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MEMORANDUM

Date: June 19, 2013  
 To: Regional Plan Implementation Committee  
 From: TRPA Staff  
 Subject: Programmatic mitigation measures process and schedule

**Requested Action:** Endorse the creation and membership of Technical Working Groups (TWGs) to assist with the development of the mitigation measures.

**Background:** As discussed at the February 2013 Governing Board meeting, the Regional Plan EIS includes eight programmatic mitigation measures that address significant impacts that could result from implementation of the Regional Plan. With certification of the Final EIS and adoption of the Regional Plan, the Governing Board committed to implementing these programmatic mitigation measures by December 2013. Each of these mitigation measures requires the development and implementation of policies addressing specific topics. Attachment A includes the full text of each programmatic mitigation measure. The eight programmatic mitigation measures address five topic areas:

- Reductions in greenhouse gas emissions,
- Affordable and moderate income housing,
- Construction best practices for air quality and noise,
- Long-term traffic noise reduction, and
- Noise policy for mixed-use development.

**Process and Schedule:** Each topic area is being addressed through a similar process and schedule. Conceptual approaches are currently being developed for each mitigation measure. Following input from the RPIC, staff will further develop conceptual or draft policies in coordination with TWGs and/or stakeholder groups. Staff anticipates presenting conceptual policies to the Governing Board in August, and requesting direction on the approach for each mitigation topic. Draft policies and/or code would then be developed for review by the APC in October or November, followed by Governing Board consideration in November or December, 2013. The table below summarizes the proposed process and schedule for completion of the mitigation measures.

June	July	August	September	October	November	December
RPIC direction on schedule, process, and TWG	Develop conceptual policies in coordination with TWG and/or stakeholders	Governing Board direction on conceptual policies	Develop draft Policy and/or Code in coordination with TWG and stakeholders	APC review of Draft Policy and/or Code	Governing Board consideration of proposed Policy and/or Code	Contingency date for Governing Board action

**Technical Working Groups (TWGs):** Staff is recommending that the RPIC appoint two TWGs to assist with the development and review of the programmatic mitigation measures. One TWG would be focused on

air quality and noise, and would assist with development of mitigation measures related to construction emissions and noise, long-term traffic noise, and a noise policy for mixed-use development. The second TWG would be focused on greenhouse gas reduction and would assist with development of Mitigation Measure 3.5-1: Implement Sustainability Measures with Performance Standard. Because the mitigation measure related to affordable and moderate income housing is already being developed in close coordination with affected stakeholders and all local jurisdictions, staff is not recommending the creation of a TWG to assist with this topic.

Each of the technical working groups would meet as needed to assist in developing conceptual approaches for the RPIC to consider, and to assist in developing policy and/or code language to implement the mitigation. Staff is recommending seven member TWGs with one member representing each of the following sectors: California statewide, Nevada statewide, California local jurisdiction, Nevada local jurisdiction, environmental advocacy organization, business interest, and lay member. Proposed TWG members are provided below.

	<b>Air Quality &amp; Noise</b>	<b>Greenhouse Gas Reduction</b>
CA Statewide	<b>Michael Baker</b> , Air Resources Engineer – construction vehicle emissions, CA Air Resources Board	<b>Dana Papke Waters</b> , Air Pollution Specialist – Green Building Technical Lead, CA Air Resources Board
NV Statewide	<b>Staff member TBD</b> , NV Division of Environmental Protection, Bureau of Air Pollution Control	<b>Staff member TBD</b> , NV Division of Environmental Protection, Bureau of Air Pollution Control
CA Local Jurisdiction	<b>Steve Buelna</b> , Supervising Planner, Placer County	<b>Hilary Roverud</b> , Development Services Director, City of South Lake Tahoe
NV Local Jurisdiction	<b>Jeff Foltz</b> , Senior Civil Engineer, Douglas County Department of Public Works	<b>Brandy McMahon</b> , Senior Planner, Douglas County
Environmental Advocacy	<b>Alexis Ollar</b> , Executive Director, Mountain Area Preservation Foundation	<b>Shannon Eckmeyer</b> , Policy Analyst, League to Save Lake Tahoe
Business Interest	<b>Tillio Olcese</b> , Former President, Contractors Association of Truckee Tahoe; Olcese Construction; and National Demolition Association	<b>Pat Davison</b> , Executive Director, Contractors Association of Truckee Tahoe
Lay Member	<b>Steve Teshara</b> , Tahoe Transportation District APC representative	<b>Andrew Ryan</b> , Principal, PR Design and Engineering

Contact Information: If you have any questions, please contact Adam Lewandowski, Senior Planner, at 775.589.5233.

