area near Base Camp One condominiums by either clearing snow out of the sharp bend in Kirkwood Creek, or constructing a low floodwall; 3) replace the two existing footbridges upstream of Kirkwood Meadows Drive, which currently restrict the flow of Kirkwood Creek; 4) prevent the infrequent overtopping of Kirkwood Meadows Drive by enlarging the bridge opening or constructing a floodwall eastward along the east creek bank; some boulders could be removed from the creek in this area as well; 5) any proposed structures in the Kirkwood Creek area should be built a few feet above the floodplain elevation; 6) channel work in Kirkwood Creek such as bank protection (subject to permit requirements).</p>	<p>recommendations from the Kirkwood Creek Floodplain Study.</p>	<p>improvement plans or grading plans.</p>		<p>County building official.</p>	<p>County building official.</p>

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 55a - Mitigation Measure 4.3.1(ff) Implement the grazing management plan [2002 Final EIR, Appendix B].	As outlined under Mitigation Measure 4.2 (dd).				
Impacts to Kirkwood Lake fisheries.					
COA 56 - Mitigation Measure 4.3.1 (h). KMR will assist in educating Kirkwood residents and visitors about fishing regulations at Kirkwood Lake and, with the permission of the Forest Service, post such regulations at angler access points to the lake.	Disseminate fishing regulations at visitor contact points at Kirkwood. Post signs as appropriate along popular access routes to Kirkwood and Caples lakes.	Within the first year following Proposed Project approval.	KMR.	FS.	FS.
COA 57 - Mitigation Measure 4.3.1 (i). KMR will not create additional parking for the purpose of facilitating access to Kirkwood Lake.	Do not approve any such plan.	Ongoing.	KMR.	TC-TAC, FS.	Counties, FS.
4.3.2 WILDLIFE RESOURCES					
Increased human presence.					
COA 58 - Mitigation Measure 4.3.2 (a). All dogs will be kept indoors or controlled on a leash.	Update CC&Rs as appropriate to reflect strict leash laws.	Within the first year following Proposed Project approval.	KMR, KRMOA, homeowner/condominium associations.	County Planning, KRMOA.	KRMOA.
COA 59 - Mitigation Measure 4.3.2 (b). Expand CC&Rs to include regulations to govern cat ownership, requiring owners to keep all cats indoors unless these pets are	Update CC&Rs as appropriate to reflect stricter leash laws.	Within the first year following Proposed Project approval.	KMR, KRMOA, homeowner/condominium associations.	County Planning, KRMOA.	KRMOA.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
also controlled on a leash.					
COA 60 - Mitigation Measure 4.3.2 (c). Require household garbage to be stored in wildlife-proof containers prior to pick up.	Update CC&Rs as appropriate.	Within the first year following Proposed Project approval.	KMR, KRMOA, homeowner/condominium associations.	County Planning, KRMOA.	KRMOA.
COA 61 - Mitigation Measure 4.3.2 (d). All pets will be fed inside, and pet food will not be stored or provided to pets where wild animals could gain access.	Update CC&Rs as appropriate.	Within the first year following Proposed Project approval.	KMR, KRMOA, homeowner/condominium associations.	County Planning, KRMOA.	KRMOA.
COA 62 - Mitigation Measure 4.3.2 (e). Implement restrictions to prohibit the feeding of wildlife, except seed feeders for birds and nectar feeders for hummingbirds.	Update CC&Rs as appropriate.	Within the first year following Proposed Project approval.	KMR, KRMOA, homeowner/condominium associations.	County Planning, KRMOA.	KRMOA.
COA 63 - Mitigation Measure 4.3.2 (f). All projects with the potential to impact waters of the U.S., including wetlands, will be reviewed by the COE and the appropriate county and will be designed to avoid impacts and/or minimize impacts to the maximum extent possible.	As outlined under the cited mitigation measures.				
Impacts to wildlife at Kirkwood and Caples Lakes.					
COA 64 - Mitigation Measure 4.3.2 (g). KMR will retain a qualified wildlife biologist to survey the basin immediately surrounding Kirkwood and Caples Lakes in early summer to determine the presence of special-status	Implement the described monitoring and, if necessary, mitigation program .	Ongoing (as specified), beginning the first year after approval of the Proposed	KMR, FS.	FS.	FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>species identified in Table 4.13 of the 2002 Final EIR and establish baseline conditions. After the initial survey to establish baseline conditions, surveys will be performed every 3 years for a 6-year period (i.e., two additional surveys or as determined to be needed by the Forest Service). The summary results will be submitted within 60 days of the survey completion to the Amador Ranger District. If the wildlife populations or resources appear to be negatively affected, the Forest Service will develop management plans designed to mitigate the effects documented by the surveys. These plans will include specific measures such as trail re-routing, interpretive signing, protective fencing, area closures, and limits on user numbers or seasons of use. They may also call for KMR involvement in the development and implementation of an education program for Kirkwood visitors. The objective of the management plans would be to insure that the pertinent statutory protections extended to special-status species identified in Tables 4.11 and 4.13 of the 2002 Final EIR are met.</p>		Project.			
Impacts to threatened, endangered or sensitive species.					
COA 65 - Mitigation Measure 4.3.2 (h). The project proponent will employ a	Conduct systematic, wildlife surveys in areas that will be	Evaluate concurrent with tentative maps,	Project proponent.	TC-TAC.	CDFG, USFWS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>qualified biologist to conduct surveys for threatened, endangered, and sensitive wildlife species at Kirkwood prior to individual project construction. Surveys will be conducted within two breeding seasons prior to commencement of individual project construction. These surveys will be completed during the appropriate season for any species with suitable habitat in the project area. The geographic scope of the surveys should be limited to the area in which direct or indirect impacts could occur. A report outlining results of the surveys will be submitted to the California Department of Fish and Game (CDFG) and to the respective county where construction is to take place within one month of completion of the survey and prior to construction activities. If state-listed species are found, a 2081 Permit will be obtained from the CDFG. If federally listed threatened or endangered Species are found, KMR will enter into consultation with the U.S. Fish and Wildlife Service (USFWS) to determine the appropriate course of action, including obtaining an Incidental Take Permit if necessary.</p>	<p>impacted, directly or indirectly, by construction of project elements, then proceed accordingly, as outlined.</p>	<p>use permits or equivalent application for development.</p>			

