

INITIAL DETERMINATION OF ENVIRONMENTAL IMPACT CHECKLIST

Project Name: Proposed Code Amendments: Allowing Ground-based Mechanical Equipment on Slopes between 30 and 50 percent.

Project Description:

The Angora Fire began in the North Upper Truckee area in South Lake Tahoe, California. The fire burned out of control, threatening hundreds of residences and commercial structures, and resulted in thousands of evacuations. A total of 3,100 acres were burned and 254 homes were destroyed. The Angora Fire underscored the need for a comprehensive review of fire prevention and fuels management practices in the Basin and spurred the creation of the Joint Fire Commission to conduct this review and generate recommendations on future policy and practice.

The Emergency California-Nevada Tahoe Basin Fire Commission Report, produced in 2008, created a set of findings and recommendations presented in six categories that address both short and long-term needs, policy changes, education, funding, governmental structures, and environmental practices related to Lake Tahoe's vulnerability to wildfire.

The Commission found that when the TRPA was created the risk of catastrophic wildfire to ecosystems and communities was not considered. This risk is compounded by climate change that ushers in a new era of "mega-fires". Subsequently, the Commission recommended the TRPA, LRWQCB, USDA Forest Service, and other affected agencies amend their plans and ordinances to allow for mechanical equipment use on slopes greater than 30% based on current and future technology and forest practices that ensure environmental protection.

Article 4 of the California Forest Practice Act allows for mechanical treatment on slopes up to 50%. The Act states: "Except for tethered operations, heavy equipment shall be prohibited where any of the following conditions are present: (A) Slopes steeper than 65%. (B) Slopes steeper than 50% where the Erosion Hazard Rating is high or extreme."

In Nevada, NRS Chapter 528 Forest Practice and Reforestation also allows mechanical treatments on steep slopes through a variance procedure with the Nevada Firewarden. When issuing a variance, the Firewarden will consider whether ground-based equipment may destroy advanced regeneration and litter cover; the extent to which ground-based equipment may cause soils to be displaced or erode; and, the extent to which ground-based equipment may cause siltation and eroded soils to infiltrate the 50-foot stream buffer.

Likewise, The LTBMU 2016 Land Management Plan outlines a series of standard and guidelines related to forest vegetation, fuels, and fire management. Standard and Guideline 30 outlines the following for forest treatments, "In general, operate ground-based mechanized equipment for vegetation treatment on slopes less than or equal to 30%. Exceptions should be consistent with safety and design specifications and with the ability to effectively alleviate significant resource impacts."

The project proposes ground-based mechanical equipment for thinning treatments on slopes up to 50 percent, which increases the proportion of land in the Basin that could be treated using mechanical equipment (see Table 1 and Figure 1). Chapter 61 of the TRPA Code prohibits mechanized equipment on slopes greater than 30 percent. The proposed project includes an amendment to the TRPA Code to allow ground-based mechanical equipment and skidding on slopes up to 50 percent depending on specific site conditions and TRPA approval.

Approximately 60,685.05 acres within the Basin are located on slopes between 30 and 50 percent. Currently, under the TRPA Code of Ordinances, these acres may only be treated by hand with subsequent pile burning or aerial logging. Allowing ground-based mechanical equipment as opposed to hand thinning on slopes up to 50 percent would allow land managers to remove trees to meet restoration objectives, increase forest resilience, and decrease fire risk. Approximately, 25,305.05 acres (41.7%) on slopes between 30 and 50 percent fall within the Wildland Urban Interface (WUI) Threat or Defense Zones (Figure 2). A WUI Defense Zone is the area directly adjoining structures and evacuation routes that is converted to a less-flammable state to increase defensible space and firefighter safety. The WUI Threat Zone is an additional strip of vegetation modified to reduce flame heights and radiant heat. These areas represent critical acres for treatment in the face of climate change and longer, more extreme fire seasons. Additionally, the code amendment may increase the pace and scale of thinning treatments and generate financial and ecological efficiencies by utilizing staff capacity and equipment more effectively for planning and implementation of restoration treatments such as mechanical thinning and broadcast burning.

