

APPENDIX C

Summary of Project Mitigation Measures

**Appendix C. Summary of Project Mitigation Measures
Lake Forest Erosion Control Project**

Mitigation Measure	Summary of Mitigation Measure	Monitoring Responsibility	Timing
3.2 Vegetation and Wildlife			
MM 3.2.3a	Prior to construction, a TRPA Forester will conduct a tree removal survey and advise specific BMPs for implementation.	Placer County is responsible for completing the necessary surveys prior to tree removal.	Removal of trees and shrubs scheduled for 2009.
MM 3.2.3b	During construction, upland and riparian native vegetation would be removed and native vegetation of good quality would be stockpiled and replanted onsite for restoration purposes. The vegetation shall be irrigated while it is stockpiled and once it is planted. Disturbed areas shall be revegetated or stabilized where needed once construction is complete.	The Contractor and Placer County's Construction Manager will monitor during construction.	Removal of trees and shrubs scheduled for 2009. Directions for this task will be included in the Contractor's plans and specifications.
MM 3.2.3c	Post-construction monitoring of revegetated areas would be conducted for a minimum of three years and until vegetation success has been achieved.	The Contractor and Placer County's Construction Manager will monitor during construction.	Monitoring for vegetation establishment will be conducted in 2010 and 2011.
MM 3.2.3d	Management activities that require the removal of trees and shrubs would be conducted outside the avian nesting season (April 1 through August 15) unless a qualified biologist determines that no nesting is occurring. The project proponent shall retain a qualified biologist to conduct a focused survey for active nest sites of migratory birds covered by the Migratory Bird Treaty Act within a 1/8 mile radius of the project area prior to (i.e. within fifteen days) the onset of construction activities initiated during the nesting season. If active nests are located during the preconstruction surveys, the biologist shall consult with CDFG and/or USFWS to determine the appropriate buffer around the nest.	The County or their Construction Manager will be required to hire a qualified biologist to conduct nesting bird surveys.	Removal of trees and shrubs scheduled for 2009. If vegetation removal is required during the avian nesting season, an avian nest survey will be conducted by a qualified biologist no sooner than 30 days prior to the removal of trees.
3.3 Special Status Species			
MM 3.3.3a	Any sighting of listed species, sensitive species, or location of nest or dens of these species will be reported	The County or their Construction Manger shall be responsible for	Special status species sightings shall be

**Appendix C. Summary of Project Mitigation Measures
Lake Forest Erosion Control Project**

Mitigation Measure	Summary of Mitigation Measure	Monitoring Responsibility	Timing
	to the appropriate governing agency (USFWS, CDFG, TRPA, LTBMU, etc.). The species will be monitored by a qualified biologist and appropriate avoidance measures would be determined with the governing agency.	informing USFWS, CDFG, USFS LTBMU or TRPA.	reported to the County or their Construction Manager by the Contractor, throughout the project construction timeline.
MM 3.3.3b	If special status wildlife species with agency-mandated protected activity centers and limiting operating periods (LOP) are found breeding in the project area, a protected activity center will be delineated by a qualified biologist and a LOP will be implemented.	Special status species sightings shall be reported to the County or their Construction Manager by the contractor. The County or their Construction Manager shall be responsible for informing USFWS, CDFG, USFS LTBMU or TRPA.	Throughout project construction timeline.
MM 3.3.3c	Prior to construction activities in undeveloped habitat, a survey for special status species will be conducted. If these species are found during the pre-construction survey, species specific avoidance measures and BMPs will be implemented.	Placer County's consultant will conduct species surveys prior to completion of final plans and specifications.	BMPs will be described in the Contractor's plans and specifications. Special status species locations will be identified on the plans.
MM 3.3.3d	Mitigation measures to avoid impacts to Tahoe yellow cress shall include the following: a Tahoe yellow cress field survey will be conducted prior to construction each year, between June 30 and September 30 by a qualified biologist. The results will be mapped on the working engineering plan set for proposed project improvements. In all years during which construction will take place along the lake shore, prior to commencement of construction, Tahoe yellow cress populations within 200 feet of the proposed disturbance areas will be identified and delineated with orange construction fence to ensure that populations are not impacted by equipment. Equipment access routes	If plants are found, the County or their Construction Manager shall coordinate with CDFG and TRPA. Species protection measures will be determined through consultation with these agencies.	Directions for this task will be included in the Contractor's plans and specifications.

