

NT Fire Dist Info

***The North Tahoe Fire Protection District
free chipping program began work on June 2nd.
Please note that we will not be picking up
pine needles this year.***

***Free disposal of pine needles, cones, sticks and
other small yard waste is being offered on
Saturday, August 9th & Sunday, August 10th
from 9:00 AM - 3:00 PM at the
North Tahoe Regional Park.***

***DUE TO THE NUMBER OF REQUESTS WE'VE
RECEIVED FOR CHIPPING TO DATE, CURRENT
RESPONSE IS AT 3-4 WEEKS. ANOTHER CHIPPER
HAS RECENTLY BEEN ADDED TO OUR FLEET, AND
WITH TWO CHIPPING CREWS NOW
WORKING, RESPONSE SHOULD BE RETURNING TO
WITHIN TWO WEEKS SHORTLY.
WE APPRECIATE YOUR PATIENCE.***

**NORTH TAHOE FIRE PROTECTION
DISTRICT
FREE CHIPPING PROGRAM
(530) 546-4347**



Do you have enough Defensible Space?

Summer brings the threat of wildland fires to the Lake Tahoe basin. Fire prevention can keep fires from starting and can be a determining factor in protecting your property should a wildland fire occur in your area. Through a grant funded program, the North Tahoe Fire Protection District is offering a FREE chipping service and property inspection to assist residents in creating “Defensible Space” around their homes and structures.

How does the program work?

To participate in the program all you have to do is call the NTFPD’s “chipper hotline”, leave your name, address, phone number, the best time to return your call, and whether you would like the chips blown back onto your property, left in a pile on the edge of your property or hauled away to be recycled.

Here are the rules:

- Chipping will occur within approximately a two week window from the time of your call on a first-come-first-served basis. Priority will be given where multiple parcels are to be chipped.

- Material should be placed OFF the pavement, on your property and clear of any drainages, structures or fire hydrants. If material is not chipped or collected before snow falls, it will be your responsibility to make sure it is removed for snow removal or placed well onto your property so as not to create a public nuisance.
- Do not block traffic lanes or drainages with stacked or piled material.

It's a neighborhood thing!

Get your neighbors together and have a “block party”! The NTFPD encourages groups of property owners, or neighborhoods to get together for a chipping party, and will give them priority.

Homeowners frequently ask “What can be done about my neighbor’s property?” North Tahoe Fire suggests that you make a personal appeal and provide fire hazard and defensible space literature available from the district. If that doesn’t elicit response you can send a letter of complaint to the District.

If you would like to have a speaker at your homeowner’s association or neighborhood meetings, please call NTFPD at 530-583-6911 and request to speak to a fire prevention officer to set up an appointment

Wildfire Threat Reduction Recommendations for Lake Tahoe Basin Homeowners

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Introduction

In 2002, the University of Nevada Cooperative Extension, in cooperation with the Lake Tahoe Regional Fire Chiefs' Association, initiated an effort to standardize wildfire threat reduction recommendations for Tahoe Basin homeowners used by federal, state, and local fire prevention organizations. The "Living With Fire ? Wildfire Threat Reduction Recommendations for Lake Tahoe Basin Homeowners" is the result of this process. It is important to note: these are suggestions for Tahoe Basin homeowners endorsed by the program's sponsors and are not requirements. Local fire jurisdictions should be consulted regarding requirements. These recommendations are not intended to be in conflict with local ordinances, codes, or laws.

Recommendations

1.0 Purpose: These are wildfire threat reduction recommendations for Tahoe Basin homeowners to implement on their properties. The recommendations are presented in three categories: Built Zone; Defensible Space Zone; and Access Zone.

2.0 Built Zone

2.1 Objective: Improve the ignition resistance of the house and associated structures.

2.2 Definition: The Built Zone consists of the house, deck, and other structures.

2.3 Roof

a. Roof Covering: Wood shake or shingle roofs should be replaced with a noncombustible roof covering such as composition, non-glare metal, cement product, or tile.

b. Roof Assembly: The fire resistance of the roof assembly (includes the covering, underlayment, and support) should have at least a Class C rating. Contact the local fire department for detailed information concerning fireresistant roofs.

c. Roof Openings: All roof openings, such as a space between the roof covering and the roof decking, should be plugged or screened with ¼-inch or smaller wire mesh to prevent entry of embers.

d. Roof Debris: The roof should be kept free of fallen needles, leaves, branches, and other debris.