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
4.3.3. WETLAND RESOURCES					
Potential direct impact to water of the U.S., including wetlands.					
COA 66 - Mitigation Measure 4.3.3 (a). The project proponent will negotiate and abide by an acceptable Streambed Alteration Agreement (Fish and Game Code Section 1603) with CDFG prior to construction of any improvements affecting streambeds.	Develop a Streambed Alteration Agreement in conjunction with CDFG.	Prior to construction.	Project proponent.	CDFG.	CDFG.
COA 67 - Mitigation Measure 4.3.3 (b). The project proponent will obtain appropriate permits from the Corps. of Engineers ("COE") prior to any placement of fill in wetlands. The applicant will also comply with the terms and conditions specified in any permits obtained from the COE..	Identify wetland boundaries and apply for Section 404 permits as necessary.	Submit with site improvement plans or grading plans.	Project proponent.	COE.	COE.
COA 68 - Mitigation Measure 4.3.3 (c). During construction of any utility infrastructure within wetlands, the construction contractor will place sidecast materials in upland areas to minimize impacts as a result of temporary storage. These materials will be used to backfill the trench as soon as possible.	Implement BMPs to regulate construction practices.	Submit with site improvement plans or grading plans, and during construction of utility infrastructure.	Project proponent.	County Engineer.	County Engineer.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 69 - Mitigation Measure 4.3.3 (e). In the vicinity of wetlands, the construction contractor will restrict construction equipment, vehicles, and the placement of soil stockpiles to upland sites except for implementation of COE-authorized crossings.	Minimize construction activity and soil storage in lowland sites.	Submit with site improvement plans or grading plans, and ongoing during construction.	Project proponent.	County Engineer.	County Engineer.
COA 70 - Mitigation Measure 4.3.3 (f). The project proponent will review proposed development plans with the county of jurisdiction or the Forest Service, if in the special use permit (SUP) area, and the COE to ensure that specific projects have been designed to avoid any impacts to wetlands or other waters of the U.S. to the maximum extent practicable. In cases where avoidance is not feasible, such as a road crossing of a linear wetland feature, then the impact should be minimized by making the crossing as narrow as possible and crossing at a narrow point in the wetland.	Formulate development plans that avoid or minimize impacts to wetlands and submit plans for described review.	Evaluate concurrent with tentative maps, use permits or equivalent application for development.	Project proponent.	County Planning, FS.	County Engineer, FS.
COA 71 - Mitigation Measure 4.3.3 (g). The project proponent will review proposed stream crossings with the respective counties or the Forest Service, if in the SUP area, and the COE and determine, based on the quality of the stream system and adjacent riparian habitat,	Present proposed stream crossing locations and conceptual engineer's design of crossings to COE.	Evaluate concurrent with tentative maps, use permits or equivalent application for development.	KMR, Project proponent.	CDFG, COE, FS.	COE, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
which site would be appropriate for bridging.					
COA 72 - Mitigation Measure 4.3.3 (h). The project proponent will develop and implement a mitigation plan to replace any wetland losses due to the proposed development. The mitigation plans will be reviewed and approved by the COE and the appropriate counties prior to implementation.	Develop wetland mitigation plans in coordination with the COE.	Following identification of unavoidable wetland impacts.	Project proponent.	COE.	COE.
Potential indirect impact to waters of the U.S., particularly streams, from decreased water quality due to sedimentation associated with disturbance in upland.					
COA 73 - Mitigation Measure 4.3.3 (j).If on private land, the county with jurisdiction will require a minimum 35-foot buffer of undisturbed vegetation between wetlands, and perennial or intermittent streams with riparian vegetation, and disturbed areas (construction sites), or parking lots, or other impervious areas that produce runoff. If on federal land in the SUP area, minimum setback requirements outlined for riparian conservation areas in the Sierra Nevada Forest Plan Amendment will be required. These include setback requirements of 300 feet for perennial streams and meadows, and 150 feet for seasonally flowing streams.	Incorporate stipulated buffers into subdivision and construction designs.	Evaluate concurrent with tentative maps, use permits or equivalent application for development.	Project proponent.	County Planning, TC-TAC, FS.	County Planning, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 74 - Mitigation Measure 4.3.3 (k). KMR's landscape and revegetation guidelines (KMR 1998) will be followed, and revised if necessary, to limit the use of traditional manicured lawns in landscaping; to limit fertilizer use to direct application to plants installed during revegetation efforts; and to limit the use of herbicides, pesticides, and fungicides by individual property owners to direct applications to control exotic species.	Follow and amend as necessary landscape and revegetation guidelines.	Concurrent with the adoption of the Specific Plan.	KMR.	County Planning.	County Planning.
4.3.4 VEGETATION RESOURCES					
Direct and indirect impacts to the vegetation communities due to construction.					
COA 75 - Mitigation Measure 4.3.4 (a). KMR will follow the landscape and revegetation guidelines (KMR 1998), unless an item is specifically updated by requirements of the noxious weed control plan [2002 Final EIR, Appendix B].	Comply with the cited plans.	Ongoing.	Project proponent.	County Planning, FS.	County Planning, FS.
COA 76 - Mitigation Measure 4.3.4 (b). KMR will implement the noxious weed control plan [2002 Final EIR, Appendix B] prior to construction of any elements of the Proposed Project. The plan addresses weed issues of concern through measures such as requiring the use of approved, native seed, weed-free hay, and construction practices	Implement appropriate terms of the cited plan on private and public lands.	Ongoing.	Project proponent.	County Planning, FS.	County Planning, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>such as the cleaning of residual soil from off of construction equipment transported from other areas prior to use at Kirkwood. KMR will utilize current and approved seed mixes and revegetation techniques, outlined in the landscape and revegetation guidelines, except for specifically updated guidelines, as follows:</p> <ul style="list-style-type: none"> • Strongly recommend use of native grasses only. This would change the seed mix #1 in the landscape and revegetation guidelines by excluding the use of Dactylis glomerata (Orchard grass). • As outlined under the El Dorado National Forest Seed, Mulch, and Fertilizer Prescriptions (Forest Service 2000), rice straw, (local) native grass straw, or pine needle mulch (if certified to be from a non-infected area) may be used in place of certified weed-free hay, pending development of the California certification program. • Use of quick-release, inorganic fertilizers should be avoided, as their use tends to favor establishment of exotic weeds and grasses (Forest Service 2000). 					

