

# CHAPTER 61: VEGETATION AND FOREST HEALTH

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## 61.1. TREE REMOVAL

### 61.1.1. Purpose

The purpose of this section is to regulate the management of forest resources to achieve and maintain the environmental threshold standards for species and structural diversity, to promote the long-term health of natural resources, to restore and maintain suitable habitats for native wildlife species, and to reduce accumulations of hazardous fuels in order to decrease the likelihood of catastrophic wildfire events.

### 61.1.2. Applicability

TRPA requires the protection and maintenance of all native vegetation types. TRPA may require the preparation and implementation of a remedial vegetation management plan for any parcel where the need for remedial vegetation management has been identified for purposes of environmental threshold maintenance or attainment. The use, protection, and maintenance of vegetation are also addressed in the following chapters of the Code of Ordinances:

- A. 2: *Applicability of the Code of Ordinances;*
- B. 30: *Land Coverage;*
- C. 33: *Grading and Construction;*
- D. 36: *Design Standards;*
- E. 53: *Individual Parcel Evaluation System;*
- F. 60: *Water Quality;*
- G. 61: *Vegetation and Forest Health;*
- H. 62: *Wildlife Resources;*
- I. 63: *Fish Resources;*
- J. 64: *Livestock Grazing;*
- K. 80: *Review of Projects in the Shorezone and Lakezone;*
- L. 84: *Development Standards Lakeward of High Water, and*
- M. 90: *Definitions.*

### 61.1.3. Delegation of Project Review and Permit Determination

Qualified agencies, or third party designees, may be delegated authority for permit determinations set forth in this chapter. Stream environment zone areas (SEZ's) may be excluded from the delegation. TRPA may, on a case-by-case basis, designate the review of SEZ's if the agency or third party has demonstrated expertise in hydrology, ecology, botany, restoration, soil science, or similar scientific disciplines and are qualified to evaluate and prevent negative impacts to SEZ's and water quality. If TRPA delegates these review and permitting functions, these agencies will also be responsible for ensuring compliance with all other provisions of the Compact, Regional Plan, and Code of Ordinances.

#### **61.1.4. Reasons for Tree Removal**

Except for trees identified for retention under subsection 61.3.7, tree removal shall incorporate measures and prescriptions that promote a range of threshold standards and SEZs pursuant to subsection 61.3.3.C. Trees may be removed for the reasons provided below.

##### **A. Hazardous Tree Removal**

To protect lives and property, trees reported by a qualified forester to be hazardous to property or lives may be removed upon approval by TRPA unless otherwise exempt through a Memorandum of Understanding. Other vegetation shall be protected during removal operations to prevent their damage.

##### **1. Fire Hazard Tree Removal**

Trees identified and marked by a qualified forester as a fire hazard may be removed upon approval by TRPA or pursuant to a TRPA MOU Authorization. Trees identified and marked by a defensible space assessor for defensible space purposes associated with a building or structure may be removed upon approval by TRPA or pursuant to a TRPA MOU Authorization. Fuel reduction projects shall consider multiple threshold objectives. As an alternative to tree removal, the defensible space assessor may approve the limbing of trees that are determined to be a fire hazard, consistent with defensible space requirement of the applicable fire agency. (See Chapter 90 for definition of "fuels management.")

##### **2. Emergency Tree Removal**

When a tree constitutes a physical emergency (e.g., imminent threat of falling on occupied or substantial structures or people), the tree may be removed, but the land owner or manager shall provide photographic documentation and all applicable paperwork and fees to TRPA within ten working days of removal of the hazardous tree.

##### **3. Tree Removal During Emergency Fire Suppression Activities**

Trees may be removed when an emergency fire suppression need exists as determined by the local, state, or federal fire suppression agency involved in a fire suppression activity.

##### **B. Ecosystem Management Goals and EIP Projects**

##### **1. Management Objectives**

Trees may be removed to meet ecosystem management goals:

- a. Restoration and expansion of stream environment zones and riparian vegetation;
- b. Improvement of the structural diversity of all forests based on judgement of a qualified forester;
- c. Enhancement of native wildlife species and/or native wildlife habitat diversity;
- d. Enhancement and protection of tree species of limited occurrence, such as aspen, black cottonwood, ponderosa pine, Douglas-fir, incense-cedar, sugar pine, western white pine, mountain hemlock, whitebark pine, and western juniper;
- e. Protection of sensitive lands;
- f. Minimization of construction of new roads;

- g. Revegetation of existing temporary roads;
  - h. Avoidance of disturbance of stream environment zones, unless such project is to enhance the health of stream environment zones through projects intended to thin trees or prescribe burn within SEZ in accordance with subparagraph 61.3.3.C;
  - i. Utilization of existing openings or disturbed areas as landings where appropriate;
  - j. The promotion of a diversity of seral stages, species diversity, and age class;
  - k. Fuels management for fire hazard reduction; and
  - l. Forest health and resilience to drought, insects, disease, and climate change.
2. **Dead, Dying, or Diseased Tree Removal**  
To enhance forest health, dying, or diseased trees may be removed upon approval by TRPA. Dead trees less than or equal to 30 inches in westside forest types and less than or equal to 24 inches in eastside forest types may be removed without TRPA approval pursuant to subsection 2.3.2.E.
3. **Tree Removal for Early Successional Stage Vegetation Management**  
Tree removal may be permitted when it has been determined by TRPA that it is appropriate to convert an area to, and/or maintain an area in, an early successional stage vegetation type. (See Chapter 90 for definition of "early successional stage vegetation management.") Where soil stabilization is required and/or the replacement of removed vegetation, the applicant shall provide a revegetation or soil stabilization plan in accordance with subsection 61.4.5.
4. **Tree Removal for Enhancement of Forest Health and Diversity**  
Tree removal may be permitted where the species or structural diversity of an area is not in accordance with management objectives. TRPA shall apply the criteria below in reviewing tree removal to enhance forest health and diversity.
- a. A management plan that demonstrates the need for the project and the means of accomplishing the objectives listed below shall be prepared by a qualified forester.
    - (i) Removal of trees shall not result in less than minimum stocking levels required by the applicable state or federal forestry agency.
    - (ii) If improved structural diversity is the objective, removal of trees shall be linked to a reforestation program that provides for the establishment of younger-aged trees, or be accompanied by a report from a qualified forester that states the reasons why a reforestation plan is not necessary to achieve structural diversity objectives.
    - (iii) If improved species diversity is the objective, removal of trees shall be linked to a reforestation program that provides for the establishment of native species other than the local dominant, or be accompanied by a report from a qualified forester that states the reasons why a reforestation plan is not necessary to achieve species diversity objectives.
    - (iv) On parcels of three acres or less, the tree removal permit may serve as the management plan.