2.4 Chimney: Every chimney, flue, or roof vent should have an approved spark arrestor consisting of ½-inch or smaller wire mesh.

2.5 Eaves and Overhangs: The undersides of eaves and other overhangs (e.g., cantilever balconies) should be covered with at least a ½-inch thick solid sheathing material.

2.6 Rain Gutters: Rain gutters should be kept free of fallen leaves, needles, and other debris.

2.7 Exterior Wall Covering: Exterior wall coverings consisting of wood shakes or shingles, boards, or panels and vinyl siding are poor choices. Stucco, brick, metal, cement board, stone, and log wall construction are usually more fireresistant.

2.8 Windows: Single-paned and large windows are poor choices. Windows that are at least double-paned or use tempered glass are preferred. Low “E” glass may provide some advantages. Windows with aluminum frames and sashes are better choices than those using vinyl or wood. Closable, solid exterior shutters can provide additional protection.

2.9 Vents: All vent openings should be covered with ¼-inch or smaller non-corrosive mesh. Do not use fiberglass mesh.

2.10 Decks: Preferably, the undersides of decks should be enclosed with fireresistant materials.

2.7 Exterior Wall Covering. As an alternative, the undersides of decks can be screened with ¼-inch or smaller wire mesh. The area underneath decks should be kept free of all easily combustible materials.

2.11 Flammable Items: Flammable items, such as paper, fallen leaves and needles, trash, firewood, and combustible decorations, should be removed from exposed locations, such as porches, steps, patios, and decks.

2.12 Wooden Fences: If a wooden fence is attached to the house, create a barrier using fire-resistant materials, such as masonry or metal, between the house and the fence.

3.0 Defensible Space Zone

3.1 Objective: Reduce the flammability of vegetation near the house.

3.2 Definition: Defensible space is that area between a house and an oncoming wildfire where the vegetation has been managed (i.e., pruned, thinned, removed, replaced, etc.) to reduce the wildfire threat and allow firefighters to safely defend the house.

3.3 Defensible Space Zone Distances: The distance from the house in which defensible space practices should be implemented vary by fuel type and steepness of slope. The recommended minimum distances are presented below.

Recommended Defensible Space Zone Distances

Fuel Type (Fuel Models) ²	Percent Slope		
	0-20%	21-40%	> 40%
Grass (1-3)	30 feet	100 feet	100 feet
Shrub (4-7)	100 feet	200 feet	200 feet
Timber³ (8-13)	100 feet	100 feet	200 feet

¹ As measured from the footprint of the house.

² BEHAVE Fuel Models.

³ Use shrub values if a substantial shrub understory is present.

3.4 Defensible Space Zone Areas: The Defensible Space Zone consists of three areas: the Noncombustible Zone; the Lean, Clean, and Green Zone; and the Wildland Fuel Reduction Zone.

3.5 Noncombustible Area: This area lies immediately adjacent to the house and extends out from the footprint of the house for at least five feet. The objective of this area is to prevent the ignition of a smoldering or flaming fire that could in turn ignite the house. Of particular concern is the prevention of ignition from burning embers. Recommendations for the Noncombustible Area include:

a. Remove Dead Plant Material: All dead plant material including dead shrubs and trees; fallen leaves and needles; bark and wood mulches; dried grass, flowers, and weeds; dead leaves, flowers and branches still attached to living plants; firewood; and construction materials, should be removed from this area.

b. Remove Flammable Living Plants: Flammable native plants, such as big sagebrush, bitterbrush, rabbitbrush, greenleaf manzanita, huckleberry oak, snowbrush, and coniferous trees that are less than six inches in diameter at breast height (dbh), should be removed from this area. Flammable ornamental plants such juniper, mugo pine, Austrian black pine, other coniferous shrubs and trees, large exotic grasses, and Scotch broom, should be removed and should not be planted in this area. When removing shrubs and trees from this area, the root systems should be left in place to reduce the potential for erosion. Trees should be cut to ground level and the stumps treated with powdered borax.

c. Use Noncombustible Materials: Consider the use of noncombustible materials, such as rock, gravel, brick, and concrete, in this area. Note: TRPA land coverage standards may apply and permits may be required.