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 77 - Mitigation Measure 4.3.4 (c). KMR will retain the services of a California Registered Professional Forester to assess forest conditions and meet the requirements for submitting timber harvesting plans.	Comply with requirements of the California Department of Forestry and Fire Protection, mandating that a California Registered Professional Forester assess forest conditions in order to comply with Timber Harvest Plan requirements.	Prior to timber operations.	Project proponent.	Department of Forestry and Fire Protection.	Department of Forestry and Fire Protection.
Direct and indirect impacts to the threatened, endangered, and special-status plants due to construction.					
COA 78 - Mitigation Measure 4.3.4 (d). KMR will obtain the services of a qualified botanist to conduct preconstruction surveys for special-status plant species if individuals are known to potentially occur in the area of proposed disturbance. A report outlining results of the surveys will be submitted to the respective county where construction is to take place within one month of completion of the survey and prior to construction activities. If sensitive species are found, construction envelopes should be redesigned (if feasible) to avoid the populations of sensitive plants. If federally listed threatened or endangered species are found on federal land, the project proponent will enter into consultation with the USFWS.	Conduct pre-construction clearances for threatened, endangered, and special-status plant species.	Evaluate concurrent with tentative maps, use permits or equivalent application for development.	Project proponent.	CDFG, USFWS.	CDFG, USFWS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 79 - Mitigation Measure 4.3.4 (e). Implement recommendations to minimize or eliminate impacts to special-status species, as cited in the botanical survey report (Jones and Stokes 2000), which include using a helicopter lift to transport equipment and supplies, using stakes and flagging to carefully delineate and restrict the construction area, and notifying construction crews of the presence of the sensitive biological resource.	Incorporate cited measures to prevent damage to special-status plants during construction activities.	During construction.	Project proponent.	County Planning, FS.	County Planning.
4.4 AIR QUALITY					
Increase in particulate matter emissions.					
COA 80 - Mitigation Measure 4.4 (a). The counties will enact an ordinance to reduce particulate emissions from wood burning within Kirkwood. The ordinance shall include the following standards: <ul style="list-style-type: none"> • Incentives to eliminate or replace existing woodburning devices which do not comply with EPA Phase II Certification requirement. • A requirement that all new residences previously approved for the installation of new woodburning devices incorporate EPA Phase II Certified 	Develop and adopt county ordinances stipulating these measures to reduce particulate emissions from wood burning stoves and fireplaces.	Within 6 months of adoption of the Specific Plan.	County Boards of Supervisors.	GBUAPCD	GBUAPCD

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>requirements.</p> <ul style="list-style-type: none"> • A requirement that, upon installation of a new EPA Phase II Certified woodburning device, at least one noncompliant wood burning device be eliminated within the Kirkwood area. • A prohibition on installation of new woodburning devices, including open hearth-style fireplaces, which do not comply with EPA Phase II Certification requirements, except that one noncompliant open hearth style fireplace will be allowed in the following locations: <ul style="list-style-type: none"> - a common lobby area located in a building containing more than four multi-family units, - a common lobby area located within lodges, hotels, motels, bed and breakfast accommodations, or a public recreation/meeting facility, - a bar/saloon or restaurant, - outdoors in the Village plaza area. 					

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>Mitigation Measure 4.4(aa). Prior to the addition of a second diesel generator at the wastewater treatment plant, particulate matter source testing will be conducted on the first generator to determine its emissions with the catalytic soot filter in place. The results will be combined with estimates of emissions from the second generator and also with emissions produced by generators associated with the MU power plant expansion, to assess the potential cancer risk. Particulate matter source-testing will be conducted on the second generator once it is installed. Additional environmental controls, such as a catalytic soot scrubber on the second generator, will be installed as necessary to meet all current, applicable air quality standards. Any additional generators will need to meet the GBUAPCD performance standard of (currently) a cancer risk less than or equal to ten in one million.</p>	<p>Complete assessment of PM output as described as part of permitting process.</p>	<p>When second generator is proposed.</p>	<p>KMPUD.</p>	<p>County Engineer, GBUAPCD.</p>	<p>County Engineer, GBUAPCD.</p>
<p>Increase in SO_x and NO_x.</p>					
<p>COA 81 - Mitigation Measure 4.4 (b). Mountain Utilities (MU) will continue to operate the power generation plant with the Selective Catalytic Reduction (SCR) system in place as required by the Great Basin Unified Air Pollution Control</p>	<p>Continue operation of the power generation plant with the SCR in place.</p>	<p>Ongoing.</p>	<p>MU.</p>	<p>GBUAPCD</p>	<p>GBUAPCD.</p>

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
District (GBUAPCD).					
Regional Haze.					
COA 82 - Mitigation Measure 4.4 (d). During summer months, the application of dust suppressants will be required in areas where earth-moving activities are being conducted.	Apply dust suppressants to soils exposed during construction.	Ongoing during construction.	KMR, Project proponent.	County Engineer.	County Engineer.
COA 83 - Mitigation Measure 4.4 (e). Streets will be swept by a vacuum sweeper during periods when road conditions are dry enough to allow the removal of anti-skid materials (i.e., sand). The streets must be swept from curb to curb, which includes the driving lanes, to maximize the control effectiveness.	As outlined under Mitigation Measure 4.2 (v).				