- b. The site proposed for tree removal for forest diversity shall be within a contiguous area of at least three acres in which a single tree species of similar age class dominates. There is no minimum acreage when removing trees for forest health or for successional management of stream environment zones.

**C. Tree Removal for Solar Access**

Removal of healthy trees to maximize efficiency of solar energy systems may be permitted according to the standards below.

1. TRPA may approve the removal of healthy trees provided TRPA finds that the trees unreasonably impede the operation of a solar energy system and that the solar energy system is properly located so as to minimize the need for tree removal.
2. The number of healthy trees that may be removed for the system's operation shall be the minimum necessary.
3. The only trees that shall be considered for removal for an active or passive solar energy system are those that lie generally south of the proposed solar collector and are in the sun's path between an 18° vertical angle measured from the base of the solar collector and a 70° vertical angle from the same base measurement. Trees on adjacent properties may be removed provided a contractual agreement to allow for such removal is signed by the affected parties. Tree removal may be conditioned upon replacement elsewhere on the property.

**D. Public Utility Rights-of-Way**

The removal of trees within utility and public rights-of-way may be allowed if TRPA finds that the removal is for public health and safety. When a tree-related emergency exists, the utility or public agency may remove the trees and advise TRPA of the action on the next business day. At that time TRPA may issue an emergency permit in accordance with its Rules of Procedure.

**E. Tree Removal for Ski Areas**

For expansion of ski areas, including but not limited to, the widening of runs and the addition or replacement of lifts, only the minimum number of trees necessary for the operation of the ski area shall be removed.

**F. Tree Removal for Development**

Tree removal for development in conjunction with a TRPA permit shall be in accordance with the provisions of this chapter and Section 33.6.

**G. Tree Removal to Enhance Scenic View Points from Public Roadways**

Select trees may be removed to enhance scenic viewpoints from scenic turnouts located on highways, public right-of-ways and other public lands immediately adjacent to highway corridors.

**61.1.5. General Tree Removal Standards**

The cutting, moving, removing, killing, or materially damaging of live trees, and the attachment of appurtenances to trees, shall comply with this subsection. The removal of trees 14 inches dbh or less shall be exempt from TRPA approval under subparagraph 2.3.2.M and requirements of this chapter, except as provided herein. Removal of trees greater than 14 inches dbh shall require approval by TRPA except as provided in subparagraphs 61.1.4.A.2 and 61.1.4.A.3. Removal of trees greater than six inches dbh on lakefront properties where the trees to be removed provide vegetative screening of existing structures as viewed from Lake Tahoe requires TRPA approval, except as

provided in subsections 61.1.4.A.2 and 61.1.4.A.3. Permits shall be granted or denied in conformity with the provisions of this chapter.

**A. Additional Code Standards**

Such tree-related projects and activities also shall conform to the provisions of the Code as provided below.

1. If vegetative screening is required by an existing permit for any property, the vegetative screening shall not be removed without prior approval from TRPA except for defensible space purposes pursuant to subparagraph 61.3.6.D.
2. If tree and/or vegetation removal to occur on any property where existing permit conditions require retention of vegetation, including tree and/or vegetation removal for defensible space purposes pursuant to subparagraph 61.3.6.D, alternative scenic mitigation shall be proposed to TRPA within 30 days of vegetation removal and shall be subject to review and approval by TRPA notwithstanding the permit exemption in subparagraph 2.3.2.M.

**B. Findings**

Before tree-related projects and activities are approved by TRPA, TRPA shall find, based on a report from a qualified forester, that the project or activity is consistent with this chapter and the Code. TRPA may delegate permit issuance to a federal, state, or other qualified agency through a memorandum of understanding.

**C. Harvest or Tree Removal Plan**

In cases of substantial tree removal, as set forth in subparagraph 61.1.8, the applicant shall submit a harvest plan or tree removal plan prepared by a qualified forester. The plan shall set forth prescriptions for tree removal, water quality protection, vegetation protection, residual stocking levels, reforestation, slash disposal, fire protection, and other appropriate considerations. The plan, as approved by TRPA, shall become a part of the project and prescriptions contained in the plan shall be conditions of approval. TRPA may consider plans developed pursuant to the California Forest Practice Rules or other CEQA documents completed by a qualified forester to meet the intention of this section provided all the required elements are addressed.

**61.1.6. Minimum Standards for Tree Removal**

The minimum standards for tree removal shall be as provided below.

**A. Cutting Practices**

The following cutting practice standards apply:

1. Sufficient trees shall be reserved and left uncut and undamaged to meet the minimum acceptable stocking standards of the appropriate state or federal forestry agency, except in cases of early successional stage management;
2. Group selections shall be limited to use for achieving management objectives based on the judgement of a qualified forester. Group selections shall be limited in size to less than five acres (See subparagraph 61.1.6);
3. All live trees to be cut shall be marked on bole and stump with paint by, or under the supervision of, a qualified forester prior to TRPA approval.

Trees to be removed or protected may be designated by other means in situations involving clear cuts or thinning of exceptionally dense thickets, or other situations that warrant an alternate method of designation. The alternate method shall be stated in the plans and must be approved by TRPA;

4. Damage to unmarked trees and residual vegetation shall be avoided to the extent feasible;
5. All trees shall be felled in line with the skidding direction wherever possible;
6. All trees shall be limbed on all sides where feasible and topped prior to skidding except where whole tree skidding is less disruptive to the forest resources;
7. Stumps shall be cut as low as can be done safely and to the extent that is feasible for harvesting equipment;
8. If stump removal will result in greater than three cubic yards of soil disturbance, a grading permit shall be obtained from TRPA prior to removal of stumps;
9. Green stumps shall be treated to prevent the spread of root disease as specified by a qualified forester; and
10. Insect-infested wood and wood susceptible to insect infestation shall be treated or disposed of as specified by a qualified forester.