# ATTACHMENT A

## FINAL EIS MITIGATION MEASURES

### Reductions in Greenhouse Gas Emissions

Summary: One mitigation measure requires that TRPA implement sustainability measures that will reduce the emissions of greenhouse gases (GHGs). While the Regional Plan Update already includes measures to reduce greenhouse gas emissions from transportation sources, this mitigation measure requires that TRPA coordinate the implementation of policies that reduce GHGs from construction activities, and from the long-term operation of buildings and other facilities. This policy will consider existing state and local regulations and where existing regulations meet the intent of the policy, no additional or redundant requirements will apply. Where existing regulations do not meet the intent of the policy, TRPA will coordinate with local jurisdictions to ensure that the policy is implemented. This mitigation measure will likely be addressed through a best construction practices policy that is closely aligned with the best construction practices policy for air quality and noise, described above; and a separate policy that targets long-term operational GHG emissions.

#### Mitigation Measure:

#### **Mitigation Measure 3.5-1: Implement Sustainability Measures with Performance Standard.**

Within twelve months of adoption of an updated Regional Plan, TRPA will coordinate implementation of a GHG Emission Reduction Policy through TRPA-approved plans, project permitting, or projects/programs developed in coordination with local or other governments addressing Best Construction Practices and ongoing operational efficiency. Until that time, TRPA will continue existing practice to require measures developed on a project-specific basis. The policy will require implementation of measures for the reduction of GHG emissions generated by demolition and construction activity in the Region and by ongoing building and property operations. Where local ordinances already require GHG Emission Reductions consistent with the Policy, no further action is necessary. Where local government ordinances do not adequately address GHG reduction practices, those practices will be implemented through local government and/or TRPA permitting activities. Such measures may include, but are not limited to, the following:

#### Minimize Construction-Related GHG Emissions

- Limit equipment idling time to a maximum of five (5) minutes.
- Recycle or reuse construction waste and demolition material to the maximum extent feasible.
- Use electrified or alternative-fueled construction equipment to the maximum extent feasible.
- Use local and sustainable building materials to the extent possible.

#### Minimize Operation-Related GHG Emissions

- Use on-site renewable energy, such as photovoltaic systems.
- Exceed building code standards for energy efficiency.
- Install energy efficient appliances and equipment in new buildings.
- Retrofit existing buildings to exceed energy efficiency building code standards.
- Construct new development to allow for electric lawn maintenance and snow removal equipment compatibility.
- Require minimum passive solar design standards in new buildings.
- Expand recycling opportunities and increase recycling infrastructure, including food waste diversion into a composting process.
- Implement water conservation standards in new development.

TRPA will require through TRPA-approved plans, project permitting, or projects/programs developed in coordination with local or other governments that GHG emissions from project-specific construction and operational activities permitted pursuant to and in accordance with the Regional Plan are reduced to the maximum extent feasible. As described in the RTP/SCS EIR/EIS, all feasible mitigation measures pertaining to mobile-source GHG emissions have been considered within the range of transportation strategies already included in the three RTP/SCS Transportation Strategy Packages. Through the grant awarded to the Lake Tahoe Region from the California Strategic Growth Council, a partnership of agencies and organizations are working on a regional Sustainability Action Plan, which will address other primary sources of GHG emissions (i.e., energy use and efficiency, water supply and conservation, and solid waste). When a Sustainability Action Plan is completed for the Tahoe Region, TRPA will coordinate implementation measures through TRPA-approved plans, project permitting, or projects/programs developed in coordination with local or other governments, as feasible.

### **Affordable and Moderate-Income Housing**

Summary: One mitigation measure requires that TRPA coordinate a regional housing needs assessment, and coordinate the implementation of policy or ordinance changes necessary to achieve adopted housing goals.