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
4.5 CULTURAL RESOURCES					
Prehistoric resources.					
COA 84 - Mitigation Measure 4.5 (a). Any area ultimately identified for project development should be surveyed for prehistoric cultural resources by a qualified archaeologist prior to ground-disturbing activity.	Conduct pre-construction archeological surveys in building envelopes, road corridors, and any areas where soil disturbing activities will take place.	Evaluate concurrent with tentative maps, use permits or equivalent application for development.	KMR, Project proponent.	State Historic Preservation Officer.	County Planning.
COA 85 - Mitigation Measure 4.5 (b). If cultural resources are found, and if the resource is determined to be significant under CEQA/CRHR criteria, or is a unique archaeological resource, mitigation through data recovery or other appropriate measures should be devised and carried out by a qualified archaeologist, in consultation with all concerned parties.	Develop and conduct data recovery or other suitable mitigation for archeological resources.	Following identification of any significant archeological resource and prior to construction.	Project proponent.	State Historic Preservation Officer.	State Historic Preservation Officer.
COA 86 - Mitigation Measure 4.5 (c). If Native American burial sites are found, specific mitigation measures would be determined in consultation with the Native American group that comprises the most likely descendants, as identified by the Native American Heritage Commission (NAHC). Options could include leaving a burial in place if further disturbance can be avoided, or removal and reburial with or	Develop and implement appropriate mitigation measures in the event that a Native American burial is discovered.	Following identification of any significant archeological resource and prior to construction.	KMR, Project proponent.	County Planning, NAHC, applicable tribal authority.	County Planning, NAHC, applicable tribal authority.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
without previous archaeological treatment. All such procedures should be conducted within the context of CEQA Guidelines Section 15064.5 and California Public Resources Code Sections 5097.94, 5097.98 and 5097.99.					
COA 87 - Mitigation Measure 4.5 (d). In the event that construction personnel observe previously undiscovered subsurface prehistoric archaeological deposits (e.g., concentrations of bone, ash, charcoal, and/or artifacts) or human bones are encountered in an area subject to development activity, work in the immediate vicinity of the find should be halted and a professional archaeologist consulted, or, in the case of human burials, the County Coroner and the Native American group that comprises the most likely descendants (identified by the NAHC). If the resource is determined to be historically significant under CEQA/CRHR criteria, mitigative data recovery or other measures should be devised, and carried out by a qualified archaeologist in consultation with all concerned parties..	Develop and implement appropriate mitigation measures in the event that a subsurface archeological deposits are uncovered during construction.	Ongoing.	Project proponent.	State Historic Preservation Officer, County Planning.	State Historic Preservation Officer, County Planning.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
Historic resources.					
COA 88 - Mitigation Measure 4.5 (e). Any area ultimately identified for potential project development should be surveyed for historic cultural resources by a qualified archaeologist prior to ground-disturbing activity.	Conduct pre-construction archeological surveys in building envelopes, road corridors, and any areas where soil disturbing activities will take place.	Prior to ground-disturbing activity.	KMR, Project proponent.	County Planning, State Historic Preservation Officer.	County Planning.
COA 89 - Mitigation Measure 4.5 (f). If historic cultural resources are found, and if the resource is determined to be a historic resource or "unique archaeological resource" under CEQA/CRHR criteria, mitigation through data recovery or other appropriate measures should be devised and carried out by a qualified archaeologist, in consultation with all concerned parties. All such procedures should be conducted in compliance with CEQA Guidelines Section 15064.5.	Develop and conduct data recovery or other suitable mitigation for archeological resources.	Following identification of any significant archeological resource and prior to construction.	Project proponent.	County Planning, State Historic Preservation Officer.	County Planning, State Historic Preservation Officer.
COA 90 - Mitigation Measure 4.5 (g). In the event that construction personnel observe previously undiscovered subsurface historic archaeological deposits (e.g., concentrations of historic materials such as ceramics, glass, or other historic materials) in an area subject to development activity, work in the immediate vicinity of the find should be	Develop and implement appropriate mitigation measures in the event that a subsurface archeological deposits are uncovered during construction.	Ongoing.	Project proponent.	County Planning, State Historic Preservation Officer.	County Planning, State Historic Preservation Officer.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
halted and a professional archaeologist consulted. All such procedures should be conducted in compliance with CEQA Guidelines Section 15064.5.					
<p>COA 91 - Mitigation Measure 4.5 (h). Implementation of any element of the Draft Plan that could affect the integrity of the Kirkwood Inn setting should be subject to review by Alpine and El Dorado counties. Any future additions should follow the same architectural style. Any future additions must also consider the view to and from the building, especially from the front or highway side. For structural reasons, any new development and related heavy equipment should be distanced from the Kirkwood Inn so as to not place additional stresses on the existing foundation. Review should include development of measures to mitigate indirect impacts to the Kirkwood Inn to a less-than-significant level. Specific mitigation measures to be implemented by KMR will include some or all of the following:</p> <ul style="list-style-type: none"> • Include use of architecturally compatible materials and design developed with the input of a qualified historical architect, if the 	Implement the stipulated review prior to approval of any development potentially impacting the integrity of the Kirkwood Inn.	Prior to construction.	KMR, Project proponent.	El Dorado County, State Historic Preservation Officer.	El Dorado County, State Historic Preservation Officer.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>new construction affects the visual setting of the Kirkwood Inn and it is determined that its setting contributes to its significance.</p> <ul style="list-style-type: none"> • Use of vegetative screening. • Use of architecturally harmonious materials and sensitive placement of new structures. • Placement of an appropriate interpretive sign near the Kirkwood Inn explaining the significance of the structure and its place in local and regional history. 					
<p>COA 92 - Mitigation Measure 4.5 (i). [COA 92 is an El Dorado County measure.]</p>					
<p>Indirect impacts to sites on the Emigrant Trail.</p>					
<p>COA 93 - Mitigation Measure 4.5 (j). Educational literature will be developed by KMR to educate guests about the fragile and irreplaceable nature of cultural resources and the penalties for violation of state and federal laws related to cultural resources. This informational literature could be in the form of a pamphlet or other handout that could be distributed at the same venues where other Kirkwood</p>	<p>Develop educational materials to help protect Kirkwood area cultural resources.</p>	<p>Within the first year following approval of the Proposed Project.</p>	<p>KMR.</p>	<p>TC-TAC, FS.</p>	<p>TC-TAC, FS.</p>

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
materials are distributed.					
4.6 LAND USE					
No mitigation required.					
4.7 TRAFFIC					
Effects of increased traffic volumes on SR 88/Kirkwood Meadows Drive.					
COA 94 - Mitigation Measure 4.7 (a). A northbound to westbound left-turn acceleration lane on SR88 should be created to accommodate left-turn movements. Kirkwood Meadows Drive should be restriped and/or widened to accommodate three 10-foot-wide lanes (minimum), which would include one southbound lane and two northbound lanes (one left-turn, one right-turn). Either restriping additional turn lanes or temporarily placing traffic cones during peak periods to form turn lanes would allow left-turn vehicle storage while allowing right-turning vehicles to flow.	Modify SR88 to accommodate increased traffic volumes.	Within 5 years of approval of the Proposed Project.	KMR, Caltrans.	TC-TAC, Caltrans, Amador County Public Works.	TC-TAC, Caltrans, Amador County Public Works.
COA 95 - Mitigation Measure 4.7 (b). Traffic control during peak periods, either through signalization or manual control, at the State Route (SR) 88/Kirkwood Meadows Drive intersection would	The following actions shall be completed by KMR every three years beginning in 2005 and every three years thereafter or as determined by	Ongoing (as specified).	KMR, Caltrans. Note: KMR shall be responsible for funding any necessary	TC-TAC, Caltrans, Amador County Public Works.	TC-TAC, Caltrans, Amador County Public Works.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>improve the Level of Significance (LOS) rating to B at build-out. KMR will conduct traffic counts and LOS modeling during periods of peak visitation, which could include summer special events, every 3 years and provide the results to TC-TAC. The frequency of this requirement may be modified by TC-TAC based on the rate of growth in traffic experienced since the last evaluation and that expected in the near future. Signalization or manual control of the intersection will occur if traffic flows meet Caltrans minimum requirements for signalization. Alternatively, KMR may pursue other traffic control measures acceptable to Caltrans and all three counties that would improve the LOS rating of the SR88/Kirkwood Meadows Drive intersection to LOS B.</p>	<p>TC-TAC pursuant to the stated mitigation measure: (a) Collect morning and evening peak hour turning movement counts at the SR 88/Kirkwood Meadows Drive intersection on at least one peak summer and winter weekday and weekend day (total of at least 4 days) with more than 4000 day use visitors at the resort; (b) Collect three-year accident history from Caltrans and/or CHP for accidents that occurred within 500 feet of the intersection; (c) Retain a registered professional engineer to perform the following: (i) Review the current condition of the intersection including geometrics, sight distance constraints, and field observations (delays, queues, etc.); (ii) Compute the LOS at the intersection during these peak hours in accordance with the methodologies prescribed in the most recent version of the</p>		<p>improvements to the State Route (SR) 88/Kirkwood Meadows Drive intersection . To the extent that funding is available through Caltrans, it may be used to supplement the cost of the improvements.</p>		