**Appendix C. Summary of Project Mitigation Measures
Lake Forest Erosion Control Project**

Mitigation Measure	Summary of Mitigation Measure	Monitoring Responsibility	Timing
	will be identified and any Tahoe yellow cress populations along the access route will be delineated. The contractor will be instructed regarding current policy regarding Tahoe yellow cress. If any project activities are conducted during a low lake level period when plants may be present, all work activities will remain above 6,228 feet AMSL to avoid the low lying populations.		
3.4 Traffic			
MM 3.4.3a	At some locations, temporary lane closures would be necessary to facilitate construction. Where roads must be temporarily closed, the contractor will try to keep one lane open at all times.	The construction contractor is responsible for correctly implementing lane closures and managing mitigation for traffic.	Throughout project construction timeline.
MM 3.4.3b	On roads with the heaviest traffic, SR 28 and Lake Forest Road, there will be no lane closures on weekends, holidays, or Fridays that precede holiday weekends.	The construction contractor is responsible for correctly implementing lane closures and managing mitigation for traffic.	Throughout project construction timeline.
MM 3.4.3c	Appropriate signage and flaggers would be used to direct traffic, as needed.	The construction contractor is responsible for correctly implementing lane closures and managing mitigation for traffic.	Throughout project construction timeline.
MM 3.4.3d	Temporary detours may be employed, however at no time would access for local residents, emergency vehicles, or school buses be prohibited.	The construction contractor is responsible for correctly implementing lane closures and managing mitigation for traffic.	Throughout project construction timeline.
MM 3.4.3e	Traffic controls would be implemented during work hours and only when it is necessary to perform work.	The construction contractor is responsible for correctly implementing lane closures and managing mitigation for traffic.	Throughout project construction timeline.
MM 3.4.3f	Prior to construction a traffic study must be conducted and a subsequent traffic management/control plan would be created by Placer County for approval by TRPA and	Placer County is responsible for conducting the necessary studies and obtaining the necessary	Prior to project implementation.

**Appendix C. Summary of Project Mitigation Measures
Lake Forest Erosion Control Project**

Mitigation Measure	Summary of Mitigation Measure	Monitoring Responsibility	Timing
	Placer County. Elements of the plan would include appropriate use of signage, flaggers, traffic calming, and alternative routes to accommodate local and through traffic.	approvals.	
MM 3.4.3g	Placer County would advise local residents regarding schedules for construction traffic detours through distribution of flyers in the area neighborhoods well in advance of construction initiation.	Placer County would be responsible for providing notice to residents.	Prior to ignition of roadway activities that would cause detours.
3.5 Water Resources and Quality			
MM 3.5.3a	Construction fencing would be placed around wetland areas that are located outside of proposed construction areas to avoid disturbance.	The County or their Construction Manager to monitor during construction. TRPA will inspect during pregrade inspection.	Prior to grading activities in 2008. Directions for this daily task are included in the plans and specifications.
MM 3.5.3b	Earthwork shall be confined to areas of construction according to the construction phasing plan. Filter fencing will be installed around all of the stockpile locations and equipment storage areas.	The County and their Construction Manager will monitor during construction. LRWQCB and TRPA to monitor as part of issuance of the construction permits and permit compliance. Both agencies will conduct preconstruction inspections for stormwater BMPs and may inspect periodically during construction.	Throughout project construction timeline.
MM 3.5.3c	Permits including 401, 404, exemption to 100-year floodplain and SEZ prohibition, NPDES, and Streambed Alteration Agreement would be obtained for the proposed project.	Placer County is responsible for obtaining the necessary approvals from water resource agencies.	All necessary permits would be obtained prior to project construction.
MM 3.5.3d	Temporary BMPs including but not limited to silt fencing on vulnerable slopes, gravel bags for drain inlet protection, and turbidity curtains installed at channel	The construction contractor would be responsible for BMP installation and monitoring.	BMPs would be monitored and maintained throughout the construction timeline.