**B. Logging Roads, Skid Trails, and Landings**

All logging roads, skid trails, and landings shall be constructed or otherwise created and maintained in accordance with the requirements of this chapter and the *Handbook of Best Management Practices*. Existing roads, skid trails, and landings shall be used whenever possible. New roads shall be approved only if TRPA finds that all alternatives have been explored and determines that the construction of new roads, skid trails, or landings would be the preferred alternative. In accordance with subparagraph 60.1.3.B, existing roads and landings may be accessed in the winter to help prepare for over-snow **and over frozen ground** tree removal. Such preparation **for winter operations** shall be limited to ~~packing snow over the roadways to obtain a firm snow base and allowing~~ movement of logs and equipment without disturbance of the soil. The standards provided below also shall apply.

1. The requirements and standards for design, grade, tree felling in right-of-way, slash cleanup, width, and maintenance, by road type as determined by TRPA, shall be as shown in Tables 61.1.65-1 and 61.1.65-2.

TABLE 61.1.65-1: LOGGING ROADS AND SKID TRAILS: DESIGN AND GRADE		
Road Type	Design	Maximum Grade
Permanent administrative roads	Plans and specifications	10%
Limited use roads remaining open	Plans and specifications	10% with occasional 15%
Limited use roads closed after logging	Plans and specifications	10% with occasional 15%
Temporary roads	Flag line	20%
Tractor roads and main skid trails	Flag line	<del>30</del> 50%
Secondary skid trail	None	<del>30</del> 50%

**TABLE 61.1.65-2: LOGGING ROADS AND SKID TRAILS: OTHER STANDARDS**

Road Type	Right of Way Tree Falling	Minimum Slash Cleanup	Maximum Width	Maintenance
Permanent administrative roads	Prefall	Removal within 50 feet of road	30 feet*	As determined by TRPA
Limited use roads remaining open	Prefall	Removal within 50 feet of road	15 feet 2/turnouts*	Annual maintenance required**
Limited use roads closed after logging	Prefall	Lop and scatter	15 feet 2/turnouts*	Close to vehicle use and revegetate
Temporary roads	Prefall	Lop and scatter	15 feet*	Close to vehicle use and revegetate
Tractor roads and main skid trails	Concurrent	Lop and scatter	15 feet	Close to vehicle use and revegetate
Secondary skid trails	Concurrent	Lop and scatter	15 feet	Close to vehicle use and revegetate

\* Unless TRPA finds that greater width is necessary for feasible use or safety.

\*\* "Annual Maintenance" includes activities such as restoring drainage features and making other road repairs as necessary.

2. Skid trails shall be located so as to protect residual stands through utilization of natural openings and topographic characteristics. The number of skid trails shall be kept to the minimum necessary and their width shall be 15 feet or less **shall be the minimum size needed**. Directional felling shall be used whenever possible to minimize skid trail density. Main skid trails shall be flagged in advance of felling operations and shall require approval by TRPA.
3. Best Management Practices shall be installed on all skid trails, landings, and roads, no later than 15 days following completion of operations within a particular treatment unit, or at the time of seasonal shutdown, whichever is sooner.
4. Water breaks shall be spaced as provided below.
  - a. The maximum slope distance in feet by **estimated hazard rating and land capability district** shall be according to Table 61.1.65-3 **unless exceptions to water break spacing are requested and approved by TRPA as equally or more protective of water quality**.

**TABLE 61.1.5-3: MAXIMUM SLOPE DISTANCE IN FEET BY LAND CAPABILITY DISTRICT**

Gradient	5-7	3-4
Less Than 10%	200	200
10-20%	150	90
21-30%	90	50

TABLE 61.1.6-3: WATER BREAK SPACING REQUIREMENTS BY ESTIMATED HAZARD RATING			
Estimated Hazard Rating	U.S. Equivalent Measure Road or Trail Gradient (10 or less percent)	U.S. Equivalent Measure Road or Trail Gradient (11-25 percent)	U.S. Equivalent Measure Road or Trail Gradient (26-50 percent)
Extreme	100 ft.	75 ft.	50 ft.
High	150 ft.	100 ft.	75 ft.
Moderate	200 ft.	150 ft.	100 ft.
Low	300 ft.	200 ft.	150 ft.

- b. Water breaks shall be placed at lesser intervals as necessary to prevent soil erosion caused by firebreaks, trails, or landings.
- c. Construction of water breaks shall be kept current with operations or at the time of seasonal shutdown, whichever is sooner. Erosion control work, including the design and interval of water breaks, shall require TRPA approval **unless addressed under a Memorandum of Understanding.**
- d. Landing areas shall be properly drained in a manner to prevent soil erosion and stream pollution.

**C. Removal Methods**

Only the tree removal methods shown in Table 61.1.65-4 shall be used on lands located within the land capability districts shown **unless other removal methods are shown to have the same practical effect as removal methods below:**

TABLE 61.1.65-4: TREE REMOVAL METHODS	
Land Capability District	Removal Method
1a, 1c, or 2	Aerial removal, hand carry, and use of existing roads, in conformance with subsection 61.1.6. Over-snow and <b>over frozen ground</b> removal may be approved pursuant to subparagraph 61.1.6.F.1. <b>Use of ground-based equipment and skidding may be used pursuant to 61.1.6.F.1. through 61.1.6.F.5. with approval by the TRPA.</b>
1b (Stream Environment Zone)	As permitted in Land Capability District 1a, end lining may be approved when site conditions are dry and stable, or when winter conditions are adequate for end lining operations so as to avoid adverse impacts to the soil and vegetation. The use of "innovative technology" vehicles and/or "innovative techniques" for removing trees from SEZs may be considered pursuant to subparagraph <del>61.1.6.C.1.b.</del> <b>61.3.3.C.1.c.</b>
3	As permitted in Land Capability District 1b, Ground skidding pursuant to subparagraph 61.1.6. <del>D.F.2</del> may be approved.
4 - 7, Inclusive	As permitted in Land Capability District 1b. Ground skidding, as well as pickup and removal by conventional construction equipment, may be approved. Ground-based vehicle systems for removing trees without skidding may be approved pursuant to subparagraph 61.1.6. <del>DF.5</del> .

**D. Skidding and Ground Based Vehicle Systems**

Skidding is the act of dragging **or partially suspending** a tree or log along the ground, ~~or~~ **over snow, or frozen ground** by cable systems or by mobile equipment. Ground skidding is the act of skidding a log or tree in full contact with the ground



behind mobile equipment. End lining is dragging a log or tree in full contact with the ground by a winch. Cable yarding is the act of removing a log or tree by cable with one end of the log or tree in contact with the ground **or fully suspended**. Ground based vehicle systems **include** ~~are all in one "process at the stump"~~ harvesters **and machines** that cut, process, and remove trees **and may require** ~~without any~~ ground skidding.