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
	<p>Highway Capacity Manual</p> <p>(iii) Evaluate the accident data to determine if the type or lack of control at the intersection contributed to any of the reported accidents:</p> <p>(iv) Conduct a signal warrants analysis based on the peak hour counts and the accident experience per Caltrans' Traffic Manual;</p> <p>(v) Recommend changes to the intersection geometrics and/or traffic control devices necessary to maintain acceptable LOS; and</p> <p>(vi) Document the results of the task described above for review and comment by TC-TAC and Caltrans.</p> <p>(d) KMR will submit the report with TC-TAC recommendations to Caltrans District 10 for approval of an encroachment permit to construct any necessary improvements. Improvements may include signalization, manual control during peak days, lane additions, signing</p>				

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
	and /or striping improvements, sight distance modifications and other appropriate measures. KMR will then be responsible for construction of the improvements as deemed necessary by TC-TAC and Caltrans. KMR may work with the counties, regional transportation planning agencies and Caltrans to pursue State sources to help fund these improvements.				
COA 96 - Mitigation Measure 4.7 (c). Alpine County will implement a traffic impact mitigation fee for future development within Kirkwood. The fee would be used to mitigate traffic impacts on SR 88 both east and west of Kirkwood (in Alpine County) that are partially attributable to Alpine County development. The fee system would be based on a similar mitigation fee program already in place within Amador County, which is applicable to development at Kirkwood within Amador County.	Adoption of an ordinance implementing a traffic impact mitigation fee. Alpine County shall adopt an ordinance implementing a traffic impact mitigation fee. Such ordinance shall apply to all future development within the Alpine County portion of Kirkwood.	Within 6 months of approval of the Proposed Project.	Alpine County Planning and Board of Supervisors.	TC-TAC.	Alpine County Board of Supervisors.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
Adequacy of parking.					
<p>COA 97 - Mitigation Measure 4.7 (d). KMR will prepare an annual report that includes a detailed analysis of day-visitor parking during peak periods such as the Christmas holiday, Presidents Day weekend and other weekends during the ski season, peak periods during the summer, and special events, when more than 4,000 day-use visitors are at the resort. The study will compare day-visitor parking demand during these periods to day-visitor parking capacity at the resort. The results will be reported to TC-TAC in June of each year. If the study shows that the number of day-visitor-related vehicles parked within the resort exceeds the amount of parking spaces available for day visitors (approximately 2,500 spaces), TC-TAC will require KMR to implement a mitigation plan which will include one or more of the following actions:</p> <ul style="list-style-type: none"> • Provide additional parking spaces in surface lots or parking structures. • Implement methods to provide greater efficiency in the use of existing parking lots. • Reduce parking demand through 	<p>Conduct parking counts during peak visitation times and develop a plan to accommodate additional vehicles once available parking becomes inadequate.</p>	<p>Ongoing (as specified).</p>	<p>KMR.</p>	<p>TC-TAC.</p>	<p>County Planning.</p>

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>greater utilization of mass transit, increased vehicle occupancy, car/van pools or other programs that will result in reduced parking demand during peak periods.</p> <ul style="list-style-type: none"> Restrict day-visitor use to a level that allows parking demand to be accommodated in existing day-visitor parking areas 					
Effects of Kirkwood North development on traffic.					
COA 98 - Mitigation Measure 4.7 (e). Caltrans design requirements should be used to develop the final intersection layout.	Develop an intersection layout for access to Kirkwood North.	Prior to development of Kirkwood North.	KMR, Caltrans.	TC-TAC, Caltrans.	Caltrans, El Dorado County Public Works.
4.8 VISUAL AND AESTHETIC RESOURCES					
Project visibility.					
COA 99 - Mitigation Measure 4.8 (a). At high-visibility locations, such as upper elevations of Ski-In/Ski-Out South, new trees will be grouped and planted strategically to help break up or screen out the visibility of the proposed development. Additional refinements to location will be defined through design review and analysis of specific proposals.	Amend the Kirkwood Landscaping and Revegetation Ordinance to require landscape plans for all new development, and include the required mitigation in landscape plans for proposed development in high-visibility locations.	Following the adoption of the Proposed Project and prior to approval of first subdivision plan for Kirkwood.	County Planning and Boards of Supervisors.	TC-TAC.	Boards of Supervisors.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 100 - Mitigation Measure 4.8 (b). Proposed development in forested areas will be established with curvilinear, undulating boundaries wherever possible.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance as outlined under Mitigation Measure 4.8 (a).				
COA 101 - Mitigation Measure 4.8 (c). During construction, clearing of land for facilities or activities will emphasize curvilinear boundaries instead of straight lines in natural appearing landscapes.	Project proponents will submit grading plans for new development, which show how site grading will incorporate the stated mitigation measure.	Submitted with final subdivision plans and prior to securing building permits.	Project proponent.	TC-TAC, FS.	County Planning, County Engineer, FS.
COA 102 - Mitigation Measure 4.8 (d). Grading will be done in a manner which minimizes erosion, conforms to the natural topography, and minimizes cuts and fills.	Incorporate this stipulation into grading plans.				
COA 103 - Mitigation Measure 4.8 (e). Clearing trees and vegetation for the project will be limited to the minimum area required.	Incorporate this stipulation into grading plans.				
COA 104 - Mitigation Measure 4.8 (f). Soil excavated during construction and not used will be backfilled evenly into the cleared area, and will be graded to conform with the terrain and the adjacent landscape.	Incorporate this stipulation into grading plans.				
COA 105- Mitigation Measure 4.8 (g). Site-specific efforts will be made, such as removing stumps or smoothing soil, to	Incorporate this stipulation into grading plans.				