As noted above, allowing ground-based mechanical equipment on slopes between 30 and 50 percent would likely decrease the number of hand piles for burning. This would allow managers to reduce smoke emissions associated with pile burning and increase opportunities for biomass utilization that could provide long-term carbon storage and reduce greenhouse gas emissions.

The Code amendment would not allow the use of ground-based mechanical equipment on slopes up to 50 percent slopes that are identified or mapped as unstable or active or dormant landslides.

The proposed code amendments will require TRPA review and approval of ground skidding and ground-based mechanical equipment operations on slopes between 30 and 50 percent to ensure environmental protective measures will be in place to minimize slope erosion. Project-specific requirements to meet minimized slope erosion can include but are not limited to leaving remaining ground cover above 85%, use of slash mats, use of low-pressure technology that limits ground disturbance, or inclusion of vegetative buffers. Prior to approval and implementation, implementors will submit to the TRPA their project description, information, and an initial environmental checklist per project that demonstrates minimized slope erosion.

The Basin-wide Code amendment would apply to approximately 60,685.05 acres within the Basin (see Figure 1). Potential for access constraints among other site-specific factors (e.g., unstable slopes) would inform where mechanical treatments would be appropriate and feasible on 30-50 percent slopes. Of the 60,685.05 acres within the Basin that are on slopes between 30 to 50 percent, approximately 47,162.44 acres (77.7%) are on federal lands, 5,270.12 acres (8.6%) are on state lands, 3,885.40 acres are on private lands, and 882.28 acres are on local lands (Table 2 and Figure 3). Partner agencies that would be able to utilize this code amendment include the USDA Forest Service, the California Tahoe Conservancy, the Nevada Division of Forestry, The Nevada Division of State Lands, California State Parks, and others.

Approximately, 6,293.77 acres within the Basin are on slopes between 30 to 50 percent and are also classified as Wilderness. This is a National Forest System classification that allows for limited management and does not allow mechanized equipment unless under emergency authorizations. Wilderness areas within the Basin are at higher elevations with less trees and more exposed granite, so will most likely not warrant mechanical treatment.

Approximately, 362.83 acres within the Basin are on slopes between 30 to 50 percent and are classified as Stream Environment Zones (SEZs). These areas are not included in the potential code amendment.

Table 1: Acreage by Slopes in the Lake Tahoe Basin

Area	0-30% Slopes (acres)	30-50% Slopes (acres)	Slopes >50% (acres)	Total (acres)
Lake Tahoe Basin	121,536.1	60,685.05	44,142.56	226,363.61

Table 2: 30 to 50 Percent Slopes Acreage by Ownership

Ownership	30-50% Slopes (acres)
Federal	47,162.44
Local	882.28
Private	3,885.40
State	5,270.12
Other	3,592.04

Figure 1: Lake Tahoe Basin Slopes



Figure 2: 30 to 50 Percent Slopes in the Lake Tahoe Basin by WUI Defense or Threat Zone