**Appendix C. Summary of Project Mitigation Measures
Lake Forest Erosion Control Project**

Mitigation Measure	Summary of Mitigation Measure	Monitoring Responsibility	Timing
	outlets would be implemented to minimize soil erosion in the case of storm events during construction. BMPs would be consistent with TRPA standards as well as Federal and state permit conditions including Corps, LRWQCB, and CDFG permits. Daily BMP inspections during construction would be conducted and remedial actions would be taken should deficiencies be noted.		
MM 3.5.3e	A dewatering plan would be implemented for each construction year.	The County and their Construction Manager will monitor during construction.	Prior to construction activities.
MM 3.5.3f	The following winterization measures would be adhered to: maintain all temporary erosion control including filter fencing and coir logs; stabilize all disturbed areas with heavy mulch and tackifier; clean up and remove all construction site waste including trash, debris and spoil piles; and, cover all soil stockpiles/berms with a natural fiber blanket and secure stockpiles/berms with filter fencing.	The Construction Contractor will be responsible for implementing winterization measures prior to October 15 of each year in which construction activities are conducted.	Prior to October 15 each year.
MM 3.5.3g	Spills shall be reported to the LRWQCB and procedures and response protocols for immediate cleanup outlined in the SWPPP shall be implemented. These procedures shall include placement of sandbags, gravel, boards or other TRPA approved methods to prevent spilled material from entering any drainage facilities or areas.	The County and their Construction Manager will monitor during construction. LRWQCB and TRPA to monitor as part of issuance of the construction permits and permit compliance. Both agencies will conduct preconstruction inspections for stormwater BMPs and may inspect periodically during construction.	Throughout project construction timeline.
MM 3.5.3h	Construction vehicles and equipment will be limited to restricted areas and will be serviced in specific upland areas or stabilized areas to prevent accidental spills of fluids, oils and lubricants into surface water. This area	The County and their Construction Manager will monitor during construction. LRWQCB and TRPA to monitor as part of	Throughout project construction timeline.

**Appendix C. Summary of Project Mitigation Measures
Lake Forest Erosion Control Project**

Mitigation Measure	Summary of Mitigation Measure	Monitoring Responsibility	Timing
	will consist of a clean gravel pad with an impervious liner underneath.	issuance of the construction permits and permit compliance. Both agencies will conduct preconstruction inspections for stormwater BMPs and may inspect periodically during construction.	
MM 3.5.3i	Construction equipment shall be cleaned to remove any loose dirt or sediment prior to exiting the site. Washing will take place in an area stabilized with crushed stone and drain to an approved sediment trap or basin.	The County and their Construction Manager will monitor during construction. LRWQCB and TRPA to monitor as part of issuance of the construction permits and permit compliance. Both agencies will conduct preconstruction inspections for stormwater BMPs and may inspect periodically during construction.	Throughout project construction timeline.
MM 3.5.3j	The excess fill disposal locations will be regarded to the natural contours of the surrounding area and revegetated with native upland species.	The County and their Construction Manager will monitor during construction. LRWQCB and TRPA to monitor as part of issuance of the construction permits and permit compliance. Both agencies will conduct preconstruction inspections for stormwater BMPs and may inspect periodically during construction.	At the conclusion of construction activities.
MM 3.5.3k	A SWPPP would be prepared to detail water pollution prevention strategies.	The County and their Construction Manager will monitor the installation and maintenance of BMPs during construction, as described in the SWPPP and conduct a water quality monitoring	SWPPP would be developed prior to construction activities. Water quality monitoring to occur during active construction periods.