#### Mitigation Measures:

#### **Mitigation Measure 3.12-2: Prepare a Regional Housing Needs Program and Implement Recommendations.**

Within 12 months of adoption of an updated Regional Plan, TRPA shall coordinate with local governments and other organizations to develop and implement a Regional Housing Needs Program. The Housing Needs Program will evaluate progress towards the adopted housing goals and recommend policy and ordinance changes necessary to achieve housing goals. Changes may include, but are not limited to, the conversion of residential allocations to bonus units that would be available only for the construction of affordable and/or moderate-income housing, the creation of new bonus units for affordable housing and modification of development standards to promote housing affordability

## **Best Construction Practices for Air Quality and Noise**

**Summary:** Four separate mitigation measures address different aspects of construction impacts related to air quality, noise, and ground vibrations. Each of these mitigation measures calls for TRPA to coordinate the development and implementation of a construction best practices policy. The policy will consider existing state and local regulations and where existing regulations meet the intent of the policy, no additional or redundant requirements will apply. Where existing regulations do not meet the intent of the policy, TRPA will coordinate with local jurisdictions to ensure that the policy is implemented. For practical purposes, each of these mitigation measures will likely be addressed through a single construction best practices policy that includes all required elements.

### **Mitigation Measures:**

#### **Mitigation Measure 3.4-2: Develop and Implement a Best Construction Practices Policy for Construction Emissions.**

Within 12 months of adoption of an updated Regional Plan, TRPA will coordinate implementation of Best Construction Practices for Construction Emissions through TRPA approved plans, project-permitting, or projects/programs developed in coordination with local or other governments that require, as a condition of project approval, implementation of feasible measures and Best Management Practices to reduce construction-generated emissions to the extent feasible. Until that time, TRPA will continue existing practice to require measures developed on a project-specific basis. Where local ordinances, rules, or regulations already require Best Construction Practices for construction emissions, no further action is necessary. Where local government ordinances, rules, or regulations do not adequately address Best Construction Practices, those practices will be implemented through local government and/or TRPA permitting activities. Such measures may include, but are not limited to, the following:

- Construction contractors shall prepare and submit an inventory of heavy-duty equipment over 50 horsepower and used an aggregate of 40 or more hours during construction. The equipment inventory shall demonstrate that the project-wide fleet average will achieve a minimum 20 percent NOX and 45 percent particulate matter emissions reduction compared to the most recent statewide average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
- Fugitive dust shall not exceed 40 percent opacity and not go beyond the property boundary at any time during project construction.
- No open burning of removed vegetation shall occur during infrastructure improvements.
- Minimize idling time to five minutes for all diesel-power equipment.

- Apply water to control dust as needed to prevent dust impacts offsite. Operational water truck(s) shall be onsite, as required, to control fugitive dust. Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off-site.
- Apply approved chemical soil stabilizers, vegetative mats, or other appropriate Best Management Practices to manufacturer’s specifications, to all inactive construction areas (previously graded areas which remain inactive for 96 hours). Spread soil binders on unpaved roads and employee/equipment parking areas and wet broom or wash streets if silt is carried over to adjacent public thoroughfares.
- Utilize existing power sources (e.g., power poles) or clean-fuel generators rather than temporary diesel power generators, wherever feasible.

**Mitigation Measure 3.4-5: Develop and Implement a Best Construction Practices Policy for Toxic Air Contaminant (TAC) Emissions during Construction.**

Within 12 months of adoption of an updated Regional Plan, TRPA will coordinate implementation of Best Construction Practices for Construction Emissions through TRPA approved plans, project-permitting, or projects/programs developed in coordination with local or other governments that require, as a condition of project approval, implementation of feasible measures to reduce exposure of sensitive receptors to construction-related TAC emissions. Until that time, TRPA will continue the existing practice to require measures developed on a project-specific basis. Where local ordinances, rules, or regulations already require Best Construction Practices for construction emissions, no further action is necessary. Where local government ordinances, rules, or regulations do not adequately address Best Construction Practices, those practices will be implemented through local government and/or TRPA permitting activities. Such measures may include, but are not limited to, the following:

- Limit idling time to five minutes maximum.
- Equip heavy-duty construction equipment with diesel particulate traps.
- Locate construction staging areas as far away as possible on the project site from off-site receptors.
- As a condition of approval, individual project environmental review shall demonstrate that current district-recommended BMPs are implemented to ensure sensitive receptors are not exposed to substantial TAC concentrations.