1. Skidding over snow **or frozen ground** is preferred to **unfrozen** ground skidding. The depth of the snow shall be sufficient to prevent disturbance of the soil beneath the snow as determined by site-specific field observations. ~~Skidding operations shall cease when soil becomes visible on the surface of the snow.~~
2. **Ground skidding may be permitted on slopes under 30%. Ground skidding on slopes between 30% and 50% requires TRPA review and approval to ensure that environmental protective measures (e.g., water breaks, vegetative buffers, slope length limitations, and remaining ground cover post-treatment, erodible soil avoidance) will be in place to minimize slope erosion. Ground skidding shall be limited to Land Capability Districts 3, 4, 5, 6, and 7.**
3. Logs shall only be skidded endwise.
4. No logging arches, other than integral arch equipment, shall be permitted.
5. Ground-based vehicle systems for removing trees without skidding, such as harvester and forwarder combinations, may be used **on slopes below 30 percent**. ~~approved by TRPA for use in Land Capability Districts 4, 5, 6, and 7.~~ **On slopes between 30% and 50%, ground-based vehicle systems for tree removal requires TRPA review and approval to ensure that environmental protective measures (e.g., water breaks, vegetative buffers, slope length limitations, and remaining ground cover post-treatment, erodible soil avoidance) will be in place to minimize slope erosion. The use of "innovative technology" vehicles and/or "innovative techniques" for removing trees without skidding may be considered in Land Capability District 1b and 3 pursuant to subparagraph 61.3.3.C.1.c.61.1.6.C.1 and subparagraph 61.1.6.CE.**

**E. Slash Disposal**

Slash shall be disposed of according to an approved slash disposal plan.

1. Lop and scatter, pile and burn or broadcast burn (consistent with Sections 61.2 and 65.1), chip, or haul away. All burns shall be located beyond approved buffers from any stream channel, unless it can be demonstrated, using best available science, that slash burning within the approved buffer of a channel will not cause adverse environmental impacts.
2. Cull logs and other material shall be disposed of as required by the permit.

**F. Erosion Control**

The adequacy of all required BMPs shall be confirmed at the time of the TRPA pre-operations inspection. Any modifications to the required BMPs as determined by TRPA shall be incorporated into the project permit at that time or

as determined to be necessary throughout forest management operations. The following erosion control standards apply:

1. The following Temporary BMPs are required to be installed prior to the commencement of any forest management or equipment operations:
  - a. Temporary erosion controls and vegetation protection measures.
  - b. Equipment exclusion area boundary markings or fencing, as necessary to comply with the TRPA-approved forest management plan.
2. Excavated material shall be stored upslope from the excavated areas to the extent possible. No material shall be stored in any SEZ, wet area, or stream buffer zone.
3. Projects must have design criteria to avoid tracking soil off the project site. Equipment operations shall cease when a violation of this condition exists. The site shall be cleaned and the road right-of-way swept clean when necessary.
4. No equipment or vehicle repairs, other than necessary maintenance of harvest equipment, shall be permitted in the project area unless authorized by TRPA. The discharge of petroleum products, construction waste and litter (including sawdust), or earthen materials to the surface waters of the Lake Tahoe Basin is prohibited. Spill containment and absorbent materials shall be kept on site at all times. All petroleum products and hazardous waste shall be removed from the project area and disposed of at an approved location.

#### **61.1.7. Commercial Tree Removal**

##### **A. General Standard**

Trees may be removed as a commercial enterprise pursuant to the tree removal practices of subsection 61.1.6.

##### **B. Cutting and Cultivation of Christmas Trees**

Legally existing Christmas tree cultivation operations, when certified by a qualified forester to be utilizing native species and proper silvicultural methods, may continue upon approval by TRPA. New Christmas tree farm operations meeting the above conditions may be permitted if TRPA finds them to be in compliance with the Code and the applicable plan area statements.

#### **61.1.8. Substantial Tree Removal**

Substantial tree removal shall be activities on project areas of three acres or more and proposing the removal of more than 100 live trees 14 inches dbh or larger, or proposing tree removal that as determined by TRPA after a joint inspection with appropriate state or federal Forestry staff does not meet the minimum acceptable stocking standards set forth in subparagraph 61.1.6.H. Substantial tree removal projects shall be processed by the appropriate state and federal agencies in coordination with TRPA as required below.

##### **A. Private Parcels**

The review process for private parcels shall include the following:

1. Harvest plan shall be written by a qualified forester;

2. Harvest plan shall be submitted to the appropriate state and federal agencies and TRPA with an initial environmental checklist or environmental assessment;
  3. Preparation of environmental impact statement if necessary;
  4. Pre-approval field review;
  5. Approval of project by TRPA;
  6. Pre-harvest field review; and
  7. Post-harvest review.
- B. Public Parcels**
1. The review process for substantial tree removal for public parcels administered by public land management agencies may be determined according to a Memorandum of Understanding (MOU) between the partner agency and the TRPA. For agencies without an MOU with the TRPA, the process shall be the same as for private parcels listed above.

## **61.2. PRESCRIBED BURNING**

### **61.2.1. Purpose**

This section sets forth standards and regulations pertaining to the use of fire in controlled circumstances for vegetation management.

### **61.2.2. Applicability**

The standards and regulations in this section apply to all intentional burning for the purpose of vegetation management, unless otherwise exempt from TRPA review under the provisions of Chapter 2: *Applicability of the Code of Ordinances*.

### **61.2.3. Prescribed Burning**

#### **A. Prescribed Burning Allowed**

Persons who own or manage forests or range lands may use prescribed burning, consistent with the standards and regulations set forth in this section, to maintain forest health and diversity and to reduce the risk of wildfire.

### **61.2.4. Performance Standards**

The use of prescribed burning for vegetation management shall comply with the standards provided below.

#### **A. Location of Prescribed Burning**

The use of prescribed burning shall be limited to those areas where the plan area statements designate as a permissible use one or more of the following uses:

1. Nonstructural wildlife habitat management;
2. Range improvement;
3. Fuels management; or
4. Prescribed fire management.

#### **B. Extent of Prescribed Burning**

Each prescribed burn shall be limited to the minimum area necessary to achieve the purpose of the prescription.

**C. Timing of Prescribed Burning**

Prescribed burning shall be limited to time periods for which TRPA finds that atmospheric conditions normally will allow complete dispersion of the smoke from the prescribed burn during each day of the burn.