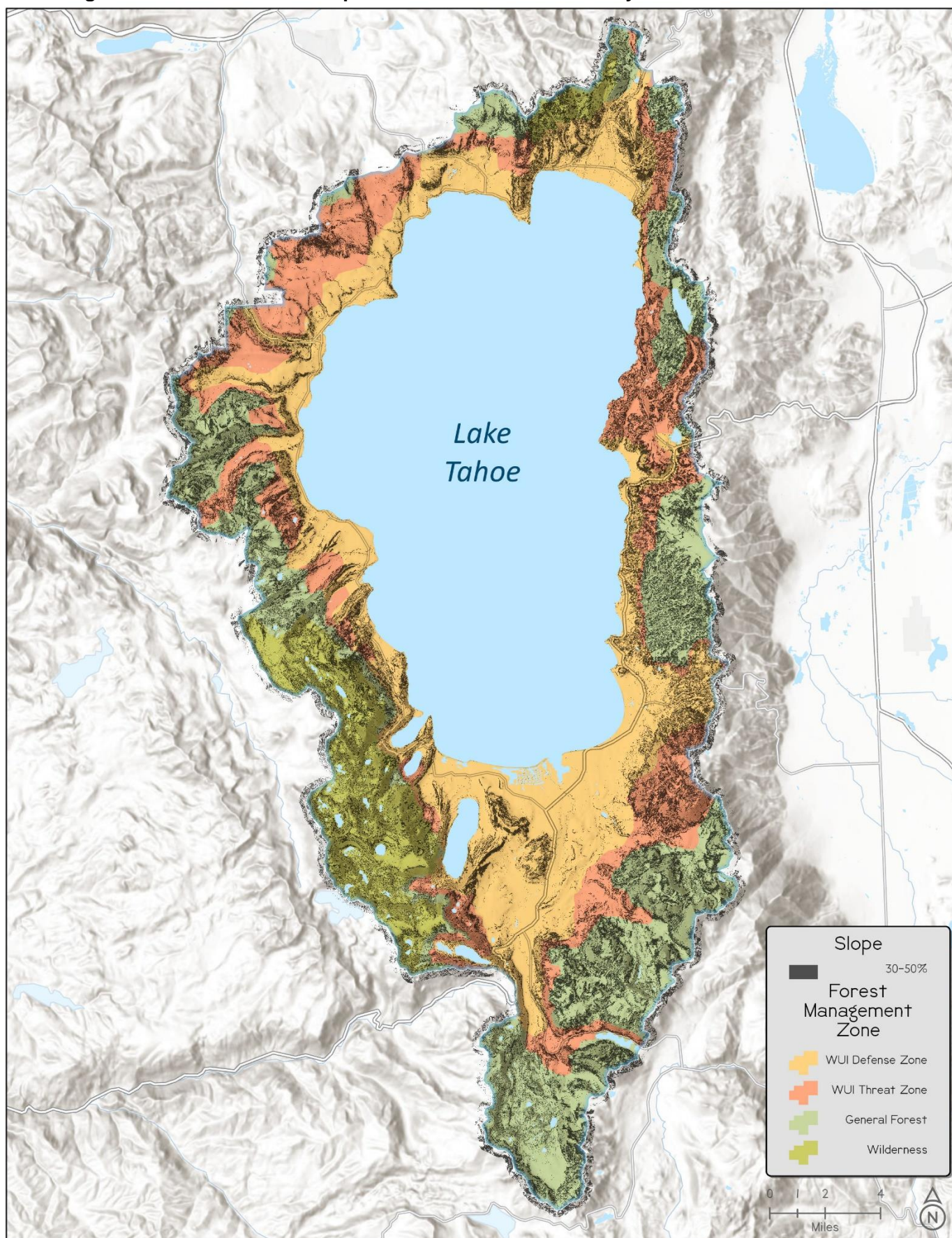
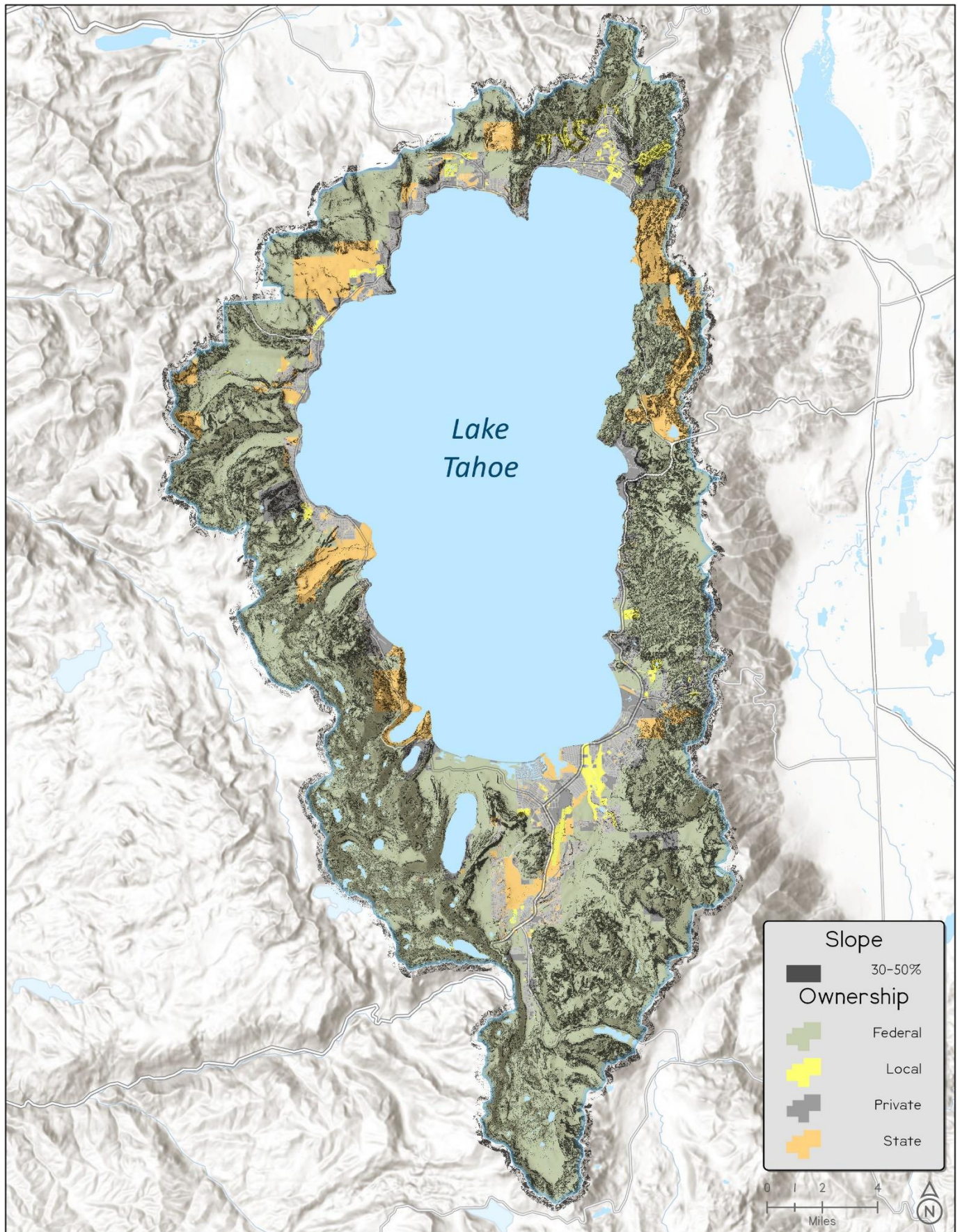