**Mitigation Measure 3.6-2: Develop and Implement a Best Construction Practices Policy for the Minimization of Exposure to Construction-Generated Noise and Ground Vibration.**

Within 12 months of adoption of an updated Regional Plan, TRPA will coordinate implementation of a Best Construction Practices Policy for Minimization of Construction-Generated Noise and Ground Vibration through TRPA-approved plans, project permitting, or projects/programs developed in coordination with local or other governments. Until that time, TRPA will continue the existing practice to require measures developed on a project-specific

basis. The policy will require implementation of measures for the reduction of noise generated by demolition and construction activity in the Region. Where local ordinances already require Best Construction Practices for construction noise, no further action is necessary. Where local government ordinances do not adequately address Best Construction Practices, those practices will be implemented through local government and/or TRPA permitting activities. Measures for minimizing exposure to construction-generated noise may include, but are not limited to, the following:

- All construction equipment shall be equipped with properly operating mufflers and engine shrouds, in accordance with manufacturers' specifications.
- Equipment engine doors shall be kept closed during equipment operation.
- Inactive construction equipment shall not be left idling for prolonged periods of time (i.e., more than 5 minutes).
- Stationary equipment (e.g., power generators) and staging areas for other equipment shall be located at the maximum distance feasible from nearby noise-sensitive receptors.
- Trucks hauling materials and goods to and from the construction site shall only do so during active construction periods.
- Temporary sound barriers shall be installed along the boundaries of the construction site or surrounding stationary sources of noise (e.g. pumps or generators) to protect nearby noise-sensitive receptors, where feasible and applicable.
- All construction and demolition activity using heavy-duty, off-road equipment shall be performed between 8:00 a.m. and 6:30 p.m. Construction-generated noise is exempt from TRPA noise standards during these hours by TRPA Code Section 68.9. Noise-generating construction activity may occur during other times of the day if the resultant noise levels would not exceed TRPA noise standards. TRPA will require all project applications to include a construction noise reduction plan, specific to the proposed project that fully complies with those applicable measures identified in the Region-wide Best Construction Practices Policy.

**Mitigation Measure 3.6-3: Develop and Implement a Best Construction Practices Policy for the Minimization of Construction-Generated Noise and Ground Vibration.**

The Best Construction Practices Policy for the Minimization of Construction Noise and Ground Vibration, which is required by Mitigation Measure 3.6-2, will also include measures to address vibration generated during construction and demolition activity. Measures required by the policy to reduce ground vibration may include, but are not limited to, the following:

- Sonic pile driving shall be performed instead of impact pile driving, where feasible;
- To further reduce pile-driving ground vibration impacts, holes shall be predrilled to the maximum feasible depth to reduce the number of blows required to seat the pile;

- All construction equipment on construction sites shall be operated as far away from vibration-sensitive sites as reasonably possible;
- No construction or demolition activity shall be performed that would expose an existing structure to levels of ground vibration that exceed 0.20 in/sec PPV. The vibration control program shall include minimum setback requirements for different types of ground vibration-producing activities (e.g., pile driving, blasting) for the purpose of preventing damage to nearby structures. Established setback requirements may be waived with a project-specific analysis conducted by a qualified specialist that indicates that no structural damage would occur at nearby buildings or structures.
- No construction or demolition activity shall be performed that would expose human activity in an existing building to levels of ground vibration that exceed FTA's 80 VdB standard. The vibration control program shall also include minimum setback requirements for different types of ground vibration-producing activities (e.g., pile driving, blasting) for the purpose of preventing negative human response. Established setback requirements may be waived with a project-specific analysis by a qualified specialist that indicates that the buildings would not be exposed to ground vibration levels in excess of 80 VdB, confirmed by monitoring.

TRPA will only approve projects, plans, or programs that would comply with the requirements of the Best Construction Practices Policy.

### **Long-Term Traffic Noise Reduction**

Summary: One mitigation measure requires that TRPA coordinate the development and implementation of a long-term traffic noise reduction program to achieve adopted thresholds. It should be noted that the peer-review of the most recent Threshold Evaluation identified a need to revise the adopted noise Threshold Standards. Implementation of this mitigation measure should be closely coordinated with any revisions to Noise Threshold Standards.