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
ensure a temporary impact where clearing is required in sensitive or scenic areas.					
COA 106 - Mitigation Measure 4.8 (h). Permanent vegetative cover will be established on disturbed areas. Replanting poor or difficult sites will be done if initial efforts fail to ensure the establishment and continued growth of plant material to prevent erosion and sedimentation. Qualified personnel will perform all reseeded and revegetation efforts.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				
COA 107 - Mitigation Measure 4.8 (i). Indigenous plant materials will be selected on the basis of site-specific climatic conditions, soil characteristics, soil moisture regimen, and topography, and further selected based on their ability to blend with existing vegetation.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				
COA 108 - Mitigation Measure 4.8 (j). The seedbed will be modified to provide an optimum environment for seed germination, seedling growth, and plant survival, as specified in the Kirkwood erosion control ordinance and the KRMOA Design Guidelines.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				
COA 109 - Mitigation Measure 4.8 (k). Landscape design which repeats or blends	Include this requirement in the amendments to the Kirkwood				

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
with the surrounding existing landscape character will be applied in highly visible or sensitive areas to enhance the appearance of project building installation.	Landscaping and Revegetation Ordinance.				
COA 110- Mitigation Measure 4.8 (l). Feathering the edges of the highway ROW in certain areas will be utilized to repeat vegetation patterns of existing open space edges.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				
COA 111 - Mitigation Measure 4.8 (m). Natural woody vegetation within 100 to 200 feet of SR 88 in Kirkwood North will be evaluated carefully before removal in order to preserve a visual buffer for this area. Selective removal or pruning of trees in areas with sensitive scenic values (e.g., SR 88 recreation areas and residences) will be done in consultation with the Caltrans landscape architect or county-approved visual resource specialist prior to any tree removal in these areas.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				
COA 112 - Mitigation Measure 4.8 (n). Trees and other plants for landscaping will be selected based on their ability to blend with existing vegetation. Rip-Rap stabilization material will be a non-contrasting color.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 113 - Mitigation Measure 4.8 (o). Mulch or scatter tree slash debris on cut and fill areas to mask bare soil and maintain a more appropriate texture to areas back from travelways.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				
COA 114 - Mitigation Measure 4.8 (p). Control planting times to maximize successful revegetation.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				
COA 115 - Mitigation Measure 4.8 (q). Use natural-looking planting patterns on cut/fill slopes.	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				
COA 116 - Mitigation Measure 4.8 (t). Design to take advantage of natural screens (i.e., vegetation, landforms).	Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.				
COA 117 - Mitigation Measure 4.8 (u). Seed cuts and fills with native grass species that will not have substantial winter or other seasonal color contrasts.	Incorporate this stipulation into landscape plans.				
COA 118 - Mitigation Measure 4.8 (v). Visual prominence of development within visually sensitive areas, as viewed from SR 88, will continue to comply with requirements for building colors,	Development plans for areas visible from SR 88 will adhere to cited guidance for visual compliance.	Prior to issuing building permits.	Project proponent.	FS, TC-TAC.	County Planning, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>construction materials, and architectural design as administered by the Forest Service and the TC-TAC, and outlined in KRMOA CC&Rs and Design Guidelines. Particular attention should be given to any new Kirkwood North development, especially regarding the architectural style and color scheme.</p>					
<p>COA 119 - Mitigation Measure 4.8 (w). Structures will be constructed of materials that blend with the landscape character. Lift components will meet Forest Service Manual (FSM) 2380 policy for color and reflectivity, which is 4.5 on the Munsell neutral value color scale. Building designs (on USFS lands), including color and material, will be submitted to the Forest Service for approval prior to construction.</p>	<p>Incorporate these stipulations into plans for structures on NSF land proposed under the MMDP.</p>	<p>Prior to FS NEPA and engineering review of proposed structures.</p>	<p>KMR.</p>	<p>FS.</p>	<p>FS.</p>
<p>COA 120 - Mitigation Measure 4.8 (x). The appearance of human-made openings will simulate existing natural openings in the forest such as those that occur in the project area.</p>	<p>Include this requirement in the amendments to the Kirkwood Landscaping and Revegetation Ordinance.</p>				
<p>Mitigation Measure 4.8 (y). In accordance with FSM 2380, appropriate siting of buildings will be incorporated, as will the use of low-impact materials and colors, on NFS lands.</p>	<p>Incorporate these stipulations into plans for structures on NSF land proposed under the MMDP.</p>	<p>Prior to ENF NEPA and engineering review of proposed structures.</p>	<p>KMR.</p>	<p>ENF.</p>	<p>ENF.</p>

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
Light and glare.					
COA 121 - Mitigation Measure 4.8 (z). For working and public gathering areas, lighting levels will be 3.5 foot-candles average horizontal, with a minimum illumination of 1/3 average, a maximum of three times the average.	Incorporate these stipulations into lighting plans.	Prior to issuance of a building permit.	KMR, Project proponent.	TC-TAC, County Planning, FS.	County Planning, FS.
COA 122- Mitigation Measure 4.8 (aa). Fixtures will be required to minimize fugitive light into existing residential areas, including East Meadow, KMA subdivision, and other residential locations susceptible to light and glare, by using asymmetrical distribution, light shields and vegetation.	Incorporate this stipulation into lighting plans.	Prior to issuance of a building permit.	KMR, Project proponent.	TC-TAC, County Planning, FS.	County Planning, FS.
COA 123 - Mitigation Measure 4.8 (ab) A lighting plan for all new development will be required, as outlined in KRMOA Design Guidelines, that will be reviewed by the counties when specific project level plans are submitted for review.	Submit lighting plans prior to approval of project building permits.	Prior to issuance of a building permit.	KRMOA, Project proponent.	TC-TAC, County Planning, FS.	TC-TAC, County Planning, FS.
4.9 NOISE					
Construction noise and structures.					
COA 124 - Mitigation Measure 4.9 (a). Construction activities which generate or produce noise that can be heard beyond the	Limit construction activities to the time period between 7 a.m. and 7 p.m.	Ongoing.	Project proponent.	County Planning, County building official, FS.	County Planning, County building official, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
boundaries of a project site will be limited to the hours of 7 a.m. to 7 p.m. Exceptions are allowed for emergency repairs.					
COA 125 - Mitigation Measure 4.9 (aa). Loudspeaker use will continue to be allowed at special events related to ski area operation. Their operation will be limited to between the hours of 7 a.m. and 7 p.m.	Limit loudspeaker use to the time period between 7 a.m. and 7 p.m.	Ongoing.	Project proponent.	County Planning, FS.	County Planning, County building official, FS.
Snow making activities.					
COA 126 - Mitigation Measure 4.9 (b). KMR will continue to implement the Snowmaking Noise Management Program, which was adopted when the snowmaking project was approved. This incorporates several features including restrictions on the type of nozzle, shielding of nozzles, and acceptable time of operation.	Implement the Snowmaking Noise Making Management Program.	Ongoing.	KMR, Project proponent.	County Planning, FS.	County Planning, FS.
4.10 SOCIOECONOMICS					
Housing.					
COA 127 - Mitigation Measure 4.10 (a). Counties will enact an ordinance requiring employee housing to be provided at Kirkwood. The ordinance will, at a minimum, include the following elements: (1) A requirement that at least 30 percent of	Counties will enact an employee housing ordinance for the Kirkwood community.	Following the adoption of the Proposed Project and prior to approval of first subdivision plan for	County Planning.	TC-TAC.	County Planning.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
<p>the number of average peak-season employees be provided with employee housing concurrent with future development of the resort; (2) A method of ensuring that the amount of required employee housing will continue to be provided in the future; (3) Consideration of possible allowance for a fee to be paid in lieu of constructing employee housing. Consideration of possible credit toward the employee housing requirement in exchange for KMR providing transportation for employees residing outside of the Kirkwood area.</p> <p>Consideration of possible credit toward the employee housing requirement for housing units located outside of the Kirkwood area which are reserved by KMR for use by employees within the Kirkwood area.</p>		Kirkwood.			
4.11 HAZARDOUS MATERIALS					
Fuel storage and use.					
COA 128 - Mitigation Measure 4.11 (a). Underground storage tanks or other hazardous material storage will not be sited within the Caltrans right-of-way.	Do not locate storage tanks in the Caltrans right-of-way.	Ongoing.	KMR, Project proponent.	County Planning, Caltrans.	Caltrans.
COA 129 - Mitigation Measure 4.11 (b).	Develop and maintain	Ongoing.	KMR,	County Planning.	Counties.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
The Kirkwood Maintenance Shop and MU will maintain spill prevention plans for all hazardous materials. These plans will be reviewed and updated annually, as appropriate, and filed with the appropriate county.	hazardous materials spill prevention plans.		MU.		
COA 130 - Mitigation Measure 4.11 (c). All existing and proposed fuel tanks will be maintained, operated and tested in accordance with local, state and federal regulations.	Maintain fuel storage tanks according to local, state, and federal regulations.	Ongoing.	KMR, Project proponent.	County Planning.	Amador Air District, El Dorado County Environmental Management Agency, Alpine County Environmental Health, California EPA.
COA 131 - Mitigation Measure 4.11 (d). Hazardous materials cleanup and containment supplies will be carried in any vehicle that transports fuel for refueling construction equipment.	Maintain hazardous spill cleanup and containment materials in all transporting vehicles.	Ongoing.	KMR, Project proponent, contractors.	County Planning.	Amador Air District, El Dorado County Environmental Management Agency, Alpine County Environmental Health.
COA 132 - Mitigation Measure 4.11 (e). Hazardous materials cleanup and	Maintain hazardous spill cleanup and containment	Ongoing.	KMR, Project proponent,	County Planning.	Amador Air District, El Dorado