Figure 3: Land Ownership within the Tahoe Basin with 30 to 50 percent slopes



I. Environmental Impacts

1. Land

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Unstable soil conditions during or after completion of the proposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The continuation of or increase in wind or water erosion of soils, either on or off the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code change would only allow for tree removal and forest thinning on slopes between 30 to 50 percent when proven environmentally suitable with limited erosion impacts and post-treatment remediation in place. Implementors will submit a project description, location, and initial environmental checklist for TRPA review and approval that shows all environmental protection measures to minimize slope erosion.

Additionally, implementors currently meet a variety of standards, guidelines, and requirements related to erosion and soil protection within the Tahoe Basin. For example, the Lake Tahoe Basin Management Unit 2016 Land Management Plan outlines a variety of standards and guidelines that dictate forest management practices as they related to soil compaction, erosion, and protection. These standards and guidelines include, but are not limited to:

- SG10. Avoid soil displacement to the extent practical when grading slopes, piling brush or slash, or engaging in other heavy equipment operations where earth moving is not the objective. [Guideline]
- SG11. During vegetation management activities, limit operation of wheeled or tracked vehicles and timber harvesting equipment to designated routes, and restrict operations to periods of suitable soil moisture conditions as defined in project planning documents and contracts. Suitable conditions also include frozen ground, and/or a firm, protective base of compacted snow. When suitable conditions are not present, restrict equipment use to roads and designated stream crossings unless suitable mitigation measures can be employed. [Guideline]
- SG12. Avoid unstable areas and SEZs when reconstructing existing roads and landings or constructing new roads and landings. Minimize and mitigate impacts where avoidance is not practical. [Guideline]