**D. Responsible Persons**

A qualified expert, experienced in the use of fire for vegetation management, shall prepare a burning prescription for review and, if appropriate, approval by TRPA. The expert shall certify that the prescription meets the standards of this section. The expert shall oversee the conduct of the burn.

**E. Standards of Other Government Agencies**

All prescribed burning shall comply with applicable standards of other government agencies with appropriate jurisdiction, including but not limited to the following agencies: the El Dorado County Air Pollution Control District; the Placer County Air Pollution Control District; the California Air Resources Board; the California State Water Resources Control Board; the California Regional Water Quality Control Board; the Nevada Division of Environmental Protection; the California and Nevada Departments of Forestry; and the United States Forest Service. Where TRPA standards conflict with another agency's standards, the most stringent standard shall control.

**61.2.5. Compliance Program**

To achieve compliance with the standards in subsection 61.2.4, TRPA shall apply the following provisions:

**A. Consistency with Primary Use**

TRPA shall review and, if appropriate, approve applications to conduct prescribed burns consistent with the provisions of Chapter 21: *Permissible Uses*, regarding allowed and special uses for those uses listed in subparagraph 61.2.4.A.

**B. Burn Prescription**

All applications to conduct prescribed burning shall be accompanied by a burn prescription. A burn prescription shall include the following items:

1. Detailed statement of the purpose of the prescribed burn;
2. Description, including a map at an appropriate scale of the location and a real extent of the prescribed burn. Such description shall allow TRPA to determine whether the proposed burn complies with subparagraphs 61.2.4.A and 61.2.4.B;
3. Description of the timing of the prescribed burn, and meteorological information that demonstrates that the timing of the prescribed burn will normally allow complete dispersion of the smoke from the burn during each day of the burn;
4. A list of the applicable standards of TRPA and other government agencies with jurisdiction over the burn, and a discussion of how the proposed prescription complies with those standards;
5. A detailed description of the proposed burning operation, including a description of all safety procedures that will be used to prevent wildfire;
6. A certification by a qualified expert experienced in the use of fire for vegetation management that the burn prescription complies with this

section; and that the expert shall oversee the conduct of the burn to ensure that the prescription is followed; and

## **61.3. VEGETATION PROTECTION AND MANAGEMENT**

### **61.3.1. Purpose**

In accordance with the Vegetation Conservation Element of the Regional Plan Goals and Policies, this section provides for the protection of Stream Environment Zone (SEZ) vegetation, other common vegetation, uncommon vegetation, and sensitive plants. It also provides for remedial management of vegetation to achieve and maintain environmental thresholds for plant species and structural diversity, and the maintenance of vegetation health. The management and protection of vegetation shall, at a minimum, consider the diversity of plant species and landscape pattern of plant communities, and their attributes in relationship to wildlife and fisheries habitat, scenic quality, recreation use, soil conservation, and water quality.

### **61.3.2. Applicability**

TRPA requires the protection and maintenance of all native vegetation types. TRPA may require the preparation and implementation of a remedial vegetation management plan for any parcel where the need for remedial vegetation management has been identified for purposes of environmental threshold maintenance or attainment.

### **61.3.3. Protection of Stream Environment Zones**

#### **A. General Requirement**

Unless excepted in B below, no project or activity shall be undertaken in an SEZ (Land Capability District 1b) that converts SEZ vegetation to a non-native or artificial state or that negatively impacts SEZ vegetation through action including, but not limited to, reducing biomass, removing vegetation, or altering vegetation composition.

#### **B. Exceptions**

The activities below are exceptions to the general requirement in A above.

1. Manipulation or management of SEZ vegetation may be permitted in accordance with the Code for purposes of SEZ vegetation health or wildlife or fish habitat improvements, and after approval of a vegetation management plan pursuant to subparagraph 61.3.5.B, or as provided in Section 30.5, subsection 30.4.4, subparagraph 30.4.6.D.3, Section 63.3, or Sections 61.1 or 61.2.
2. Maintenance of landscaping that was installed prior to the creation of TRPA, or installed for the purpose of scenic quality pursuant to Chapter 36: *Design Standards*, or pursuant to a TRPA permit, or under a TRPA exemption prior to August 1, 1997, provided that fertilizer use is restricted in accordance with the BMP Handbook and described in subparagraph 60.1.8.A, unless a remedial action pursuant to subsection 61.3.4 has been taken by TRPA.
3. Removal of vegetation may be permitted pursuant to subparagraphs 2.3.2.E, or 2.3.6.A.8, Section 33.6, Chapter 64: *Livestock Grazing*, or under defensible-space guidelines approved by TRPA.

#### **C. Tree Cutting Within Stream Environment Zones**

Tree cutting within stream environment zones may be permitted to allow for early successional stage vegetation management, sanitation salvage cuts, fuels management for fire hazard reduction, maintenance of utility rights-of-way, restoration or enhancement of ecosystem health and diversity, and fish and

wildlife habitat improvement projects, in accordance with the standards provided below. TRPA -approved reasons for removal of trees over 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types within an SEZ are the same as TRPA-approved reasons for removal of trees over 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types as listed in Sections 61.3.7.A.1 through Section 61.3.7.A.10.

**1. Vehicle Restrictions**

All vehicles shall be restricted to areas outside of the SEZ or to existing roads within SEZs, except for tree removal over-snow or frozen ground with hard frozen soil conditions or use of low impact technology where permanent disturbance does not occur.