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
containment supplies will be present at any permanent location where refueling is done.	materials where refueling occurs.		contractors.		County Environmental Management Agency, Alpine County Environmental Health.
COA 133 - Mitigation Measure 4.11 (f). KMR, MU, and KMPUD will train all vehicle operators who will be participating in refueling activities in spill prevention and in the use of cleanup materials.	Develop and implement spill prevention and clean-up training for vehicle operators.	Ongoing.	KMR, MU, KMPUD.	County Planning.	Amador Air District, El Dorado County Environmental Management Agency, Alpine County Environmental Health.
COA 134 - Mitigation Measure 4.11 (g). No motor fuel refueling will be conducted within 100 feet of Kirkwood Creek or any of its perennial tributaries, or within 50 feet of any occupied housing unit.	Identify refueling areas, considering proximity to housing and Kirkwood Creek or its tributaries.	Ongoing.	KMR, MU, KMPUD.	County Planning.	Amador Air District, El Dorado County Environmental Management Agency, Alpine County Environmental Health.
COA 135 - Mitigation Measure 4.11 (h). In the event that a hazardous material spill	Notify appropriate regulatory agencies and affect land	Ongoing.	KMR, MU, KMPUD,	County Planning, FS.	Department of Environmental

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
of a reportable quality occurs, the responsible party will immediately notify the Department of Environmental Health of the affected county or counties, the CDFG and any other agencies as required under regulations applicable at the time of the spill. If the spill occurs on USFS land, Kirkwood will also notify the Amador Ranger District.	management agencies in the event of a spill.		contractors.		Health of the affected county or counties, CDFG, FS.
COA 136 - Mitigation Measure 4.11 (i). KMR and its agents and subcontractors will adhere to the reporting standards outlined in California Hazardous Materials Spill/Release Notification Guidance (Lercari 1999) established by the Governor's Office of Emergency Services.	Follow reporting standards outlined in California Hazardous Materials Spill/Release Notification Guidance, as required by law.	Ongoing.	KMR, MU, KMPUD, contractors.	County Planning.	Governor's Office of Emergency Services.
COA 137 - Mitigation Measure 4.11 (j). KMR, MU, and KMPUD shall comply with Title 22 of the California Code of Regulations for submission of business plans, inventory statements, explosive storage, and spill prevention control countermeasure plans, as may be required.	Comply with Title 22 as required to avoid risks associated with hazardous materials.	Ongoing.	KMR, MU, KMPUD.	County Planning.	State Department of Health Services.
COA 138 - Mitigation Measure 4.11 (k). Future development in portions of Amador or Alpine County where soil or groundwater contamination by petroleum products has been identified will at a	Submit development plans for review.	Evaluate concurrent with review of tentative maps, use permits or equivalent permit	KMR, Project proponent.	County Planning.	CVRWQCB, County Health Department.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
minimum require approval from the applicable County Health Department and the Central Valley Regional Water Quality Control Board (CVRWQCB).		for development.			
4.12 RECREATION					
Effects of increased population on use of surrounding public lands.					
COA 139 - Mitigation Measure 4.12 (b) KMR will conduct surveys to identify on-off-site recreation use patterns of residents and guests and report results to TC-TAC and the Forest Service. Such surveys will be conducted every 4 years or as deemed necessary by TC-TAC and the Forest Service. Results will be reported to these agencies within 60 days of their completion. This information will increase TC-TAC and Forest Service knowledge of recreational use patterns in the Kirkwood area and contribute to development of responsive management plans for heavily impacted recreational sites and facilities.	FS can use this information in its planning for management of recreational facilities on public lands in the area.	Periodically as specified.	KMR, FS.	TC-TAC, FS.	TC-TAC, FS.
Effects on Kirkwood Lake, including fishing.					
COA 140 - Mitigation Measure 4.12 (c). Implement mitigation measures 4.3.1 (h) through 4.3.1 (i), as described in the Aquatic Resources section. In addition,	As outlined under mitigation measures 4.3.1 (h) through 4.3.1 (i). Also, develop and implement the cited	Within the first year following Proposed Project approval.	KMR, FS.	County Planning, FS.	County Planning, FS.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
KMR will work with the FS to develop and implement an instructional/interpretive program to inform Kirkwood visitors about sensitive resource issues at Kirkwood Lake.	instructional/interpretive program.				
4.13 PUBLIC SERVICES					
Police/sheriff protection.					
COA 141 - Mitigation Measure 4.13 (a). KMR will monitor the level of police protection services required as development proceeds and the resident population increases. Alpine and Amador counties will add deputies as dictated by community needs.	Monitor level of police protection and add deputies as needed.	Ongoing.	KMR.	Alpine and Amador County Planning.	Alpine and Amador County Planning.
Fire protection.					
COA 142 - Mitigation Measure 4.13 (b). Construct all facilities to adhere to the UBC, the Uniform Fire Code, and all other applicable codes.	Adhere to the UBC.	During construction.	Project proponent.	County building official.	County building official.
COA 143 - Mitigation Measure 4.13 (c). KMR should continue to implement, maintain, and revise as needed, the Kirkwood Village Fire and Safety Plan and demonstrate that the development complies with the plan.	Implement and update as needed the Kirkwood Village Fire and Safety Plan.	Ongoing	KMR, Project proponent.	TC-TAC.	County Planning, County building official.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
COA 144 - Mitigation Measure 4.13 (d). KMR will increase infrastructure and physical accommodations in the service district to support the level of fire protection required for the proposed development.	Expand fire protection support and infrastructure as necessary.	Ongoing.	KMR, KMPUD.	County Planning.	County Planning.
COA 145 - Mitigation Measure 4.13 (e). KMR will monitor the level of firefighting services required as development proceeds and the resident population increases. KMPUD will add fire fighters as dictated by community needs.	Increase firefighting staff as necessary to meet growing community size.	Ongoing.	KMR, KMPUD.	County Planning.	County Planning.