Chapter 528 of Nevada Revised Statutes regarding Forest Practice and Reforestation outlines activities to minimize erosion from forestry operations. For example, NRS 528.055 states, "Skid trails, landings, logging roads and firebreaks shall be so located, constructed, used and left after timber harvesting that erosion caused by water flow therefrom and water flow in natural watercourses shall be limited to a reasonable minimum that will not impair the productivity of the soil or appreciably diminish the quality of the water." Additionally, Chapter 528 outlines best management practices and requirements as they relate to post-treatment restoration including reseeding and revegetating sites (NRS 528.057).

Article 4 of the 2021 California Forest Practice Rules outlines requirements for harvesting practices and erosion control regarding forest management in the State of California. For example, heavy equipment shall not operate on Unstable Areas. If such areas are unavoidable, the RPF shall develop specific measures to minimize the effect of operations on slope instability. These measures shall be explained and justified in the plan and must meet the requirements of 14 CCR § 914 [934, 954]. Additionally, when waterbreaks cannot sufficiently dissipate surface runoff, other erosion controls shall be installed as needed. Erosion Controls means drainage facilities, soil stabilization treatments, road and Landing Abandonment, removal and treatment of Watercourse crossings, and any other features or actions to reduce surface erosion, gully, channel erosion, and mass erosion. Erosion controls must be repaired and maintained year-round to deal with varying weather conditions.

Due to state, federal, and TRPA requirements regarding soil erosion and minimized slope erosion, the proposed code amendments will not have significant impacts as they relate to land.

2. Air Quality

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. Substantial air pollutant emissions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Deterioration of ambient (existing) air quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Air Quality

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
c. The creation of objectionable odors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Increased use of diesel fuel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

While the proposed code amendment could increase the pace and scale of restoration, most likely forest thinning and restoration activities will continue at the current pace. Additionally, implementors have a suite of best management practices they currently employ to meet air quality and noise standards associated with activities including limitations on the time trucks are allowed to idle. Likewise, implementors within the Basin currently need to meet all air quality regulations dictated by County Air Quality Control Boards or state agencies such as the Nevada Department of Environmental Protection. Lastly the proposed code amendment would have significantly less impacts to noise and air quality standards when compared to catastrophic wildfire emissions and associated emergency operations.

3. Water Quality

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Changes in currents, or the course or direction of water movements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Alterations to the course or flow of 100-yearflood waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Change in the amount of surface water in any water body?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Water Quality

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
f. Alteration of the direction or rate of flow of ground water?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Substantial reduction in the amount of water otherwise available for public water supplies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The TRPA Code of Ordinances already outlines protections for water quality as it relates to forest management. For example, 61.1.5.C. requires a tree removal plan be submitted to TRPA for approval of substantial tree removal. The tree removal plan must include prescriptions for water quality protection.

The Lake Tahoe Basin Management Unit 2016 Land Management Plan lists a variety of standards and guidelines related to forest treatments and protection of water quality standards including:

- SG4. Design all Forest management activities to prevent violations of applicable water quality standards. [Guideline]
- SG5. Apply current version of the PSW Region Best Management Practices as described in Forest Service Handbook direction for Soil and Water Conservation, Water Quality Management, and Forest Service National Core BMP Technical Guide to all management activities.[Standard]
- SG7. Store fuel and other toxic materials only at designated sites. Prohibit storage of fuel and other toxic materials within SEZs except at designated administrative sites and sites covered by a Special Use Authorization. Refuel outside of SEZs unless there are no other alternatives. [Guideline]

Chapter 528 of Nevada Revised Statutes regarding Forest Practice and Reforestation (NRS 528.053) prohibits the felling of trees, skidding, rigging or construction of roads or landings, or the operation of vehicles, may take place during a logging operation within 50 feet, measured on the slope, of the high-water mark of any lake, reservoir, stream or other body of water unless a variance is first obtained pursuant to subsection 2 from a committee composed of the State Forester Firewarden, the Director of the Department of Wildlife and the State Engineer.

