Appendix A

Resource Protection Measures

RESOURCE PROTECTION MEASURES

The following resource protection measures are standard practices that would be implemented during construction in the project area, as applicable.

BIOLOGICAL RESOURCES

BIO-1: Nesting Bird and Roosting Bat Habitat Removal

- Vegetation removal activities, including removal of riparian vegetation, removal of conifers, and topping/limbing of conifers, would be completed the year prior to commencement of construction activities between September 15 and November 15 (i.e., outside of the nesting bird season, bat maternity season, and bat hibernation season).
- Removal of bald eagle nests is prohibited regardless of the occupancy status under the federal Bald and Golden Eagle Protection Act. If a bald eagle nest is present in a tree planned for removal, then the nest and tree will not be removed.
- Removal of swallow nests under the bridge over Meeks Creek will be completed the year prior to commencement of construction activities between August 31st and January 31st (i.e., outside of the nesting bird season).
- Demolition of buildings in the project area would be completed between September 15th and November 15th (i.e., outside of the bat maternity season and bat hibernation season), if feasible.

BIO-2: Special-Status Plant Species (Not Including Tahoe Yellow Cress)

- Before the onset of construction activities, a qualified botanist designated or approved by the LTBMU botanist will conduct a complete floristic survey (i.e., all plant species present will be identified to the taxonomic level necessary to determine if they are a special-status species) of construction activity areas (including all vehicle travel routes), and suitable habitat within 0.25 mile of construction activity areas. The floristic survey will be conducted during a time that coincides with the blooming periods for target species (special-status species that have potential to occur in the project area). This survey will be conducted no more than two years prior to the start of construction and no later than the blooming period preceding construction.
- If special-status plants are found in the survey area, and these special-status plants can be avoided, the following measures will be implemented:
  - Exclusion zones will be established around areas occupied by special-status plants. The size of the exclusion zones will be determined based on: (a) plant phenology at time of construction; (b) rareness and imperilment of species; (c) vulnerability to the construction activity and immediate indirect effects; and (d) environmental conditions and terrain. Prior to project implementation, the LTBMU Botanist will review all information, including any new information, and develop buffers that will reduce effects to FSS plants. Special-status plant exclusion zones shall be flagged or fenced for avoidance, at the direction of the qualified botanist, no more than 30 days prior to the start of construction. Flagging and fencing shall be refreshed and maintained throughout construction.
  - The project implementer, in consultation with the qualified botanist, and/or the LTBMU shall first attempt to avoid effects of project implementation on special-status plants and protect their occurrences in the project area. If a special-status plant occurrence cannot be avoided by construction activities, the project implementer shall coordinate with the responsible agency (i.e., LTBMU, TRPA, or CDFW) to establish appropriate protection measures.
  - Relocation of special-status plants would only be attempted in cases where relocation has a high probability of success, and it would not be possible to implement the project without harming special-status plants. If

sacrifice seed collection (annual species) or transplantation/translocation (perennial angiosperms and bryophytes) are selected as appropriate mitigations, then the following measures would apply: a) a qualified biologist designated or approved by the responsible agency (e.g., LTBMU, TRPA) will collect mature seeds of annual species, live plants or underground buds (e.g., bulbs, rhizomes, corms) from perennial angiosperms and bryophytes store them at an appropriate native plant nursery or comparable facility; b) upon the completion of work, the qualified biologist will redistribute the salvaged plants, seeds, or propagules within the original location of the population or nearest onsite suitable habitat for the species; c) the project implementer shall establish agency-approved performance standards for survivorship and will monitor and document the success rate of the transplanted individuals for three consecutive growing seasons; d) if performance standards are not met, as determined by the responsible agency, corrective measures shall be implemented and monitoring and adaptive management continued until success criteria are met.

- If special-status plants are found in the survey area and project activities would result in removal or mortality of a small number of individuals of a special-status plant population but would not result in loss of an entire special-status plant occurrence, would not reduce the number of plants in the occurrence below self-sustaining numbers, and would not remove or permanently adversely alter occupied habitat, then mitigation, such as plant salvage and relocation efforts, would not be necessary. The decision about whether plant salvage and replanting or relocation will be required will be made in consultation with the responsible agency (e.g., LTBMU or TRPA).
- Ground disturbance and vegetation and tree removal shall be minimized to only the areas necessary for construction.
- Construction or tree removal work within the exclusion zone of a special-status plant occurrence will be monitored by a qualified environmental monitor designated or approved by the responsible agency (LTBMU, TRPA, or CDFW) to ensure protective measures are sufficient.
- LTBMU will coordinate with other responsible agencies (e.g., TRPA), as appropriate, to determine an appropriate seed mix and application rate or tree-planting plan. The plan shall include approved seed mixes and soil amendments, application rates, and application methods. The plan shall also include long-term erosion and sediment control measures, slope stabilization, and monitoring procedures.
- To facilitate revegetation in temporarily disturbed areas, topsoil and/or sod, where present, shall be salvaged in areas to be graded or excavated. Surface preparations (e.g., soil loosening, scarification) necessary for reestablishment of selected plant species and appropriate to the type of vegetation establishment being used (e.g., seeding, sodding, planting) will be included in the final restoration design. Topsoil shall be segregated, stockpiled separately from subsoil, and covered. The topsoil shall then be replaced to the approximate location of its removal after project construction has been completed to facilitate revegetation of temporarily disturbed areas. Topsoil may also be salvaged from where permanent facilities are planned or where operation and maintenance activities preclude the establishment of vegetation and used to assist in revegetation of adjacent areas.
- To the maximum extent possible, existing roads shall be used to access the project area and construction areas. Temporary access routes and overland travel routes must be approved by LTBMU.

BIO-3: Tahoe Yellow Cress. A qualified biologist designated or approved by the LTBMU botanist (FSH 2609.26 sec 11) shall conduct a focused preconstruction survey for Tahoe yellow cress (TYC) in all beach habitat within 0.25 mile of where construction-related disturbance could occur in the vicinity of TYC occurrences during that year. Surveys shall be conducted between June 15 and September 30, when TYC is clearly identifiable, and shall follow *Survey Protocols for Tahoe Yellow Cress Annual Surveys* (Stanton and Pavlik 2009). Surveys shall be completed for each year that construction activities could occur in beach habitat. If construction is scheduled to begin prior to June 15 in a given year, surveys for TYC shall be completed between June 15 and September 30 of the previous year. If no TYC stems

are found during the survey, the results of the survey shall be documented in a letter report to LTBMU that shall become part of the project environmental record, and no further actions shall be required.

(a) If TYC stems are located in areas that may be disturbed by construction activities, the stems shall be clearly marked for avoidance in the field and protected from impacts associated with construction activities. Protective measures shall include installing high-visibility fencing around known stem locations during construction. No construction-related activities shall be allowed in areas fenced for avoidance, and construction personnel shall be briefed about the presence of the stems and the need to avoid effects on the stems.

(b) If restoration actions such as the removal of sheet pile at the mouth of Meeks Creek and restoration of the barrier beach requires work in occupied TYC habitat and full avoidance of all plants is not feasible, LTBMU will identify a mitigation area in a suitable location at Meeks Bay, excavate and translocate potentially affected stems, plant additional nursery-grown TYC plants, and monitor and adaptively manage the mitigation area, as described below. If TYC mortality occurs from project construction, or from death of translocated stems, propagation and outplanting would be completed at a 3:1 ratio. Translocation, seed collection, storage, propagation, and outplanting of TYC shall follow the best management practices presented in the conservation strategy for TYC (Stanton and AMWG 2015).

All translocated or outplanted plants will be marked and/or mapped to facilitate monitoring. Transplanting or outplanting will be followed by active monitoring and adaptive management for the remainder of the growing season in which planting occurs, and the following two growing seasons. Monitoring and adaptive management will include the following actions:

Surveys will be conducted between June 15 and September 30 following Stanton and Pavlik 2009. If the number of stems in the restoration area is less than the number recorded in the growing season prior to implementation, and the reduced number cannot be explained by annual fluctuations in lake levels, then LTBMU will conduct additional outplanting of container-grown TYC plants to replace TYC mortality at a 3:1 ratio to maintain a minimum number of stems in the restoration area as were present before project implementation. If lake levels are higher than normal and the restoration area is inundated such the TYC cannot establish, monitoring may be rescheduled to occur in years with normal lake levels.

Monitoring activities may include an annual site survey or participation in the lake-wide AMWG survey. LTBMU may enlist monitoring and adaptive management support from the TYC AMWG to facilitate success.

To protect TYC plants from potential long-term increased beach use and disturbance as an indirect result of potential increased recreation activity in the shorezone, protective fencing, or natural barriers to discourage access (e.g., dense vegetation, logs) and/or educational signage about the need to avoid these areas will be installed around occurrences of TYC that may be subject to adverse effects from recreational activities. Protective barriers and signage would be managed adaptively based on the results of annual AMWG monitoring results to ensure their function and placement meet their objectives. These features would be designed not to interfere with necessary operations and maintenance activities at facilities.

BIO-4: Roosting Bat Survey and Avoidance of Communal Roosts

- Pursuant to the "Nesting Bird and Roosting Bat Habitat Removal" RPM, described above, vegetation in the project area would be removed the year prior to commencement of construction activities and between September 15th and November 15th, which would avoid the bat maternity season. Additionally, demolition of buildings in the project area would be completed between September 15th and November 15th (i.e., outside of the bat maternity season and bat hibernation season), if feasible.
- If buildings would be demolished during the bat maternity season (i.e., May 1 through September 15) or the bat hibernation season (i.e., November 15 through March 15), a roosting bat survey for any buildings that may require removal will be conducted prior to removal, to determine the presence of, or potential for, communal bat roosting. Factors used to rate the potential for a feature to support communal bat roosts may include, depending on the type of feature: 1) presence, orientation, and thermal properties of cavities, cracks, and crevices and 2) visible or audible sign of bat use (e.g., presence of guano, urine staining, odors, or sounds).

- Where buildings are not expected to support communal bat roosts (e.g., where sign of bat use is absent or the feature is otherwise determined low-quality for roosting), removal activities may proceed, including during the bat maternity and hibernation seasons (May 1 through September 15 and November 15 through March 15, respectively).
- Any buildings with confirmed or suspected use by communal roosting bats will be retained and avoided by a buffer of at least 250 feet during the bat maternity and hibernation seasons, as determined by a qualified biologist. If needed to determine likelihood of use by communal roosting bats, buildings determined by the project wildlife biologist to have high potential to support communal bat roosts may receive a follow-up, pre-project dusk or dawn emergence survey to identify any active use by bats. Project activities may not occur within the buffer during the bat maternity and hibernation seasons. If a building confirmed or suspected to support a communal bat roost must be removed, removal will occur outside the bat maternity and hibernation seasons.

BIO-5: Southern Long-toed Salamander Survey and Protection Measures

- Immediately prior to project activities within Meeks Creek and in upland areas within approximately 100 feet of Meeks Creek, a qualified biologist familiar with the life cycle of southern long-toed salamander will conduct a preconstruction survey for southern long-toed salamanders in the disturbance area. Surveys will consist of visual inspections of Meeks Creek, and "walk and turn" surveys of areas beneath surface objects (e.g., rocks, leaf litter, moss mats, coarse woody debris) for salamanders. The preconstruction survey will be conducted within the appropriate season to maximize potential for observation of the species, and appropriate surveys will be conducted for the applicable life stages (i.e., eggs, larvae, adults).
- If southern long-toed salamanders are not detected during the preconstruction survey, the qualified biologist will submit a report summarizing the results of the survey to LTBMU, and further mitigation will not be required.
- If southern long-toed salamanders are detected during the preconstruction survey, LTBMU shall relocate individual animals (see BIO-6 RPM below), and apply other measures as necessary to ensure that no injury to or mortality of salamanders would occur.

BIO-6: To minimize the stranding of fish and aquatic biota, The project would retain a qualified biologist(s) to oversee rescue and relocate fish, and other important native aquatic species (e.g., Sierra Nevada yellow-legged frog, southern long-toed salamander) when flows are diverted from in-channel construction sites. Organisms would be removed from these sites and transported and released into suitable sites (i.e., Lake Tahoe or sites on Meeks Creek upstream of the affected area). All equipment used for dewatering and aquatic species rescue would be properly decontaminated to kill or remove all potential invasive aquatic species (e.g., Eurasian watermilfoil). All pump intakes would be screened to limit entrainment of fish, other important native aquatic species, and aquatic weeds. All activities would occur in compliance with TRPA's Lake Tahoe Region Aquatic Invasive Species Management Plan.

BIO-7: Pollinator Habitat Restoration Measures. As part of restoration of Meeks Creek, LTBMU will incorporate additional restoration measures to specifically benefit bumble bees, monarch butterflies, and other pollinators as described in Conserving Bumble Bees Guidelines for Creating and Managing Habitat for America's Declining Pollinators or other applicable source (Xerces 2012). These measures may include but not be limited to:

- Plant native plants with a variety of flower shapes, flower colors, and bloom periods with an emphasis on known floral resources of western bumble bees and monarch butterflies.
- Retain snags and downed woody debris in the restoration footprint.

INVASIVE SPECIES MANAGEMENT MEASURES

Several management measures, including standard management measures and project-specific management measures, were identified in the project Invasive Plant Risk Assessment (LTBMU 2022) to reduce the risk of spreading invasive plants. These management measures are listed below and would be followed during project planning and implementation activities for all project alternatives; thus, impacts discussed below constitute residual impacts after application of the management measures. The following measures are designed to minimize risk of new weed

introductions, minimize the spread of weeds within units, and minimize the spread of weeds between units. These measures are consistent with Forest Service policy and manual direction and the LTBMU LRMP as amended by the SNFPA.

INV-1: Inventory—As part of site-specific planning, project areas and adjacent areas (particularly access roads) will be inventoried for invasive plants. Infestations discovered prior to or during project implementation should be flagged and avoided, then reported to the Forest Botanist or their designated appointee for prioritization and assessment for treatment.

INV-2: Equipment Cleaning

a) All equipment and vehicles (Forest Service and contracted) used for project implementation must be free of invasive plant material before moving into the project area. Equipment will be considered clean when visual inspection does not reveal soil, seeds, plant material or other such debris. Cleaning shall occur at a vehicle washing station or steam-cleaning facility before the equipment and vehicles enter the project area.

b) When working in known invasive plant infestations or designated weed units, equipment shall be cleaned before moving to other National Forest Service system lands. These areas will be identified on project maps.

INV-3: Staging areas—Equipment, materials, or crews will not be staged in invasive plant-infested areas.

INV-4: Control Areas—Where feasible, invasive plant infestations will be designated as Control Areas—areas where equipment traffic and soil-disturbing project activities would be excluded. If Control Areas are designated, they will be identified on project maps and delineated in the field with flagging.

INV-5: Project-related disturbance—The amount of ground and vegetation disturbance in staging and construction areas will be minimized to the extent possible. Where feasible, vegetation will be reestablished on disturbed bare ground to reduce invasive species establishment; revegetation is especially important in staging areas. Where soil compaction has occurred to an extent that would inhibit native plant establishment disturbed areas should be decompacted by scarifying prior to seeding.

INV-6: Early Detection—Any additional infestations discovered prior to or during project implementation shall be reported to the Forest Botanist or their designated appointee for prioritization and assessment for treatment.

INV-7: Post Project Monitoring—After the project is completed, the Forest Botanist will be notified so that the project area can be monitored for invasive plants for a minimum of three years after project implementation.

INV-8: Gravel, fill, and other materials—All gravel, fill, or other materials will be required to be determined as a suitable or conditional weed-free source by the LTBMU weed free material program. Onsite sand, gravel, rock, or organic matter will be used when possible. If conditional sources are used, EDRR monitoring of application sites will be conducted for two growing seasons following implementation.

INV-9: Mulch and topsoil—NAISMA certified weed-free mulch will be used if chipped material is not available on site. Topsoil will be salvaged from the project area for use in onsite revegetation, unless contaminated with invasive species.

INV-10: Revegetation:

a) Seed and plant mixes must be approved by the Forest Botanist or their designated appointee who has knowledge of local flora.

b) Invasive species will not be intentionally used in revegetation. Seed lots will be tested for weed seed and test results will be provided to Forest Botanist or their designated appointee.

Seed and plant material will be sourced from species native to the Lake Tahoe Basin. As a general rule, plant and seed material should be collected from local genetic sources within the USFS Provisional Seed Zone of the disturbed area and within 500 – 1,000 ft elevation of the site.

INV-11: Project-Specific Management Measures. The following measures are included either to a) address the specific risks identified in this analysis that are not addressed by the standard measures or b) to provide site-specific direction

to implement the standard management measures (Table A-1). Different treatment protocols are described for some infestations of the same species.

Table A-1 Proposed Management and Treatment Methods for Each Infestation

Species	Infestation	Management/Treatment
Cheatgrass (*Bromus tectorum*)	BRTE-5	Management: ▶ revisit site prior to the start of ground disturbance and treat via hand-pulling (no plants found in 2020); ▶ wash equipment after working in infestation area; ▶ minimize disturbance in infested areas; and ▶ where possible, work should progress from uninfested area to infested area.
	All other BRTE infestations	Flag and avoid.
Canada thistle (*Cirsium arvense*)	CIAR-1	Manual removal: ▶ removal should occur within six weeks of the start of ground disturbance on the site; ▶ dig plants removing as much of the root system as possible, securely bag plants, and dispose in a landfill; ▶ revisit site every 6 weeks during the growing season and repeat treatment as necessary; and ▶ coordinate with forest botanist for continued treatment. ▶ Where appropriate to meet weed management objectives, herbicide treatment would be considered for these species and would be administered within the terms of the 2010 Terrestrial Invasive Plan Species Treatment Project Environmental Assessment and Decision Notice.
Bull thistle (*Cirsium vulgare*)	All CIVU infestations	Manual removal: ▶ cut and securely bag any flower heads; ▶ dig plants removing at least two inches of the taproot; and ▶ cut plants may be turned upside-down and left on-site to desiccate if they have no flower heads.
Common St. Johnswort (*Hypericum perforatum*)	HYPE-1	Revisit site prior to the start of construction and remove any target plants via hand pulling or other appropriate mechanical treatments. Where appropriate to meet weed management objectives, herbicide treatment would be considered for these species and would be administered within the terms of the 2010 Terrestrial Invasive Plan Species Treatment Project Environmental Assessment and Decision Notice.
Oxeye daisy (*Leucanthemum vulgare*)	LEVU-1	Revisit site prior to the start of construction and remove any target plants via hand pulling.

Source: Created by Ascent Environmental in 2020.

All treatment of infestations would occur in the growing season prior to the start of ground disturbance. Infestations prioritized for treatment will be treated in accordance with Forest Service management direction and the design features of the LTBMU 2010 Terrestrial Invasive Plant Species Treatment Project Environmental Assessment (USDA Forest Service 2010).

HAZARDOUS MATERIALS

HAZ-1: Hazardous materials required for project implementation will be stored at designated staging areas outside of the stream environment zone, and other suitable sites.

HAZ-2: Work will stop immediately if suspected contamination is encountered, and the Project Engineer shall be notified immediately. Upon confirmation of contamination, the Project Engineer will assess the Project design and obtain the required approvals to modify the design to avoid conflicts with the contaminated material and/or any ongoing or future remediation projects.

HAZ-3: All encountered contamination will be addressed and handled appropriately, as described in the SWPPP. The Landowner will provide records regarding any contamination encountered during the Proposed Project to any appropriate requesting party. Appropriate requesting parties include, but are not limited to, the Lahontan Regional Water Quality Control Board, El Dorado County Department of Environmental Management, any responsible party or potentially responsible party, or the designated environmental consultant to any responsible party or potentially responsible party.

HAZ-4: All soil and groundwater materials removed during construction activities that have been deemed hazardous shall be placed in labeled containers and disposed of appropriately. Excavated soils that have been deemed hazardous will not be used as backfill material. Depending on the type of hazardous material, a water truck or other approved water spraying device will be on site at all times during excavation of hazardous or potentially hazardous materials, or materials would be covered to prevent particles from becoming airborne.

HAZ-5: On NFS lands, spill prevention and clean-up of hazardous materials would be implemented in accordance with the LTBMU Spill Notification and Response Plan (for emergency spills) or with USFS BMPs for non-emergency spills (USDA 2000). Contractors will train/instruct onsite construction personnel in spill prevention practices and provide spill containment materials near all staging areas. Further information regarding spills will be available in the Spill Response section of the SWPPP.

HAZ-6: The contractor or USFS shall clear dry vegetation and other potential fire fuels, to the extent feasible, in and near work areas. Ignition sources unrelated to project implementation (e.g., smoking [unless in designated areas], barbecues, stoves, campfires) shall be prohibited.

HYDROLOGY AND WATER QUALITY

HYD-1: Construction BMPs would include temporary erosion control BMPs (e.g., silt fencing, fiber rolls, drain inlet protection) and other requirements consistent with the project Stormwater Pollution Prevention Plan (SWPPP).

HYD-2: The extent of all excavation and soil disturbance would be minimized to avoid unnecessary soil disturbance.

HYD-3: Grading and ground-disturbing construction areas would be winterized by October 15, unless authorized by a TRPA grading season extension.

HYD-4: Surplus or waste earthen materials would be removed from project sites, and stockpiled material would be stabilized and protected from erosion.

HYD-5: Spill prevention plans would be prepared and implemented to capture and contain pollutants from fueling operations, and an emergency spill kit must be at the project during active construction periods.

HYD-6: Diversion and Dewatering: Use screening devices for water drafting pumps. Use pumps with low entry velocity to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats. The following criteria should be used to avoid impacts:

a. Drafting operations should be restricted to one hour after sunrise to one hour before sunset to avoid the use of lights that attract fish.

b. Pumping rate shall not exceed 350 gallons per minute.

c. The pumping rate shall not exceed ten percent of stream flow (estimated by pump operators) to ensure adequate downstream flow to support aquatic species.

d. Drafting should occur in streams and pools with deep and flowing water; not streams with low flows and isolated pools.

e. Pumping operations shall not result in obvious down-down of upstream or downstream pools.

f. Each pumping operation shall use screens. The screen face should be oriented parallel to flow for best screening performance.

HYD-7: No debris, cement, concrete (of wash water therefrom), oil or petroleum products would enter surface waters or be placed where it may be washed from the project area by rainfall or runoff into surface waters. When operations are complete, any excess material would be removed from the project area and from any areas adjacent to the work area where such material may be transported into surface waters.

HYD-8: Construction equipment would be monitored for leaks and removed from service if necessary to protect water quality.

HYD-9: Caissons, sleeves, or turbidity curtains would be used during placement of pilings to prevent re-suspension and discharge of lakebed sediments. The control measures would be inspected and maintained as necessary to prevent discharge of suspended sediment outside the containment area. Construction activities would cease for periods of high wind and wave action that cause degraded water quality within the curtained area until weather conditions improve.

HERITAGE RESOURCES

HER-1: Removal of the mortared stone wall in the day use area at Meeks Bay Resort would be limited to the minimum amount necessary to construct project features.

HER-2: All eligible cultural resource sites and properties with undetermined eligibility within the Area of Potential Effects (APE) will be avoided and protected in place.

HER-3: If unrecorded/new cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) are discovered during project implementation, then work shall be halted immediately within 50 feet of the discovery, the CTC LTBMU shall be notified, and a professional archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards and Guidelines ([Code of Federal Regulations, 36 CFR Part 61]) in archaeology and/or history shall be retained to determine the significance of the discovery.

HER-4: If potentially unique paleontological resources (fossils) are discovered during Project implementation, then standard BMPs shall be followed, including: work shall be halted immediately within 50 feet of the discovery, the LTBMU shall be notified, and a professional paleontologist shall be retained to determine the significance of the discovery.

HER-5: If human remains are discovered during the Proposed Project implementation, then work shall be halted immediately within 50 feet of the discovery, the LTBMU shall be notified, and the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), and the procedures outlined in the Native American Graves Protection and Repatriation Act and CEQA Section 15064.5(d) and (e) shall be followed.

RECREATION

REC-1: LTBMU or concessionaire will notify overnight guests and day users of anticipated construction. Notification of planned construction would be posted on LTBMU and concessionaire websites. Signage would also be posted at the entrances to the Meeks Bay Campground and Meeks Bay Resort regarding anticipated construction activities and any temporary closures.

SCENIC RESOURCES

VIS-1: Railings of the SR 89 bridge will be constructed of natural stone, stamped and painted concrete, or a similar material, and would be designed to closely mimic the appearance of the existing railings.

VIS-2: The removal of native vegetation located between the lake and developed features would be limited to the minimum amount necessary to construct project features.

VIS-3: Feasible recommendations for landscaping and vegetative screening from the Lake Tahoe Basin Scenic Resource Evaluation (TRPA 1993) would be incorporated into the final site design.

VIS-4: Shoreline revetments will include boulders and native vegetation that blends with natural environment.

TRANSPORTATION AND CIRCULATION

TRANS-1: A Traffic Management Plan will be developed and implemented to minimize traffic disruption during construction and maintain continual emergency access and evacuation across Meeks Creek.

TRANS-2: Signage will be installed on multi-use paths to support safety of bicyclists and pedestrians and circulation through the project area consistent with the California Manual on Uniform Traffic Control Devices and the USDA Forest Service Built Environment Image Guide. Where multi-use paths intersect with roadways, "STOP" or "YIELD" signs for either the path or the cross street shall be installed. Wayfinding signage along the paths shall direct users to the primary destinations in the project area (e.g., beach, day-use areas, campgrounds). Signage shall be installed directing bicyclists or pedestrians traveling outside of Meeks Bay to use the path along SR 89.

TRANS-3: Traffic flow will be maintained during bridge demolition and construction; temporary lane and/or shoulder closure with traffic control or a temporary structure would be required during construction. Night work may be necessary.

UTILITIES

UTL-1: The sewer and water line encasements and associated infrastructure will be constructed in a manner that is compatible with the long-term restored channel profile. This may involve burying utilities at a sufficient depth, armoring with rock, and/or encasement in concrete.

WILDFIRE

WLD-1: Defensible space and healthy forest communities would be achieved by thinning conifer trees smaller than 30 inches diameter at breast height (dbh) outside the restoration footprint (note that most, if not all, conifers within the channel and lagoon restoration disturbance footprint could be removed).