The following criteria shall apply:

- a. TRPA may permit the use of vehicles in/on frozen ground with hard frozen soil conditions or over-snow tree removal operations. A qualified forester will ensure that conditions are suitable to prevent visible or permanent soil disturbance and/or significant vegetation damage; and
- b. Winter ground-based equipment operations would take place on portions of the treatment unit where adequate snow or frozen ground with hard frozen soil conditions are present. The following criteria will be applied in determining equipment operations:
  - (i) Frozen soil operations are permitted where operated vehicles, tractors and equipment can travel without sinking into soil, road, and/ or landing surfaces to a depth of more than 2 inches for a distance of more than 25 feet. Temperatures must also remain low enough to preclude thawing of the soil surface.
  - (ii) For over-snow operations, maintain approximately 12 inches of compacted snow/ice on undisturbed ground, and 6 inches of compacted snow/ice on existing disturbed surfaces. For over-the-snow and frozen soil operations in SEZs, exclude ground- based equipment from the 25- foot buffer around perennial and intermittent watercourse channels.
- c. TRPA shall review site-specific proposals for and may permit the use of "innovative technology" vehicles and/or "innovative techniques" for the purpose of fire hazard reduction in SEZs provided that no significant soil disturbance or significant vegetation damage will result from the use of equipment. (See Chapter 90: *Definitions*, for definitions of "innovative technology" vehicles and "innovative techniques.") Project proposals should be developed within an adaptive management framework that will result in data that can be used to support and/or improve on equipment and techniques. TRPA shall conduct a pre-operation inspection of the site to decide if vehicle use is appropriate for the given situation, to verify the boundaries of the SEZ, and to identify other areas of concern. The following minimum conditions shall apply:

- (i) Project proponents shall provide documentation substantiating that the use of such vehicles will not cause significant soil disturbance or significant vegetation damage. Documentation must take into account soil types, hydrology, vegetation type and cover, and other ecosystem characteristics, relevant to the use of such vehicles in similar environments. Documentation can include relevant scientific research, monitoring studies, and other supporting analyses;
- (ii) Operations using “innovative technology” vehicles in SEZs shall be limited to the management of common conifer species (e.g., lodgepole pine, white fir), however, incidental hardwoods that need to be removed from within a conifer vegetation type may also be removed using the vehicles;
- (iii) Operations shall be limited to times of the year when soils are sufficiently dry to avoid and/or minimize compaction and sufficiently stable to avoid and/or minimize erosion;
- (iv) Erosion control measures (BMPs) shall be implemented both during and after operations to avoid soil detachment and transport wherever possible, and to minimize erosion wherever soil disturbance cannot be avoided;
- (v) To prevent sediment delivery to surface waters, including wetlands, more stringent setbacks from watercourses than the setbacks set forth in other regulations regulating timber harvests, such as the California Forest Practice Rules and Nevada State Statutes, may be designated if deemed necessary by TRPA;
- (vi) Operations shall incorporate appropriate measures to avoid impacts to wildlife during critical wildlife nesting and denning periods in accordance with Chapter 62: *Wildlife Resources*;
- (vii) Operations shall incorporate measures to protect historic resources in accordance with Chapter 67: *Historic Resource Protection*; and
- (viii) Projects shall be monitored to ensure that the SEZ has not sustained any significant damage to soil or vegetation function. Along with the project proposal, adaptive management concepts should be applied to the monitoring plan. A monitoring plan shall be submitted with all project proposals, including at a minimum: a list of sites and attributes to be monitored; specification of who will be responsible for conducting the monitoring and reporting; a narrative for implementing corrective actions when monitoring determines such corrective action is necessary; and a monitoring and reporting schedule.
- (ix) Once an innovative technology has been deemed acceptable by TRPA, all partners or permittees may utilize that technology.

**2. Soil Conditions**

All work within stream environment zones shall be limited to times of the year when soil conditions are dry and stable, or when conditions are adequate for frozen ground with hard frozen soil conditions or over-snow tree removal operations without causing significant soil disturbance and/or significant vegetation damage

**3. Trees and Debris Kept from Streams**

Felled trees and harvest debris shall be kept out of all watercourses. If deposited in the stream, the material shall be promptly removed unless

it is determined that such logs and woody material adds structural diversity pursuant to fish and wildlife habitat improvements in accordance with Chapter 62: *Wildlife Resources*, and Chapter 63: *Fish Resources*. This determination shall be approved by TRPA. Logs or other woody material may be placed in streams to provide woody structure pursuant to fish or wildlife habitat improvement programs approved by TRPA in accordance with Chapter 63.

**4. Stream Crossings**

The crossing of perennial streams or other wet areas shall be limited to improved crossings meeting Best Management Practices or to temporary bridge spans that can be removed upon project completion or at the end of the work season, whichever is sooner. Any damage or disturbance to the stream environment zone associated with a temporary crossing shall be restored within one year of its removal. In no instance shall any method requiring the placing of rock and earthen material into the stream or streambed be considered an improved crossing. Other temporary measures may be permitted for dry stream crossings in accordance with the *Handbook of Best Management Practices*.

**5. Special Conditions**

Special conditions shall be placed on all tree harvests within stream environment zones or within the transition or edge zone adjoining stream environment zones, as necessary to protect in-stream aquatic habitat values and wildlife habitat integrity and diversity.

**61.3.4. Remedial Vegetation Management**

TRPA and resource management agencies, including the states' forestry departments, shall identify areas where remedial management of vegetation is necessary to achieve and maintain environmental thresholds for health and diversity in vegetation. Requests by TRPA to prepare and implement a remedial vegetation management plan for a specified area shall follow the procedures set forth in Section 5.12: *Remedial Action Plans*.

**61.3.5. Preparation of Remedial Vegetation Management Plans**

At the request of TRPA, remedial vegetation management plans shall be prepared by the property owners of areas identified for remedial vegetation management in cooperation with TRPA and appropriate resource management agencies.

**A. Plan Content**

Remedial vegetation management plans shall contain, at a minimum, the following information:

1. Purpose of the management plan, including a list of objectives;
2. Description of existing vegetation, including the abundance, distribution, and age class of tree species;
3. Remedial measures necessary to achieve the stated objectives, including details of harvest and revegetation plans (see Section 61.4); and
4. An implementation schedule, including a monitoring program to report progress on monitoring of vegetation.



**B. Plan Approval**

TRPA may approve a remedial vegetation management plan provided the plan is necessary to achieve, and can reasonably be expected to achieve, the purposes set forth in subsection 61.3.4.

**61.3.6. Sensitive and Uncommon Plant Protection and Fire Hazard Reduction**

**A. Purpose**

This subsection sets forth standards for the preservation and management of vegetation of significant scenic, recreational, educational, scientific, or natural values of the region, and for management of vegetation to prevent the spread of wildfire.

**B. Applicability**

This subsection applies to all projects and activities that could have a detrimental effect on designated sensitive plants or uncommon plant communities, and to all areas where vegetation may contribute to a significant fire hazard.

**C. Sensitive Plants and Uncommon Plant Communities**

Designation of plants for special significance is based on such values as scarcity and uniqueness. The following standards shall apply to all sensitive plants and uncommon plant communities referenced in the environmental thresholds, and to other plants or plant communities identified later for such distinction. The general locations of sensitive plant habitat and uncommon plant communities are depicted on the TRPA Special Species map layers. The special species map layers indicate the location of habitat for threatened, endangered, rare, and special interest species and where populations of sensitive or uncommon plants have been observed.