d. Use Low-growing, Irrigated, Herbaceous Plants: Consider the use of lowgrowing (less than 18 inches in height) herbaceous (non-woody) plants, such as lawn, conservation grasses, clover, forbs, and succulents, that are kept green during the fire season with irrigation.

e. Use Deciduous Shrubs: The use of native and ornamental deciduous shrubs, except for those presented in **3.5b**, is acceptable, so long as they are kept healthy and vigorous, the lower branches do not touch the ground, and branches are not in contact with the house. Shorter shrubs (less than 18 inches in height) are preferred.

f. TRPA Recommended Plant List: In situations other than borders, entryways, flower beds, and similar locations, vegetation to be planted in this area should be selected from the TRPA Recommended Plant List.

g. Fire-resistant Trellises: Use noncombustible materials for trellises.

h. Bare Soil: Implementation of defensible space practices in this area should not result in an increase in the amount of bare soil.

3.6 Lean, Clean, and Green Area: This area often serves as the transition between wildland vegetation and the house and is usually where the irrigated, residential landscape is situated. It extends out for at least 30 feet from the footprint of the house. The objectives for this area are to: 1) manage the vegetation so that the fuels present would be unable to generate enough heat for a long enough time to ignite the house, and 2) provide a safe and effective area for firefighters, if present, to defend the house. Recommendations for the Lean, Clean, and Green Area include:

a. Dead Plant Material: Remove standing dead trees and shrubs; recently fallen trees; dead branches that have fallen or that are still attached to living plants to height of 15 feet aboveground; dried grass, flowers, and weeds; fallen needles and leaves covering areas other than bare soil (such as lawn, roof, plants, deck, etc.), dead leaves and needles that are still attached to living plants to a height of 15 feet; firewood (should be located at least 30 feet uphill from the house); and wood scraps or debris. Fallen dead trees that are embedded into the soil can be left in place so long as all exposed branches are removed. Wood and bark mulches can be used. Fallen leaves and pine needles covering bare soil should be maintained at a depth of 1 inch to 2 inches.

b. Flammable Living Shrubs: For the most part, the presence of flammable living plants as listed in **3.5b** should be substantially reduced in this area and replaced with less flammable species. Individual specimens or small group plantings of these species may be retained so long as they are kept healthy and vigorous; are pruned to reduce height and fuel load; and cannot convey a fire burning in adjacent wildlands to the house. Sufficient quantities of residual vegetation should remain in this area to stabilize the soil and prevent erosion. When removing shrubs from this area, the root systems should be left in place to reduce the potential for erosion.

c. Native Live Trees: Native live trees should be thinned to provide an average separation of ten feet between crowns. Cutting of live trees greater than six inches dbh requires a permit and the trees must be marked prior to removal. Healthy trees greater than 24 inches dbh should be retained. Trees to

be removed that are greater than six inches dbh should be cut to within six inches of the ground. Trees less than six inches dbh should cut at ground level. All stumps should be treated with powdered borax. If feasible, tree species of limited occurrence, such as incense cedar, sugar pine, western white pine, mountain hemlock, whitebark pine, and western juniper, should be retained; and more common tree species, such as white fir, should be removed.

d. Retain Low-growing Native Plants: Low-growing (less than 18 inches in height) native plants, such as squaw carpet, pinemat manzanita, phlox, and sulfur flower buckwheat, can be retained so long as they are kept healthy and vigorous.

e. Use Noncombustible Materials: See 3.5c.

f. Use Low-growing, Irrigated, Herbaceous Plants: See 3.5d.

g. Use Deciduous Trees and Shrubs: Deciduous trees and shrubs can be used if they are kept healthy and vigorous; are kept free of dead leaves and wood; and are arranged so that a fire burning in the adjacent wildland vegetation cannot be conveyed through them to the house. Shorter shrubs (less than 18 inches tall) are preferred.

h. TRPA Recommended Plant List: In situations other than borders, entryways, flower beds, and similar locations, vegetation to be planted in this area should be selected from the TRPA Recommended Plant List.

i. Ladder Fuels: A vertical separation between tree or tall shrub canopies and understory vegetation should be created that is at least three times the height of the understory plants. Removal of lower branches should not exceed one-third of the tree or tall shrub height. When no understory vegetation is present, the lower branches of trees and tall shrubs should be removed to a height of at least five feet aboveground. Branches of shorter shrubs that are in contact with the ground should be removed.

j. Problem Tree Branches: Tree branches within 10 feet of a chimney, encroaching on power lines, overhanging the roof, or in contact with the house should be removed.

k. Bare Soil: Implementation of defensible space practices in this area should not result in an increase in the amount of bare soil.