Appendix B

Special-Status Species

Table B-1 Special-Status Plant Species Known to Occur in the Vicinity of the Project Area and Potential for Occurrence in the Project Area

Species[1]	Listing Status[2] Federal	Listing Status[2] State	CRPR[2]	TRPA Special Interest	Habitat	Potential for Occurrence
Mountain bent grass *Agrostis humilis*	–	SE	2B.3	–	Sometimes on calcareous substrates. High elevation grass. 5,000–11,155 feet in elevation. Blooms July–September.	*May occur*. This species has been documented west of the project area which is within the species elevation range.
Tiehm's rockcress *Boechera tiehmii* (Synonym: *Arabis tiehmii*)	USFS-S	–	1B.3	–	Species is known to occur in the open rocky soils in the Mt. Rose Wilderness, outside the LTBMU. 9,745–11,780 feet in elevation. Blooms July–August.	*Not expected to occur*. Subalpine habitat is not present in the project area.
Galena Creek rockcress *Boechera rigidissima* (Synonym: *Arabis rigidissima* var. *Demota)*	USFS-S	–	1B.2	Special Interest Species	Open, rocky areas along forest edges of conifer and/or aspen stands; usually found on north aspects. Well-drained, stony soil underlain by basic volcanic rock. 5,900–10,020 feet in elevation. Blooms July–August.	*May occur*. Project area contains forest edge habitat potentially suitable for this species, although known occurrences in the Tahoe Basin are above 7,000 feet elevation.
Threetip sagebrush *Artemisia* ssp. *Tripartita*	–	–	2B.3	–	Openings in the forest. Rocky, volcanic soils. 6,770–8,000 feet in elevation. Blooms August.	*May occur*. Project area contains rocky volcanic soils and open forested habitat potentially suitable for this species.
Austin's astragalus *Astragalus austiniae*	USFS-WL	–	1B.3	–	Alpine boulder and rock field, Subalpine coniferous forest. 8,000–9,730 feet in elevation. Blooms July–September.	*Not expected to occur*. Project area is outside of the known range of this species.
Tulare rockcress *Boechera tularensis*	USFS-S	–	1B.3	–	Shaded, mostly east-facing subalpine rocky areas, including rocky slopes, rock-lined streams and seeps, rocky outcrops, saddles, and canyons. 5,990–11,010 feet in elevation. Blooms June–July.	*Not expected to occur*. Subalpine habitat is not present in the project area.
Upswept moonwort *Botrychium ascendens*	USFS-S	–	2B.3	–	Primarily in open habitats. In California and NV, mountain meadows, shrublands, and near seeps, fens, and streams. ≥5,000 feet in elevation. Blooms July–August.	*May occur*. Project area has open habitat near creek potentially suitable for this species.
Scalloped moonwort *Botrychium crenulatum*	USFS-S	–	2B.2	–	One of the most hydrophilic of *Botrychiums*; grows in saturated soils or seeps along the stabilized margins of small streams, often among dense herbaceous vegetation. Also, in seasonally wet roadside ditches and drainageways. In these habitats it is usually found in partly shaded to heavily shaded sites at mid to high elevations. 2,000-10,760 feet in elevation. Blooms June–September.	*May occur*. Project area contains riparian creek habitat potentially suitable for this species. The nearest known occurrence is approximately 1.4 miles southwest of the project area.

Species[1]	Listing Status[2] Federal	Listing Status[2] State	CRPR[2]	TRPA Special Interest	Habitat	Potential for Occurrence
Slender moonwort *Botrychium lineare*	USFS-S	–	1B.1	–	Mid-successional perennial herbaceous meadow vegetation developed over calcareous bedrock or soils influenced by calcareous seepage. Also associated with fen-like seeps and gravelly roadsides resulting from past (15–50 years) disturbance. In California, plants grow on the margins of fen seeps and streams where their roots reach mineral soil. California site is 8,531 feet in elevation.	*Not expected to occur*. The project area is below the known elevation range in California for this species.
Common moonwort *Botrychium lunaria*	USFS-S	–	2B.3	–	Varied habitat associations. At high latitudes and elevations, it is associated with open to lightly wooded meadows as well as sparsely vegetated scree slopes. At lower elevations and latitudes, it occurs in deep woods as well as meadows and sparsely vegetated sand dunes. It most commonly occurs on moist but well-drained soils with a neutral pH. 7,500-11,200 feet in elevation. Blooms August.	*Not expected to occur*. The project area is below the known elevation range for this species.
Mingan moonwort *Botrychium minganense*	USFS-S	–	2B.2	–	Habitat varies widely from dense forest to open meadow and from summer-dry meadows to permanently saturated fens and seeps. In meadows, plants may be in open sun or under dense herbaceous cover. Often associated with old (i.e., greater than 10 years) disturbances such as logging roads and road shoulders. May be less closely associated with calcareous soils than most moonworts. 4,800-6,800 feet in elevation. Blooms July–September.	*May occur*. Project area contains montane forest with grassland and riparian habitat potentially suitable for this species.
Western goblin *Botrychium montanum*	USFS-S	–	2B.1	–	Associated with areas that have a continuous supply of moisture and a high mineral content either in fens, seeps, and meadows along streams or under incense cedar (*Calocedrus decurrens*) adjacent to streams. 4,700–7,000 feet in elevation. Blooms July–September.	*May occur*. Project area contains montane forest alongside creek habitat potentially suitable for this species
Watershield *Brasenia schreberi*	–	–	2B.3	–	Aquatic from water bodies both natural and artificial in California. 100–7,220 feet in elevation. Blooms June–September.	*May occur*. Project area contains creek habitat potentially suitable for the species

Species[1]	Listing Status[2] Federal	Listing Status[2] State	CRPR[2]	TRPA Special Interest	Habitat	Potential for Occurrence
Bolander's candle moss *Bruchia bolanderi*	USFS-S	–	4.2	–	Mainly in montane meadows and stream banks, but also on bare, slightly eroding soil where competition is minimal. 5,300–10,950 feet in elevation.	*May occur*. Project area contains montane riparian habitat in the western portion of the project area alongside Meeks creek potentially suitable for the species.
Davy's sedge *Carex davyi*	USFS-WL	–	1B.3	–	Subalpine coniferous forest, upper montane coniferous forest. 4,790–10,600 feet in elevation. Blooms May–August.	*May occur*. Project area contains upper montane coniferous forest habitat potentially suitable for the species.
Woolly-fruited sedge *Carex lasiocarpa*	–	–	2B.3	–	Sphagnum bogs, freshwater marsh, lake margins. 1,970–6,900 feet in elevation. Blooms June–July.	*May occur*. Project area contains riparian creek habitat potentially suitable for the species.
Mud sedge *Carex limosa*	–	–	2B.2	–	Grows in upper and lower montane coniferous forest, fens, seeps, soggy meadows, floating bogs, and edges of lakes. 4,500–9,200 feet in elevation. Blooms June–August.	*May occur*. Project area contains montane coniferous forest alongside creek and lake habitat potentially suitable for the species. This species has been documented north of the project area in Sugar Pine Point State Park.
Alpine dusty maidens *Chaenactis douglasii* var. *alpina*	USFS-WL	–	2B.3	–	Open, subalpine to alpine gravel and crevices; granitic substrate. 7,750–11,010 feet in elevation. Blooms July–September.	*Not expected to occur*. Project area out of elevation range of this species.
Fell-fields claytonia *Claytonia megarhiza*	USFS-WL	–	2B.3	–	In the crevices between rocks, rocky or gravelly soil. 8,530–10,940 feet in elevation. Blooms July–September.	*Not expected to occur*. Project area out of elevation range of this species.
Branched collybia *Dendrocollybia racemosa*	USFS-S	–	–	–	On old decayed or blackened mushrooms or occasionally in coniferous duff, usually within old growth stands. Fruiting from late-fall to mid-winter.	*Not expected to occur*. Old growth stands not present in the project area.
Tahoe draba *Draba asterophora* var. *asterophora*[3]	USFS-S	–	1B.2	Special Interest Species	Rock crevices and open granite talus slopes at high elevations on north-east facing slopes. 8,000 to 10,200 feet in elevation. Blooms July–August.	*Not expected to occur*. Subalpine habitat is not present in the project area.
Cup Lake draba *Draba asterophora* var. *Macrocarpa*[3]	USFS-S	–	1B.1	Special Interest Species	This species is found on steep, gravelly or rocky slopes. 8,400-9,300 feet in elevation. Blooms July–August.	*Not expected to occur*. The project area is below the known elevation range for this species.
Mineral King draba *Draba cruciata*	UFSF-S	–	1B.3	–	Subalpine gravelly or rocky slopes, ridges, crevices, cliff ledges, sink holes, boulder and small drainage edges. 7,800-13,000 feet in elevation. Blooms June–August.	*Not expected to occur*. Subalpine habitat is not present in the project area.
Starved daisy *Erigeron miser*	USFS-S	–	1B.3	–	Rocky, granitic outcrops. 5,600–8,100 feet in elevation. Blooms June–October.	*Not expected to occur*. Suitable rock outcrop habitat is not present in the project area.

Species[1]	Listing Status[2] Federal	Listing Status[2] State	CRPR[2]	TRPA Special Interest	Habitat	Potential for Occurrence
Goldencarpet buckwheat *Eriogonum luteolum* var. *saltuarium*	USFS-S	SE	1B.2	–	Sandy granitic flats and slopes, sagebrush communities, montane conifer woodlands. 5,600-7,400 feet in elevation. Blooms July–September.	*Not expected to occur*. Montane conifer woodland habitat is present in the project area east of SR 89; however, this habitat is significantly disturbed due to the campground, marina, and other facilities. In addition, this habitat contains very little understory vegetation.
Donner Pass buckwheat *Eriogonum umbellatum* var. *torreyanum*	USFS-S	–	1B.2	–	Dry gravelly or stony sites in meadows, seeps, and upper montane coniferous forests; often on harsh exposures (e.g., ridge tops, steep slopes). 6,900–8,600 feet in elevation. Blooms July–September.	*Not expected to occur*. Suitable microhabitat is not present in the project area which is below the known elevation range for this species.
Subalpine aster *Eurybia merita* (Synonym: *Aster sibiricus* var. *meritus*)	–	–	2B.3	–	Upper montane coniferous forest. 4,265–6,560 feet in elevation.	*May occur*. Project area contains coniferous forest habitat potentially suitable for the species.
American manna grass *Glyceria grandis*	–	–	2B.3	–	Wet meadows, ditches, streams, and ponds, in valleys and lower elevations in the mountains. 50–6,710 feet in elevation. Blooms June–August.	*May occur*. Project area contains meadow habitat potentially suitable for the species.
Blandow's bog moss *Helodium blandowii*	USFS-S	–	2B.3	–	Bogs, fens, wet meadows, and along streams under willows. In the Sierra Nevada, the elevation and habitat range appears to be limited to fens. 6,100 to 8,900 feet (Rowe and Stevens 2016).	*Not expected to occur*. Project area does not contain habitat (i.e., fens) that is suitable for the species.
Short-leaved hulsea *Hulsea brevifolia*	USFS-S	–	1B.2	–	Red fir forest, but also in mixed conifer forests; found on gravelly soils. 4,900-8,900 feet in elevation. Blooms May–August.	*May occur*. There are no known occurrences in LTBMU (Rowe and Stevens 2016). Mixed conifer forest is present in the project area east of SR 89; however, this habitat is significantly disturbed due to the campground, marina, and other facilities. In addition, this habitat contains very little understory vegetation. Although not expected to occur in the project area due to degraded conditions, project-related surveys to confirm absence or presence have not been completed.

Species[1]	Listing Status[2] Federal	Listing Status[2] State	CRPR[2]	TRPA Special Interest	Habitat	Potential for Occurrence
Plumas ivesia *Ivesia sericoleuca*	USFS-S	–	1B.2	–	Associated with seasonally wet meadows, meadow ecotones, alkaline flats, vernal pools within sagebrush scrub or lower montane coniferous forest, terraces and toeslopes on soils that are primarily volcanic in origin. The plant has not been located on granitic soils. All of the associated soil types have slow permeability and incur periodic saturation from fluctuating water tables, and have subterranean flow associated with seeps and snow melt (USDA Forest Service 1992). 4,200 to 7,200 feet in elevation. Blooms May–October.	*May occur*. Project area has montane riparian habitat potentially suitable for the species. This species has a documented occurrence from 1989, at Sugar Pine Point State Park, northwest of the project area.
Hutchison's lewisia *Lewisia kelloggii* ssp. *hutchisonii*	USFS-S	–	3.2	–	Ridgetops or flat open spaces with widely spaced trees and sandy granitic to erosive volcanic soil. 5,000-7,000 feet in elevation. Blooms May–August.	*Not expected to occur*. Suitable microhabitat is not present in the project area.
Kellogg's lewisia *Lewisia kelloggii* ssp. *kelloggii*	USFS-S	–	3.2	–	Ridge tops or flat open spaces with widely spaced trees and sandy granitic to erosive volcanic soil. 5,000-7,000 feet in elevation. Blooms May–August.	*Not expected to occur*. Suitable microhabitat is not present in the project area.
Long-petaled lewisia *Lewisia longipetala* (Synonym: *L. pygmea* ssp. *longipetala*)	USFS-S	–	1B.3	Special Interest Species	Northerly exposures on slopes and ridge tops where snowbanks persist throughout the summer. Often found near the margins of snowbanks in wet soils. 8,000-12,500 feet in elevation. Blooms July–August.	*Not expected to occur*. The project area is below the known elevation range for this species.
Three-ranked hump moss *Meesia triquetra*	–	–	4.2	–	Moss growing on mesic soil. Saturated bogs, fens, seeps and meadows in coniferous to subalpine forests. 4,265–9,695 feet in elevation. Blooms July.	*May occur*. Project area contains meadows in coniferous forest alongside creek habitat potentially suitable for the species.
Broad-nerved hump moss *Meesia uliginosa*	USFS-S	–	2B.2	–	Bogs and fens, and permanently wet meadows, typically spring fed, in subalpine and upper montane coniferous forest; 4,265 to 9,200 feet. Blooms July–October.	*May occur*. Project area contains montane riparian habitat potentially suitable for the species.
Orthotrichum moss *Orthotrichum praemorsum*	USFS-S	–	–	–	Shaded, moist microhabitats of rock outcrops; eastern Sierra to intermountain West. ≤ 8,200 feet in elevation.	*Not expected to occur*. Suitable rock outcrop habitat is not present in the project area.

Species[1]	Listing Status[2] Federal	Listing Status[2] State	CRPR[2]	TRPA Special Interest	Habitat	Potential for Occurrence
Western waterfan lichen *Peltigera gowardii*	USFS-S	–	4.2	–	Aquatic. Must be in cool, unpolluted water that flows all year. Can be found in splash zones within small creeks. Cannot tolerate drying or heavy flows of water that can scour. Streams are usually less than 8 inches deep and often have many other aquatic mosses and bryophytes. It often grows on bedrock or cobbles but can be found on soil. 3,500–8,500 feet in elevation.	*May occur*. Project area contains stream habitat that may be suitable for this species.
Stebbins' phacelia *Phacelia stebbinsii*	–	–	1B.2	–	Among rocks and rubble on metamorphic rock benches, meadows, and lower montane coniferous forest. 2,000–6,595 feet in elevation. Blooms May–July.	*Not expected to occur*. Suitable microhabitat is not present in the project area.
Whitebark pine *Pinus albicaulis*	USFS-SFP	–	–	–	Subalpine and at timberline on rocky, well-drained granitic or volcanic soils. 6,600–12,140 in elevation. Blooms July–August	*Not expected to occur*. Subalpine habitat is not present in the analysis area.
Nuttall's ribbon-leaved pondweed *Potamogeton epihydrus*	–	–	2B.2	–	Shallow water, ponds, lakes, streams, irrigation ditches. 970–8,660 feet in elevation. Blooms July–September.	*May occur*. Project area contains riparian creek habitat potentially suitable for the species.
Alder buckthorn *Rhamnus alnifolia*	–	–	2B.2	–	Mesic sites including wet meadow edges, seeps and stream sides. 4,690–7,005 feet in elevation. Blooms May–July.	*May occur*. Project area contains riparian creek habitat potentially suitable for the species.
Tahoe yellow cress *Rorippa subumbellata*	USFS-S	SE	1B.1	Special Interest Species	Endemic to the shorezone of Lake Tahoe, typically in back beach areas. Can be present on lakeside margins and in riparian communities on decomposed granite sand. 6,220–6,235 feet in elevation. Blooms May–September.	*Known to occur*. This species has been documented in the Meeks Bay beach area, along the shore of Meeks Creek/Marina area, and on a sandbar within Meeks Creek in the project area.
Marsh skullcap *Scutellaria galericulata*	–	–	2B.2	–	Swamps and wet places. 0–6,400 feet in elevation. Blooms June–September.	*May occur*. Project area contains riparian habitat potentially suitable for the species. This species has been documented in the west portion of the project area and north of Meeks Creek.
Munro's desert mallow *Sphaeralcea munroana*	–	–	2B.2	–	Great Basin scrub. 6,560 feet in elevation. Blooms May–June.	*Not expected to occur*. Habitat suitable for this species is not present in the project area.
Northern slender pondweed *Stuckenia filiformis* ssp. *Alpina*	–	–	2B.2	–	Shallow, clear waters of lakes and drainage channels. 15–7,630 feet in elevation. Blooms May–July.	*May occur*. Project area contains creek habitat potentially suitable for the species.

Species[1]	Listing Status[2] Federal	Listing Status[2] State	CRPR[2]	TRPA Special Interest	Habitat	Potential for Occurrence
Flat-leaved bladderwort *Utricularia intermedia*	–	–	2B.2	–	Mesic meadows, lake margins, marshes, fens. 2,200–8,710 feet in elevation. Blooms July–August.	*May occur*. Project area contains meadow alongside creek habitat potentially suitable for this species.

Notes: CRPR = California Rare Plant Rank; CEQA = California Environmental Quality Act; TRPA = Tahoe Regional Planning Agency

[1] Nomenclature according to Jepson Flora Project 2021.

[2] Listing Status Definitions

Federal:

FP Proposed for Listing under ESA (Not legally protected by ESA)
USFS-S USDA Forest Service Sensitive Plant Species
USFS-WL USDA Forest Service Watch List Species

State:

SE State Listed as Endangered (legally protected by CESA)

California Rare Plant Ranks (CRPR):

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA).
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).
3 Plant species for which the necessary information to assign them to one of the other ranks or to reject them is lacking. Many of the plants constituting California Rare Plant Rank 3 meet the definitions of the California Endangered Species Act of the California Fish and Game Code and are eligible for state listing (protected under CEQA, but not legally protected under ESA or CESA).
4 Plant species with limited distribution or are infrequent throughout a broader area in California whose status should be monitored regularly (protected under CEQA, but not legally protected under ESA or CESA).

CRPR Threat Ranks:

0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

[3] This taxon is not recognized in The Jepson Manual, nomenclature here is according to USDA Plants 2021.

Sources: CNDDB 2021; CNPS 2021; USFS 2013a; LTBMU 2021

Table B-2 Special-Status Wildlife Species Known to Occur in the Vicinity of the Project Area and Potential for Occurrence in the Project Area

Species	Listing Status[1] Federal	Listing Status[1] State	TRPA Special Interest	Habitat	Potential for Occurrence
Amphibians					
Northern leopard frog *Lithobates pipiens*	–	SSC	–	Native range is east of Sierra Nevada-Cascade Crest. Near permanent or semi-permanent water in a variety of habitats. Highly aquatic species. Shoreline cover, submerged and emergent aquatic vegetation are important habitat characteristics.	*Not expected to occur*. The project area is outside of the current known range of this species.
Sierra Nevada yellow-legged frog *Rana sierrae*	FE USFS-S	ST	–	Sierra Nevada yellow-legged frog is highly aquatic, rarely moving far from water. The species primarily occurs in alpine lakes and other deep, perennial aquatic habitats (with sufficient depth to prevent freezing) above timberline in the central Sierra Nevada (Jennings and Hayes 1994, Vredenburg 2004), although habitat suitable for the species may occur in other aquatic settings above 4,500 feet in elevation (USFWS 2014a). Most populations in the Sierra Nevada are found between 6,000–12,000 feet elevation. Sierra Nevada yellow-legged frog can also occur in streams but appear absent from the smallest creeks presumably because of the lack of sufficient depth for aquatic refugia and year-round water for overwintering habitat (USFWS 2014a). Sierra Nevada yellow-legged frog requires aquatic habitat with shallow or gently sloping edge habitats and solar exposure to support necessary food resources; suitable sites for basking and cover, strongly favoring aquatic habitat with concealed underwater refugia; and uplands adjacent to aquatic habitat suitable for foraging and movement (USFWS 2014a). Habitat suitability is impaired by the presence of nonnative salmonids, such as rainbow trout, brook trout, and brown trout, and American bullfrog, which is known to prey on tadpoles (Knapp and Mathews 2000).	*Not expected to occur*. Sierra Nevada yellow-legged frog has not been documented in the project area or vicinity, and the presence of predators (e.g., nonnative salmonids, ccrayfish) limits habitat suitability for Sierra Nevada yellow-legged frog in the project area. Amphibian surveys in Meeks Meadow and Meeks Creek conducted by LTBMU in 2013, 2016, and 2017 did not detect Sierra Nevada yellow-legged frog. Outside the project area and vicinity, the highest elevations of the southwest and south portions of the Tahoe Basin and adjacent lands contain occurrences of Sierra Nevada yellow-legged frog. Specific locations in the Tahoe Basin where Sierra Nevada yellow-legged frog has been documented in the last 50 years include Desolation Wilderness at Tamarack Lake, Fontanillis Lake, Heather Lake area, Lower Velma Lake, and the Eagle Creek drainage upstream of the lake (Muskopf, pers. comm., 2020; CNDDB 2021), near Upper Velma Lake, and a pond west of Echo Lake; and Hell Hole bog and vicinity near Armstrong Pass and Freel Peak inside the south-southeast boundary of the Lake Tahoe Basin (CNDDB 2021). Additionally, outside the Tahoe Basin, the nearest documented Sierra Nevada yellow-legged frog occurrences are from the surrounding mountain lakes and drainages within Desolation Wilderness and Eldorado National Forest, including Lake Aloha, Lake of the Woods, Pyramid Lake, Gefo Lake, and Waca Lake. Important areas for recovery identified in the 2016 Lake Tahoe Basin Management Unit Land and Resource Management Plan include the headwaters of Glen Alpine Creek and Trout Creek.

Species	Listing Status[1] Federal	Listing Status[1] State	TRPA Special Interest	Habitat	Potential for Occurrence
Southern long-toed salamander *Ambystoma macrodactylum sigillatum*	–	SSC	–	High elevation meadows and lakes in the Sierra Nevada, Cascade, and Klamath mountains. Aquatic larvae occur in ponds and lakes. Outside of breeding season adults are terrestrial and associated with underground burrows of mammals and moist areas under logs and rocks, usually within approximately 330 feet (100 meters) of aquatic habitat.	*Known to occur*. The project area is within the known range of southern long-toed salamander and adult salamanders and larvae have been observed within the project area in Meeks Creek (CNDDB 2021). Aquatic habitat suitable for this species is present in Meeks Creek. While southern long-toed salamanders are known to use upland habitats within approximately 330 feet (100 meters) of aquatic habitat, much of the upland areas within 330 feet of Meeks Creek is developed and highly disturbed (i.e., campgrounds). Therefore, upland habitat suitable for southern long-toed salamanders is only present within approximately 100 feet or less from Meeks Creek.
Yosemite toad *Anaxyrus canorus*	FT	SSC	–	Vicinity of wet meadows in central High Sierra, 6,400–11,300 feet in elevation. Primarily occurs in montane wet meadows and in seasonal ponds associated with lodgepole pine and subalpine conifer forest.	*Not expected to occur*. The project area is outside of the current known range of this species.
Birds					
American peregrine falcon *Falco peregrinus anatum*		FP	Special Interest Species	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	*Not expected to occur*. The project area does not contain nesting habitat suitable for American peregrine falcon. American peregrine falcons could occasionally forage or perch within, or otherwise move through, portions of the project area; however, regular or concentrated use of the project area by this species is not expected.
Bald eagle *Haliaeetus leucocephalus*	USFS-S	SE FP	Special Interest Species	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	*May occur*. Nesting bald eagles have been documented approximately 1.6 miles north and 5 miles southeast of the project area (CNDDB 2021; TRPA 2020). The project area does not contain nesting habitat suitable for bald eagle; however, this species may forage within the project area. The project area may also provide habitat for wintering bald eagles.
Bank swallow *Riparia*	–	ST	–	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	*Not expected to occur*. Bank or cliff nesting habitat suitable for this species is not present in the project area. Bank swallow is considered extirpated from this portion of its historic range.

Species	Listing Status[1] Federal	Listing Status[1] State	TRPA Special Interest	Habitat	Potential for Occurrence
California spotted owl *Strix occidentalis*	USFS-S	SSC	–	Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure greater than 40 percent. Most often found in deep-shaded canyons, on north-facing slopes, and within approximately 1,000 feet of water.	*Not expected to occur ()*. There have been no documented detections of California spotted owl in the project area and there are no USDA Forest Service-designated spotted owl Protected Activity Centers (PACs) in the project area. Habitat suitable for California spotted owl is not present in the project area. Forest habitat in the project area does not provide nesting habitat suitable for California spotted owl due to development, intensive summer recreation uses, and marginal forest structure. California spotted owls could occasionally forage or perch within, or otherwise move through, portions of the project area; however, regular or concentrated use of the project area by this species is not expected.
Golden eagle *Aquila chrysaetos*	–	FP	Special Interest Species	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	*Not expected to occur*. The project area does not contain nesting or foraging habitat suitable for golden eagle.
Great gray owl *Strix nebulosa*	USFS-S	SE	–	Resident of mixed conifer or red fir forest habitat, in or on edge of meadows. Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.	*Not expected to occur.* The project area is outside of the current range of great gray owl. Project implementation would have no effect on great gray owl, and this species is not analyzed further.
Long-eared owl *Asio otus*	–	SSC	–	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	*May occur*. Most of the nesting habitat potentially suitable for this species in the project area (e.g., forest) is characterized by development and intensive summer recreation uses, which would typically preclude long-eared owls from establishing nests in the area. However, long-eared owls may nest in forest habitat in the western portion of the project area adjacent to Meeks Meadow.
Northern goshawk *Accipiter gentilis*	USFS-S	SSC	Special Interest Species	Within, and in vicinity of, coniferous forest. Uses old nests and maintains alternate sites. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	*Not expected to occur* . The Upper General Creek northern goshawk PAC is located approximately 0.4-mile northwest of the project area. Forest habitat in the project area does not provide nesting habitat suitable for northern goshawk due to development, intensive summer recreation uses, and marginal forest structure. Goshawks could occasionally forage or perch within, or otherwise move through, the project area; however, regular use of the project area by northern goshawk is not expected.

Species	Listing Status[1] Federal	Listing Status[1] State	TRPA Special Interest	Habitat	Potential for Occurrence
Olive-sided flycatcher *Contopus cooperi*	–	SSC	–	Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas fir, redwood, red fir and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes, or other open terrain.	*May occur*. Most of the nesting habitat potentially suitable for this species in the project area (e.g., forest) is characterized by development and intensive summer recreation uses, which would typically preclude olive-sided flycatchers from establishing nests in the area. Higher quality nesting habitat for olive-sided flycatchers is present in the western portion of the project area adjacent to Meeks Meadow.
Osprey *Pandion haliaetus*	–	–	Special Interest Species	Osprey is associated with large fish-bearing waters. In the Tahoe Basin, osprey nests are distributed primarily along the northern portion of the east shore and the southern portion of the west shore of Lake Tahoe. Other osprey nests in the Tahoe Basin are located along the shorelines of smaller lakes (such as Fallen Leaf Lake) and in forest uplands up to 1.5 miles from water. Ospreys forage in Lake Tahoe as well as several other fish-bearing lakes, streams, and rivers within the Tahoe Basin.	*May occur*. The nearest documented osprey nest is approximately 2.8 miles south of the project area near Rubicon Point (TRPA 2020). Nesting habitat suitable for osprey is present in the project area and the species also likely forages in the project area.
Willow flycatcher *Empidonax traillii*	USFS-S	SE	–	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters; 2,000-8,000 feet elevation Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.	*Not expected to occur* . Nesting habitat suitable for willow flycatcher is not present in the project area; the riparian and meadow habitat in the project area lacks the specific biophysical conditions required to support nesting willow flycatcher (i.e., suitable hydrology, riparian shrub density, and meadow size). However, the species has been observed in Meeks Meadow (in 2005; eBird 2022) and two audible detections of willow flycatcher were documented (2010, 2019) in Meeks Meadow approximately 0.2-mile west of the project area (USDA Forest Service 2021). Willow flycatchers could occasionally forage or perch within, or otherwise move through, the project area; however, regular use of the project area by the species is not expected.
Yellow warbler *Setophaga petechia*	–	SSC	–	Riparian habitat. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	*May occur*. Riparian nesting habitat potentially suitable for yellow warbler is present in the western portion of the project area (i.e., Meeks Meadow) near Meeks Creek.