Medical services.					
COA 146 - Mitigation Measure 4.13 (f). KMR will continue to maintain medical facilities during the ski season consistent with the requirements of the U.S. Forest Service special use permit issued for the ski area.	Maintain medical facilities consistent with the provisions of the SUP.	Ongoing.	KMR.	FS.	FS.
COA 147 - Mitigation Measure 4.13 (g). KMR will monitor the level of medical services required as development proceeds and the resident population increases. If the increase in year-round population warrants, KMR will add medical services to meet community needs.	Add medical services to meet growing community needs.	Ongoing.	KMR.	County Planning.	County Planning.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
School and child care.					
COA 148 - Mitigation Measure 4.13 (h). KMR will continue providing funding support of educational facilities for elementary school children (Grades K-6) at Kirkwood (e.g., continue financial support for rented facilities). This requirement will be reviewed every 5 years and a determination made by Alpine County as to whether the requirement should be continued, modified or eliminated.	Fund education facilities for elementary school aged students.	Ongoing (as specified).	KMR.	TC-TAC, Alpine County Unified School District.	Alpine County Board of Supervisors.
4.14 UTILITIES AND INFRASTRUCTURE					
Energy.					
COA 149 - Mitigation Measure 4.14 (a). MU will expand the existing electrical facility or construct a new facility to meet projected electrical demands as identified in section 4.14.4.1 of the 2002 Final EIR. As electrical requirements increase and the existing facility reaches capacity, expanded or new facilities must be developed. At the time a tentative development map is submitted, MU must provide the respective county with the current capacity of the electrical generation facility, the current electrical demand of the Kirkwood area, and the projected electrical requirements of	Expand electrical power supply to meet anticipated demand of the growing community.	Submitted with tentative map, use permit, or equivalent application for development.	MU, KMR, County Planning.	TC-TAC.	County Planning.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
the development. If the projected electrical need will not be met by the existing facility, improvements will also be provided and the schedule for completion will be identified. Expanded or new facilities must be in operation prior to electrical demands of the new development.					
Mitigation Measure 4.14 (b). KMPUD will connect a new well to the water supply system if the maximum daily demand exceeds the available supplies with the largest well out of service, such that emergency storage reserves would be depleted in 7 days if demands continued at the maximum rate.	Bring new culinary water wells on line to meet growing community demands.	Ongoing.	KMPUD.	TC-TAC.	Applicable well permitting agency.
Water supply.					
COA 150 - Mitigation Measure 4.14 (c). KMPUD will monitor water supply output and install additional wells prior to increased water supply demands of new development parcels. At the time a tentative development map is submitted, KMPUD will provide the respective county with the current water supply, the current water consumption of the Kirkwood area, and the projected water requirements of the development. If the projected water	Bring new culinary water wells on line if actual community demands exceed predicted demands.	Submitted with tentative map, use permit, or equivalent application for development.	KMPUD, Project proponent.	TC-TAC, County Planning..	Applicable well permitting agency.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
requirements will not be met by the existing supply, as defined in final EIR Mitigation Measure 4.14 (b), KMPUD will identify the number and location of proposed wells to be installed and the schedule for completion. Additional wells must be in operation prior to water demands of the new development.					
COA 151 - Mitigation Measure 4.14 (d). Plan and implement new development to ensure the use of best available technologies for water conservation, including, but not limited to, water-conserving toilets, showerheads, faucets, and irrigation systems.	Incorporate best available technology into new developments to promote water conservation.	Submitted with building plans.	Project proponent.	County Engineer County building official.	County Engineer County building official.
Wastewater treatment.					
COA 152 - Mitigation Measure 4.14 (e). Monitor wastewater treatment operations and upgrade as appropriate. Expanded or new facilities must be in operation prior to wastewater demands of the new development.	Upgrade waste water treatment plant before existing capacity is exceeded.	Ongoing.	KMPUD.	CVRWQCB.	County Planning, CVRWQCB.
COA 153 - Mitigation Measure 4.14 (f). At the time a tentative development map is submitted, KMPUD will provide the respective county with: (1) the current capacity of the wastewater treatment	Calculate anticipated demand concurrent with proposal for new development.	Submitted with tentative map, use permit, or equivalent application for	KMPUD.	TC-TAC, County Planning, CVRWQCB	County Planning, CVRWQCB.

Impact and Mitigation Measure	Action Required	Timing Requirement	Responsible Party	Review Authority	Enforcement Authority
facility; (2) the current wastewater output of the Kirkwood area; and (3) the projected wastewater requirements of the development.		development.			

List of Acronyms

BMP	Best Management Practices
CC&R	Covenants, Conditions, and Restrictions
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
COE	Corps of Engineers
CRHR	California Register of Historical Resources
CVRWQCB	Central Valley Regional Water Quality Control Board
FS	Forest Service
GBUAPCD	Great Basin Unified Air Pollution Control District
KMPUD	Kirkwood Meadow Public Utility District
KMR	Kirkwood Mountain Resort
KRMOA	Kirkwood Resort Master Owner’s Association
LOS	Level of Service
MMDP	Mountain Master Development Plan
MMRP	Mitigation Monitoring Plan
MU	Mountain Utilities
NAHC	California Native American Heritage Commission
NFS	National Forest System
ROW	Right of Way
RRFEIR	Recirculated Revised Final Environmental Impact Report
SUP	Special Use Permit
TC-TAC	Tri-County Technical Advisory Committee
UBC	Uniform Building Code
USFWS	U.S. Fish and Wildlife Service
WWTP	Wastewater treatment plant