The California Forest Practice Rules of 2021 outline a variety of requirements associated with the protection of water quality and resources during forest management and timber harvesting including limiting the use of landings, skid trails, and roads during winter operations and ensuring all erosion and ensuring water quality BMPs are in place and functioning for all weather events or conditions. Additionally, all forestry projects within the Basin must comply with any federal and state water quality regulations including the Clean Water Act.

4. Vegetation

Will the proposal result in:		Yes	No	No, with mitigation	Data insufficient
a.	Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Reduction of the numbers of any unique, rare or endangered species of plants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Removal of stream bank and/or backshore vegetation, including woody vegetation such as willows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.	Removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h.	A change in the natural functioning of an old growth ecosystem?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendment will allow for increased forest treatment and the use of ground-based mechanized equipment on slopes between 30 and 50 percent within the Basin. Through removal of trees,

forest treatments in the Basin are typically designed to accomplish forest restoration by increasing forest resilience and decreasing the potential for high severity/catastrophic fires. Removing trees increases horizontal and vertical heterogeneity, which breaks up fuels, can promote tree growth, and provides for diverse wildlife habitat.

Implementors within the Basin currently follow a variety of best management practices associated with terrestrial invasive species control. For example, the Lake Tahoe Basin Management Unit 2016 Land Management Plan) includes several standards and guidelines related to the terrestrial invasive species including:

- SG73. Incorporate prevention and control measures into project planning, management activities and operations to prevent new introductions or contribute to spreading of invasive species, and reduce impacts from existing infestations on NFS lands, or to adjacent lands and water bodies. [Standard]
- SG74. When feasible, employ the following control measures, such as: [Guideline]
 - Use contract and permit clauses to require that the activities of contractors and permittees (including but not limited to special use permits, utility permits, pack stock operators) are conducted to prevent and control the introduction, establishment, and spread of aquatic and terrestrial invasive species.
 - Include invasive species prevention and control measures in mining plans of operation and reclamation plans.
 - When working in known invasive species infestations during project implementation, equipment and vehicles shall be cleaned before moving to other NFS lands.
 - Support partner agencies and their programs. e) Use on-site materials where feasible, unless contaminated with invasive species.
- SG75. Gravel, fill, topsoil, mulch, and other materials should be free of invasive species. [Guideline]
- SG76. New infestations are inventoried and known infestations are prioritized and contained, controlled, or eradicated using an integrated management approach. [Standard]

5. Wildlife

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Reduction of the number of any unique, rare or endangered species of animals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? ☐ ☒ ☐ ☐
- d. Deterioration of existing fish or wildlife habitat quantity or quality? ☐ ☒ ☐ ☐

Discussion

The proposed code amendment will allow for increased forest treatment and the use of ground-based mechanized equipment on slopes between 30 and 50 percent within the Basin. Through removal of trees, forest treatments in the Basin are typically designed to accomplish forest restoration by increasing forest resilience and decreasing the potential for high severity/catastrophic fires. Removing trees increases horizontal and vertical heterogeneity, which breaks up fuels, can promote tree growth, and provides for diverse wildlife habitat. Wildlife habitat will be protected, and in many cases promoted, by decreasing the potential for catastrophic wildfire and subsequently increasing forest resilience.