Species	Listing Status[1] Federal	Listing Status[1] State	TRPA Special Interest	Habitat	Potential for Occurrence
Yellow-headed blackbird *Xanthocephalus xanthocephalus*	–	SSC	–	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	*Not expected to occur*. Wetland habitat in the project area does not contain deep water or dense vegetation suitable for nesting yellow-headed blackbirds.
Waterfowl	–	–	Special Interest Species	Several waterfowl species occur in the Tahoe Basin during spring and summer months, including Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), green-winged teal (*Anas crecca*), common merganser (*Mergus merganser*), ruddy duck (*Oxyura jamaicensis*), northern pintail (*Anas acuta*), northern shoveler (*Anas clypeata*), cinnamon teal (*Anas cyanoptera*), American widgeon (*Anas americana*), gadwall (*Anas strepera*), ring-necked duck (*Aythya collaris*), and others. Most of these species nest along shallow-water margins of streams or lakes, in areas of emergent vegetation or other vegetation that provides concealment. Typically, nests are in marshes or adjacent meadows.	*May occur*. The project area does not contain waterfowl habitat as defined by TRPA (TRPA 2020); however, waterfowl species may forage within aquatic habitat in the project area.
Invertebrates					
Monarch *Danaus plexippus*	FC	–	–	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Along migration routes and within summer ranges, monarch butterflies require two suites of plants: (1) host plants for monarch caterpillars, which are primarily milkweeds (*Asclepias* spp.) within the family Apocynaceae upon which adult monarchs lay eggs; and (2) nectar-producing flowering plants of many other species that provide food for adult butterflies. Having both host and nectar plants available from early spring to late fall and along migration corridors is critical to the survival of migrating pollinators.	*May occur*. Suitable breeding and migratory habitat for monarch butterfly are widespread across the western U.S., and the project area is within the spring/summer breeding and spring/fall migration ranges. The Western Monarch Milkweed Mapper (WMMM) reports observations of the species north of the project area near Tahoe City and Alpine Meadows as well as east of the project area along the eastern shore of Lake Tahoe (Xerces Society et al. 2022). Breeding monarchs have been documented east of the project area near the East Fork Carson River (Xerces Society et al. 2022). Breeding in the project area has not been documented in WMMM; however, the presence of milkweed in suitable habitats, particularly in meadows and other open-canopy settings, is expected and monarch butterfly breeding could occur in the project aera. The project area is not located within the overwintering range of monarch butterfly.

Species	Listing Status[1] Federal	Listing Status[1] State	TRPA Special Interest	Habitat	Potential for Occurrence
Western bumble bee *Bombus occidentalis*	USFS-S	–	–	Bumble bees have three basic habitat requirements: suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens. Western bumble bee is currently largely restricted to high elevation areas in the Sierra Nevada.	*May occur*. There have been no documented occurrences of western bumble bee in the project area, and only one known collection of the species in the Tahoe Basin since 2000 (CNDDB 2021). However, foraging habitat (i.e., nectar and pollen resources) and nesting habitat (e.g., rodent burrows) are likely present in the project area.
Mammals					
American badger *Taxidea taxus*	–	SSC	–	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	*May occur*. An American badger was detected on Meeks Meadow Road in 2003 by a LTBMU wildlife biologist (USFW, pers. comm., 2021). The next nearest known occurrence of American badger was documented recently (October 2021) in South Lake Tahoe, approximately 11 miles southeast of the project area. Another badger record is located approximately 15 miles south of the project area near Echo Lake (CNDDB 2021). Habitat in the project area potentially suitable for American badgers (i.e., forest, Meeks meadow) is characterized by development and intensive summer recreation uses, which would typically preclude badgers from establishing dens in the area. However, it is possible that a badger could den in less disturbed areas of Meeks Meadow.
California wolverine *Gulo*	USFS-S	ST FP	–	Found in the north coast mountains and the Sierra Nevada. Found in a wide variety of high elevation habitats. Needs water source. Uses caves, logs, burrows for cover and den area. Hunts in more open areas. Can travel long distances.	*Not expected to occur*. While the project area is located within the historic range of California wolverine, the only recently confirmed wolverine in California occurs in Tahoe National Forest (CNDDB 2021). The location of this known wolverine is a considerable distance from the project area (approximately 28 miles northwest), and this species is therefore not expected to occur in the project area.
Fisher – West Coast Distinct Population Segment (DPS) *Pekania pennanti*	–	SSC	–	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	*Not expected to occur*. Fisher is considered to be extirpated from most of the northern and central Sierra Nevada (Zielinski et al. 1995; Sweitzer et al. 2015) and has not been detected within or in the vicinity of the project since the 1980s (CNDDB 2021).

Species	Listing Status[1] Federal	Listing Status[1] State	TRPA Special Interest	Habitat	Potential for Occurrence
Sierra Nevada red fox – Sierra Nevada DPS (*Vulpes vulpes necator*)	FE	ST	–	Suitable habitat for Sierra Nevada red fox includes high-elevation alpine and subalpine habitats, including meadows, forest (e.g., subalpine conifer, lodgepole pine, red fir, aspen, mixed conifer, ponderosa pine), montane chaparral, talus, and fell fields. Sierra Nevada red fox typically moves from high elevation areas to lower elevation areas during the winter. Dens are typically found in rock outcrops, hollow logs and stumps, and burrows (USFWS 2015, 2020, 2021).	*Not expected to occur*. The historic range of Sierra Nevada red fox included the Lake Tahoe region. However, the current range of the species has contracted significantly from its historic range and no longer includes the Lake Tahoe region; the only extant population of this DPS within its historic or current range is located south of the Tahoe region near Sonora Pass, Mono County (USFWS 2020, 2021). Accordingly, the species is not known or considered to presently occur in or adjacent to the Lake Tahoe region, including the project area. Additionally, where the species occurs, Sierra Nevada red fox typically uses high-elevation alpine and subalpine habitats above the elevation range of the project area.
Fringed myotis *Myotis thysanodes*	USFS-S	–	–	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer. Uses caves, mines, buildings or crevices for maternity colonies and roosts.	*May occur*. Fringed myotis has been detected in Meeks Meadow, approximately 0.1-mile west-northwest of the project area (LBTMU 2021). The Meeks Meadow portion of the project area contains some large snags and trees that may provide suitable roost habitat for fringed myotis. The bridge over Meeks Creek does not have features that would support critical roosting for bats. Facilities buildings in the project area east of SR 89 may provide additional potential roost habitat.
Mule deer *Odocoileus hemionus*	–	–	Special Interest Species	Common to abundant with a widespread distribution throughout most of California. Occur along major river corridors, in scattered desert mountain areas, and intermediate successional stages of most forest, woodland, and brush habitats.	*Not expected to occur (fawning or core migration)*. Mule deer is designated by TRPA as a special interest species. While mule deer may forage or move through the project area, the project area does not contain deer fawning habitat as defined by TRPA (TRPA 2022; Figure 3.4-3); and the project area is not positioned within an important deer migration route.

Species	Listing Status[1] Federal	Listing Status[1] State	TRPA Special Interest	Habitat	Potential for Occurrence
Pallid bat *Antrozous pallidus*	USFS-S	SSC	–	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	*May occur*. Though not considered abundant in the region, pallid bat has been detected increasingly on the LTBMU. In 2019, pallid bat was detected in Meeks Meadow during acoustic surveys along the north boundary of the project area (USDA Forest Service 2021). The Meeks Meadow portion of the project area contains some large snags and trees that may provide roost habitat suitable for pallid bat. The bridge over Meeks Creek does not have features that would support critical roosting for bats. Facilities buildings in the project area east of SR 89 may provide additional potential roost habitat.
Ringtail *Bassariscus astutus*	–	FP	–	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations.	*May occur*. The project area contains riparian and forest habitat potentially suitable for ringtail. The Meeks Meadow portion of the project area contains some large snags and trees that may provide den habitat suitable for ringtail. Ringtail in the Tahoe Basin is considered extremely rare, and occurrences are not well-known. The only documented occurrence is from the Glenbrook area, detected by Forest Service biologists during carnivore track-plate surveys conducted for the Multi-Species Inventory and Monitoring Program in 2002–2005 (USDA Forest Service 2007).
Pacific marten (*Martes caurina*)	USFS-S	–	–	Mixed evergreen forests with more than 40 percent crown closure along Sierra Nevada and Cascade mountains. Needs variety of different-aged stands, particularly old-growth conifers and snags which provide cavities for dens/nests.	*Not expected to occur*. Martens are known to occur in the vicinity of the project area (CNDDB 2021); however, denning habitat suitable for this species is not present in the project area due to development, intensive summer recreation uses, and marginal forest structure. Marten could occasionally move through portions of the project area, particularly in Meeks Meadow west of SR 89. However, regular marten use of the core project area east of SR 89 is not expected due to development and intensive human uses discussed previously. Additionally, the SR 89 corridor and fencing around much of the resort/campground west perimeter are likely functional barriers to significant movements and may isolate the property from larger blocks of habitat suitable for the species west of SR 89.

Species	Listing Status[1] Federal	Listing Status[1] State	TRPA Special Interest	Habitat	Potential for Occurrence
Sierra Nevada mountain beaver *Aplodontia rufa californica*	–	SSC	–	Dense growth of small deciduous trees and shrubs, wet soil, and abundance of forbs in the Sierra Nevada and east slope. Needs dense understory for food and cover. Burrows into soft soil. Needs abundant supply of water.	*Not expected to occur*. The project area does not contain dense, contiguous riparian shrub habitat suitable for Sierra Nevada mountain beaver.
Sierra Nevada snowshoe hare *Lepus americanus tahoensis*	–	SSC	–	Boreal riparian areas in the Sierra Nevada. Thickets of deciduous trees in riparian areas and thickets of young conifers.	*May occur*. The project area contains riparian habitat potentially suitable for Sierra Nevada snowshoe hare.
Townsend's big-eared bat *Corynorhinus townsendii*	USFS-S	SSC	–	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	*May occur*. This species has been detected only infrequently in the Tahoe Basin, and optimal roosting habitat (e.g., caves, mines, tunnels) is not present in the project area. However, the Meeks Meadow portion of the project area includes some large snags and trees that may provide roost sites suitable for the species. The bridge over Meeks Creek does not have features that would support critical roosting for bats. Facilities buildings in the project area east of SR 89 may provide additional potential roost sites.
Western red bat *Lasiurus blossevillii*	–	SSC	–	Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	*May occur*. This species has been detected only infrequently in the Tahoe Basin; however, the Meeks Meadow portion of the project area contains habitat potentially suitable for this species (i.e., willows).
Western white-tailed jackrabbit *Lepus townsendii*	–	SSC	–	Preferred habitats are sagebrush, subalpine conifer, juniper, alpine dwarf-shrub, and perennial grassland. Also uses low sagebrush, wet meadow, and early successional stages of various conifer habitats.	*May occur*. The project area contains conifer, grassland, and meadow habitat potentially suitable for western white-tailed jackrabbit.

Notes: CNDDB = California Natural Diversity Database; CEQA = California Environmental Quality Act

[1] Listing Status Definitions

Federal:

FC Candidate for Listing under ESA (Not legally protected by ESA)
FE Federally Listed as Endangered (legally protected)
FT Federally Listed as Threatened (legally protected)
USFS-S USDA Forest Service Sensitive Wildlife Species

State:

FP Fully protected (legally protected)
SSC Species of special concern (no formal protection other than CEQA consideration)
SE State Listed as Endangered (legally protected)
ST State Listed as Threatened (legally protected)

Sources: CNDDB 2021; LTBMU 2021; TRPA 2020; TRPA 2021c; USFWS 2022; USFS 2013b; USDA Forest Service 2021

Appendix C

Emissions Modeling

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Meeks Bay Alternative 1

El Dorado-Lake Tahoe County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	44.00	1000sqft	1.01	44,000.00	0
City Park	63.50	Acre	63.50	2,766,060.00	0
User Defined Recreational	1,800.00	User Defined Unit	0.40	1,800.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2029
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.66	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Emissions factors calculated for Liberty Utilities.

Land Use - Alternative includes construction of 300 foot pier, restoration of Meeks Creek and Lagoon, SR 89 bridge replacement, and bicyle infrastructure.

Construction Phase - Construction would occur over a 5-year period. Construction activities would be limited to May 1-October 15 consistent with local regulations.

Off-road Equipment - Addition of bore/drill rig for construction of pier.

Off-road Equipment - Addition of two bore/drill rig to construct 300 foot pier.

Demolition -

Grading - Marina removal and restoration would require substantial earth moving and grading, preliminarily estimated from the conceptual design as 30,000 cubic yards of excavation.

Vehicle Trips - approximately 95,000 VMT annually generated.

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	75.00	120.00
tblConstructionPhase	NumDays	40.00	120.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	180.00	17.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblLandUse	LandUseSquareFeet	0.00	1,800.00
tblLandUse	LotAcreage	0.00	0.40
tblProjectCharacteristics	CH4IntensityFactor	0	0.029
tblProjectCharacteristics	CO2IntensityFactor	0	535.66
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	3.70
tblVehicleTrips	CNW_TL	6.60	3.50
tblVehicleTrips	CW_TL	14.70	7.40

2.0 Emissions Summary

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1926	1.9614	1.4108	3.8900e-003	1.1183	0.0820	1.2003	0.6036	0.0755	0.6790			345.6167	0.0976	5.3100e-003	349.6411
2025	0.1805	1.7741	1.6359	4.1700e-003	0.3934	0.0685	0.4620	0.2057	0.0631	0.2688			369.4055	0.1061	5.1500e-003	373.5923
2026	0.1802	1.7693	1.6331	4.1600e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			368.4881	0.1061	5.0300e-003	372.6380
2027	0.1799	1.7649	1.6307	4.1500e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			367.5496	0.1061	4.9000e-003	371.6614
2028	0.0594	0.5167	0.9004	1.4500e-003	0.0110	0.0252	0.0362	2.9300e-003	0.0232	0.0261			128.1248	0.0390	1.8000e-004	129.1542
Maximum	**0.1926**	**1.9614**	**1.6359**	**4.1700e-003**	**1.1183**	**0.0820**	**1.2003**	**0.6036**	**0.0755**	**0.6790**			**369.4055**	**0.1061**	**5.3100e-003**	**373.5923**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1926	1.9614	1.4108	3.8900e-003	1.1183	0.0820	1.2003	0.6036	0.0755	0.6790			345.6163	0.0976	5.3100e-003	349.6408
2025	0.1805	1.7741	1.6359	4.1700e-003	0.3934	0.0685	0.4620	0.2057	0.0631	0.2688			369.4052	0.1061	5.1500e-003	373.5919
2026	0.1802	1.7693	1.6331	4.1600e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			368.4877	0.1061	5.0300e-003	372.6376
2027	0.1799	1.7649	1.6306	4.1500e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			367.5492	0.1061	4.9000e-003	371.6610
2028	0.0594	0.5167	0.9004	1.4500e-003	0.0110	0.0252	0.0362	2.9300e-003	0.0232	0.0261			128.1246	0.0390	1.8000e-004	129.1541
Maximum	**0.1926**	**1.9614**	**1.6359**	**4.1700e-003**	**1.1183**	**0.0820**	**1.2003**	**0.6036**	**0.0755**	**0.6790**			**369.4052**	**0.1061**	**5.3100e-003**	**373.5919**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2024**	**7-31-2024**	1.1776	1.1776
2	**8-1-2024**	**10-31-2024**	0.9733	0.9733
5	**5-1-2025**	**7-31-2025**	1.0685	1.0685
6	**8-1-2025**	**10-31-2025**	0.8832	0.8832
9	**5-1-2026**	**7-31-2026**	1.0658	1.0658
10	**8-1-2026**	**10-31-2026**	0.8809	0.8809
13	**5-1-2027**	**7-31-2027**	1.0634	1.0634

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

14	**8-1-2027**	**10-31-2027**	0.8789	0.8789
17	**5-1-2028**	**7-31-2028**	0.3155	0.3155
18	**8-1-2028**	**9-30-2028**	0.2092	0.2092
		Highest	1.1776	1.1776

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0411	1.6000e-004	0.0175	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005			0.0341	9.0000e-005	0.0000	0.0363
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.0299	0.0277	0.2083	3.2000e-004	0.0350	3.0000e-004	0.0353	9.3600e-003	2.8000e-004	9.6400e-003			30.8958	2.7800e-003	1.8000e-003	31.5005
Waste						0.0000	0.0000		0.0000	0.0000			1.1083	0.0655	0.0000	2.7458
Water						0.0000	0.0000		0.0000	0.0000			64.3404	3.4800e-003	7.2000e-004	64.6423
Total	**0.0710**	**0.0278**	**0.2258**	**3.2000e-004**	**0.0350**	**3.6000e-004**	**0.0353**	**9.3600e-003**	**3.4000e-004**	**9.7000e-003**			**96.3786**	**0.0719**	**2.5200e-003**	**98.9249**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0411	1.6000e-004	0.0175	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005			0.0341	9.0000e-005	0.0000	0.0363
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.0299	0.0277	0.2083	3.2000e-004	0.0350	3.0000e-004	0.0353	9.3600e-003	2.8000e-004	9.6400e-003			30.8958	2.7800e-003	1.8000e-003	31.5005
Waste						0.0000	0.0000		0.0000	0.0000			1.1083	0.0655	0.0000	2.7458
Water						0.0000	0.0000		0.0000	0.0000			64.3404	3.4800e-003	7.2000e-004	64.6423
Total	**0.0710**	**0.0278**	**0.2258**	**3.2000e-004**	**0.0350**	**3.6000e-004**	**0.0353**	**9.3600e-003**	**3.4000e-004**	**9.7000e-003**			**96.3786**	**0.0719**	**2.5200e-003**	**98.9249**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Restoration Efforts (2024)	Site Preparation	5/1/2024	10/15/2024	5	120	
2	Restoration Efforts (2025)	Grading	5/1/2025	10/15/2025	5	120	
3	Restoration Efforts (2026)	Grading	5/1/2026	10/15/2026	5	120	

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4	Restoration Efforts (2027)	Grading	5/1/2027	10/15/2027	5	120	
5	Paving	Paving	5/1/2028	10/13/2028	5	120	

Acres of Grading (Site Preparation Phase): 17

Acres of Grading (Grading Phase): 17

Acres of Paving: 1.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Restoration Efforts (2024)	Bore/Drill Rigs	2	8.00	221	0.50
Restoration Efforts (2024)	Rubber Tired Dozers	3	8.00	247	0.40
Restoration Efforts (2024)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Restoration Efforts (2025)	Excavators	2	8.00	158	0.38
Restoration Efforts (2025)	Graders	1	8.00	187	0.41
Restoration Efforts (2025)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2025)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2025)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2026)	Excavators	2	8.00	158	0.38
Restoration Efforts (2026)	Graders	1	8.00	187	0.41
Restoration Efforts (2026)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2026)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2026)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2027)	Excavators	2	8.00	158	0.38
Restoration Efforts (2027)	Graders	1	8.00	187	0.41
Restoration Efforts (2027)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2027)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2027)	Tractors/Loaders/Backhoes	2	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Restoration Efforts (2024)	9	23.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2025)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2026)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2027)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0935	0.0000	1.0935	0.5969	0.0000	0.5969			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1849	1.8587	1.3447	3.4200e-003		0.0813	0.0813		0.0748	0.0748			300.6085	0.0972	0.0000	303.0391
Total	**0.1849**	**1.8587**	**1.3447**	**3.4200e-003**	**1.0935**	**0.0813**	**1.1748**	**0.5969**	**0.0748**	**0.6717**			**300.6085**	**0.0972**	**0.0000**	**303.0391**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-003	0.0986	0.0150	3.3000e-004	7.8400e-003	6.4000e-004	8.4800e-003	2.1500e-003	6.1000e-004	2.7600e-003			31.6119	7.0000e-005	4.9500e-003	33.0901
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	6.1300e-003	4.1000e-003	0.0511	1.4000e-004	0.0169	9.0000e-005	0.0170	4.4900e-003	8.0000e-005	4.5800e-003			13.3963	3.4000e-004	3.6000e-004	13.5120
Total	**7.6300e-003**	**0.1027**	**0.0660**	**4.7000e-004**	**0.0247**	**7.3000e-004**	**0.0255**	**6.6400e-003**	**6.9000e-004**	**7.3400e-003**			**45.0081**	**4.1000e-004**	**5.3100e-003**	**46.6020**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0935	0.0000	1.0935	0.5969	0.0000	0.5969			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1849	1.8587	1.3447	3.4200e-003		0.0813	0.0813		0.0748	0.0748			300.6082	0.0972	0.0000	303.0388
Total	**0.1849**	**1.8587**	**1.3447**	**3.4200e-003**	**1.0935**	**0.0813**	**1.1748**	**0.5969**	**0.0748**	**0.6717**			**300.6082**	**0.0972**	**0.0000**	**303.0388**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-003	0.0986	0.0150	3.3000e-004	7.8400e-003	6.4000e-004	8.4800e-003	2.1500e-003	6.1000e-004	2.7600e-003			31.6119	7.0000e-005	4.9500e-003	33.0901
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	6.1300e-003	4.1000e-003	0.0511	1.4000e-004	0.0169	9.0000e-005	0.0170	4.4900e-003	8.0000e-005	4.5800e-003			13.3963	3.4000e-004	3.6000e-004	13.5120
Total	**7.6300e-003**	**0.1027**	**0.0660**	**4.7000e-004**	**0.0247**	**7.3000e-004**	**0.0255**	**6.6400e-003**	**6.9000e-004**	**7.3400e-003**			**45.0081**	**4.1000e-004**	**5.3100e-003**	**46.6020**

3.3 Restoration Efforts (2025) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0373	0.1058	0.0000	329.6815
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0373**	**0.1058**	**0.0000**	**329.6815**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2025) - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4500e-003	0.0943	0.0148	3.2000e-004	7.8500e-003	6.1000e-004	8.4500e-003	2.1500e-003	5.8000e-004	2.7400e-003			30.9844	7.0000e-005	4.8600e-003	32.4335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.0200e-003	3.1900e-003	0.0413	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	7.0000e-005	3.9800e-003			11.3839	2.7000e-004	2.9000e-004	11.4773
Total	**6.4700e-003**	**0.0975**	**0.0561**	**4.4000e-004**	**0.0225**	**6.8000e-004**	**0.0232**	**6.0600e-003**	**6.5000e-004**	**6.7200e-003**			**42.3683**	**3.4000e-004**	**5.1500e-003**	**43.9108**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0369	0.1058	0.0000	329.6811
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0369**	**0.1058**	**0.0000**	**329.6811**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2025) - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4500e-003	0.0943	0.0148	3.2000e-004	7.8500e-003	6.1000e-004	8.4500e-003	2.1500e-003	5.8000e-004	2.7400e-003			30.9844	7.0000e-005	4.8600e-003	32.4335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.0200e-003	3.1900e-003	0.0413	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	7.0000e-005	3.9800e-003			11.3839	2.7000e-004	2.9000e-004	11.4773
Total	**6.4700e-003**	**0.0975**	**0.0561**	**4.4000e-004**	**0.0225**	**6.8000e-004**	**0.0232**	**6.0600e-003**	**6.5000e-004**	**6.7200e-003**			**42.3683**	**3.4000e-004**	**5.1500e-003**	**43.9108**

3.4 Restoration Efforts (2026) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0373	0.1058	0.0000	329.6815
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0373**	**0.1058**	**0.0000**	**329.6815**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2026) - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0898	0.0146	3.2000e-004	7.8500e-003	5.8000e-004	8.4200e-003	2.1500e-003	5.5000e-004	2.7100e-003			30.3219	6.0000e-005	4.7500e-003	31.7401
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7400e-003	2.8800e-003	0.0386	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			11.1290	2.5000e-004	2.7000e-004	11.2163
Total	**6.1300e-003**	**0.0927**	**0.0533**	**4.4000e-004**	**0.0225**	**6.5000e-004**	**0.0232**	**6.0600e-003**	**6.1000e-004**	**6.6800e-003**			**41.4509**	**3.1000e-004**	**5.0200e-003**	**42.9565**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0369	0.1058	0.0000	329.6811
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0369**	**0.1058**	**0.0000**	**329.6811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2026) - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0898	0.0146	3.2000e-004	7.8500e-003	5.8000e-004	8.4200e-003	2.1500e-003	5.5000e-004	2.7100e-003			30.3219	6.0000e-005	4.7500e-003	31.7401
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7400e-003	2.8800e-003	0.0386	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			11.1290	2.5000e-004	2.7000e-004	11.2163
Total	**6.1300e-003**	**0.0927**	**0.0533**	**4.4000e-004**	**0.0225**	**6.5000e-004**	**0.0232**	**6.0600e-003**	**6.1000e-004**	**6.6800e-003**			**41.4509**	**3.1000e-004**	**5.0200e-003**	**42.9565**

3.5 Restoration Efforts (2027) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0373	0.1058	0.0000	329.6815
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0373**	**0.1058**	**0.0000**	**329.6815**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2027) - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3400e-003	0.0858	0.0145	3.1000e-004	7.8500e-003	5.5000e-004	8.4000e-003	2.1500e-003	5.3000e-004	2.6800e-003			29.6198	6.0000e-005	4.6400e-003	31.0053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.4800e-003	2.6100e-003	0.0363	1.1000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			10.8925	2.2000e-004	2.6000e-004	10.9746
Total	**5.8200e-003**	**0.0884**	**0.0508**	**4.2000e-004**	**0.0225**	**6.2000e-004**	**0.0232**	**6.0600e-003**	**5.9000e-004**	**6.6500e-003**			**40.5123**	**2.8000e-004**	**4.9000e-003**	**41.9799**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0369	0.1058	0.0000	329.6811
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0369**	**0.1058**	**0.0000**	**329.6811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2027) - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3400e-003	0.0858	0.0145	3.1000e-004	7.8500e-003	5.5000e-004	8.4000e-003	2.1500e-003	5.3000e-004	2.6800e-003			29.6198	6.0000e-005	4.6400e-003	31.0053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.4800e-003	2.6100e-003	0.0363	1.1000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			10.8925	2.2000e-004	2.6000e-004	10.9746
Total	**5.8200e-003**	**0.0884**	**0.0508**	**4.2000e-004**	**0.0225**	**6.2000e-004**	**0.0232**	**6.0600e-003**	**5.9000e-004**	**6.6500e-003**			**40.5123**	**2.8000e-004**	**4.9000e-003**	**41.9799**

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0549	0.5149	0.8747	1.3700e-003		0.0251	0.0251		0.0231	0.0231			120.1155	0.0389	0.0000	121.0867
Paving	1.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0562**	**0.5149**	**0.8747**	**1.3700e-003**		**0.0251**	**0.0251**		**0.0231**	**0.0231**			**120.1155**	**0.0389**	**0.0000**	**121.0867**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	3.1600e-003	1.7800e-003	0.0258	8.0000e-005	0.0110	5.0000e-005	0.0111	2.9300e-003	4.0000e-005	2.9700e-003			8.0092	1.5000e-004	1.8000e-004	8.0675
Total	**3.1600e-003**	**1.7800e-003**	**0.0258**	**8.0000e-005**	**0.0110**	**5.0000e-005**	**0.0111**	**2.9300e-003**	**4.0000e-005**	**2.9700e-003**			**8.0092**	**1.5000e-004**	**1.8000e-004**	**8.0675**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0549	0.5149	0.8747	1.3700e-003		0.0251	0.0251		0.0231	0.0231			120.1154	0.0389	0.0000	121.0866
Paving	1.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0562**	**0.5149**	**0.8747**	**1.3700e-003**		**0.0251**	**0.0251**		**0.0231**	**0.0231**			**120.1154**	**0.0389**	**0.0000**	**121.0866**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	3.1600e-003	1.7800e-003	0.0258	8.0000e-005	0.0110	5.0000e-005	0.0111	2.9300e-003	4.0000e-005	2.9700e-003			8.0092	1.5000e-004	1.8000e-004	8.0675
Total	**3.1600e-003**	**1.7800e-003**	**0.0258**	**8.0000e-005**	**0.0110**	**5.0000e-005**	**0.0111**	**2.9300e-003**	**4.0000e-005**	**2.9700e-003**			**8.0092**	**1.5000e-004**	**1.8000e-004**	**8.0675**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0299	0.0277	0.2083	3.2000e-004	0.0350	3.0000e-004	0.0353	9.3600e-003	2.8000e-004	9.6400e-003			30.8958	2.7800e-003	1.8000e-003	31.5005
Unmitigated	0.0299	0.0277	0.2083	3.2000e-004	0.0350	3.0000e-004	0.0353	9.3600e-003	2.8000e-004	9.6400e-003			30.8958	2.7800e-003	1.8000e-003	31.5005

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	49.53	124.46	139.07	94,910	94,910
Other Asphalt Surfaces	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	49.53	124.46	139.07	94,910	94,910

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	7.40	3.70	3.50	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
User Defined Recreational	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Other Asphalt Surfaces	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Recreational	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0411	1.6000e-004	0.0175	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005			0.0341	9.0000e-005	0.0000	0.0363
Unmitigated	0.0411	1.6000e-004	0.0175	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005			0.0341	9.0000e-005	0.0000	0.0363

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.6200e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0359					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	1.6100e-003	1.6000e-004	0.0175	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005			0.0341	9.0000e-005	0.0000	0.0363
Total	**0.0411**	**1.6000e-004**	**0.0175**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**			**0.0341**	**9.0000e-005**	**0.0000**	**0.0363**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.6200e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0359					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	1.6100e-003	1.6000e-004	0.0175	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005			0.0341	9.0000e-005	0.0000	0.0363
Total	**0.0411**	**1.6000e-004**	**0.0175**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**			**0.0341**	**9.0000e-005**	**0.0000**	**0.0363**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	64.3404	3.4800e-003	7.2000e-004	64.6423
Unmitigated	64.3404	3.4800e-003	7.2000e-004	64.6423

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 75.6591	64.3404	3.4800e-003	7.2000e-004	64.6423
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**64.3404**	**3.4800e-003**	**7.2000e-004**	**64.6423**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 75.6591	64.3404	3.4800e-003	7.2000e-004	64.6423
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**64.3404**	**3.4800e-003**	**7.2000e-004**	**64.6423**

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.1083	0.0655	0.0000	2.7458
Unmitigated	1.1083	0.0655	0.0000	2.7458

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	5.46	1.1083	0.0655	0.0000	2.7458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1083**	**0.0655**	**0.0000**	**2.7458**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	5.46	1.1083	0.0655	0.0000	2.7458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1083**	**0.0655**	**0.0000**	**2.7458**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Meeks Bay Alternative 1

El Dorado-Lake Tahoe County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	44.00	1000sqft	1.01	44,000.00	0
City Park	63.50	Acre	63.50	2,766,060.00	0
User Defined Recreational	1,800.00	User Defined Unit	0.40	1,800.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2029
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.66	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Emissions factors calculated for Liberty Utilities.