**1. Sensitive Plants**

**a. List of Sensitive Plants**

The sensitive plants are:

- (i) *Rorippa subumbellata* (Tahoe yellow cress);
- (ii) *Arabis rigidissima* var. *demote* (Galena Creek rock cress);
- (iii) *Lewisia longipetala* (long-petaled lewisia);
- (iv) *Draba asterophora* v. *macrocarpa* (Cup Lake draba); and
- (v) *Draba asterophora* v. *asterophora* (Tahoe draba).

**b. Standards for Sensitive Plants**

Projects and activities in the vicinity of sensitive plants or their associated habitat shall be regulated to preserve sensitive plants and their habitat. All projects or activities that are likely to harm, destroy, or otherwise jeopardize sensitive plants or their habitat shall fully mitigate their significant adverse effects. Projects and activities that cannot fully mitigate their significant adverse effects are prohibited. Measures to protect sensitive plants and their habitat include, but are not limited to:

- (i) Fencing to enclose individual populations or habitat;
- (ii) Restrictions on access or intensity of use;
- (iii) Modifications to project design as necessary to avoid adverse impacts;

(iv) Dedication of open space to include entire areas of suitable habitat;  
or

(v) Restoration of disturbed habitat.

**2. Uncommon Plant Communities**

**a. List of Uncommon Plant Communities**

The uncommon plant communities are:

(i) The deepwater plants of Lake Tahoe, Grass Lake (sphagnum fen);

(ii) Osgood Swamp, Hell Hole (sphagnum fen);

(iii) Pope Marsh, Taylor Creek Marsh, Upper Truckee Marsh; and

(iv) The Freel Peak cushion plant community.

**b. Standards for Uncommon Plant Communities**

Uncommon plant communities shall be managed and protected to preserve their unique ecological attributes and other associated values. Projects and activities that significantly adversely impact uncommon plant communities, such that normal ecological functions or natural qualities of the community are impaired, shall not be approved.

**D. Vegetation Management to Prevent the Spread of Wildfire**

Within areas of significant fire hazard, as determined by local, state, or federal fire agencies, flammable or other combustible vegetation shall be removed, thinned, or manipulated in accordance with local and state law. Revegetation with approved species or other means of erosion control including soil stabilization may be required where vegetative ground cover has been eliminated or where erosion problems may occur.

**61.3.7. Old Growth Enhancement and Protection**

The standards in this subsection shall govern forest management activities and projects.

**A. Standards for Conservation and Recreation Lands**

Within lands classified by TRPA as conservation or recreation land use, any live, dead, or dying tree larger than 30 inches diameter at breast height (dbh) in westside forest types shall not be cut, and any live, dead or dying tree larger than 24 inches diameter at breast height in eastside forest types shall not be cut, except as provided below.

**1. Unreasonably Contribute to Fire Hazard**

Trees and snags larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be felled, treated, or removed in urban interface areas if TRPA determines that they would unreasonably contribute to fuel conditions that would pose a fire threat or hinder defense from fire in an urbanized area. Within the urban interface areas, fire management strategies favoring the retention of healthy trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types trees shall be fully considered. Urban interface areas are defined as all undeveloped lands within a 1,250 foot zone immediately adjacent to TRPA residential, commercial, or public service plan area boundaries.

**2. Unacceptable Risk to Structures or Areas of High Use**

A tree larger than 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types may be felled, treated, or removed

if TRPA and the land manager determine the tree poses an unacceptable risk to occupied or substantial structures, overhead utility lines and conductors, critical public or private infrastructure, or areas of high human use. Examples of areas of high human use are campgrounds, parking lots, ski trails, and developed beaches. Where a land manager determines that a tree constitutes a physical emergency (e.g., imminent threat of falling on occupied or substantial structures, or people), the land manager may remove the tree but must provide photographic documentation and any applicable paperwork and fees to TRPA within ten working days of removal of the hazardous tree.

**3. Diseased or Infested Trees**

Where immediate treatment and removal is warranted to help control an outbreak of pests or disease, severely insect-infested or diseased trees larger than 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types may be removed. Trees to be felled, treated, or removed require TRPA review on a project-level basis, within 30 working days of written notification by the land manager.

**4. Ecosystem Management Goals**

In limited cases, trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be felled, treated, or removed if a management prescription clearly demonstrates that the identified trees need to be cut for ecosystem management goals consistent with TRPA goals and policies and to increase forest health and resilience. The project and prescription must be developed and reviewed by a qualified forester, and only the trees necessary to achieve ecosystem objectives at a specific site shall be removed. Each tree larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types shall be approved by TRPA. The marking of these trees shall be done by a qualified forester.

**5. Ski Areas Master Plans**

In ski areas with existing TRPA-approved master plans, trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be removed for facilities that are consistent with that master plan. For activities that are consistent with a TRPA – approved master plan, trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be removed when it is demonstrated that the removal is necessary for the activity.

**6. EIP Projects**

Trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be removed when it is demonstrated that the removal is necessary for the activity.

**7. Extreme Fuel Loading**

In case of extreme fuel loading some snags larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be cut if the removal is consistent with subsection 62.3.4: Snags and Coarse Woody Debris.

**8. Large Public Utilities Projects**

Trees larger than 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types may be removed for large public utilities projects if TRPA finds there is no other reasonable alternative.