Implementors within the Basin must meet all state and federal threatened and endangered species laws and requirements including obtaining clearances and permits from the US Fish and Wildlife Service, the California Department of Fish and Wildlife, and the Nevada Department of Wildlife. Additionally, implementors currently manage for sensitive species such as Goshawks and Northern Spotted Owls. These habitat areas are mapped within the Basin and have a strict set of criteria for management. For example, the Lake Tahoe Basin Management Unit 2016 Land Management Plan includes standards and guidelines for the protection of species and associated habitats including, but not limited to:

- SG43. On a project specific basis, prescribe measures needed to provide for the diversity of plant and animal communities and support the persistence of native species. [Guideline]
- SG44. During project development, evaluate the project area, including any designated critical habitat, for the habitat suitability and/or occurrence of TEPCS species. [Standard]
- SG45. Implement Limited Operating Periods (LOPs) for TEPCS species and TRPA identified native species (Plan Appendix C) when determined necessary through biological review. [Standard]
- SG47. Decontaminate field clothing and gear prior to entering and when moving between cave habitats to prevent the spread of pathogens and disease. [Guideline] SG48. Maintain and restore the hydrologic connectivity of streams, meadows, wetlands, and other special aquatic features by implementing corrective actions where BMPs have not been implemented or are not effective on roads and trails that intercept, divert, or disrupt natural surface and subsurface water flow paths. [Guideline]
- SG63. Outside of WUI defense zones, salvage harvests are prohibited in California spotted owl PACs and known carnivore den sites unless a biological evaluation determines that the areas proposed for harvest are rendered unsuitable for the purpose they were intended by a catastrophic stand-replacing event. [Standard]

- SG65. During project-specific analysis determine appropriate amount of coarse woody debris to provide for long-term habitat quality. Coarse woody debris is generally comprised of at least three downed logs per acre in varying stages of decay. [Guideline]
- SG67. Do not construct roads and trails within ¼ mile of the top or base of known cliff nesting raptor sites. [Standard]

6. Noise

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Area Plan, Plan Area Statement, Community Plan or Master Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of people to severe noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Exposure of existing structures to levels of ground vibration that could result in structural damage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendment will not increase noise disturbance or pollution above current allowances within the Tahoe Basin.

7. Light and Glare

Will the proposal:

	Yes	No	No, with mitigation	Data insufficient
a. Include new or modified sources of exterior lighting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create new illumination which is more substantial than other lighting, if any, within the surrounding area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Cause light from exterior sources to be cast off -site or onto public lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create new sources of glare through the siting of the improvements or through the use of reflective materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendment will not significantly impact light and glare.

8. Land Use

Will the proposal:

	Yes	No	No, with mitigation	Data insufficient
a. Include uses which are not listed as permissible uses in the applicable Area Plan, Plan Area Statement, adopted Community Plan, or Master Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Expand or intensify an existing non-conforming use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendment will not significantly impact land use.

9. Natural Resources

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. A substantial increase in the rate of use of any natural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantial depletion of any non-renewable natural resource?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

While this code amendment would promote the removal of trees through ground-based mechanical equipment and may have implications for an increased pace and scale of treatment within the Basin, the benefits of decreased high severity fire risk and increased forest resilience outweigh the potential removal of trees. Likewise, any impacts from the depletion of trees or use of trees by this action would be offset by the potential savings of more trees from high severity wildfire or a mass mortality event from insects and disease spreading through even-aged and dense tree stands.

10. Risk of Upset

Will the proposal:

	Yes	No	No, with mitigation	Data insufficient
a. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Involve possible interference with an emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendment would not have significant impacts regarding risk of upset.

11. Population

Will the proposal:

	Yes	No	No, with mitigation	Data insufficient
a. Alter the location, distribution, density, or growth rate of the human population planned for the Region?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Include or result in the temporary or permanent displacement of residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments would not have a significant impact on population.

12. Housing

Will the proposal:

	Yes	No	No, with mitigation	Data insufficient
a. Affect existing housing, or create a demand for additional housing? To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions:				
1. Will the proposal decrease the amount of housing in the Tahoe Region?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Will the proposal result in the loss of housing for lower-income and very-low-income households?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments would not have a significant impact on housing.

13. Transportation / Circulation

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Generation of 100 or more new Daily Vehicle Trip Ends (DVTE)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Changes to existing parking facilities, or demand for new parking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Alterations to present patterns of circulation or movement of people and/or goods?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Alterations to waterborne, rail or air traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments would not have a significant impact on transportation.