Land Use - Alternative includes construction of 300 foot pier, restoration of Meeks Creek and Lagoon, SR 89 bridge replacement, and bicyle infrastructure.

Construction Phase - Construction would occur over a 5-year period. Construction activities would be limited to May 1-October 15 consistent with local regulations.

Off-road Equipment - Addition of bore/drill rig for construction of pier.

Off-road Equipment - Addition of two bore/drill rig to construct 300 foot pier.

Demolition -

Grading - Marina removal and restoration would require substantial earth moving and grading, preliminarily estimated from the conceptual design as 30,000 cubic yards of excavation.

Vehicle Trips - approximately 95,000 VMT annually generated.

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	75.00	120.00
tblConstructionPhase	NumDays	40.00	120.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	180.00	17.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblLandUse	LandUseSquareFeet	0.00	1,800.00
tblLandUse	LotAcreage	0.00	0.40
tblProjectCharacteristics	CH4IntensityFactor	0	0.029
tblProjectCharacteristics	CO2IntensityFactor	0	535.66
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	3.70
tblVehicleTrips	CNW_TL	6.60	3.50
tblVehicleTrips	CW_TL	14.70	7.40

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	3.2179	32.6206	23.6111	0.0651	18.6552	1.3667	20.0219	10.0633	1.2578	11.3211			6,368.0724	1.7935	0.0971	6,441.8302
2025	3.0163	29.5040	27.3446	0.0696	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,802.2829	1.9492	0.0941	6,87[illegible]054
2026	3.0103	29.4282	27.2922	0.0694	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,785.0380	1.9487	0.0919	6,861.1406
2027	3.0045	29.3594	27.2463	0.0692	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,767.4453	1.9482	0.0896	6,842.8569
2028	0.9940	8.6078	15.0561	0.0243	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,364.9175	0.7164	3.0800e-003	2,383.7455
Maximum	3.2179	32.6206	27.3446	0.0696	18.6552	1.3667	20.0219	10.0633	1.2578	11.3211			6,802.2829	1.9492	0.0971	6,879.0544

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	3.2179	32.6206	23.6111	0.0651	18.6552	1.3667	20.0219	10.0633	1.2578	11.3211			6,368.0724	1.7935	0.0971	6,441.8302
2025	3.0163	29.5040	27.3446	0.0696	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,802.2829	1.9492	0.0941	6,879.0544
2026	3.0103	29.4282	27.2922	0.0694	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,785.0380	1.9487	0.0919	6,861.1406
2027	3.0045	29.3594	27.2463	0.0692	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,767.4452	1.9482	0.0896	6,842.8569
2028	0.9940	8.6078	15.0561	0.0243	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,364.9175	0.7164	3.0800e-003	2,383.7455
Maximum	**3.2179**	**32.6206**	**27.3446**	**0.0696**	**18.6552**	**1.3667**	**20.0219**	**10.0633**	**1.2578**	**11.3211**			**6,802.2829**	**1.9492**	**0.0971**	**6,879.0544**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2343	1.7600e-003	0.1943	1.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			0.4175	1.0900e-003		0.4446
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3901	0.2651	2.0895	3.5200e-003	0.3814	3.1600e-003	0.3846	0.1018	2.9600e-003	0.1047			375.1714	0.0288	0.0195	381.7094
Total	**0.6244**	**0.2669**	**2.2837**	**3.5300e-003**	**0.3814**	**3.8500e-003**	**0.3853**	**0.1018**	**3.6500e-003**	**0.1054**			**375.5889**	**0.0299**	**0.0195**	**382.1540**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2343	1.7600e-003	0.1943	1.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			0.4175	1.0900e-003		0.4446
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3901	0.2651	2.0895	3.5200e-003	0.3814	3.1600e-003	0.3846	0.1018	2.9600e-003	0.1047			375.1714	0.0288	0.0195	381.7094
Total	**0.6244**	**0.2669**	**2.2837**	**3.5300e-003**	**0.3814**	**3.8500e-003**	**0.3853**	**0.1018**	**3.6500e-003**	**0.1054**			**375.5889**	**0.0299**	**0.0195**	**382.1540**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Restoration Efforts (2024)	Site Preparation	5/1/2024	10/15/2024	5	120	
2	Restoration Efforts (2025)	Grading	5/1/2025	10/15/2025	5	120	
3	Restoration Efforts (2026)	Grading	5/1/2026	10/15/2026	5	120	
4	Restoration Efforts (2027)	Grading	5/1/2027	10/15/2027	5	120	
5	Paving	Paving	5/1/2028	10/13/2028	5	120	

Acres of Grading (Site Preparation Phase): 17

Acres of Grading (Grading Phase): 17

Acres of Paving: 1.01

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Restoration Efforts (2024)	Bore/Drill Rigs	2	8.00	221	0.50
Restoration Efforts (2024)	Rubber Tired Dozers	3	8.00	247	0.40
Restoration Efforts (2024)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Restoration Efforts (2025)	Excavators	2	8.00	158	0.38
Restoration Efforts (2025)	Graders	1	8.00	187	0.41
Restoration Efforts (2025)	Rubber Tired Dozers	1	8.00	247	0.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Restoration Efforts (2025)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2025)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2026)	Excavators	2	8.00	158	0.38
Restoration Efforts (2026)	Graders	1	8.00	187	0.41
Restoration Efforts (2026)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2026)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2026)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2027)	Excavators	2	8.00	158	0.38
Restoration Efforts (2027)	Graders	1	8.00	187	0.41
Restoration Efforts (2027)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2027)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2027)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Restoration Efforts (2024)	9	23.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2025)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2026)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2027)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	3.0819	30.9780	22.4124	0.0570		1.3546	1.3546		1.2463	1.2463			5,522.7366	1.7862		5,567.3907
Total	**3.0819**	**30.9780**	**22.4124**	**0.0570**	**18.2257**	**1.3546**	**19.5804**	**9.9483**	**1.2463**	**11.1946**			**5,522.7366**	**1.7862**		**5,567.3907**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0255	1.5826	0.2491	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0101	0.0472			580.6693	1.2600e-003	0.0910	607.8166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.1105	0.0600	0.9496	2.5700e-003	0.2938	1.5000e-003	0.2953	0.0779	1.3800e-003	0.0793			264.6665	6.0500e-003	6.0600e-003	266.6229
Total	**0.1360**	**1.6426**	**1.1987**	**8.0600e-003**	**0.4295**	**0.0121**	**0.4415**	**0.1150**	**0.0115**	**0.1265**			**845.3358**	**7.3100e-003**	**0.0971**	**874.4395**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	3.0819	30.9780	22.4124	0.0570		1.3546	1.3546		1.2463	1.2463			5,522.7366	1.7862		5,567.3907
Total	**3.0819**	**30.9780**	**22.4124**	**0.0570**	**18.2257**	**1.3546**	**19.5804**	**9.9483**	**1.2463**	**11.1946**			**5,522.7366**	**1.7862**		**5,567.3907**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0255	1.5826	0.2491	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0101	0.0472			580.6693	1.2600e-003	0.0910	607.8166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.1105	0.0600	0.9496	2.5700e-003	0.2938	1.5000e-003	0.2953	0.0779	1.3800e-003	0.0793			264.6665	6.0500e-003	6.0600e-003	266.6229
Total	**0.1360**	**1.6426**	**1.1987**	**8.0600e-003**	**0.4295**	**0.0121**	**0.4415**	**0.1150**	**0.0115**	**0.1265**			**845.3358**	**7.3100e-003**	**0.0971**	**874.4395**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2025) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.5144	0.2465	5.3800e-003	0.1357	0.0101	0.1458	0.0371	9.7000e-003	0.0468			569.1320	1.2200e-003	0.0892	595.7440
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0905	0.0467	0.7670	2.1600e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			224.8695	4.7500e-003	4.9000e-003	226.4489
Total	**0.1150**	**1.5611**	**1.0135**	**7.5400e-003**	**0.3912**	**0.0114**	**0.4025**	**0.1049**	**0.0108**	**0.1157**			**794.0014**	**5.9700e-003**	**0.0941**	**822.1929**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2025) - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.5144	0.2465	5.3800e-003	0.1357	0.0101	0.1458	0.0371	9.7000e-003	0.0468			569.1320	1.2200e-003	0.0892	595.7440
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0905	0.0467	0.7670	2.1600e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			224.8695	4.7500e-003	4.9000e-003	226.4489
Total	**0.1150**	**1.5611**	**1.0135**	**7.5400e-003**	**0.3912**	**0.0114**	**0.4025**	**0.1049**	**0.0108**	**0.1157**			**794.0014**	**5.9700e-003**	**0.0941**	**822.1929**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2026) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0236	1.4432	0.2436	5.2600e-003	0.1357	9.6100e-003	0.1453	0.0371	9.1900e-003	0.0463			556.9510	1.1700e-003	0.0873	582.9965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0855	0.0422	0.7175	2.0900e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			219.8056	4.3100e-003	4.6000e-003	221.2827
Total	**0.1090**	**1.4853**	**0.9611**	**7.3500e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1151**			**776.7566**	**5.4800e-003**	**0.0919**	**804.2792**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2026) - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0236	1.4432	0.2436	5.2600e-003	0.1357	9.6100e-003	0.1453	0.0371	9.1900e-003	0.0463			556.9510	1.1700e-003	0.0873	582.9965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0855	0.0422	0.7175	2.0900e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			219.8056	4.3100e-003	4.6000e-003	221.2827
Total	**0.1090**	**1.4853**	**0.9611**	**7.3500e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1151**			**776.7566**	**5.4800e-003**	**0.0919**	**804.2792**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2027) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.3783	0.2410	5.1400e-003	0.1358	9.1500e-003	0.1449	0.0371	8.7600e-003	0.0459			544.0445	1.1200e-003	0.0853	569.4871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0806	0.0382	0.6742	2.0300e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			215.1194	3.9100e-003	4.3300e-003	216.5084
Total	**0.1033**	**1.4166**	**0.9152**	**7.1700e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7700e-003**	**0.1147**			**759.1638**	**5.0300e-003**	**0.0896**	**785.9955**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2027) - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.3783	0.2410	5.1400e-003	0.1358	9.1500e-003	0.1449	0.0371	8.7600e-003	0.0459			544.0445	1.1200e-003	0.0853	569.4871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0806	0.0382	0.6742	2.0300e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			215.1194	3.9100e-003	4.3300e-003	216.5084
Total	**0.1033**	**1.4166**	**0.9152**	**7.1700e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7700e-003**	**0.1147**			**759.1638**	**5.0300e-003**	**0.0896**	**785.9955**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0221					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9372**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0568	0.0261	0.4781	1.4800e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			158.1723	2.6800e-003	3.0800e-003	159.1577
Total	**0.0568**	**0.0261**	**0.4781**	**1.4800e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**158.1723**	**2.6800e-003**	**3.0800e-003**	**159.1577**

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0221					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9372**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0568	0.0261	0.4781	1.4800e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			158.1723	2.6800e-003	3.0800e-003	159.1577
Total	**0.0568**	**0.0261**	**0.4781**	**1.4800e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**158.1723**	**2.6800e-003**	**3.0800e-003**	**159.1577**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3901	0.2651	2.0895	3.5200e-003	0.3814	3.1600e-003	0.3846	0.1018	2.9600e-003	0.1047			375.1714	0.0288	0.0195	381.7094
Unmitigated	0.3901	0.2651	2.0895	3.5200e-003	0.3814	3.1600e-003	0.3846	0.1018	2.9600e-003	0.1047			375.1714	0.0288	0.0195	381.7094

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	49.53	124.46	139.07	94,910	94,910
Other Asphalt Surfaces	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	49.53	124.46	139.07	94,910	94,910

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	7.40	3.70	3.50	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
User Defined Recreational	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Other Asphalt Surfaces	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
User Defined Recreational	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Meeks Bay Alternative 1 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2343	1.7600e-003	0.1943	1.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			0.4175	1.0900e-003		0.4446
Unmitigated	0.2343	1.7600e-003	0.1943	1.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			0.4175	1.0900e-003		0.4446

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0179	1.7600e-003	0.1943	1.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			0.4175	1.0900e-003		0.4446
Total	**0.2343**	**1.7600e-003**	**0.1943**	**1.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**			**0.4175**	**1.0900e-003**		**0.4446**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0179	1.7600e-003	0.1943	1.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			0.4175	1.0900e-003		0.4446
Total	**0.2343**	**1.7600e-003**	**0.1943**	**1.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**			**0.4175**	**1.0900e-003**		**0.4446**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Meeks Bay Alternative 2

El Dorado-Lake Tahoe County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	44.00	1000sqft	1.01	44,000.00	0
Parking Lot	376.00	Space	3.38	150,400.00	0
City Park	63.50	Acre	63.50	2,766,060.00	0
User Defined Recreational	0.20	User Defined Unit	0.00	200.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2029
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.66	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Emissions factors calculated for Liberty Utilities.

Land Use - Alternative includes construction of 200 foot pedestrian pier, restoration of Meeks Creek and Lagoon, construction of 376 parking spaces, SR 89 bridge replacement, and bicyle infrastructure.

Construction Phase - Construction would occur over a 5-year period. Construction activities would be limited to May 1-October 15 consistent with local regulations.

Off-road Equipment - Addition of bore/drill rig for construction of pier.

Off-road Equipment - Addition of bore/drill rig to construct 200 foot pier.

Demolition -

Grading - Marina removal and restoration would require substantial earth moving and grading, preliminarily estimated from the conceptual design as 30,000 cubic yards of excavation.

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Trips - approximately 95,000 VMT annually generated.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	75.00	120.00
tblGrading	AcresOfGrading	360.00	330.00
tblGrading	AcresOfGrading	360.00	330.00
tblGrading	AcresOfGrading	360.00	330.00
tblGrading	AcresOfGrading	180.00	60.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblLandUse	LandUseSquareFeet	0.00	200.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.029
tblProjectCharacteristics	CO2IntensityFactor	0	535.66
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	3.40
tblVehicleTrips	CNW_TL	6.60	3.30
tblVehicleTrips	CW_TL	14.70	7.90

2.0 Emissions Summary

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.9933	30.8033	21.3637	0.0551	18.9969	1.3039	20.3008	10.0942	1.2000	11.2942			5,396.3083	1.4964	0.0971	5,462.6584
2025	3.0167	29.5903	27.2666	0.0694	9.3389	1.1423	10.4812	3.7314	1.0513	4.7827			6,782.9319	1.9496	0.0949	6,859.9516
2026	3.0108	29.5095	27.2201	0.0692	9.3389	1.1417	10.4806	3.7314	1.0507	4.7821			6,766.1838	1.9491	0.0927	6,842.5207
2027	3.0051	29.4364	27.1791	0.0691	9.3389	1.1412	10.4801	3.7314	1.0502	4.7816			6,749.0362	1.9486	0.0903	6,824.6697
2028	1.0690	8.6138	15.0075	0.0242	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,351.1640	0.7167	3.5400e-003	2,370.1351
Maximum	**3.0167**	**30.8033**	**27.2666**	**0.0694**	**18.9969**	**1.3039**	**20.3008**	**10.0942**	**1.2000**	**11.2942**			**6,782.9319**	**1.9496**	**0.0971**	**6,859.9516**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.9933	30.8033	21.3637	0.0551	18.9969	1.3039	20.3008	10.0942	1.2000	11.2942			5,396.3083	1.4964	0.0971	5,462.6584
2025	3.0167	29.5903	27.2666	0.0694	9.3389	1.1423	10.4812	3.7314	1.0513	4.7827			6,782.9319	1.9496	0.0949	6,859.9516
2026	3.0108	29.5095	27.2201	0.0692	9.3389	1.1417	10.4806	3.7314	1.0507	4.7821			6,766.1838	1.9491	0.0927	6,842.5207
2027	3.0051	29.4364	27.1791	0.0691	9.3389	1.1412	10.4801	3.7314	1.0502	4.7816			6,749.0362	1.9486	0.0903	6,824.6697
2028	1.0690	8.6138	15.0075	0.0242	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,351.1640	0.7167	3.5400e-003	2,370.1351
Maximum	**3.0167**	**30.8033**	**27.2666**	**0.0694**	**18.9969**	**1.3039**	**20.3008**	**10.0942**	**1.2000**	**11.2942**			**6,782.9319**	**1.9496**	**0.0971**	**6,859.9516**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2585	4.5000e-004	0.0493	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1059	2.8000e-004		0.1127
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3014	0.3024	2.3378	3.3000e-003	0.3801	3.1500e-003	0.3833	0.1014	2.9500e-003	0.1044			351.3050	0.0344	0.0215	358.5697
Total	**0.5599**	**0.3029**	**2.3871**	**3.3000e-003**	**0.3801**	**3.3300e-003**	**0.3834**	**0.1014**	**3.1300e-003**	**0.1046**			**351.4108**	**0.0347**	**0.0215**	**358.6824**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2585	4.5000e-004	0.0493	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1059	2.8000e-004		0.1127
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3014	0.3024	2.3378	3.3000e-003	0.3801	3.1500e-003	0.3833	0.1014	2.9500e-003	0.1044			351.3050	0.0344	0.0215	358.5697
Total	**0.5599**	**0.3029**	**2.3871**	**3.3000e-003**	**0.3801**	**3.3300e-003**	**0.3834**	**0.1014**	**3.1300e-003**	**0.1046**			**351.4108**	**0.0347**	**0.0215**	**358.6824**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Restoration Efforts (2024)	Site Preparation	5/1/2024	10/15/2024	5	120	
2	Restoration Efforts (2026)	Grading	5/1/2025	10/15/2025	5	120	
3	Restoration Efforts (2027)	Grading	5/1/2026	10/15/2026	5	120	
4	Restoration Efforts (2025)	Grading	5/1/2027	10/15/2027	5	120	
5	Paving	Paving	5/1/2028	10/13/2028	5	120	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 330

Acres of Paving: 4.39

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Restoration Efforts (2024)	Bore/Drill Rigs	1	8.00	221	0.50
Restoration Efforts (2024)	Rubber Tired Dozers	3	8.00	247	0.40
Restoration Efforts (2024)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Restoration Efforts (2026)	Excavators	2	8.00	158	0.38
Restoration Efforts (2026)	Graders	1	8.00	187	0.41
Restoration Efforts (2026)	Rubber Tired Dozers	1	8.00	247	0.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Restoration Efforts (2026)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2026)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2027)	Excavators	2	8.00	158	0.38
Restoration Efforts (2027)	Graders	1	8.00	187	0.41
Restoration Efforts (2027)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2027)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2027)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2025)	Excavators	2	8.00	158	0.38
Restoration Efforts (2025)	Graders	1	8.00	187	0.41
Restoration Efforts (2025)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2025)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2025)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Restoration Efforts (2024)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2026)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2027)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2025)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.6057	0.0000	18.6057	9.9893	0.0000	9.9893			0.0000			0.0000
Off-Road	2.8714	29.0770	20.3740	0.0476		1.2920	1.2920		1.1886	1.1886			4,605.3733	1.4895		4,642.6101
Total	**2.8714**	**29.0770**	**20.3740**	**0.0476**	**18.6057**	**1.2920**	**19.8977**	**9.9893**	**1.1886**	**11.1780**			**4,605.3733**	**1.4895**		**4,642.6101**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.6619	0.2506	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0102	0.0473			580.9071	1.2100e-003	0.0911	608.0724
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0973	0.0643	0.7390	2.0400e-003	0.2555	1.3000e-003	0.2568	0.0678	1.2000e-003	0.0689			210.0279	5.7600e-003	6.0500e-003	211.9760
Total	**0.1219**	**1.7263**	**0.9897**	**7.5300e-003**	**0.3911**	**0.0119**	**0.4031**	**0.1049**	**0.0114**	**0.1162**			**790.9350**	**6.9700e-003**	**0.0971**	**820.0484**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.6057	0.0000	18.6057	9.9893	0.0000	9.9893			0.0000			0.0000
Off-Road	2.8714	29.0770	20.3740	0.0476		1.2920	1.2920		1.1886	1.1886			4,605.3733	1.4895		4,642.6101
Total	**2.8714**	**29.0770**	**20.3740**	**0.0476**	**18.6057**	**1.2920**	**19.8977**	**9.9893**	**1.1886**	**11.1780**			**4,605.3733**	**1.4895**		**4,642.6101**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.6619	0.2506	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0102	0.0473			580.9071	1.2100e-003	0.0911	608.0724
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0973	0.0643	0.7390	2.0400e-003	0.2555	1.3000e-003	0.2568	0.0678	1.2000e-003	0.0689			210.0279	5.7600e-003	6.0500e-003	211.9760
Total	**0.1219**	**1.7263**	**0.9897**	**7.5300e-003**	**0.3911**	**0.0119**	**0.4031**	**0.1049**	**0.0114**	**0.1162**			**790.9350**	**6.9700e-003**	**0.0971**	**820.0484**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9477	0.0000	8.9477	3.6265	0.0000	3.6265			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**8.9477**	**1.1309**	**10.0786**	**3.6265**	**1.0404**	**4.6669**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0237	1.5899	0.2481	5.3800e-003	0.1357	0.0102	0.1459	0.0371	9.7300e-003	0.0468			569.3921	1.1700e-003	0.0893	596.0230
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0918	0.0576	0.6874	1.9700e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			205.2584	5.2200e-003	5.6300e-003	207.0672
Total	**0.1155**	**1.6474**	**0.9355**	**7.3500e-003**	**0.3912**	**0.0114**	**0.4026**	**0.1049**	**0.0109**	**0.1157**			**774.6505**	**6.3900e-003**	**0.0949**	**803.0902**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9477	0.0000	8.9477	3.6265	0.0000	3.6265			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**8.9477**	**1.1309**	**10.0786**	**3.6265**	**1.0404**	**4.6669**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0237	1.5899	0.2481	5.3800e-003	0.1357	0.0102	0.1459	0.0371	9.7300e-003	0.0468			569.3921	1.1700e-003	0.0893	596.0230
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0918	0.0576	0.6874	1.9700e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			205.2584	5.2200e-003	5.6300e-003	207.0672
Total	**0.1155**	**1.6474**	**0.9355**	**7.3500e-003**	**0.3912**	**0.0114**	**0.4026**	**0.1049**	**0.0109**	**0.1157**			**774.6505**	**6.3900e-003**	**0.0949**	**803.0902**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9477	0.0000	8.9477	3.6265	0.0000	3.6265			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**8.9477**	**1.1309**	**10.0786**	**3.6265**	**1.0404**	**4.6669**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.5147	0.2452	5.2700e-003	0.1357	9.6400e-003	0.1454	0.0371	9.2200e-003	0.0463			557.2342	1.1200e-003	0.0874	583.2995
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0869	0.0519	0.6438	1.9100e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			200.6681	4.7500e-003	5.2800e-003	202.3598
Total	**0.1096**	**1.5666**	**0.8890**	**7.1800e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1152**			**757.9024**	**5.8700e-003**	**0.0927**	**785.6593**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9477	0.0000	8.9477	3.6265	0.0000	3.6265			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**8.9477**	**1.1309**	**10.0786**	**3.6265**	**1.0404**	**4.6669**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.5147	0.2452	5.2700e-003	0.1357	9.6400e-003	0.1454	0.0371	9.2200e-003	0.0463			557.2342	1.1200e-003	0.0874	583.2995
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0869	0.0519	0.6438	1.9100e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			200.6681	4.7500e-003	5.2800e-003	202.3598
Total	**0.1096**	**1.5666**	**0.8890**	**7.1800e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1152**			**757.9024**	**5.8700e-003**	**0.0927**	**785.6593**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9477	0.0000	8.9477	3.6265	0.0000	3.6265			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**8.9477**	**1.1309**	**10.0786**	**3.6265**	**1.0404**	**4.6669**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0218	1.4465	0.2427	5.1400e-003	0.1358	9.1800e-003	0.1449	0.0371	8.7800e-003	0.0459			544.3476	1.0700e-003	0.0854	569.8104
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0821	0.0471	0.6053	1.8600e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			196.4072	4.3300e-003	4.9700e-003	197.9979
Total	**0.1039**	**1.4935**	**0.8480**	**7.0000e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7900e-003**	**0.1147**			**740.7547**	**5.4000e-003**	**0.0903**	**767.8083**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9477	0.0000	8.9477	3.6265	0.0000	3.6265			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**8.9477**	**1.1309**	**10.0786**	**3.6265**	**1.0404**	**4.6669**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0218	1.4465	0.2427	5.1400e-003	0.1358	9.1800e-003	0.1449	0.0371	8.7800e-003	0.0459			544.3476	1.0700e-003	0.0854	569.8104
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0821	0.0471	0.6053	1.8600e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			196.4072	4.3300e-003	4.9700e-003	197.9979
Total	**0.1039**	**1.4935**	**0.8480**	**7.0000e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7900e-003**	**0.1147**			**740.7547**	**5.4000e-003**	**0.0903**	**767.8083**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0110**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0580	0.0322	0.4296	1.3500e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			144.4188	2.9800e-003	3.5400e-003	145.5473
Total	**0.0580**	**0.0322**	**0.4296**	**1.3500e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**144.4188**	**2.9800e-003**	**3.5400e-003**	**145.5473**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0959					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0110**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0580	0.0322	0.4296	1.3500e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			144.4188	2.9800e-003	3.5400e-003	145.5473
Total	**0.0580**	**0.0322**	**0.4296**	**1.3500e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**144.4188**	**2.9800e-003**	**3.5400e-003**	**145.5473**

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3014	0.3024	2.3378	3.3000e-003	0.3801	3.1500e-003	0.3833	0.1014	2.9500e-003	0.1044			351.3050	0.0344	0.0215	358.5697
Unmitigated	0.3014	0.3024	2.3378	3.3000e-003	0.3801	3.1500e-003	0.3833	0.1014	2.9500e-003	0.1044			351.3050	0.0344	0.0215	358.5697

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	49.53	124.46	139.07	94,580	94,580
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	49.53	124.46	139.07	94,580	94,580

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	7.90	3.40	3.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Recreational	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Other Asphalt Surfaces	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Parking Lot	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
User Defined Recreational	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

Meeks Bay Alternative 2 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2585	4.5000e-004	0.0493	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1059	2.8000e-004		0.1127
Unmitigated	0.2585	4.5000e-004	0.0493	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1059	2.8000e-004		0.1127

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.5400e-003	4.5000e-004	0.0493	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1059	2.8000e-004		0.1127
Total	**0.2585**	**4.5000e-004**	**0.0493**	**0.0000**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**			**0.1059**	**2.8000e-004**		**0.1127**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.5400e-003	4.5000e-004	0.0493	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1059	2.8000e-004		0.1127
Total	**0.2585**	**4.5000e-004**	**0.0493**	**0.0000**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**			**0.1059**	**2.8000e-004**		**0.1127**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Meeks Bay Alternative 3

El Dorado-Lake Tahoe County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	44.00	1000sqft	1.01	44,000.00	0
Parking Lot	390.00	Space	3.51	156,000.00	0
City Park	63.50	Acre	63.50	2,766,060.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2029
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.66	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Emissions factors calculated for Liberty Utilities.