9. **Emergency Fire Suppression**  
Trees may be removed when an emergency fire suppression need exists as determined by the local, state, or federal fire suppression agency involved in a fire suppression activity.
  10. **Private Landowners**  
Private landowners may fell, treat, or remove trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types provided the landowner follows one of the planning processes set forth in subparagraph C.
- B. Standards for Non-SEZ Urban Lands**  
Within non-SEZ urban areas, individual trees larger than 30 inches dbh that are healthy and structurally sound shall be retained as desirable specimen trees having aesthetic and wildlife value, unless no reasonable alternative exists to retain the tree, including reduction of parking areas or modification of the original design.
- C. Alternative Private Landowner Process**  
As an alternative to complying with the standards in subparagraph A, a private landowner may follow one of the following planning processes to achieve or maintain the late seral/old growth threshold, goals, and polices.
1. **Alternative Forest Management Plan**  
A private landowner, in the development of a forest management plan, shall follow the planning process described in Chapter 14: *Specific and Master Plans*, except as provided below.
    - a. In relation to subparagraph 14.8.1.A only the private landowner may initiate the private forest management planning process.
    - b. In relation to subparagraph 14.8.1.B the project team shall consist of a designee of the Executive Director, appropriate regulatory and land management agencies, the proponent's qualified forester, and the team shall consult with the appropriate public land management agencies if the private land is adjacent to public land.
    - c. In relation to Section 14.9, the content of a forest master plan shall be described in the TRPA Forest Master Plan Guidelines. The content shall include enough information to make the required findings of Section 14.10; shall provide guidelines for salvage harvest, insect control, and fire salvage. The document shall be organized by described and mapped planning units. As an example, a non-industrial timber management plan that contains enough information to make the required findings of Section 14.10 can be submitted provided it is developed with approval of the steering committee.
    - d. The harvest practices shall comply with local and state regulations.
    - e. A proposed schedule (and seasonality) of harvest projects and improvement projects shall be included within the plan.
    - f. Individual harvest projects proposed under the master plan within the planned schedule and proposed method shall receive a streamlined review.
  2. **Limited Forest Plan**  
Private landowners may prepare a limited forest plan when there would be limited proposed impact to large trees.

- a. A limited forest plan may be prepared if ten percent or less of the trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types within the project site are proposed to be cut within the life of the plan.
- b. The limited forest plan shall include:
  - (i) The relative state permit application, if available;
  - (ii) Description of harvest activities;
  - (iii) Description of management activities;
  - (iv) Explanation of how thresholds, goals and policies shall be attained under the forest plan; and
  - (v) The expiration date of the plan. A minimum lifespan of ten years and a maximum lifespan of 50 years shall be accepted.
- 3. TRPA shall review proposed cutting of trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside or larger forest types on a tree-by-tree basis consistent with the forest plan.

#### **61.3.8. Historic and Cultural Resource Protection**

- A. Operations and any ground disturbing activities shall be in accordance with Chapter 67: *Historic Resource Protection*. All historic resources located within the project area shall be flagged and avoided except in accordance with a TRPA-approved resource recovery plan. Flagging shall be removed at the time of completion of operations.

#### **61.3.9. Wildlife, Habitat, and Sensitive Plants**

- A. Operations shall incorporate appropriate measures to avoid impacts to wildlife during critical wildlife nesting and denning periods in accordance with Chapter 62: *Wildlife Resources*.
- B. Snags shall be retained in accordance with subsection 62.3.4.
- C. Discovery of a TRPA-designated sensitive species or species of interest, or the location of a nest or den of one of those species, shall be immediately reported to TRPA. Any nests, dens, or plant locations shall be protected in accordance with TRPA regulations. All work within the project area shall cease until TRPA identifies under what conditions the project may continue.

### **61.4. REVEGETATION**

#### **61.4.1. Purpose**

This section provides standards for revegetation for such purposes as soil stabilization and improvement of the vegetative cover mix.

#### **61.4.2. Applicability**

This section shall apply wherever revegetation is required as a condition of project approval or where revegetation is necessary to comply with other provisions of the Code. Landscaping provisions are set forth in Chapter 36: *Design Standards*.

#### **61.4.3. Approved Species**

Revegetation programs shall use TRPA-approved plant species listed on the TRPA Recommended Native and Adapted Plant List. This list shall be a part of the *Handbook of Best Management Practices* and shall be updated from time to time based on the

criteria that listed plants should be adapted to the climate of the Tahoe region, should require little water and fertilizer after establishment, and should be non-invasive. Specifications of plant materials shall be in accordance with the following requirements:

**A. Site Conditions**

Plant species selected shall be appropriate for site conditions.

**B. Small Scale Programs**

Small scale revegetation programs shall emphasize the use of TRPA-approved grass species in conjunction with mulching or other temporary soil stabilization treatments, as described in the *Handbook of Best Management Practices*.

**C. Large Disturbed Areas**

Revegetation of disturbed areas larger than 10,000 square feet shall include reseeded with TRPA-approved grass species as well as reestablishment of appropriate shrub and tree species.

**D. Fertilizer**

Fertilizer may be permitted to help establish vegetation following planting, but plant species shall be selected that do not require long term fertilization.

**61.4.4. Soil Stabilization**

Site preparation for revegetation shall include measures necessary to stabilize the soil until the vegetation is reestablished. Revegetation and stabilization programs for disturbed sites shall minimize the use of extensive grading whenever practical. Situations where extensive grading and recontouring may be necessary include the following:

- A. Oversteepened cut slopes;
- B. Quarry sites;
- C. Abandoned landfills;
- D. Reclamation of already developed sites; or
- E. Abandoned roads.

**61.4.5. Revegetation Plans**

Where revegetation is required to stabilize soils, replace removed vegetation, or for rehabilitation of areas where runoff or soil erosion needs to be controlled, the applicant shall provide a revegetation plan.

**A. Contents of Plan**

Revegetation plans shall include at a minimum:

1. A description of the site, including the soil type, if applicable, the stream environment zone or backshore type, and existing vegetation;
2. A list of appropriate plant species to be used at the site and a plan showing where they will be planted;
3. The number and size of shrubs and trees to be used, if any;
4. A description of the extent and methods of irrigation, if any;
5. Specifications for site preparation and installation of plant materials;

6. Specifications and schedule for onsite care, including amount and method of application of fertilizers pursuant to the *Handbook of Best Management Practices*, if necessary;
7. Specifications for long term plant care and protection, including the amount and method of application of fertilizers, if necessary; and
8. A description of mulches or tackifiers to be used.

**B. Plant Materials**

Plant materials to be used in a stream environment zone or the backshore shall be from the list shall be derived from stock possessing genetic characteristics of native plants or, if used outside of these areas, plant materials shall originate from a similar elevation and climate as the revegetation site if stock is available. If such stock is not available, stock with demonstrated success in the region may be approved.

**C. Soil Materials**

Revegetation plans may include provisions that allow for the importation of soil in limited situations involving reclamation of extensively disturbed sites, such as those in subsection 61.4.4. Soil material may be permitted to be imported from outside the region if an acceptable source in the region cannot be located. Acceptable sources of soil material in the region include by-products of approved dredging or grading activities and compost.

**D. Security Release**

The portion of a security related to revegetation shall be released when TRPA determines that the required vegetation is established. Establishment of vegetation generally takes one or two growing seasons.