14. Public Services

Will the proposal have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?:

	Yes	No	No, with mitigation	Data insufficient
a. Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Parks or other recreational facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Maintenance of public facilities, including roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f. Other governmental services? ☐ ☒ ☐ ☐

Discussion

The proposed code amendments would not have a significant impact on public services.

15. Energy

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Use of substantial amounts of fuel or energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Ground-based mechanical equipment for tree removal uses diesel fuel. It is not anticipated that the amount of diesel fuel used will be substantially larger than what is currently used within the Basin for tree removal projects. For this reason, the proposed code amendments will not have a significant impact on energy.

16. Utilities

Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:

	Yes	No	No, with mitigation	Data insufficient
a. Power or natural gas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Communication systems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

e. Storm water drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Solid waste and disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments will not have a significant impact on utilities.

17. Human Health

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. Creation of any health hazard or potential health hazard (excluding mental health)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of people to potential health hazards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments will not have a significant impact on human health.

18. Scenic Resources / Community Design

Will the proposal:	Yes	No	No, with mitigation	Data insufficient
a. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Be visible from any public recreation area or TRPA designated bicycle trail?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- e. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines? ☐ ☒ ☐ ☐

Discussion

The proposed code amendment will not have long-term impacts on scenic resources or community design. While there may be short-term localized impacts from treatment units, these impacts will be temporary and significantly less than the potential scenic impacts of a catastrophic wildfire or large insect and disease event. Additionally, implementors within the Basin must currently meet all TRPA scenic requirements as outlined in Chapter 66 of the TRPA Code of Ordinances.

Lastly, implementors currently take into consideration scenic impacts related to forest management. For example, the Lake Tahoe Basin Management Unit 2016 Land Management Plan lists the follow standards and guidelines related to scenic resources:

- SG117. Scenic resource and built environment guidelines are incorporated into management activities and into the design and development of agency facilities.
- SG116. All resource management and permitted activities shall meet or exceed the established scenery objectives shown on the Minimum Scenic Integrity Objective (MSIO) map. Utilize techniques such as: [Standard]
 - Size areas cleared for management objectives to meet minimum requirements for operability and safety.
 - With consideration for scenic objectives, maintain clumps of trees within cleared areas if they do not pose a safety or operational risk.
 - Maintain understory vegetation within cleared corridors if they do not pose a safety or operational risk

19. Recreation

Will the proposal:

	Yes	No	No, with mitigation	Data insufficient
a. Create additional demand for recreation facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create additional recreation capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have the potential to create conflicts between recreation uses, either existing or proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- d. Result in a decrease or loss of public access to any lake, waterway, or public lands? ☐ ☒ ☐ ☐

Discussion

There may be short-term, localized impacts from temporary closures to public lands and recreation areas in the event a treatment unit overlaps a recreation site; however, these impacts will be temporary and significantly less than potential long-term impacts associated with a catastrophic wildfire that could include permanent closure and complete loss of a recreation site and resources.

20. Archaeological / Historical

	Yes	No	No, with mitigation	Data insufficient +
a. Will the proposal result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Is the property associated with any historically significant events and/or sites or persons?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Implementors must comply with all State Historic Preservation Office regulations as outlined by the States of Nevada and California. These requirements typically include surveying for known or unknown archaeological and historical resources prior to implementation and flagging and avoiding of resources when possible. Additionally, implementors regularly consult and coordinate with the Washoe Tribe regarding culturally sensitive and important resources within the Basin and any potential restoration or management impacts.

21. Findings of Significance

	Yes	No	No, with mitigation	Data insufficient
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Does the project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments will not have significant impacts.

Determination:

On the basis of this evaluation:

- a. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure ☒ YES ☐ NO
- b. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules and Procedures. ☐ YES ☒ NO
- c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and TRPA's Rules of Procedures. ☐ YES ☒ NO

Signature of Evaluator

Date _____

Title of Evaluator