Land Use - Alternative includes restoration of Meeks Creek and Lagoon, construction of 390 parking spaces, SR 89 bridge replacement, and bicyle infrastructure.

Construction Phase - Construction would occur over a 5-year period. Construction activities would be limited to May 1-October 15 consistent with local regulations.

Off-road Equipment - Addition of bore/drill rig for construction of pier.

Off-road Equipment -

Demolition -

Grading - Marina removal and restoration would require substantial earth moving and grading, preliminarily estimated from the conceptual design as 30,000 cubic yards of excavation.

Vehicle Trips - approximately 95,000 VMT annually generated.

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	75.00	120.00
tblConstructionPhase	PhaseEndDate	6/25/2024	10/15/2024
tblConstructionPhase	PhaseEndDate	11/26/2024	10/15/2025
tblConstructionPhase	PhaseEndDate	4/29/2025	10/15/2026
tblConstructionPhase	PhaseEndDate	9/30/2025	10/15/2027
tblConstructionPhase	PhaseEndDate	1/13/2026	10/13/2028
tblConstructionPhase	PhaseStartDate	6/26/2024	5/1/2025
tblConstructionPhase	PhaseStartDate	11/27/2024	5/1/2026
tblConstructionPhase	PhaseStartDate	4/30/2025	5/1/2027
tblConstructionPhase	PhaseStartDate	10/1/2025	5/1/2028
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	180.00	17.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.029
tblProjectCharacteristics	CO2IntensityFactor	0	535.66
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	3.60
tblVehicleTrips	CNW_TL	6.60	3.40

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	CW_TL	14.70	7.70

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1660	1.7324	1.1551	2.7300e-003	1.1146	0.0745	1.1891	0.6026	0.0685	0.6711			242.8383	0.0653	5.2400e-003	246.0301
2025	0.1805	1.7741	1.6359	4.1700e-003	0.3934	0.0685	0.4620	0.2057	0.0631	0.2688			369.4055	0.1061	5.1500e-003	373.5923
2026	0.1802	1.7693	1.6331	4.1600e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			368.4881	0.1061	5.0300e-003	372.6380
2027	0.1799	1.7649	1.6307	4.1500e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			367.5496	0.1061	4.9000e-003	371.6614
2028	0.0640	0.5167	0.9004	1.4500e-003	0.0110	0.0252	0.0362	2.9300e-003	0.0232	0.0261			128.1248	0.0390	1.8000e-004	129.1542
Maximum	**0.1805**	**1.7741**	**1.6359**	**4.1700e-003**	**1.1146**	**0.0745**	**1.1891**	**0.6026**	**0.0685**	**0.6711**			**369.4055**	**0.1061**	**5.2400e-003**	**373.5923**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1660	1.7324	1.1551	2.7300e-003	1.1146	0.0745	1.1891	0.6026	0.0685	0.6711			242.8380	0.0653	5.2400e-003	246.0299
2025	0.1805	1.7741	1.6359	4.1700e-003	0.3934	0.0685	0.4620	0.2057	0.0631	0.2688			369.4052	0.1061	5.1500e-003	373.5919
2026	0.1802	1.7693	1.6331	4.1600e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			368.4877	0.1061	5.0300e-003	372.6376
2027	0.1799	1.7649	1.6306	4.1500e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			367.5492	0.1061	4.9000e-003	371.6610
2028	0.0640	0.5167	0.9004	1.4500e-003	0.0110	0.0252	0.0362	2.9300e-003	0.0232	0.0261			128.1246	0.0390	1.8000e-004	129.1541
Maximum	**0.1805**	**1.7741**	**1.6359**	**4.1700e-003**	**1.1146**	**0.0745**	**1.1891**	**0.6026**	**0.0685**	**0.6711**			**369.4052**	**0.1061**	**5.2400e-003**	**373.5919**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2024**	**7-31-2024**	1.0376	1.0376
2	**8-1-2024**	**10-31-2024**	0.8576	0.8576
5	**5-1-2025**	**7-31-2025**	1.0685	1.0685
6	**8-1-2025**	**10-31-2025**	0.8832	0.8832
9	**5-1-2026**	**7-31-2026**	1.0658	1.0658
10	**8-1-2026**	**10-31-2026**	0.8809	0.8809
13	**5-1-2027**	**7-31-2027**	1.0634	1.0634

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14	**8-1-2027**	**10-31-2027**	0.8789	0.8789
17	**5-1-2028**	**7-31-2028**	0.3180	0.3180
18	**8-1-2028**	**9-30-2028**	0.2109	0.2109
		Highest	1.0685	1.0685

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0463	4.0000e-005	4.5600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005			8.8900e-003	2.0000e-005	0.0000	9.4700e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			13.2662	7.2000e-004	1.5000e-004	13.3285
Mobile	0.0300	0.0278	0.2092	3.2000e-004	0.0352	3.0000e-004	0.0355	9.4200e-003	2.8000e-004	9.7000e-003			31.0874	2.7900e-003	1.8000e-003	31.6946
Waste						0.0000	0.0000		0.0000	0.0000			1.1083	0.0655	0.0000	2.7458
Water						0.0000	0.0000		0.0000	0.0000			64.3404	3.4800e-003	7.2000e-004	64.6423
Total	**0.0763**	**0.0278**	**0.2138**	**3.2000e-004**	**0.0352**	**3.2000e-004**	**0.0355**	**9.4200e-003**	**3.0000e-004**	**9.7200e-003**			**109.8113**	**0.0725**	**2.6700e-003**	**112.4206**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0463	4.0000e-005	4.5600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005			8.8900e-003	2.0000e-005	0.0000	9.4700e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			13.2662	7.2000e-004	1.5000e-004	13.3285
Mobile	0.0300	0.0278	0.2092	3.2000e-004	0.0352	3.0000e-004	0.0355	9.4200e-003	2.8000e-004	9.7000e-003			31.0874	2.7900e-003	1.8000e-003	31.6946
Waste						0.0000	0.0000		0.0000	0.0000			1.1083	0.0655	0.0000	2.7458
Water						0.0000	0.0000		0.0000	0.0000			64.3404	3.4800e-003	7.2000e-004	64.6423
Total	**0.0763**	**0.0278**	**0.2138**	**3.2000e-004**	**0.0352**	**3.2000e-004**	**0.0355**	**9.4200e-003**	**3.0000e-004**	**9.7200e-003**			**109.8113**	**0.0725**	**2.6700e-003**	**112.4206**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Restoration Efforts (2024)	Site Preparation	5/1/2024	10/15/2024	5	120	
2	Restoration Efforts (2026)	Grading	5/1/2025	10/15/2025	5	120	
3	Restoration Efforts (2027)	Grading	5/1/2026	10/15/2026	5	120	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Restoration Efforts (2025)	Grading	5/1/2027	10/15/2027	5	120	
5	Paving	Paving	5/1/2028	10/13/2028	5	120	

Acres of Grading (Site Preparation Phase): 17

Acres of Grading (Grading Phase): 17

Acres of Paving: 4.52

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Restoration Efforts (2024)	Rubber Tired Dozers	3	8.00	247	0.40
Restoration Efforts (2024)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Restoration Efforts (2026)	Excavators	2	8.00	158	0.38
Restoration Efforts (2026)	Graders	1	8.00	187	0.41
Restoration Efforts (2026)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2026)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2026)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2027)	Excavators	2	8.00	158	0.38
Restoration Efforts (2027)	Graders	1	8.00	187	0.41
Restoration Efforts (2027)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2027)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2027)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2025)	Excavators	2	8.00	158	0.38
Restoration Efforts (2025)	Graders	1	8.00	187	0.41
Restoration Efforts (2025)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2025)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2025)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42

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Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Restoration Efforts (2024)	7	18.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2026)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2027)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2025)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0935	0.0000	1.0935	0.5969	0.0000	0.5969			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1597	1.6306	1.1001	2.2800e-003		0.0738	0.0738		0.0679	0.0679			200.7424	0.0649	0.0000	202.3655
Total	**0.1597**	**1.6306**	**1.1001**	**2.2800e-003**	**1.0935**	**0.0738**	**1.1673**	**0.5969**	**0.0679**	**0.6648**			**200.7424**	**0.0649**	**0.0000**	**202.3655**

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3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-003	0.0986	0.0150	3.3000e-004	7.8400e-003	6.4000e-004	8.4800e-003	2.1500e-003	6.1000e-004	2.7600e-003			31.6119	7.0000e-005	4.9500e-003	33.0901
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7900e-003	3.2100e-003	0.0400	1.1000e-004	0.0132	7.0000e-005	0.0133	3.5200e-003	6.0000e-005	3.5800e-003			10.4840	2.7000e-004	2.8000e-004	10.5746
Total	**6.2900e-003**	**0.1018**	**0.0549**	**4.4000e-004**	**0.0211**	**7.1000e-004**	**0.0218**	**5.6700e-003**	**6.7000e-004**	**6.3400e-003**			**42.0959**	**3.4000e-004**	**5.2300e-003**	**43.6646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0935	0.0000	1.0935	0.5969	0.0000	0.5969			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1597	1.6306	1.1001	2.2800e-003		0.0738	0.0738		0.0679	0.0679			200.7421	0.0649	0.0000	202.3652
Total	**0.1597**	**1.6306**	**1.1001**	**2.2800e-003**	**1.0935**	**0.0738**	**1.1673**	**0.5969**	**0.0679**	**0.6648**			**200.7421**	**0.0649**	**0.0000**	**202.3652**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-003	0.0986	0.0150	3.3000e-004	7.8400e-003	6.4000e-004	8.4800e-003	2.1500e-003	6.1000e-004	2.7600e-003			31.6119	7.0000e-005	4.9500e-003	33.0901
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7900e-003	3.2100e-003	0.0400	1.1000e-004	0.0132	7.0000e-005	0.0133	3.5200e-003	6.0000e-005	3.5800e-003			10.4840	2.7000e-004	2.8000e-004	10.5746
Total	**6.2900e-003**	**0.1018**	**0.0549**	**4.4000e-004**	**0.0211**	**7.1000e-004**	**0.0218**	**5.6700e-003**	**6.7000e-004**	**6.3400e-003**			**42.0959**	**3.4000e-004**	**5.2300e-003**	**43.6646**

3.3 Restoration Efforts (2026) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0373	0.1058	0.0000	329.6815
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0373**	**0.1058**	**0.0000**	**329.6815**

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3.3 Restoration Efforts (2026) - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4500e-003	0.0943	0.0148	3.2000e-004	7.8500e-003	6.1000e-004	8.4500e-003	2.1500e-003	5.8000e-004	2.7400e-003			30.9844	7.0000e-005	4.8600e-003	32.4335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.0200e-003	3.1900e-003	0.0413	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	7.0000e-005	3.9800e-003			11.3839	2.7000e-004	2.9000e-004	11.4773
Total	**6.4700e-003**	**0.0975**	**0.0561**	**4.4000e-004**	**0.0225**	**6.8000e-004**	**0.0232**	**6.0600e-003**	**6.5000e-004**	**6.7200e-003**			**42.3683**	**3.4000e-004**	**5.1500e-003**	**43.9108**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0369	0.1058	0.0000	329.6811
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0369**	**0.1058**	**0.0000**	**329.6811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4500e-003	0.0943	0.0148	3.2000e-004	7.8500e-003	6.1000e-004	8.4500e-003	2.1500e-003	5.8000e-004	2.7400e-003			30.9844	7.0000e-005	4.8600e-003	32.4335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.0200e-003	3.1900e-003	0.0413	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	7.0000e-005	3.9800e-003			11.3839	2.7000e-004	2.9000e-004	11.4773
Total	**6.4700e-003**	**0.0975**	**0.0561**	**4.4000e-004**	**0.0225**	**6.8000e-004**	**0.0232**	**6.0600e-003**	**6.5000e-004**	**6.7200e-003**			**42.3683**	**3.4000e-004**	**5.1500e-003**	**43.9108**

3.4 Restoration Efforts (2027) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0373	0.1058	0.0000	329.6815
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0373**	**0.1058**	**0.0000**	**329.6815**

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3.4 Restoration Efforts (2027) - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0898	0.0146	3.2000e-004	7.8500e-003	5.8000e-004	8.4200e-003	2.1500e-003	5.5000e-004	2.7100e-003			30.3219	6.0000e-005	4.7500e-003	31.7401
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7400e-003	2.8800e-003	0.0386	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			11.1290	2.5000e-004	2.7000e-004	11.2163
Total	**6.1300e-003**	**0.0927**	**0.0533**	**4.4000e-004**	**0.0225**	**6.5000e-004**	**0.0232**	**6.0600e-003**	**6.1000e-004**	**6.6800e-003**			**41.4509**	**3.1000e-004**	**5.0200e-003**	**42.9565**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0369	0.1058	0.0000	329.6811
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0369**	**0.1058**	**0.0000**	**329.6811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0898	0.0146	3.2000e-004	7.8500e-003	5.8000e-004	8.4200e-003	2.1500e-003	5.5000e-004	2.7100e-003			30.3219	6.0000e-005	4.7500e-003	31.7401
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7400e-003	2.8800e-003	0.0386	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			11.1290	2.5000e-004	2.7000e-004	11.2163
Total	**6.1300e-003**	**0.0927**	**0.0533**	**4.4000e-004**	**0.0225**	**6.5000e-004**	**0.0232**	**6.0600e-003**	**6.1000e-004**	**6.6800e-003**			**41.4509**	**3.1000e-004**	**5.0200e-003**	**42.9565**

3.5 Restoration Efforts (2025) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0373	0.1058	0.0000	329.6815
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0373**	**0.1058**	**0.0000**	**329.6815**

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3.5 Restoration Efforts (2025) - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3400e-003	0.0858	0.0145	3.1000e-004	7.8500e-003	5.5000e-004	8.4000e-003	2.1500e-003	5.3000e-004	2.6800e-003			29.6198	6.0000e-005	4.6400e-003	31.0053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.4800e-003	2.6100e-003	0.0363	1.1000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			10.8925	2.2000e-004	2.6000e-004	10.9746
Total	**5.8200e-003**	**0.0884**	**0.0508**	**4.2000e-004**	**0.0225**	**6.2000e-004**	**0.0232**	**6.0600e-003**	**5.9000e-004**	**6.6500e-003**			**40.5123**	**2.8000e-004**	**4.9000e-003**	**41.9799**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0369	0.1058	0.0000	329.6811
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0369**	**0.1058**	**0.0000**	**329.6811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3400e-003	0.0858	0.0145	3.1000e-004	7.8500e-003	5.5000e-004	8.4000e-003	2.1500e-003	5.3000e-004	2.6800e-003			29.6198	6.0000e-005	4.6400e-003	31.0053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.4800e-003	2.6100e-003	0.0363	1.1000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			10.8925	2.2000e-004	2.6000e-004	10.9746
Total	**5.8200e-003**	**0.0884**	**0.0508**	**4.2000e-004**	**0.0225**	**6.2000e-004**	**0.0232**	**6.0600e-003**	**5.9000e-004**	**6.6500e-003**			**40.5123**	**2.8000e-004**	**4.9000e-003**	**41.9799**

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0549	0.5149	0.8747	1.3700e-003		0.0251	0.0251		0.0231	0.0231			120.1155	0.0389	0.0000	121.0867
Paving	5.9200e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0608**	**0.5149**	**0.8747**	**1.3700e-003**		**0.0251**	**0.0251**		**0.0231**	**0.0231**			**120.1155**	**0.0389**	**0.0000**	**121.0867**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	3.1600e-003	1.7800e-003	0.0258	8.0000e-005	0.0110	5.0000e-005	0.0111	2.9300e-003	4.0000e-005	2.9700e-003			8.0092	1.5000e-004	1.8000e-004	8.0675
Total	**3.1600e-003**	**1.7800e-003**	**0.0258**	**8.0000e-005**	**0.0110**	**5.0000e-005**	**0.0111**	**2.9300e-003**	**4.0000e-005**	**2.9700e-003**			**8.0092**	**1.5000e-004**	**1.8000e-004**	**8.0675**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0549	0.5149	0.8747	1.3700e-003		0.0251	0.0251		0.0231	0.0231			120.1154	0.0389	0.0000	121.0866
Paving	5.9200e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0608**	**0.5149**	**0.8747**	**1.3700e-003**		**0.0251**	**0.0251**		**0.0231**	**0.0231**			**120.1154**	**0.0389**	**0.0000**	**121.0866**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	3.1600e-003	1.7800e-003	0.0258	8.0000e-005	0.0110	5.0000e-005	0.0111	2.9300e-003	4.0000e-005	2.9700e-003			8.0092	1.5000e-004	1.8000e-004	8.0675
Total	**3.1600e-003**	**1.7800e-003**	**0.0258**	**8.0000e-005**	**0.0110**	**5.0000e-005**	**0.0111**	**2.9300e-003**	**4.0000e-005**	**2.9700e-003**			**8.0092**	**1.5000e-004**	**1.8000e-004**	**8.0675**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0300	0.0278	0.2092	3.2000e-004	0.0352	3.0000e-004	0.0355	9.4200e-003	2.8000e-004	9.7000e-003			31.0874	2.7900e-003	1.8000e-003	31.6946
Unmitigated	0.0300	0.0278	0.2092	3.2000e-004	0.0352	3.0000e-004	0.0355	9.4200e-003	2.8000e-004	9.7000e-003			31.0874	2.7900e-003	1.8000e-003	31.6946

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	49.53	124.46	139.07	95,531	95,531
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	49.53	124.46	139.07	95,531	95,531

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	7.70	3.60	3.40	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Other Asphalt Surfaces	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Parking Lot	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000			13.2662	7.2000e-004	1.5000e-004	13.3285
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000			13.2662	7.2000e-004	1.5000e-004	13.3285
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	54600	13.2662	7.2000e-004	1.5000e-004	13.3285
Total		**13.2662**	**7.2000e-004**	**1.5000e-004**	**13.3285**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	54600	13.2662	7.2000e-004	1.5000e-004	13.3285
Total		**13.2662**	**7.2000e-004**	**1.5000e-004**	**13.3285**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0463	4.0000e-005	4.5600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005			8.8900e-003	2.0000e-005	0.0000	9.4700e-003
Unmitigated	0.0463	4.0000e-005	4.5600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005			8.8900e-003	2.0000e-005	0.0000	9.4700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.9500e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0389					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	4.2000e-004	4.0000e-005	4.5600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005			8.8900e-003	2.0000e-005	0.0000	9.4700e-003
Total	**0.0463**	**4.0000e-005**	**4.5600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**			**8.8900e-003**	**2.0000e-005**	**0.0000**	**9.4700e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.9500e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0389					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	4.2000e-004	4.0000e-005	4.5600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005			8.8900e-003	2.0000e-005	0.0000	9.4700e-003
Total	**0.0463**	**4.0000e-005**	**4.5600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**			**8.8900e-003**	**2.0000e-005**	**0.0000**	**9.4700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	64.3404	3.4800e-003	7.2000e-004	64.6423
Unmitigated	64.3404	3.4800e-003	7.2000e-004	64.6423

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 75.6591	64.3404	3.4800e-003	7.2000e-004	64.6423
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**64.3404**	**3.4800e-003**	**7.2000e-004**	**64.6423**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 75.6591	64.3404	3.4800e-003	7.2000e-004	64.6423
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**64.3404**	**3.4800e-003**	**7.2000e-004**	**64.6423**

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.1083	0.0655	0.0000	2.7458
Unmitigated	1.1083	0.0655	0.0000	2.7458

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	5.46	1.1083	0.0655	0.0000	2.7458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1083**	**0.0655**	**0.0000**	**2.7458**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	5.46	1.1083	0.0655	0.0000	2.7458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1083**	**0.0655**	**0.0000**	**2.7458**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Meeks Bay Alternative 3

El Dorado-Lake Tahoe County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	44.00	1000sqft	1.01	44,000.00	0
Parking Lot	390.00	Space	3.51	156,000.00	0
City Park	63.50	Acre	63.50	2,766,060.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2029
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.66	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Emissions factors calculated for Liberty Utilities.

Land Use - Alternative includes restoration of Meeks Creek and Lagoon, construction of 390 parking spaces, SR 89 bridge replacement, and bicyle infrastructure.

Construction Phase - Construction would occur over a 5-year period. Construction activities would be limited to May 1-October 15 consistent with local regulations.

Off-road Equipment - Addition of bore/drill rig for construction of pier.

Off-road Equipment -

Demolition -

Grading - Marina removal and restoration would require substantial earth moving and grading, preliminarily estimated from the conceptual design as 30,000 cubic yards of excavation.

Vehicle Trips - approximately 95,000 VMT annually generated.