#### Mitigation Measures:

#### **Mitigation Measure 3.6-1: Establish and Implement a Region-Wide Traffic Noise Mitigation Program.**

Within 12 months of adoption of an updated Regional Plan, TRPA will coordinate implementation of a Region-wide traffic noise reduction program through TRPA-approved plans, project permitting, or projects/programs developed in coordination with local or other governments that will implement measures for reducing attaining and maintaining traffic noise levels to below applicable CNEL standards. Until that time, TRPA will continue its existing practice of requiring measures to be developed on a project-specific basis. Measures may include those required as conditions of approval for development projects and those to be implemented by TRPA to address cumulative, regional noise levels. Traffic noise mitigation measures will be implemented through local government and/or TRPA permitting activities. Such measures may include, but are not limited to, the following:



- Construction of barriers, berms, and/or acoustical shielding—Any barriers shall blend into the overall landscape and have an aesthetically pleasing appearance that is compatible with the color and character of the general area, and not become the dominant visual element of the community. Relocation of existing vegetation and/or landscaping may also be necessary to achieve an aesthetically pleasing appearance;
- Replacement of driveways that provide access from highways to individual buildings with a common access way that routes ingress and egress traffic to nearby intersections in order to reduce the number of gaps in barriers and berms;
- Planting of dense vegetation in key locations where noise absorption is needed;
- Use of noise-reducing pavement, including repaving existing roadways with noise-reducing pavement —All pavement must be suitable for the climate of the Tahoe Region, snow removal needs, and particulate matter standards;
- Reduction of speed limits and/or implementation of traffic-calming measures that slow travel speeds, if feasible and practical;
- Establishment of setback requirements for new development in specific areas exposed to highway noise;
- Realignment of segments of the highway, if feasible, to reduce noise-sensitive areas to exposure of traffic noise from that highway segment;
- Acquisition of additional right-of-way adjacent to specific roadway segments to remove existing noise-sensitive receptors, including existing residences;
- Establishment of programs to pay for noise reduction such as low-cost loans to owners of noise-affected property or establishment of developer fees;
- Noise-reducing acoustical treatment of existing buildings; and
- Additional measures that would, based on substantial evidence, reduce the number of vehicle trips associated with project operations, such as an employee carpool or van pool program, shuttle bus service for residents or tourists, parking fees, and bicycle amenities.

Prior to adoption of the traffic noise reduction program, TRPA will continue to evaluate individual projects at the project level and enforce CNEL standards on a project-by-project basis pursuant to the noise limitations in Chapter 68 of the Code.

For projects that do not require environmental documentation beyond a checklist, TRPA may apply general noise reduction measures in the twelve months preceding adoption of the Region-wide traffic noise reduction plan.

### **Noise Policy for Mixed-Use Developments**

Summary: One mitigation measure requires that TRPA coordinate the development and implementation of a noise policy for outdoor areas in mixed-use developments.

**Mitigation Measure 3.6-4: Develop and Implement an Exterior Noise Policy for Mixed-Use Development.**

Within 12 months of adoption of an updated Regional Plan, TRPA will coordinate implementation through TRPA-approved plans, project permitting, or projects/programs developed in coordination with local or other governments of an exterior noise standard, and related policies, for outdoor activity areas of mixed-use development. Until that time, TRPA will continue existing practice to require measures developed on a project-specific basis. Traffic noise mitigation measures will be implemented through local government and/or TRPA permitting activities. Development of the exterior noise standard will be based on health criteria for noise exposure and will take into account the following:

- Pertinent guidance provided by the California Governor’s Office of Research and Planning (OPR 2003: p.253-254);
- Noise exposure standards established by local jurisdictions in the Region, including Douglas County Code 20.690.030, the Placer County General Plan (Placer County 1994: p. 139, 141), and the El Dorado County General Plan (El Dorado County 2004: p.116-117);
- The health-related effects of noise exposure;
- Any unique characteristics of the noise environment in the Region; and
- Proximity and access to quiet outdoor areas from community centers in the Region (e.g., undeveloped areas, areas zoned by TRPA for urban outdoor recreation, rural outdoor recreation, or wilderness and areas without roads).

TRPA will not approve any proposed land use development project, plan, or program that would expose outdoor activity areas of residential and tourist accommodation uses to exterior noise levels that exceed the identified standard.