**Appendix C. Summary of Project Mitigation Measures
Lake Forest Erosion Control Project**

Mitigation Measure	Summary of Mitigation Measure	Monitoring Responsibility	Timing
		program in accordance with LRWQCB and TRPA conditions.	
3.5.3l	Disturbed areas would be revegetated. Native vegetation and mulch would be applied. Where appropriate, native plants, rock, wood and soils salvaged from project excavation would be used in revegetation and restoration. Revegetation would be conducted as soon as practicable to stabilize the ground after construction is completed in an area. Irrigation systems would be installed and maintained to ensure success of the revegetation.	The Construction contractor would be responsible for revegetating the site in accordance with the Final Design Plans and Specifications.	Revegetation would be conducted in years 1, 2, and 3.
3.5.3m	In-channel construction activities would be limited to a period from July 1st to October 15 th of each year.	Placer County and the Construction Contractor are responsible for adhering to project timing guidelines.	Each year of construction.
3.6 Air Quality			
MM 3.6.3a	Prior to construction, a Fugitive Dust Control Permit would be obtained. Dust control measures included in the Fugitive Dust Control Plan would include at a minimum spraying water, applying soil stabilizer, covering stockpiles, haul materials, etc. BMPs within the fugitive dust control plan would be consistent with State and local permits.	Placer County will prepare the dust control plan. The construction contractor will be responsible for adhering to measures within the fugitive dust control plan.	Fugitive Dust Control Permit will be obtained prior to construction. The Fugitive Dust Control Plan will be followed throughout the construction period.
MM 3.6.3b	Mitigation measures that would be employed to minimize fugitive dust particle emissions would include: <ul style="list-style-type: none"> • At a minimum of three times per week, and as needed, project site and adjacent roadways would be swept for dirt and mud which has been generated from or deposited by construction equipment going to and from the construction site; • All disturbed areas shall be adequately 	The construction contractor will be responsible for implementing fugitive dust control BMPs.	Throughout the project construction period.

**Appendix C. Summary of Project Mitigation Measures
Lake Forest Erosion Control Project**

Mitigation Measure	Summary of Mitigation Measure	Monitoring Responsibility	Timing
	<p>restabilized to minimize exposure of soil to wind and water erosion;</p> <ul style="list-style-type: none"> • Watering unpaved roads and exposed dirt areas, and/or utilizing hydroseeding or palliatives; • Covering stockpiled and transported soil materials; • Washing vehicles; • Limiting vehicle speed on unpaved roads to 15 mph, and • Suspending work when winds exceed 25 mph or project activities threaten off-site dust impacts. 		
MM 3.6.3c	<p>In order to limit the temporary emissions of pollutants such as hydrocarbons and reactive organic gases due to vehicle and mechanized equipment operation, as well as paving/asphalt operations, the following mitigation measures would be implemented:</p> <ul style="list-style-type: none"> • Using existing power sources or clean fuel generators rather than diesel generators; • Utilizing low emission stationary and mobile equipment; • Construction equipment exhaust emissions shall not exceed Federal and/or State Health and Safety Code visible emission limitations; • Limiting diesel warm up and idle times to 5 minutes, and • Employing a regular equipment tuning and maintenance program. 	The construction contractor will be responsible for implementing air quality BMPs.	Throughout the project construction period.
3.7 Cultural Resources			
MM 3.7.3a	All known sites and finds shall be identified and flagged by a cultural resources specialist prior to construction activities. These flagged areas would be appropriately	US Forest Service would be the lead with respect to cultural resources.	Throughout project construction timeline.

**Appendix C. Summary of Project Mitigation Measures
Lake Forest Erosion Control Project**

Mitigation Measure	Summary of Mitigation Measure	Monitoring Responsibility	Timing
	avoided and/or protected to maintain their historical character. Any work conducted in the vicinity of the known sites will be monitored by a qualified archaeologist		
MM 3.7.3b	If buried or previously identified resources are discovered during project activities, all work in the vicinity of the find would cease, and the California State Historic Preservation Officer (SHPO) would be contacted for additional consultation per 36 CFR 13(b), Discoveries Without Prior Planning.	US Forest Service would be the lead with respect to cultural resources.	Throughout project construction timeline.
3.8 Hazardous, Toxic, and Radiological Waste			
MM 3.8.3a	A Hazardous Material Spill Prevention and Containment Plan would be prepared.	Placer County is responsible for preparing the plan	Prior to project construction
MM 3.8.3b	Staging areas for fueling and maintenance of heavy construction equipment shall be located away from stream channels and Lake Tahoe in order to limit potential spills to designated areas where observation and clean-up can be readily accomplished.	The Construction Contractor is responsible for compliance.	Throughout project construction timeline.
MM 3.8.3c	Should an oil or fuel spill occur during construction or maintenance activities, all work would stop immediately, LRWQCB would be notified, and clean up procedures would commence immediately in accordance with the guidelines of the NPDES permit and the TRPA Basin Plan.	Placer County and the Construction Manager would be responsible for following necessary spill response and containment procedures.	Throughout project timeline.