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	75.00	120.00
tblConstructionPhase	PhaseEndDate	6/25/2024	10/15/2024
tblConstructionPhase	PhaseEndDate	11/26/2024	10/15/2025
tblConstructionPhase	PhaseEndDate	4/29/2025	10/15/2026
tblConstructionPhase	PhaseEndDate	9/30/2025	10/15/2027
tblConstructionPhase	PhaseEndDate	1/13/2026	10/13/2028
tblConstructionPhase	PhaseStartDate	6/26/2024	5/1/2025
tblConstructionPhase	PhaseStartDate	11/27/2024	5/1/2026
tblConstructionPhase	PhaseStartDate	4/30/2025	5/1/2027
tblConstructionPhase	PhaseStartDate	10/1/2025	5/1/2028
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	180.00	17.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.029
tblProjectCharacteristics	CO2IntensityFactor	0	535.66
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	3.60
tblVehicleTrips	CNW_TL	6.60	3.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	CW_TL	14.70	7.70

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7728	28.8056	19.3279	0.0456	18.5913	1.2411	19.8324	10.0464	1.1422	11.1886			4,475.8095	1.1988	0.0957	4,534.3074
2025	3.0163	29.5040	27.3446	0.0696	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,802.2829	1.9492	0.0941	6,879.0544
2026	3.0103	29.4282	27.2922	0.0694	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,785.0380	1.9487	0.0919	6,861.1406
2027	3.0045	29.3594	27.2463	0.0692	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,767.4453	1.9482	0.0896	6,842.8569
2028	1.0707	8.6078	15.0561	0.0243	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,364.9175	0.7164	3.0800e-003	2,383.7455
Maximum	**3.0163**	**29.5040**	**27.3446**	**0.0696**	**18.5913**	**1.2411**	**19.8324**	**10.0464**	**1.1422**	**11.1886**			**6,802.2829**	**1.9492**	**0.0957**	**6,879.0544**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7728	28.8056	19.3279	0.0456	18.5913	1.2411	19.8324	10.0464	1.1422	11.1886			4,475.8095	1.1988	0.0957	4,534.3074
2025	3.0163	29.5040	27.3446	0.0696	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,802.2829	1.9492	0.0941	6,879.0544
2026	3.0103	29.4282	27.2922	0.0694	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,785.0380	1.9487	0.0919	6,861.1406
2027	3.0045	29.3594	27.2463	0.0692	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,767.4452	1.9482	0.0896	6,842.8569
2028	1.0707	8.6078	15.0561	0.0243	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,364.9175	0.7164	3.0800e-003	2,383.7455
Maximum	**3.0163**	**29.5040**	**27.3446**	**0.0696**	**18.5913**	**1.2411**	**19.8324**	**10.0464**	**1.1422**	**11.1886**			**6,802.2829**	**1.9492**	**0.0957**	**6,879.0544**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2561	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3908	0.2664	2.0992	3.5400e-003	0.3839	3.1800e-003	0.3871	0.1024	2.9800e-003	0.1054			377.5069	0.0289	0.0196	384.0721
Total	**0.6469**	**0.2668**	**2.1499**	**3.5400e-003**	**0.3839**	**3.3600e-003**	**0.3873**	**0.1024**	**3.1600e-003**	**0.1056**			**377.6158**	**0.0292**	**0.0196**	**384.1881**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2561	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3908	0.2664	2.0992	3.5400e-003	0.3839	3.1800e-003	0.3871	0.1024	2.9800e-003	0.1054			377.5069	0.0289	0.0196	384.0721
Total	**0.6469**	**0.2668**	**2.1499**	**3.5400e-003**	**0.3839**	**3.3600e-003**	**0.3873**	**0.1024**	**3.1600e-003**	**0.1056**			**377.6158**	**0.0292**	**0.0196**	**384.1881**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Restoration Efforts (2024)	Site Preparation	5/1/2024	10/15/2024	5	120	
2	Restoration Efforts (2026)	Grading	5/1/2025	10/15/2025	5	120	
3	Restoration Efforts (2027)	Grading	5/1/2026	10/15/2026	5	120	
4	Restoration Efforts (2025)	Grading	5/1/2027	10/15/2027	5	120	
5	Paving	Paving	5/1/2028	10/13/2028	5	120	

Acres of Grading (Site Preparation Phase): 17

Acres of Grading (Grading Phase): 17

Acres of Paving: 4.52

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Restoration Efforts (2024)	Rubber Tired Dozers	3	8.00	247	0.40
Restoration Efforts (2024)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Restoration Efforts (2026)	Excavators	2	8.00	158	0.38
Restoration Efforts (2026)	Graders	1	8.00	187	0.41
Restoration Efforts (2026)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2026)	Scrapers	2	8.00	367	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Restoration Efforts (2026)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2027)	Excavators	2	8.00	158	0.38
Restoration Efforts (2027)	Graders	1	8.00	187	0.41
Restoration Efforts (2027)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2027)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2027)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2025)	Excavators	2	8.00	158	0.38
Restoration Efforts (2025)	Graders	1	8.00	187	0.41
Restoration Efforts (2025)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2025)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2025)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Restoration Efforts (2024)	7	18.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2026)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2027)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2025)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310			3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**18.2257**	**1.2294**	**19.4551**	**9.9483**	**1.1310**	**11.0793**			**3,688.0100**	**1.1928**		**3,717.8294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0255	1.5826	0.2491	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0101	0.0472			580.6693	1.2600e-003	0.0910	607.8166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0865	0.0470	0.7432	2.0100e-003	0.2299	1.1700e-003	0.2311	0.0610	1.0800e-003	0.0621			207.1303	4.7400e-003	4.7400e-003	208.6614
Total	**0.1119**	**1.6296**	**0.9923**	**7.5000e-003**	**0.3656**	**0.0118**	**0.3774**	**0.0981**	**0.0112**	**0.1093**			**787.7996**	**6.0000e-003**	**0.0957**	**816.4780**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310			3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**18.2257**	**1.2294**	**19.4551**	**9.9483**	**1.1310**	**11.0793**			**3,688.0100**	**1.1928**		**3,717.8294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0255	1.5826	0.2491	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0101	0.0472			580.6693	1.2600e-003	0.0910	607.8166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0865	0.0470	0.7432	2.0100e-003	0.2299	1.1700e-003	0.2311	0.0610	1.0800e-003	0.0621			207.1303	4.7400e-003	4.7400e-003	208.6614
Total	**0.1119**	**1.6296**	**0.9923**	**7.5000e-003**	**0.3656**	**0.0118**	**0.3774**	**0.0981**	**0.0112**	**0.1093**			**787.7996**	**6.0000e-003**	**0.0957**	**816.4780**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.5144	0.2465	5.3800e-003	0.1357	0.0101	0.1458	0.0371	9.7000e-003	0.0468			569.1320	1.2200e-003	0.0892	595.7440
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0905	0.0467	0.7670	2.1600e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			224.8695	4.7500e-003	4.9000e-003	226.4489
Total	**0.1150**	**1.5611**	**1.0135**	**7.5400e-003**	**0.3912**	**0.0114**	**0.4025**	**0.1049**	**0.0108**	**0.1157**			**794.0014**	**5.9700e-003**	**0.0941**	**822.1929**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.5144	0.2465	5.3800e-003	0.1357	0.0101	0.1458	0.0371	9.7000e-003	0.0468			569.1320	1.2200e-003	0.0892	595.7440
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0905	0.0467	0.7670	2.1600e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			224.8695	4.7500e-003	4.9000e-003	226.4489
Total	**0.1150**	**1.5611**	**1.0135**	**7.5400e-003**	**0.3912**	**0.0114**	**0.4025**	**0.1049**	**0.0108**	**0.1157**			**794.0014**	**5.9700e-003**	**0.0941**	**822.1929**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0236	1.4432	0.2436	5.2600e-003	0.1357	9.6100e-003	0.1453	0.0371	9.1900e-003	0.0463			556.9510	1.1700e-003	0.0873	582.9965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0855	0.0422	0.7175	2.0900e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			219.8056	4.3100e-003	4.6000e-003	221.2827
Total	**0.1090**	**1.4853**	**0.9611**	**7.3500e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1151**			**776.7566**	**5.4800e-003**	**0.0919**	**804.2792**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0236	1.4432	0.2436	5.2600e-003	0.1357	9.6100e-003	0.1453	0.0371	9.1900e-003	0.0463			556.9510	1.1700e-003	0.0873	582.9965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0855	0.0422	0.7175	2.0900e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			219.8056	4.3100e-003	4.6000e-003	221.2827
Total	**0.1090**	**1.4853**	**0.9611**	**7.3500e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1151**			**776.7566**	**5.4800e-003**	**0.0919**	**804.2792**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.3783	0.2410	5.1400e-003	0.1358	9.1500e-003	0.1449	0.0371	8.7600e-003	0.0459			544.0445	1.1200e-003	0.0853	569.4871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0806	0.0382	0.6742	2.0300e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			215.1194	3.9100e-003	4.3300e-003	216.5084
Total	**0.1033**	**1.4166**	**0.9152**	**7.1700e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7700e-003**	**0.1147**			**759.1638**	**5.0300e-003**	**0.0896**	**785.9955**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.3783	0.2410	5.1400e-003	0.1358	9.1500e-003	0.1449	0.0371	8.7600e-003	0.0459			544.0445	1.1200e-003	0.0853	569.4871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0806	0.0382	0.6742	2.0300e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			215.1194	3.9100e-003	4.3300e-003	216.5084
Total	**0.1033**	**1.4166**	**0.9152**	**7.1700e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7700e-003**	**0.1147**			**759.1638**	**5.0300e-003**	**0.0896**	**785.9955**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0138**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0568	0.0261	0.4781	1.4800e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			158.1723	2.6800e-003	3.0800e-003	159.1577
Total	**0.0568**	**0.0261**	**0.4781**	**1.4800e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**158.1723**	**2.6800e-003**	**3.0800e-003**	**159.1577**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0138**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0568	0.0261	0.4781	1.4800e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			158.1723	2.6800e-003	3.0800e-003	159.1577
Total	**0.0568**	**0.0261**	**0.4781**	**1.4800e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**158.1723**	**2.6800e-003**	**3.0800e-003**	**159.1577**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3908	0.2664	2.0992	3.5400e-003	0.3839	3.1800e-003	0.3871	0.1024	2.9800e-003	0.1054			377.5069	0.0289	0.0196	384.0721
Unmitigated	0.3908	0.2664	2.0992	3.5400e-003	0.3839	3.1800e-003	0.3871	0.1024	2.9800e-003	0.1054			377.5069	0.0289	0.0196	384.0721

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	49.53	124.46	139.07	95,531	95,531
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	49.53	124.46	139.07	95,531	95,531

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	7.70	3.60	3.40	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Other Asphalt Surfaces	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Parking Lot	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2561	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Unmitigated	0.2561	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0381					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2134					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6600e-003	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Total	**0.2561**	**4.6000e-004**	**0.0507**	**0.0000**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**			**0.1089**	**2.8000e-004**		**0.1160**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0381					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2134					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6600e-003	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Total	**0.2561**	**4.6000e-004**	**0.0507**	**0.0000**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**			**0.1089**	**2.8000e-004**		**0.1160**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Meeks Bay Alternative 3

El Dorado-Lake Tahoe County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	44.00	1000sqft	1.01	44,000.00	0
Parking Lot	390.00	Space	3.51	156,000.00	0
City Park	63.50	Acre	63.50	2,766,060.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2029
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.66	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Emissions factors calculated for Liberty Utilities.

Land Use - Alternative includes restoration of Meeks Creek and Lagoon, construction of 390 parking spaces, SR 89 bridge replacement, and bicyle infrastructure.

Construction Phase - Construction would occur over a 5-year period. Construction activities would be limited to May 1-October 15 consistent with local regulations.

Off-road Equipment - Addition of bore/drill rig for construction of pier.

Off-road Equipment -

Demolition -

Grading - Marina removal and restoration would require substantial earth moving and grading, preliminarily estimated from the conceptual design as 30,000 cubic yards of excavation.

Vehicle Trips - approximately 95,000 VMT annually generated.

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	75.00	120.00
tblConstructionPhase	PhaseEndDate	6/25/2024	10/15/2024
tblConstructionPhase	PhaseEndDate	11/26/2024	10/15/2025
tblConstructionPhase	PhaseEndDate	4/29/2025	10/15/2026
tblConstructionPhase	PhaseEndDate	9/30/2025	10/15/2027
tblConstructionPhase	PhaseEndDate	1/13/2026	10/13/2028
tblConstructionPhase	PhaseStartDate	6/26/2024	5/1/2025
tblConstructionPhase	PhaseStartDate	11/27/2024	5/1/2026
tblConstructionPhase	PhaseStartDate	4/30/2025	5/1/2027
tblConstructionPhase	PhaseStartDate	10/1/2025	5/1/2028
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	180.00	17.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.029
tblProjectCharacteristics	CO2IntensityFactor	0	535.66
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	3.60
tblVehicleTrips	CNW_TL	6.60	3.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	CW_TL	14.70	7.70

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7730	28.8959	19.2514	0.0454	18.5913	1.2411	19.8325	10.0464	1.1422	11.1886			4,457.9422	1.1992	0.0965	4,516.6802
2025	3.0167	29.5903	27.2666	0.0694	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,782.9319	1.9496	0.0949	6,859.9516
2026	3.0108	29.5095	27.2201	0.0692	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,766.1838	1.9491	0.0927	6,842.5207
2027	3.0051	29.4364	27.1791	0.0691	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,749.0362	1.9486	0.0903	6,824.6697
2028	1.0718	8.6138	15.0075	0.0242	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,351.1640	0.7167	3.5400e-003	2,370.1351
Maximum	**3.0167**	**29.5903**	**27.2666**	**0.0694**	**18.5913**	**1.2411**	**19.8325**	**10.0464**	**1.1422**	**11.1886**			**6,782.9319**	**1.9496**	**0.0965**	**6,859.9516**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7730	28.8959	19.2514	0.0454	18.5913	1.2411	19.8325	10.0464	1.1422	11.1886			4,457.9422	1.1992	0.0965	4,516.6802
2025	3.0167	29.5903	27.2666	0.0694	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,782.9319	1.9496	0.0949	6,859.9516
2026	3.0108	29.5095	27.2201	0.0692	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,766.1838	1.9491	0.0927	6,842.5207
2027	3.0051	29.4364	27.1791	0.0691	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,749.0362	1.9486	0.0903	6,824.6697
2028	1.0718	8.6138	15.0075	0.0242	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,351.1640	0.7167	3.5400e-003	2,370.1351
Maximum	**3.0167**	**29.5903**	**27.2666**	**0.0694**	**18.5913**	**1.2411**	**19.8325**	**10.0464**	**1.1422**	**11.1886**			**6,782.9319**	**1.9496**	**0.0965**	**6,859.9516**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2561	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3025	0.3046	2.3523	3.3300e-003	0.3839	3.1800e-003	0.3871	0.1024	2.9800e-003	0.1054			354.6475	0.0346	0.0216	361.9571
Total	**0.5586**	**0.3050**	**2.4030**	**3.3300e-003**	**0.3839**	**3.3600e-003**	**0.3873**	**0.1024**	**3.1600e-003**	**0.1056**			**354.7564**	**0.0349**	**0.0216**	**362.0731**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2561	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3025	0.3046	2.3523	3.3300e-003	0.3839	3.1800e-003	0.3871	0.1024	2.9800e-003	0.1054			354.6475	0.0346	0.0216	361.9571
Total	**0.5586**	**0.3050**	**2.4030**	**3.3300e-003**	**0.3839**	**3.3600e-003**	**0.3873**	**0.1024**	**3.1600e-003**	**0.1056**			**354.7564**	**0.0349**	**0.0216**	**362.0731**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Restoration Efforts (2024)	Site Preparation	5/1/2024	10/15/2024	5	120	
2	Restoration Efforts (2026)	Grading	5/1/2025	10/15/2025	5	120	
3	Restoration Efforts (2027)	Grading	5/1/2026	10/15/2026	5	120	
4	Restoration Efforts (2025)	Grading	5/1/2027	10/15/2027	5	120	
5	Paving	Paving	5/1/2028	10/13/2028	5	120	

Acres of Grading (Site Preparation Phase): 17

Acres of Grading (Grading Phase): 17

Acres of Paving: 4.52

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Restoration Efforts (2024)	Rubber Tired Dozers	3	8.00	247	0.40
Restoration Efforts (2024)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Restoration Efforts (2026)	Excavators	2	8.00	158	0.38
Restoration Efforts (2026)	Graders	1	8.00	187	0.41
Restoration Efforts (2026)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2026)	Scrapers	2	8.00	367	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Restoration Efforts (2026)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2027)	Excavators	2	8.00	158	0.38
Restoration Efforts (2027)	Graders	1	8.00	187	0.41
Restoration Efforts (2027)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2027)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2027)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2025)	Excavators	2	8.00	158	0.38
Restoration Efforts (2025)	Graders	1	8.00	187	0.41
Restoration Efforts (2025)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2025)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2025)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Restoration Efforts (2024)	7	18.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2026)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2027)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2025)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310			3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**18.2257**	**1.2294**	**19.4551**	**9.9483**	**1.1310**	**11.0793**			**3,688.0100**	**1.1928**		**3,717.8294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.6619	0.2506	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0102	0.0473			580.9071	1.2100e-003	0.0911	608.0724
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0876	0.0579	0.6651	1.8300e-003	0.2299	1.1700e-003	0.2311	0.0610	1.0800e-003	0.0621			189.0251	5.1800e-003	5.4500e-003	190.7784
Total	**0.1121**	**1.7199**	**0.9158**	**7.3200e-003**	**0.3656**	**0.0118**	**0.3774**	**0.0981**	**0.0112**	**0.1093**			**769.9322**	**6.3900e-003**	**0.0965**	**798.8508**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310			3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**18.2257**	**1.2294**	**19.4551**	**9.9483**	**1.1310**	**11.0793**			**3,688.0100**	**1.1928**		**3,717.8294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.6619	0.2506	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0102	0.0473			580.9071	1.2100e-003	0.0911	608.0724
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0876	0.0579	0.6651	1.8300e-003	0.2299	1.1700e-003	0.2311	0.0610	1.0800e-003	0.0621			189.0251	5.1800e-003	5.4500e-003	190.7784
Total	**0.1121**	**1.7199**	**0.9158**	**7.3200e-003**	**0.3656**	**0.0118**	**0.3774**	**0.0981**	**0.0112**	**0.1093**			**769.9322**	**6.3900e-003**	**0.0965**	**798.8508**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0237	1.5899	0.2481	5.3800e-003	0.1357	0.0102	0.1459	0.0371	9.7300e-003	0.0468			569.3921	1.1700e-003	0.0893	596.0230
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0918	0.0576	0.6874	1.9700e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			205.2584	5.2200e-003	5.6300e-003	207.0672
Total	**0.1155**	**1.6474**	**0.9355**	**7.3500e-003**	**0.3912**	**0.0114**	**0.4026**	**0.1049**	**0.0109**	**0.1157**			**774.6505**	**6.3900e-003**	**0.0949**	**803.0902**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0237	1.5899	0.2481	5.3800e-003	0.1357	0.0102	0.1459	0.0371	9.7300e-003	0.0468			569.3921	1.1700e-003	0.0893	596.0230
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0918	0.0576	0.6874	1.9700e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			205.2584	5.2200e-003	5.6300e-003	207.0672
Total	**0.1155**	**1.6474**	**0.9355**	**7.3500e-003**	**0.3912**	**0.0114**	**0.4026**	**0.1049**	**0.0109**	**0.1157**			**774.6505**	**6.3900e-003**	**0.0949**	**803.0902**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.5147	0.2452	5.2700e-003	0.1357	9.6400e-003	0.1454	0.0371	9.2200e-003	0.0463			557.2342	1.1200e-003	0.0874	583.2995
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0869	0.0519	0.6438	1.9100e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			200.6681	4.7500e-003	5.2800e-003	202.3598
Total	**0.1096**	**1.5666**	**0.8890**	**7.1800e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1152**			**757.9024**	**5.8700e-003**	**0.0927**	**785.6593**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.5147	0.2452	5.2700e-003	0.1357	9.6400e-003	0.1454	0.0371	9.2200e-003	0.0463			557.2342	1.1200e-003	0.0874	583.2995
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0869	0.0519	0.6438	1.9100e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			200.6681	4.7500e-003	5.2800e-003	202.3598
Total	**0.1096**	**1.5666**	**0.8890**	**7.1800e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1152**			**757.9024**	**5.8700e-003**	**0.0927**	**785.6593**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0218	1.4465	0.2427	5.1400e-003	0.1358	9.1800e-003	0.1449	0.0371	8.7800e-003	0.0459			544.3476	1.0700e-003	0.0854	569.8104
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0821	0.0471	0.6053	1.8600e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			196.4072	4.3300e-003	4.9700e-003	197.9979
Total	**0.1039**	**1.4935**	**0.8480**	**7.0000e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7900e-003**	**0.1147**			**740.7547**	**5.4000e-003**	**0.0903**	**767.8083**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0218	1.4465	0.2427	5.1400e-003	0.1358	9.1800e-003	0.1449	0.0371	8.7800e-003	0.0459			544.3476	1.0700e-003	0.0854	569.8104
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0821	0.0471	0.6053	1.8600e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			196.4072	4.3300e-003	4.9700e-003	197.9979
Total	**0.1039**	**1.4935**	**0.8480**	**7.0000e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7900e-003**	**0.1147**			**740.7547**	**5.4000e-003**	**0.0903**	**767.8083**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0138**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0580	0.0322	0.4296	1.3500e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			144.4188	2.9800e-003	3.5400e-003	145.5473
Total	**0.0580**	**0.0322**	**0.4296**	**1.3500e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**144.4188**	**2.9800e-003**	**3.5400e-003**	**145.5473**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0138**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0580	0.0322	0.4296	1.3500e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			144.4188	2.9800e-003	3.5400e-003	145.5473
Total	**0.0580**	**0.0322**	**0.4296**	**1.3500e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**144.4188**	**2.9800e-003**	**3.5400e-003**	**145.5473**

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3025	0.3046	2.3523	3.3300e-003	0.3839	3.1800e-003	0.3871	0.1024	2.9800e-003	0.1054			354.6475	0.0346	0.0216	361.9571
Unmitigated	0.3025	0.3046	2.3523	3.3300e-003	0.3839	3.1800e-003	0.3871	0.1024	2.9800e-003	0.1054			354.6475	0.0346	0.0216	361.9571

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	49.53	124.46	139.07	95,531	95,531
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	49.53	124.46	139.07	95,531	95,531

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	7.70	3.60	3.40	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Other Asphalt Surfaces	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Parking Lot	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Meeks Bay Alternative 3 - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2561	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Unmitigated	0.2561	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0381					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2134					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6600e-003	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Total	**0.2561**	**4.6000e-004**	**0.0507**	**0.0000**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**			**0.1089**	**2.8000e-004**		**0.1160**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0381					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2134					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6600e-003	4.6000e-004	0.0507	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004			0.1089	2.8000e-004		0.1160
Total	**0.2561**	**4.6000e-004**	**0.0507**	**0.0000**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**			**0.1089**	**2.8000e-004**		**0.1160**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Meeks Bay Preferred Alternative

El Dorado-Lake Tahoe County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	44.00	1000sqft	1.01	44,000.00	0
Parking Lot	14.00	Space	0.13	5,600.00	0
City Park	63.50	Acre	63.50	2,766,060.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2029
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.66	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Emissions factors calculated for Liberty Utilities.

Land Use - Alternative includes restoration of Meeks Creek and Lagoon, construction of 14 additional parking spaces, SR 89 bridge replacement, and bicyle infrastructure.

Construction Phase - Construction would occur over a 5-year period. Construction activities would be limited to May 1-October 15 consistent with local regulations.

Off-road Equipment - Addition of bore/drill rig for construction of pier.

Off-road Equipment -

Demolition -

Grading - Marina removal and restoration would require substantial earth moving and grading, preliminarily estimated from the conceptual design as 30,000 cubic yards of excavation.

Vehicle Trips - approximately 95,000 VMT annually generated.

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	75.00	120.00
tblConstructionPhase	PhaseEndDate	6/25/2024	10/15/2024
tblConstructionPhase	PhaseEndDate	11/26/2024	10/15/2025
tblConstructionPhase	PhaseEndDate	4/29/2025	10/15/2026
tblConstructionPhase	PhaseEndDate	9/30/2025	10/15/2027
tblConstructionPhase	PhaseEndDate	1/13/2026	10/13/2028
tblConstructionPhase	PhaseStartDate	6/26/2024	5/1/2025
tblConstructionPhase	PhaseStartDate	11/27/2024	5/1/2026
tblConstructionPhase	PhaseStartDate	4/30/2025	5/1/2027
tblConstructionPhase	PhaseStartDate	10/1/2025	5/1/2028
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	180.00	17.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.029
tblProjectCharacteristics	CO2IntensityFactor	0	535.66
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	3.60
tblVehicleTrips	CNW_TL	6.60	3.50

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	CW_TL	14.70	7.70

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1660	1.7324	1.1551	2.7300e-003	1.1146	0.0745	1.1891	0.6026	0.0685	0.6711			242.8383	0.0653	5.2400e-003	246.0301
2025	0.1805	1.7741	1.6359	4.1700e-003	0.3934	0.0685	0.4620	0.2057	0.0631	0.2688			369.4055	0.1061	5.1500e-003	373.5923
2026	0.1802	1.7693	1.6331	4.1600e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			368.4881	0.1061	5.0300e-003	372.6380
2027	0.1799	1.7649	1.6307	4.1500e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			367.5496	0.1061	4.9000e-003	371.6614
2028	0.0596	0.5167	0.9004	1.4500e-003	0.0110	0.0252	0.0362	2.9300e-003	0.0232	0.0261			128.1248	0.0390	1.8000e-004	129.1542
Maximum	**0.1805**	**1.7741**	**1.6359**	**4.1700e-003**	**1.1146**	**0.0745**	**1.1891**	**0.6026**	**0.0685**	**0.6711**			**369.4055**	**0.1061**	**5.2400e-003**	**373.5923**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1660	1.7324	1.1551	2.7300e-003	1.1146	0.0745	1.1891	0.6026	0.0685	0.6711			242.8380	0.0653	5.2400e-003	246.0299
2025	0.1805	1.7741	1.6359	4.1700e-003	0.3934	0.0685	0.4620	0.2057	0.0631	0.2688			369.4052	0.1061	5.1500e-003	373.5919
2026	0.1802	1.7693	1.6331	4.1600e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			368.4877	0.1061	5.0300e-003	372.6376
2027	0.1799	1.7649	1.6306	4.1500e-003	0.3934	0.0685	0.4619	0.2057	0.0630	0.2688			367.5492	0.1061	4.9000e-003	371.6610
2028	0.0596	0.5167	0.9004	1.4500e-003	0.0110	0.0252	0.0362	2.9300e-003	0.0232	0.0261			128.1246	0.0390	1.8000e-004	129.1541
Maximum	**0.1805**	**1.7741**	**1.6359**	**4.1700e-003**	**1.1146**	**0.0745**	**1.1891**	**0.6026**	**0.0685**	**0.6711**			**369.4052**	**0.1061**	**5.2400e-003**	**373.5919**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2024**	**7-31-2024**	1.0376	1.0376
2	**8-1-2024**	**10-31-2024**	0.8576	0.8576
5	**5-1-2025**	**7-31-2025**	1.0685	1.0685
6	**8-1-2025**	**10-31-2025**	0.8832	0.8832
9	**5-1-2026**	**7-31-2026**	1.0658	1.0658
10	**8-1-2026**	**10-31-2026**	0.8809	0.8809
13	**5-1-2027**	**7-31-2027**	1.0634	1.0634

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

14	**8-1-2027**	**10-31-2027**	0.8789	0.8789
17	**5-1-2028**	**7-31-2028**	0.3156	0.3156
18	**8-1-2028**	**9-30-2028**	0.2092	0.2092
		Highest	1.0685	1.0685

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0310	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000			2.1700e-003	1.0000e-005	0.0000	2.3100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.4762	3.0000e-005	1.0000e-005	0.4785
Mobile	0.0300	0.0279	0.2097	3.2000e-004	0.0353	3.0000e-004	0.0356	9.4500e-003	2.9000e-004	9.7400e-003			31.2012	2.8000e-003	1.8100e-003	31.8098
Waste						0.0000	0.0000		0.0000	0.0000			1.1083	0.0655	0.0000	2.7458
Water						0.0000	0.0000		0.0000	0.0000			64.3404	3.4800e-003	7.2000e-004	64.6423
Total	**0.0610**	**0.0279**	**0.2108**	**3.2000e-004**	**0.0353**	**3.0000e-004**	**0.0356**	**9.4500e-003**	**2.9000e-004**	**9.7400e-003**			**97.1284**	**0.0718**	**2.5400e-003**	**99.6787**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0310	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000			2.1700e-003	1.0000e-005	0.0000	2.3100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.4762	3.0000e-005	1.0000e-005	0.4785
Mobile	0.0300	0.0279	0.2097	3.2000e-004	0.0353	3.0000e-004	0.0356	9.4500e-003	2.9000e-004	9.7400e-003			31.2012	2.8000e-003	1.8100e-003	31.8098
Waste						0.0000	0.0000		0.0000	0.0000			1.1083	0.0655	0.0000	2.7458
Water						0.0000	0.0000		0.0000	0.0000			64.3404	3.4800e-003	7.2000e-004	64.6423
Total	**0.0610**	**0.0279**	**0.2108**	**3.2000e-004**	**0.0353**	**3.0000e-004**	**0.0356**	**9.4500e-003**	**2.9000e-004**	**9.7400e-003**			**97.1284**	**0.0718**	**2.5400e-003**	**99.6787**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Restoration Efforts (2024)	Site Preparation	5/1/2024	10/15/2024	5	120	
2	Restoration Efforts (2026)	Grading	5/1/2025	10/15/2025	5	120	
3	Restoration Efforts (2027)	Grading	5/1/2026	10/15/2026	5	120	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Restoration Efforts (2025)	Grading	5/1/2027	10/15/2027	5	120	
5	Paving	Paving	5/1/2028	10/13/2028	5	120	

Acres of Grading (Site Preparation Phase): 17

Acres of Grading (Grading Phase): 17

Acres of Paving: 1.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Restoration Efforts (2024)	Rubber Tired Dozers	3	8.00	247	0.40
Restoration Efforts (2024)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Restoration Efforts (2026)	Excavators	2	8.00	158	0.38
Restoration Efforts (2026)	Graders	1	8.00	187	0.41
Restoration Efforts (2026)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2026)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2026)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2027)	Excavators	2	8.00	158	0.38
Restoration Efforts (2027)	Graders	1	8.00	187	0.41
Restoration Efforts (2027)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2027)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2027)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2025)	Excavators	2	8.00	158	0.38
Restoration Efforts (2025)	Graders	1	8.00	187	0.41
Restoration Efforts (2025)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2025)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2025)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Restoration Efforts (2024)	7	18.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2026)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2027)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2025)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0935	0.0000	1.0935	0.5969	0.0000	0.5969			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1597	1.6306	1.1001	2.2800e-003		0.0738	0.0738		0.0679	0.0679			200.7424	0.0649	0.0000	202.3655
Total	**0.1597**	**1.6306**	**1.1001**	**2.2800e-003**	**1.0935**	**0.0738**	**1.1673**	**0.5969**	**0.0679**	**0.6648**			**200.7424**	**0.0649**	**0.0000**	**202.3655**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-003	0.0986	0.0150	3.3000e-004	7.8400e-003	6.4000e-004	8.4800e-003	2.1500e-003	6.1000e-004	2.7600e-003			31.6119	7.0000e-005	4.9500e-003	33.0901
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7900e-003	3.2100e-003	0.0400	1.1000e-004	0.0132	7.0000e-005	0.0133	3.5200e-003	6.0000e-005	3.5800e-003			10.4840	2.7000e-004	2.8000e-004	10.5746
Total	**6.2900e-003**	**0.1018**	**0.0549**	**4.4000e-004**	**0.0211**	**7.1000e-004**	**0.0218**	**5.6700e-003**	**6.7000e-004**	**6.3400e-003**			**42.0959**	**3.4000e-004**	**5.2300e-003**	**43.6646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0935	0.0000	1.0935	0.5969	0.0000	0.5969			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1597	1.6306	1.1001	2.2800e-003		0.0738	0.0738		0.0679	0.0679			200.7421	0.0649	0.0000	202.3652
Total	**0.1597**	**1.6306**	**1.1001**	**2.2800e-003**	**1.0935**	**0.0738**	**1.1673**	**0.5969**	**0.0679**	**0.6648**			**200.7421**	**0.0649**	**0.0000**	**202.3652**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-003	0.0986	0.0150	3.3000e-004	7.8400e-003	6.4000e-004	8.4800e-003	2.1500e-003	6.1000e-004	2.7600e-003			31.6119	7.0000e-005	4.9500e-003	33.0901
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7900e-003	3.2100e-003	0.0400	1.1000e-004	0.0132	7.0000e-005	0.0133	3.5200e-003	6.0000e-005	3.5800e-003			10.4840	2.7000e-004	2.8000e-004	10.5746
Total	**6.2900e-003**	**0.1018**	**0.0549**	**4.4000e-004**	**0.0211**	**7.1000e-004**	**0.0218**	**5.6700e-003**	**6.7000e-004**	**6.3400e-003**			**42.0959**	**3.4000e-004**	**5.2300e-003**	**43.6646**

3.3 Restoration Efforts (2026) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0373	0.1058	0.0000	329.6815
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0373**	**0.1058**	**0.0000**	**329.6815**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4500e-003	0.0943	0.0148	3.2000e-004	7.8500e-003	6.1000e-004	8.4500e-003	2.1500e-003	5.8000e-004	2.7400e-003			30.9844	7.0000e-005	4.8600e-003	32.4335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.0200e-003	3.1900e-003	0.0413	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	7.0000e-005	3.9800e-003			11.3839	2.7000e-004	2.9000e-004	11.4773
Total	**6.4700e-003**	**0.0975**	**0.0561**	**4.4000e-004**	**0.0225**	**6.8000e-004**	**0.0232**	**6.0600e-003**	**6.5000e-004**	**6.7200e-003**			**42.3683**	**3.4000e-004**	**5.1500e-003**	**43.9108**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0369	0.1058	0.0000	329.6811
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0369**	**0.1058**	**0.0000**	**329.6811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4500e-003	0.0943	0.0148	3.2000e-004	7.8500e-003	6.1000e-004	8.4500e-003	2.1500e-003	5.8000e-004	2.7400e-003			30.9844	7.0000e-005	4.8600e-003	32.4335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.0200e-003	3.1900e-003	0.0413	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	7.0000e-005	3.9800e-003			11.3839	2.7000e-004	2.9000e-004	11.4773
Total	**6.4700e-003**	**0.0975**	**0.0561**	**4.4000e-004**	**0.0225**	**6.8000e-004**	**0.0232**	**6.0600e-003**	**6.5000e-004**	**6.7200e-003**			**42.3683**	**3.4000e-004**	**5.1500e-003**	**43.9108**

3.4 Restoration Efforts (2027) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0373	0.1058	0.0000	329.6815
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0373**	**0.1058**	**0.0000**	**329.6815**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0898	0.0146	3.2000e-004	7.8500e-003	5.8000e-004	8.4200e-003	2.1500e-003	5.5000e-004	2.7100e-003			30.3219	6.0000e-005	4.7500e-003	31.7401
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7400e-003	2.8800e-003	0.0386	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			11.1290	2.5000e-004	2.7000e-004	11.2163
Total	**6.1300e-003**	**0.0927**	**0.0533**	**4.4000e-004**	**0.0225**	**6.5000e-004**	**0.0232**	**6.0600e-003**	**6.1000e-004**	**6.6800e-003**			**41.4509**	**3.1000e-004**	**5.0200e-003**	**42.9565**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0369	0.1058	0.0000	329.6811
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0369**	**0.1058**	**0.0000**	**329.6811**

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3.4 Restoration Efforts (2027) - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0898	0.0146	3.2000e-004	7.8500e-003	5.8000e-004	8.4200e-003	2.1500e-003	5.5000e-004	2.7100e-003			30.3219	6.0000e-005	4.7500e-003	31.7401
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.7400e-003	2.8800e-003	0.0386	1.2000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			11.1290	2.5000e-004	2.7000e-004	11.2163
Total	**6.1300e-003**	**0.0927**	**0.0533**	**4.4000e-004**	**0.0225**	**6.5000e-004**	**0.0232**	**6.0600e-003**	**6.1000e-004**	**6.6800e-003**			**41.4509**	**3.1000e-004**	**5.0200e-003**	**42.9565**

3.5 Restoration Efforts (2025) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0373	0.1058	0.0000	329.6815
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0373**	**0.1058**	**0.0000**	**329.6815**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3400e-003	0.0858	0.0145	3.1000e-004	7.8500e-003	5.5000e-004	8.4000e-003	2.1500e-003	5.3000e-004	2.6800e-003			29.6198	6.0000e-005	4.6400e-003	31.0053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.4800e-003	2.6100e-003	0.0363	1.1000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			10.8925	2.2000e-004	2.6000e-004	10.9746
Total	**5.8200e-003**	**0.0884**	**0.0508**	**4.2000e-004**	**0.0225**	**6.2000e-004**	**0.0232**	**6.0600e-003**	**5.9000e-004**	**6.6500e-003**			**40.5123**	**2.8000e-004**	**4.9000e-003**	**41.9799**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3709	0.0000	0.3709	0.1997	0.0000	0.1997			0.0000	0.0000	0.0000	0.0000
Off-Road	0.1741	1.6766	1.5799	3.7200e-003		0.0679	0.0679		0.0624	0.0624			327.0369	0.1058	0.0000	329.6811
Total	**0.1741**	**1.6766**	**1.5799**	**3.7200e-003**	**0.3709**	**0.0679**	**0.4387**	**0.1997**	**0.0624**	**0.2621**			**327.0369**	**0.1058**	**0.0000**	**329.6811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3400e-003	0.0858	0.0145	3.1000e-004	7.8500e-003	5.5000e-004	8.4000e-003	2.1500e-003	5.3000e-004	2.6800e-003			29.6198	6.0000e-005	4.6400e-003	31.0053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.4800e-003	2.6100e-003	0.0363	1.1000e-004	0.0147	7.0000e-005	0.0148	3.9100e-003	6.0000e-005	3.9700e-003			10.8925	2.2000e-004	2.6000e-004	10.9746
Total	**5.8200e-003**	**0.0884**	**0.0508**	**4.2000e-004**	**0.0225**	**6.2000e-004**	**0.0232**	**6.0600e-003**	**5.9000e-004**	**6.6500e-003**			**40.5123**	**2.8000e-004**	**4.9000e-003**	**41.9799**

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0549	0.5149	0.8747	1.3700e-003		0.0251	0.0251		0.0231	0.0231			120.1155	0.0389	0.0000	121.0867
Paving	1.4900e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0564**	**0.5149**	**0.8747**	**1.3700e-003**		**0.0251**	**0.0251**		**0.0231**	**0.0231**			**120.1155**	**0.0389**	**0.0000**	**121.0867**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	3.1600e-003	1.7800e-003	0.0258	8.0000e-005	0.0110	5.0000e-005	0.0111	2.9300e-003	4.0000e-005	2.9700e-003			8.0092	1.5000e-004	1.8000e-004	8.0675
Total	**3.1600e-003**	**1.7800e-003**	**0.0258**	**8.0000e-005**	**0.0110**	**5.0000e-005**	**0.0111**	**2.9300e-003**	**4.0000e-005**	**2.9700e-003**			**8.0092**	**1.5000e-004**	**1.8000e-004**	**8.0675**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0549	0.5149	0.8747	1.3700e-003		0.0251	0.0251		0.0231	0.0231			120.1154	0.0389	0.0000	121.0866
Paving	1.4900e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0564**	**0.5149**	**0.8747**	**1.3700e-003**		**0.0251**	**0.0251**		**0.0231**	**0.0231**			**120.1154**	**0.0389**	**0.0000**	**121.0866**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	3.1600e-003	1.7800e-003	0.0258	8.0000e-005	0.0110	5.0000e-005	0.0111	2.9300e-003	4.0000e-005	2.9700e-003			8.0092	1.5000e-004	1.8000e-004	8.0675
Total	**3.1600e-003**	**1.7800e-003**	**0.0258**	**8.0000e-005**	**0.0110**	**5.0000e-005**	**0.0111**	**2.9300e-003**	**4.0000e-005**	**2.9700e-003**			**8.0092**	**1.5000e-004**	**1.8000e-004**	**8.0675**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0300	0.0279	0.2097	3.2000e-004	0.0353	3.0000e-004	0.0356	9.4500e-003	2.9000e-004	9.7400e-003			31.2012	2.8000e-003	1.8100e-003	31.8098
Unmitigated	0.0300	0.0279	0.2097	3.2000e-004	0.0353	3.0000e-004	0.0356	9.4500e-003	2.9000e-004	9.7400e-003			31.2012	2.8000e-003	1.8100e-003	31.8098

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	49.53	124.46	139.07	95,900	95,900
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	49.53	124.46	139.07	95,900	95,900

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	7.70	3.60	3.50	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Other Asphalt Surfaces	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Parking Lot	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000			0.4762	3.0000e-005	1.0000e-005	0.4785
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000			0.4762	3.0000e-005	1.0000e-005	0.4785
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1960	0.4762	3.0000e-005	1.0000e-005	0.4785
Total		**0.4762**	**3.0000e-005**	**1.0000e-005**	**0.4785**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1960	0.4762	3.0000e-005	1.0000e-005	0.4785
Total		**0.4762**	**3.0000e-005**	**1.0000e-005**	**0.4785**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0310	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000			2.1700e-003	1.0000e-005	0.0000	2.3100e-003
Unmitigated	0.0310	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000			2.1700e-003	1.0000e-005	0.0000	2.3100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.7200e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0292					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000			2.1700e-003	1.0000e-005	0.0000	2.3100e-003
Total	**0.0310**	**1.0000e-005**	**1.1100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**2.1700e-003**	**1.0000e-005**	**0.0000**	**2.3100e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.7200e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0292					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000			2.1700e-003	1.0000e-005	0.0000	2.3100e-003
Total	**0.0310**	**1.0000e-005**	**1.1100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**2.1700e-003**	**1.0000e-005**	**0.0000**	**2.3100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	64.3404	3.4800e-003	7.2000e-004	64.6423
Unmitigated	64.3404	3.4800e-003	7.2000e-004	64.6423

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 75.6591	64.3404	3.4800e-003	7.2000e-004	64.6423
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**64.3404**	**3.4800e-003**	**7.2000e-004**	**64.6423**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 75.6591	64.3404	3.4800e-003	7.2000e-004	64.6423
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**64.3404**	**3.4800e-003**	**7.2000e-004**	**64.6423**

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.1083	0.0655	0.0000	2.7458
Unmitigated	1.1083	0.0655	0.0000	2.7458

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	5.46	1.1083	0.0655	0.0000	2.7458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1083**	**0.0655**	**0.0000**	**2.7458**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	5.46	1.1083	0.0655	0.0000	2.7458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.1083**	**0.0655**	**0.0000**	**2.7458**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Meeks Bay Preferred Alternative

El Dorado-Lake Tahoe County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	44.00	1000sqft	1.01	44,000.00	0
Parking Lot	14.00	Space	0.13	5,600.00	0
City Park	63.50	Acre	63.50	2,766,060.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2029
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.66	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Emissions factors calculated for Liberty Utilities.

Land Use - Alternative includes restoration of Meeks Creek and Lagoon, construction of 14 additional parking spaces, SR 89 bridge replacement, and bicyle infrastructure.

Construction Phase - Construction would occur over a 5-year period. Construction activities would be limited to May 1-October 15 consistent with local regulations.

Off-road Equipment - Addition of bore/drill rig for construction of pier.

Off-road Equipment -

Demolition -

Grading - Marina removal and restoration would require substantial earth moving and grading, preliminarily estimated from the conceptual design as 30,000 cubic yards of excavation.

Vehicle Trips - approximately 95,000 VMT annually generated.

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	75.00	120.00
tblConstructionPhase	PhaseEndDate	6/25/2024	10/15/2024
tblConstructionPhase	PhaseEndDate	11/26/2024	10/15/2025
tblConstructionPhase	PhaseEndDate	4/29/2025	10/15/2026
tblConstructionPhase	PhaseEndDate	9/30/2025	10/15/2027
tblConstructionPhase	PhaseEndDate	1/13/2026	10/13/2028
tblConstructionPhase	PhaseStartDate	6/26/2024	5/1/2025
tblConstructionPhase	PhaseStartDate	11/27/2024	5/1/2026
tblConstructionPhase	PhaseStartDate	4/30/2025	5/1/2027
tblConstructionPhase	PhaseStartDate	10/1/2025	5/1/2028
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	180.00	17.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.029
tblProjectCharacteristics	CO2IntensityFactor	0	535.66
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	3.60
tblVehicleTrips	CNW_TL	6.60	3.50

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	CW_TL	14.70	7.70

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7728	28.8056	19.3279	0.0456	18.5913	1.2411	19.8324	10.0464	1.1422	11.1886			4,475.8095	1.1988	0.0957	4,534.3074
2025	3.0163	29.5040	27.3446	0.0696	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,802.2829	1.9492	0.0941	6,879.0544
2026	3.0103	29.4282	27.2922	0.0694	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,785.0380	1.9487	0.0919	6,861.1406
2027	3.0045	29.3594	27.2463	0.0692	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,767.4453	1.9482	0.0896	6,842.8569
2028	0.9969	8.6078	15.0561	0.0243	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,364.9175	0.7164	3.0800e-003	2,383.7455
Maximum	**3.0163**	**29.5040**	**27.3446**	**0.0696**	**18.5913**	**1.2411**	**19.8324**	**10.0464**	**1.1422**	**11.1886**			**6,802.2829**	**1.9492**	**0.0957**	**6,879.0544**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7728	28.8056	19.3279	0.0456	18.5913	1.2411	19.8324	10.0464	1.1422	11.1886			4,475.8095	1.1988	0.0957	4,534.3074
2025	3.0163	29.5040	27.3446	0.0696	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,802.2829	1.9492	0.0941	6,879.0544
2026	3.0103	29.4282	27.2922	0.0694	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,785.0380	1.9487	0.0919	6,861.1406
2027	3.0045	29.3594	27.2463	0.0692	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,767.4452	1.9482	0.0896	6,842.8569
2028	0.9969	8.6078	15.0561	0.0243	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,364.9175	0.7164	3.0800e-003	2,383.7455
Maximum	**3.0163**	**29.5040**	**27.3446**	**0.0696**	**18.5913**	**1.2411**	**19.8324**	**10.0464**	**1.1422**	**11.1886**			**6,802.2829**	**1.9492**	**0.0957**	**6,879.0544**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1707	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3912	0.2671	2.1050	3.5600e-003	0.3854	3.1900e-003	0.3886	0.1028	2.9900e-003	0.1058			378.8937	0.0289	0.0197	385.4750
Total	**0.5618**	**0.2672**	**2.1174**	**3.5600e-003**	**0.3854**	**3.2300e-003**	**0.3886**	**0.1028**	**3.0300e-003**	**0.1059**			**378.9202**	**0.0290**	**0.0197**	**385.5034**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1707	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3912	0.2671	2.1050	3.5600e-003	0.3854	3.1900e-003	0.3886	0.1028	2.9900e-003	0.1058			378.8937	0.0289	0.0197	385.4750
Total	**0.5618**	**0.2672**	**2.1174**	**3.5600e-003**	**0.3854**	**3.2300e-003**	**0.3886**	**0.1028**	**3.0300e-003**	**0.1059**			**378.9202**	**0.0290**	**0.0197**	**385.5034**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Restoration Efforts (2024)	Site Preparation	5/1/2024	10/15/2024	5	120	
2	Restoration Efforts (2026)	Grading	5/1/2025	10/15/2025	5	120	
3	Restoration Efforts (2027)	Grading	5/1/2026	10/15/2026	5	120	
4	Restoration Efforts (2025)	Grading	5/1/2027	10/15/2027	5	120	
5	Paving	Paving	5/1/2028	10/13/2028	5	120	

Acres of Grading (Site Preparation Phase): 17

Acres of Grading (Grading Phase): 17

Acres of Paving: 1.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Restoration Efforts (2024)	Rubber Tired Dozers	3	8.00	247	0.40
Restoration Efforts (2024)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Restoration Efforts (2026)	Excavators	2	8.00	158	0.38
Restoration Efforts (2026)	Graders	1	8.00	187	0.41
Restoration Efforts (2026)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2026)	Scrapers	2	8.00	367	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Restoration Efforts (2026)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2027)	Excavators	2	8.00	158	0.38
Restoration Efforts (2027)	Graders	1	8.00	187	0.41
Restoration Efforts (2027)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2027)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2027)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2025)	Excavators	2	8.00	158	0.38
Restoration Efforts (2025)	Graders	1	8.00	187	0.41
Restoration Efforts (2025)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2025)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2025)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Restoration Efforts (2024)	7	18.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2026)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2027)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2025)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310			3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**18.2257**	**1.2294**	**19.4551**	**9.9483**	**1.1310**	**11.0793**			**3,688.0100**	**1.1928**		**3,717.8294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0255	1.5826	0.2491	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0101	0.0472			580.6693	1.2600e-003	0.0910	607.8166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0865	0.0470	0.7432	2.0100e-003	0.2299	1.1700e-003	0.2311	0.0610	1.0800e-003	0.0621			207.1303	4.7400e-003	4.7400e-003	208.6614
Total	**0.1119**	**1.6296**	**0.9923**	**7.5000e-003**	**0.3656**	**0.0118**	**0.3774**	**0.0981**	**0.0112**	**0.1093**			**787.7996**	**6.0000e-003**	**0.0957**	**816.4780**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310			3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**18.2257**	**1.2294**	**19.4551**	**9.9483**	**1.1310**	**11.0793**			**3,688.0100**	**1.1928**		**3,717.8294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0255	1.5826	0.2491	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0101	0.0472			580.6693	1.2600e-003	0.0910	607.8166
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0865	0.0470	0.7432	2.0100e-003	0.2299	1.1700e-003	0.2311	0.0610	1.0800e-003	0.0621			207.1303	4.7400e-003	4.7400e-003	208.6614
Total	**0.1119**	**1.6296**	**0.9923**	**7.5000e-003**	**0.3656**	**0.0118**	**0.3774**	**0.0981**	**0.0112**	**0.1093**			**787.7996**	**6.0000e-003**	**0.0957**	**816.4780**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.5144	0.2465	5.3800e-003	0.1357	0.0101	0.1458	0.0371	9.7000e-003	0.0468			569.1320	1.2200e-003	0.0892	595.7440
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0905	0.0467	0.7670	2.1600e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			224.8695	4.7500e-003	4.9000e-003	226.4489
Total	**0.1150**	**1.5611**	**1.0135**	**7.5400e-003**	**0.3912**	**0.0114**	**0.4025**	**0.1049**	**0.0108**	**0.1157**			**794.0014**	**5.9700e-003**	**0.0941**	**822.1929**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.5144	0.2465	5.3800e-003	0.1357	0.0101	0.1458	0.0371	9.7000e-003	0.0468			569.1320	1.2200e-003	0.0892	595.7440
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0905	0.0467	0.7670	2.1600e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			224.8695	4.7500e-003	4.9000e-003	226.4489
Total	**0.1150**	**1.5611**	**1.0135**	**7.5400e-003**	**0.3912**	**0.0114**	**0.4025**	**0.1049**	**0.0108**	**0.1157**			**794.0014**	**5.9700e-003**	**0.0941**	**822.1929**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0236	1.4432	0.2436	5.2600e-003	0.1357	9.6100e-003	0.1453	0.0371	9.1900e-003	0.0463			556.9510	1.1700e-003	0.0873	582.9965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0855	0.0422	0.7175	2.0900e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			219.8056	4.3100e-003	4.6000e-003	221.2827
Total	**0.1090**	**1.4853**	**0.9611**	**7.3500e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1151**			**776.7566**	**5.4800e-003**	**0.0919**	**804.2792**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0236	1.4432	0.2436	5.2600e-003	0.1357	9.6100e-003	0.1453	0.0371	9.1900e-003	0.0463			556.9510	1.1700e-003	0.0873	582.9965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0855	0.0422	0.7175	2.0900e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			219.8056	4.3100e-003	4.6000e-003	221.2827
Total	**0.1090**	**1.4853**	**0.9611**	**7.3500e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1151**			**776.7566**	**5.4800e-003**	**0.0919**	**804.2792**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.3783	0.2410	5.1400e-003	0.1358	9.1500e-003	0.1449	0.0371	8.7600e-003	0.0459			544.0445	1.1200e-003	0.0853	569.4871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0806	0.0382	0.6742	2.0300e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			215.1194	3.9100e-003	4.3300e-003	216.5084
Total	**0.1033**	**1.4166**	**0.9152**	**7.1700e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7700e-003**	**0.1147**			**759.1638**	**5.0300e-003**	**0.0896**	**785.9955**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.3783	0.2410	5.1400e-003	0.1358	9.1500e-003	0.1449	0.0371	8.7600e-003	0.0459			544.0445	1.1200e-003	0.0853	569.4871
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0806	0.0382	0.6742	2.0300e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			215.1194	3.9100e-003	4.3300e-003	216.5084
Total	**0.1033**	**1.4166**	**0.9152**	**7.1700e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7700e-003**	**0.1147**			**759.1638**	**5.0300e-003**	**0.0896**	**785.9955**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9400**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0568	0.0261	0.4781	1.4800e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			158.1723	2.6800e-003	3.0800e-003	159.1577
Total	**0.0568**	**0.0261**	**0.4781**	**1.4800e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**158.1723**	**2.6800e-003**	**3.0800e-003**	**159.1577**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9400**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0568	0.0261	0.4781	1.4800e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			158.1723	2.6800e-003	3.0800e-003	159.1577
Total	**0.0568**	**0.0261**	**0.4781**	**1.4800e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**158.1723**	**2.6800e-003**	**3.0800e-003**	**159.1577**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3912	0.2671	2.1050	3.5600e-003	0.3854	3.1900e-003	0.3886	0.1028	2.9900e-003	0.1058			378.8937	0.0289	0.0197	385.4750
Unmitigated	0.3912	0.2671	2.1050	3.5600e-003	0.3854	3.1900e-003	0.3886	0.1028	2.9900e-003	0.1058			378.8937	0.0289	0.0197	385.4750

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	49.53	124.46	139.07	95,900	95,900
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	49.53	124.46	139.07	95,900	95,900

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	7.70	3.60	3.50	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Other Asphalt Surfaces	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Parking Lot	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1707	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Unmitigated	0.1707	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.4500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1400e-003	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Total	**0.1707**	**1.1000e-004**	**0.0124**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**			**0.0266**	**7.0000e-005**		**0.0283**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.4500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1400e-003	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Total	**0.1707**	**1.1000e-004**	**0.0124**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**			**0.0266**	**7.0000e-005**		**0.0283**

7.0 Water Detail

7.1 Mitigation Measures Water

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Meeks Bay Preferred Alternative

El Dorado-Lake Tahoe County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	44.00	1000sqft	1.01	44,000.00	0
Parking Lot	14.00	Space	0.13	5,600.00	0
City Park	63.50	Acre	63.50	2,766,060.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2029
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.66	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Emissions factors calculated for Liberty Utilities.

Land Use - Alternative includes restoration of Meeks Creek and Lagoon, construction of 14 additional parking spaces, SR 89 bridge replacement, and bicyle infrastructure.

Construction Phase - Construction would occur over a 5-year period. Construction activities would be limited to May 1-October 15 consistent with local regulations.

Off-road Equipment - Addition of bore/drill rig for construction of pier.

Off-road Equipment -

Demolition -

Grading - Marina removal and restoration would require substantial earth moving and grading, preliminarily estimated from the conceptual design as 30,000 cubic yards of excavation.

Vehicle Trips - approximately 95,000 VMT annually generated.

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	110.00	120.00
tblConstructionPhase	NumDays	75.00	120.00
tblConstructionPhase	PhaseEndDate	6/25/2024	10/15/2024
tblConstructionPhase	PhaseEndDate	11/26/2024	10/15/2025
tblConstructionPhase	PhaseEndDate	4/29/2025	10/15/2026
tblConstructionPhase	PhaseEndDate	9/30/2025	10/15/2027
tblConstructionPhase	PhaseEndDate	1/13/2026	10/13/2028
tblConstructionPhase	PhaseStartDate	6/26/2024	5/1/2025
tblConstructionPhase	PhaseStartDate	11/27/2024	5/1/2026
tblConstructionPhase	PhaseStartDate	4/30/2025	5/1/2027
tblConstructionPhase	PhaseStartDate	10/1/2025	5/1/2028
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	360.00	17.00
tblGrading	AcresOfGrading	180.00	17.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblGrading	MaterialExported	0.00	7,500.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.029
tblProjectCharacteristics	CO2IntensityFactor	0	535.66
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	3.60
tblVehicleTrips	CNW_TL	6.60	3.50

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	CW_TL	14.70	7.70

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7730	28.8959	19.2514	0.0454	18.5913	1.2411	19.8325	10.0464	1.1422	11.1886			4,457.9422	1.1992	0.0965	4,516.6802
2025	3.0167	29.5903	27.2666	0.0694	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,782.9319	1.9496	0.0949	6,859.9516
2026	3.0108	29.5095	27.2201	0.0692	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,766.1838	1.9491	0.0927	6,842.5207
2027	3.0051	29.4364	27.1791	0.0691	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,749.0362	1.9486	0.0903	6,824.6697
2028	0.9980	8.6138	15.0075	0.0242	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,351.1640	0.7167	3.5400e-003	2,370.1351
Maximum	**3.0167**	**29.5903**	**27.2666**	**0.0694**	**18.5913**	**1.2411**	**19.8325**	**10.0464**	**1.1422**	**11.1886**			**6,782.9319**	**1.9496**	**0.0965**	**6,859.9516**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7730	28.8959	19.2514	0.0454	18.5913	1.2411	19.8325	10.0464	1.1422	11.1886			4,457.9422	1.1992	0.0965	4,516.6802
2025	3.0167	29.5903	27.2666	0.0694	6.5727	1.1423	7.7150	3.4327	1.0513	4.4840			6,782.9319	1.9496	0.0949	6,859.9516
2026	3.0108	29.5095	27.2201	0.0692	6.5728	1.1417	7.7144	3.4327	1.0507	4.4834			6,766.1838	1.9491	0.0927	6,842.5207
2027	3.0051	29.4364	27.1791	0.0691	6.5728	1.1412	7.7139	3.4327	1.0502	4.4829			6,749.0362	1.9486	0.0903	6,824.6697
2028	0.9980	8.6138	15.0075	0.0242	0.1916	0.4193	0.6109	0.0508	0.3858	0.4366			2,351.1640	0.7167	3.5400e-003	2,370.1351
Maximum	**3.0167**	**29.5903**	**27.2666**	**0.0694**	**18.5913**	**1.2411**	**19.8325**	**10.0464**	**1.1422**	**11.1886**			**6,782.9319**	**1.9496**	**0.0965**	**6,859.9516**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1707	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3030	0.3054	2.3579	3.3400e-003	0.3854	3.1900e-003	0.3886	0.1028	2.9900e-003	0.1058			355.9436	0.0347	0.0217	363.2706
Total	**0.4736**	**0.3055**	**2.3703**	**3.3400e-003**	**0.3854**	**3.2300e-003**	**0.3886**	**0.1028**	**3.0300e-003**	**0.1059**			**355.9702**	**0.0347**	**0.0217**	**363.2990**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1707	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.3030	0.3054	2.3579	3.3400e-003	0.3854	3.1900e-003	0.3886	0.1028	2.9900e-003	0.1058			355.9436	0.0347	0.0217	363.2706
Total	**0.4736**	**0.3055**	**2.3703**	**3.3400e-003**	**0.3854**	**3.2300e-003**	**0.3886**	**0.1028**	**3.0300e-003**	**0.1059**			**355.9702**	**0.0347**	**0.0217**	**363.2990**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Restoration Efforts (2024)	Site Preparation	5/1/2024	10/15/2024	5	120	
2	Restoration Efforts (2026)	Grading	5/1/2025	10/15/2025	5	120	
3	Restoration Efforts (2027)	Grading	5/1/2026	10/15/2026	5	120	
4	Restoration Efforts (2025)	Grading	5/1/2027	10/15/2027	5	120	
5	Paving	Paving	5/1/2028	10/13/2028	5	120	

Acres of Grading (Site Preparation Phase): 17

Acres of Grading (Grading Phase): 17

Acres of Paving: 1.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Restoration Efforts (2024)	Rubber Tired Dozers	3	8.00	247	0.40
Restoration Efforts (2024)	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Restoration Efforts (2026)	Excavators	2	8.00	158	0.38
Restoration Efforts (2026)	Graders	1	8.00	187	0.41
Restoration Efforts (2026)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2026)	Scrapers	2	8.00	367	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Restoration Efforts (2026)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2027)	Excavators	2	8.00	158	0.38
Restoration Efforts (2027)	Graders	1	8.00	187	0.41
Restoration Efforts (2027)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2027)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2027)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Restoration Efforts (2025)	Excavators	2	8.00	158	0.38
Restoration Efforts (2025)	Graders	1	8.00	187	0.41
Restoration Efforts (2025)	Rubber Tired Dozers	1	8.00	247	0.40
Restoration Efforts (2025)	Scrapers	2	8.00	367	0.48
Restoration Efforts (2025)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Restoration Efforts (2024)	7	18.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2026)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2027)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Restoration Efforts (2025)	8	20.00	0.00	938.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310			3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**18.2257**	**1.2294**	**19.4551**	**9.9483**	**1.1310**	**11.0793**			**3,688.0100**	**1.1928**		**3,717.8294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.6619	0.2506	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0102	0.0473			580.9071	1.2100e-003	0.0911	608.0724
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0876	0.0579	0.6651	1.8300e-003	0.2299	1.1700e-003	0.2311	0.0610	1.0800e-003	0.0621			189.0251	5.1800e-003	5.4500e-003	190.7784
Total	**0.1121**	**1.7199**	**0.9158**	**7.3200e-003**	**0.3656**	**0.0118**	**0.3774**	**0.0981**	**0.0112**	**0.1093**			**769.9322**	**6.3900e-003**	**0.0965**	**798.8508**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Restoration Efforts (2024) - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2257	0.0000	18.2257	9.9483	0.0000	9.9483			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310			3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**18.2257**	**1.2294**	**19.4551**	**9.9483**	**1.1310**	**11.0793**			**3,688.0100**	**1.1928**		**3,717.8294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0246	1.6619	0.2506	5.4900e-003	0.1357	0.0106	0.1463	0.0371	0.0102	0.0473			580.9071	1.2100e-003	0.0911	608.0724
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0876	0.0579	0.6651	1.8300e-003	0.2299	1.1700e-003	0.2311	0.0610	1.0800e-003	0.0621			189.0251	5.1800e-003	5.4500e-003	190.7784
Total	**0.1121**	**1.7199**	**0.9158**	**7.3200e-003**	**0.3656**	**0.0118**	**0.3774**	**0.0981**	**0.0112**	**0.1093**			**769.9322**	**6.3900e-003**	**0.0965**	**798.8508**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0237	1.5899	0.2481	5.3800e-003	0.1357	0.0102	0.1459	0.0371	9.7300e-003	0.0468			569.3921	1.1700e-003	0.0893	596.0230
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0918	0.0576	0.6874	1.9700e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			205.2584	5.2200e-003	5.6300e-003	207.0672
Total	**0.1155**	**1.6474**	**0.9355**	**7.3500e-003**	**0.3912**	**0.0114**	**0.4026**	**0.1049**	**0.0109**	**0.1157**			**774.6505**	**6.3900e-003**	**0.0949**	**803.0902**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Restoration Efforts (2026) - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0237	1.5899	0.2481	5.3800e-003	0.1357	0.0102	0.1459	0.0371	9.7300e-003	0.0468			569.3921	1.1700e-003	0.0893	596.0230
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0918	0.0576	0.6874	1.9700e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1400e-003	0.0689			205.2584	5.2200e-003	5.6300e-003	207.0672
Total	**0.1155**	**1.6474**	**0.9355**	**7.3500e-003**	**0.3912**	**0.0114**	**0.4026**	**0.1049**	**0.0109**	**0.1157**			**774.6505**	**6.3900e-003**	**0.0949**	**803.0902**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.5147	0.2452	5.2700e-003	0.1357	9.6400e-003	0.1454	0.0371	9.2200e-003	0.0463			557.2342	1.1200e-003	0.0874	583.2995
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0869	0.0519	0.6438	1.9100e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			200.6681	4.7500e-003	5.2800e-003	202.3598
Total	**0.1096**	**1.5666**	**0.8890**	**7.1800e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1152**			**757.9024**	**5.8700e-003**	**0.0927**	**785.6593**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Restoration Efforts (2027) - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	1.5147	0.2452	5.2700e-003	0.1357	9.6400e-003	0.1454	0.0371	9.2200e-003	0.0463			557.2342	1.1200e-003	0.0874	583.2995
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0869	0.0519	0.6438	1.9100e-003	0.2555	1.1700e-003	0.2566	0.0678	1.0800e-003	0.0688			200.6681	4.7500e-003	5.2800e-003	202.3598
Total	**0.1096**	**1.5666**	**0.8890**	**7.1800e-003**	**0.3912**	**0.0108**	**0.4020**	**0.1049**	**0.0103**	**0.1152**			**757.9024**	**5.8700e-003**	**0.0927**	**785.6593**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0218	1.4465	0.2427	5.1400e-003	0.1358	9.1800e-003	0.1449	0.0371	8.7800e-003	0.0459			544.3476	1.0700e-003	0.0854	569.8104
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0821	0.0471	0.6053	1.8600e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			196.4072	4.3300e-003	4.9700e-003	197.9979
Total	**0.1039**	**1.4935**	**0.8480**	**7.0000e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7900e-003**	**0.1147**			**740.7547**	**5.4000e-003**	**0.0903**	**767.8083**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Restoration Efforts (2025) - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1816	0.0000	6.1816	3.3279	0.0000	3.3279			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404			6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**6.1816**	**1.1309**	**7.3124**	**3.3279**	**1.0404**	**4.3683**			**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0218	1.4465	0.2427	5.1400e-003	0.1358	9.1800e-003	0.1449	0.0371	8.7800e-003	0.0459			544.3476	1.0700e-003	0.0854	569.8104
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0821	0.0471	0.6053	1.8600e-003	0.2555	1.1000e-003	0.2566	0.0678	1.0100e-003	0.0688			196.4072	4.3300e-003	4.9700e-003	197.9979
Total	**0.1039**	**1.4935**	**0.8480**	**7.0000e-003**	**0.3912**	**0.0103**	**0.4015**	**0.1049**	**9.7900e-003**	**0.1147**			**740.7547**	**5.4000e-003**	**0.0903**	**767.8083**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9400**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0580	0.0322	0.4296	1.3500e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			144.4188	2.9800e-003	3.5400e-003	145.5473
Total	**0.0580**	**0.0322**	**0.4296**	**1.3500e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**144.4188**	**2.9800e-003**	**3.5400e-003**	**145.5473**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2028

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850			2,206.7452	0.7137		2,224.5878
Paving	0.0249					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9400**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**			**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	0.0580	0.0322	0.4296	1.3500e-003	0.1916	7.7000e-004	0.1924	0.0508	7.1000e-004	0.0515			144.4188	2.9800e-003	3.5400e-003	145.5473
Total	**0.0580**	**0.0322**	**0.4296**	**1.3500e-003**	**0.1916**	**7.7000e-004**	**0.1924**	**0.0508**	**7.1000e-004**	**0.0515**			**144.4188**	**2.9800e-003**	**3.5400e-003**	**145.5473**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3030	0.3054	2.3579	3.3400e-003	0.3854	3.1900e-003	0.3886	0.1028	2.9900e-003	0.1058			355.9436	0.0347	0.0217	363.2706
Unmitigated	0.3030	0.3054	2.3579	3.3400e-003	0.3854	3.1900e-003	0.3886	0.1028	2.9900e-003	0.1058			355.9436	0.0347	0.0217	363.2706

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	49.53	124.46	139.07	95,900	95,900
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	49.53	124.46	139.07	95,900	95,900

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	7.70	3.60	3.50	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Other Asphalt Surfaces	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724
Parking Lot	0.462641	0.061170	0.222925	0.148606	0.037943	0.007861	0.011767	0.004187	0.000680	0.000539	0.034826	0.001130	0.005724

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1707	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Unmitigated	0.1707	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.4500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1400e-003	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Total	**0.1707**	**1.1000e-004**	**0.0124**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**			**0.0266**	**7.0000e-005**		**0.0283**

Meeks Bay Preferred Alternative - El Dorado-Lake Tahoe County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.4500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1400e-003	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0266	7.0000e-005		0.0283
Total	**0.1707**	**1.1000e-004**	**0.0124**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**			**0.0266**	**7.0000e-005**		**0.0283**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix D

Noise Modeling

Construction Source Noise Prediction Model (Grading)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
SR4	650	55.3

Equipment	Reference Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Grader	85	0.4
Scraper	85	0.4
Backhoe	80	0.4

Ground Type	soft
Source Height	8
Receiver Height	5
Ground Factor[2]	0.63

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Grader	81.0
Scraper	81.0
Backhoe	76.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
84.7

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Table 4-26 from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 86).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 176 and 177).

L_{eq}(equip) = E.L.+10*log (U.F.) - 20*log (D/50) - 10*G*log (D/50)

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2018: pg 86); and

D = Distance from source to receiver.

Construction Source Noise Prediction Model (Grading + Pile Driving)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
SR1	370	69.0

Equipment	Reference Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Grader	85	0.4
Scraper	85	0.4
Backhoe	80	0.4
Impact Pile Driver	95	0.4

Ground Type	soft
Source Height	8
Receiver Height	5
Ground Factor[2]	0.63

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Grader	81.0
Scraper	81.0
Backhoe	76.0
Impact Pile Driver	91.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
91.9

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Table 4-26 from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 86).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 176 and 177).

L_{eq}(equip) = E.L.+10*log (U.F.) - 20*log (D/50) - 10*G*log (D/50)

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2018: pg 86); and

D = Distance from source to receiver.

Alternative	Site	Construction activity	Activity	Equipment
1,2,3,4	SR 89	CS1	Grading and Pile Driving	Grader,scaper, backhoe, pile driver
3	North Campground	CS2	Grading	Grader,scaper, backhoe
1,2,3,4	South Campground	CS3	Grading	Grader,scaper, backhoe
1,2,3,4	Parking North of Marina	CS4	Grading	Grader,scaper, backhoe
1	Boat Pier	CS5	Grading and Pile Driving	Grader,scaper, backhoe, pile driver
3,4	Parking at south end	CS6	Grading	Grader,scaper, backhoe
3	South end ADA Parking	CS7	Grading	Grader,scaper, backhoe

Construction Site	Construction details
CS1	State Route 89 Bridge
CS2	Campground at the North side of the Project
CS3	Campground at the South side of the Project
CS4	Parking North of Marina
CS5	Boat Pier
CS6	Parking at South-West end of the project site
CS7	ADA Parking at South-East end of the project site

Sensitive Receptors points	
SR1	Sensitive Receptor 1
SR2	Sensitive Receptor 2
SR3	Sensitive Receptor 3
SR4	Sensitive Receptor 4

Distance Propagation Calculations for Stationary Sources of Ground Vibration

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

STEP 1: Determine units in which to perform calculation.

— If vibration decibels (VdB), then use Table A and proceed to Steps 2A and 3A.

— If peak particle velocity (PPV), then use Table B and proceed to Steps 2B and 3B.

STEP 2A: Identify the vibration source and enter the reference vibration level (VdB) and distance.

STEP 3A: Select the distance to the receiver.

Table A. Propagation of vibration decibels (VdB) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (VdB)	@	distance (ft)	vibration level (VdB)	@	distance (ft)
Impact pile driver	104	@	25	72.0	@	292

The Lv metric (VdB) is used to assess the likelihood for vibration to result in human annoyance.

STEP 2B: Identify the vibration source and enter the reference peak particle velocity (PPV) and distance.

STEP 3B: Select the distance to the receiver.

Table B. Propagation of peak particle velocity (PPV) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (PPV)	@	distance (ft)	vibration level (PPV)	@	distance (ft)
Impact pile driver	0.644	@	25	0.197	@	55

The PPV metric (in/sec) is used for assessing the likelihood for the potential of structural damage.

Notes:

Computation of propagated vibration levels is based on the equations presented on pg. 185 of FTA 2018. Estimates of attenuated vibration levels do not account for reductions from intervening underground barriers or other underground structures of any type, or changes in soil type.

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. Washington, D.C. Accessed: December 20, 2020. Page Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Long-Term Noise Measurement Summary

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

Measurement Site:	Proposed site of Edgewood hotel complex
Measurement Date:	5/24/2022
Project Name:	Meeks Bay CNEL Calc

Hour of Day (military time)	Sound Level Leq (dBA)	Sound Power =10*Log(dBA/10)	Computation of CNEL: Period of 24-Hour Day (1=included, 0=not) Day	Evening	Night	Sound Power Breakdown by Period of Day Day	Evening	Night
0:00	85.0	316,227,766	0	0	1	0	0	316,227,766
1:00	85.0	316,227,766	0	0	1	0	0	316,227,766
2:00	85.0	316,227,766	0	0	1	0	0	316,227,766
3:00	85.0	316,227,766	0	0	1	0	0	316,227,766
4:00	85.0	316,227,766	0	0	1	0	0	316,227,766
5:00	85.0	316,227,766	0	0	1	0	0	316,227,766
6:00	85.0	316,227,766	0	0	1	0	0	316,227,766
7:00	85.0	316,227,766	1	0	0	316,227,766	0	0
8:00	85.0	316,227,766	1	0	0	316,227,766	0	0
9:00	85.0	316,227,766	1	0	0	316,227,766	0	0
10:00	85.0	316,227,766	1	0	0	316,227,766	0	0
11:00	85.0	316,227,766	1	0	0	316,227,766	0	0
12:00	85.0	316,227,766	1	0	0	316,227,766	0	0
13:00	85.0	316,227,766	1	0	0	316,227,766	0	0
14:00	85.0	316,227,766	1	0	0	316,227,766	0	0
15:00	85.0	316,227,766	1	0	0	316,227,766	0	0
16:00	85.0	316,227,766	1	0	0	316,227,766	0	0
17:00	85.0	316,227,766	1	0	0	316,227,766	0	0
18:00	85.0	316,227,766	1	0	0	316,227,766	0	0
19:00	85.0	316,227,766	0	1	0	0	316,227,766	0
20:00	85.0	316,227,766	0	1	0	0	316,227,766	0
21:00	85.0	316,227,766	0	1	0	0	316,227,766	0
22:00	85.0	316,227,766	0	0	1	0	0	316,227,766
23:00	85.0	316,227,766	0	0	1	0	0	316,227,766
		Sum of Sound Power during Period wo/penalty				3,794,733,192	948,683,298	2,846,049,894
		Log Factor for CNEL Penalty (i.e., 10*log(x))				1	3	10
		Sound Power during Period with penalty				3,794,733,192	2,846,049,894	28,460,498,942

Total Daily Sound Power, with penalties	###########
Hours per Day	24
Average Hourly Sound Power, with penalties	1,462,553,418
CNEL	91.7

Ldn computation on next page.

Notes:

Computation of the CNEL based on 1-hour Leq measurements for each hour of a day are based on equation 2-27 on pg. 2-57 of Caltrans 2009.

Computation of the Ldn based on 1-hour Leq measurements for each hour of a day are based on equation 2-26 on pg. 2-56 of Caltrans 2009.

Log factors for the Ldn and CNEL penalties are provided in Table 2-12 on pg. 2-52 of Caltrans 2009.

Source:

California Deaprtment of Transportation (Caltrans), Divisiong of Environmental Analysis. 2009 (November). *2009 Technical Noise Supplement* . Sacramento, CA. Available: <http://www.dot.ca.gov/hq/env/noise/>. Accessed September 24, 2010.

Long-Term Noise Measurement Summary

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

Measurement Site: Meeks Bay CNEL Calc
Measurement Date: 5/24/2022
Project Name: Meeks Bay CNEL Calc

Hour of Day (military time)	Sound Level Leq (dBA)	Sound Power =10*Log(dBA/10)	Computation of CNEL: Period of 24-Hour Day (1=included, 0=not) Day	Evening	Night	Sound Power Breakdown by Period of Day: Day	Evening	Night
0:00	92.0	1,584,893,192	0	0	1	0	0	1,584,893,192
1:00	92.0	1,584,893,192	0	0	1	0	0	1,584,893,192
2:00	92.0	1,584,893,192	0	0	1	0	0	1,584,893,192
3:00	92.0	1,584,893,192	0	0	1	0	0	1,584,893,192
4:00	92.0	1,584,893,192	0	0	1	0	0	1,584,893,192
5:00	92.0	1,584,893,192	0	0	1	0	0	1,584,893,192
6:00	92.0	1,584,893,192	0	0	1	0	0	1,584,893,192
7:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
8:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
9:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
10:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
11:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
12:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
13:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
14:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
15:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
16:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
17:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
18:00	92.0	1,584,893,192	1	0	0	1,584,893,192	0	0
19:00	92.0	1,584,893,192	0	1	0	0	1,584,893,192	0
20:00	92.0	1,584,893,192	0	1	0	0	1,584,893,192	0
21:00	92.0	1,584,893,192	0	1	0	0	1,584,893,192	0
22:00	92.0	1,584,893,192	0	0	1	0	0	1,584,893,192
23:00	92.0	1,584,893,192	0	0	1	0	0	1,584,893,192

	Day	Evening	Night
Sum of Sound Power during Period wo/penalty	19,018,718,310	4,754,679,577	14,264,038,732
Log Factor for CNEL Penalty (i.e., 10*log(x))	1	3	10
Sound Power during Period with penalty	19,018,718,310	14,264,038,732	142,640,387,322

Total Daily Sound Power, with penalties	175,923,144,363
Hours per Day	24
Average Hourly Sound Power, with penalties	7,330,131,015
CNEL	98.7

Ldn computation on next page.

Notes:

Computation of the CNEL based on 1-hour Leq measurements for each hour of a day are based on equation 2-27 on pg. 2-57 of Caltrans 2009.

Computation of the Ldn based on 1-hour Leq measurements for each hour of a day are based on equation 2-26 on pg. 2-56 of Caltrans 2009.

Log factors for the Ldn and CNEL penalties are provided in Table 2-12 on pg. 2-52 of Caltrans 2009.

Source:

California Deaprtment of Transportation (Caltrans), Divisiong of Environmental Analysis. 2009 (November). *2009 Technical Noise Supplement* . Sacramento, CA. Available: <http://www.dot.ca.gov/hq/env/noise/>. Accessed September 24, 2010.

Appendix E

Transportation Modeling

Project Details

The tool provides initial screening for all project types and more detailed analysis for residential, tourist accommodation unit, and public service projects. All non-screened commercial, recreation, and other projects will need to complete a more detailed transportation analysis. For detailed information on the PIA framework, tool usage, and calculations see the User Guidelines. For detailed information on the PIA framework, tool usage, and calculations select the User Guidelines tab. For questions about the project impact assessment process contact Melanie Sloan (msloan@trpa.gov). For technical issues with the tool contact Reid Haefer (rhaefer@trpa.gov).

Date Submitted

Wed Jan 26 22:31:28 2022

Report Notes

None

Analysis Type

TRPA

Existing Land Use

Not Applicable

Proposed Project

Meeks Bay Restoration Project: Alternative 1

Developed Campground/RV Park

2.00 Sites

VMT

Proposed Project Gross VMT - 286

Existing VMT - 0

Mitigated VMT - 0

Project Total Net VMT - 286

Standard of Significance VMT - 0

Mitigation Needed - 0

Screening

Screened - Yes

Additional Analysis Required?

Mitgation Info

Mitigations -

Percent - 0.00%

Other Project Details

Zone ID - Zone 3

Zone Average Trip Length - 11.38

ITE Trip Rate (if applicable) - 12.57

Zone VMT Per Capita Standard of Significance - 14.51

Located in Town/Regional Center - No

Located in Bonus Unit Eligible Area - No

Jurisdiction - El Dorado County

Parcel Number (APN) - 016-041-010

Project Details

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Date Submitted

Wed Jan 26 22:35:49 2022

Report Notes

None

Analysis Type

TRPA

Existing Land Use

Not Applicable

Proposed Project

Meeks Bay Restoration Project: Alternative 4

Developed Campground/RV Park

2.00 Sites

VMT

Proposed Project Gross VMT - 286

Existing VMT - 0

Mitigated VMT - 0

Project Total Net VMT - 286

Standard of Significance VMT - 0

Mitigation Needed - 0

Screening

Screened - Yes

Additional Analysis Required?

Mitgation Info

Mitigations -

Percent - 0.00%

Other Project Details

Zone ID - Zone 3

Zone Average Trip Length - 11.38

ITE Trip Rate (if applicable) - 12.57

Zone VMT Per Capita Standard of Significance - 14.51

Located in Town/Regional Center - No

Located in Bonus Unit Eligible Area - No

Jurisdiction - El Dorado County

Parcel Number (APN) - 016-041-010

Project Details

The tool provides initial screening for all project types and more detailed analysis for residential, tourist accommodation unit, and public service projects. All non-screened commercial, recreation, and other projects will need to complete a more detailed transportation analysis. For detailed information on the PIA framework, tool usage, and calculations see the User Guidelines. For detailed information on the PIA framework, tool usage, and calculations select the User Guidelines tab. For questions about the project impact assessment process contact Melanie Sloan (msloan@trpa.gov). For technical issues with the tool contact Reid Haefer (rhaefer@trpa.gov).

Date Submitted

Wed Jan 26 22:38:28 2022

Report Notes

None

Analysis Type

TRPA

Existing Land Use

Not Applicable

Proposed Project

Meeks Bay Restoration Project: Alternative 3

Developed Campground/RV Park

22.00 Sites

VMT

Proposed Project Gross VMT - 3,147

Existing VMT - 0

Mitigated VMT - 0

Project Total Net VMT - 3,147

Standard of Significance VMT - 0

Mitigation Needed - 3,147

Screening

Screened - No

Additional Analysis Required?

Mitgation Info

Mitigations -

Percent - 0.00%

Other Project Details

Zone ID - Zone 3

Zone Average Trip Length - 11.38

ITE Trip Rate (if applicable) - 12.57

Zone VMT Per Capita Standard of Significance - 14.51

Located in Town/Regional Center - No

Located in Bonus Unit Eligible Area - No

Jurisdiction - El Dorado County

Parcel Number (APN) - 016-041-010

Project Details

The tool provides initial screening for all project types and more detailed analysis for residential, tourist accommodation unit, and public service projects. All non-screened commercial, recreation, and other projects will need to complete a more detailed transportation analysis. For detailed information on the PIA framework, tool usage, and calculations see the User Guidelines. For detailed information on the PIA framework, tool usage, and calculations select the User Guidelines tab. For questions about the project impact assessment process contact Melanie Sloan (msloan@trpa.gov). For technical issues with the tool contact Reid Haefer (rhaefer@trpa.gov).

Date Submitted

Wed Jan 26 22:35:22 2022

Report Notes

None

Analysis Type

TRPA

Existing Land Use

Not Applicable

Proposed Project

Meeks Bay Restoration Project: Alternative 2

Developed Campground/RV Park

2.00 Sites

VMT

Proposed Project Gross VMT - 286

Existing VMT - 0

Mitigated VMT - 0

Project Total Net VMT - 286

Standard of Significance VMT - 0

Mitigation Needed - 0

Screening

Screened - Yes

Additional Analysis Required?

Mitgation Info

Mitigations -

Percent - 0.00%

Other Project Details

Zone ID - Zone 3

Zone Average Trip Length - 11.38

ITE Trip Rate (if applicable) - 12.57

Zone VMT Per Capita Standard of Significance - 14.51

Located in Town/Regional Center - No

Located in Bonus Unit Eligible Area - No

Jurisdiction - El Dorado County

Parcel Number (APN) - 016-041-010

Project Details

The tool provides initial screening for all project types and more detailed analysis for residential, tourist accommodation unit, and public service projects. All non-screened commercial, recreation, and other projects will need to complete a more detailed transportation analysis. For detailed information on the PIA framework, tool usage, and calculations see the User Guidelines. For detailed information on the PIA framework, tool usage, and calculations select the User Guidelines tab. For questions about the project impact assessment process contact Melanie Sloan (msloan@trpa.gov). For technical issues with the tool contact Reid Haefer (rhaefer@trpa.gov).

Date Submitted

Thu Jan 27 17:52:53 2022

Report Notes

None

Analysis Type

TRPA

Existing Land Use

Not Applicable

Proposed Project

Meeks Bay Marina Removal

Marina

12,042.00 Berths

VMT

Proposed Project Gross VMT - 3,291

Existing VMT - 0

Mitigated VMT - 0

Project Total Net VMT - 3,291

Standard of Significance VMT - 0

Mitigation Needed - 3,291

Screening

Screened - No

Additional Analysis Required?

Mitgation Info

Mitigations -

Percent - 0.00%

Other Project Details

Zone ID - Zone 3

Zone Average Trip Length - 11.38

ITE Trip Rate (if applicable) - 2.41

Zone VMT Per Capita Standard of Significance - 14.51

Located in Town/Regional Center - No

Located in Bonus Unit Eligible Area - No

Jurisdiction - El Dorado County

Parcel Number (APN) - 016-041-010