3.7 Wildland Fuel Reduction Area - Nonsensitive Lands: This area extends out from the Lean, Clean, and Green Zone to the appropriate Defensible Space Zone Distance presented in **Table 3.3a**. This area consists of wildland vegetation, such as manzanita brushfields and mixed-conifer forest. The objective for this area is to reduce the intensity and duration of a wildfire burning more than 30 feet from the house. Recommendations for the Wildland Fuel Reduction Area when situated in nonsensitive areas include:

a. Dead Plant Material: Remove standing dead trees and shrubs; recently fallen trees; dead branches that have fallen or that are still attached to living plants to height of 15 feet aboveground; dried grass, flowers, and weeds; and dead leaves and needles that are still attached to living plants to a height of 15 feet. Fallen dead trees that are embedded into the soil can be left in place so long as all exposed branches are removed.

b. Reduce Horizontal Continuity of Native Shrubs: For individual or small groups of native shrubs growing on flat to gently sloping terrain (less than 20% slope), create a horizontal separation between their canopies that is at least twice their height. On steeper terrain (greater than 20% slope), this separation distance should be greater than twice their height. The recommended separation distance can be created through shrub removal and/or pruning to reduce height and/or diameter of the shrub. When removing shrubs from this area, the root systems should be left in place to reduce the potential for erosion.

c. Native Live Trees: The recommended average separation distance between the canopies of live trees growing slopes less than 20% is ten feet. For trees growing on steeper slopes, the

separation distance should be greater. Cutting of live trees greater than six inches dbh requires a permit, and the trees must be marked prior to removal. Healthy trees greater than 24 inches dbh should be retained. Trees to be removed that are greater than six inches dbh should be cut to within six inches of the ground. Trees to be removed that are less than six inches dbh should be cut at ground level. All stumps should be treated with powdered borax. If feasible, tree species of limited occurrence, such as incense cedar, sugar pine, western white pine, mountain hemlock, whitebark pine, and western juniper, should be retained, and more common tree species, such as white fir, should be removed.

d. Remove Ladder Fuels: A vertical separation between trees or tall shrub canopies and understory vegetation should be created that is at least three times the height of the understory plants. Removal of lower branches should not exceed one-third of the tree height. When no understory vegetation is present, the lower branches of trees and tall shrubs should be removed to a height of at least 5 feet aboveground.

e. TRPA Recommended Plant List: In situations other than borders, entryways, flower beds, and similar locations, vegetation to be planted in this area should be selected from the TRPA Recommended Plant List.

f. Bare Soil: Implementation of defensible space practices in this area should not result in an increase in the amount of bare soil.

3.8 Wildland Fuel Reduction Area ? Sensitive Lands: When the Wildland Fuel Reduction Area is situated on **sensitive lands**, additional considerations apply. Sensitive lands include Stream Environment Zones (SEZ), Shoreline Zones, Scenic Areas, and Conservation/Recreation Areas.

a. SEZ: TRPA shall evaluate defensible space practices proposed for SEZs prior to implementation. No healthy SEZ indicator plants shall be removed from this area. Slash and other materials shall not be placed, piled, spread, or burned within SEZs.

b. Shoreline Zones: TRPA shall evaluate defensible space practices proposed for Shoreline Zones prior to implementation.

c. Scenic Areas: TRPA shall evaluate defensible space practices proposed for scenic areas, such as scenic corridors, state parks, and public beaches, prior to implementation.

d. Conservation/Recreation Areas: Within these areas, snags and coarse woody debris that have high wildlife value will be managed as specified in 78.2D of the TRPA Code of Ordinances.

4.0 Access Zone

4.1 Objective: Improve the ability of firefighters to locate and arrive at a house threatened by wildfire in a timely manner.

4.2 Definition: The Access Zone consists of driveways and signage associated with house location.

4.3 Address: The home address sign should be readily visible from the street, use characters that are at least four inches high, and be constructed of fire-resistant material.

4.4 Street Signs: Street signs should be at every intersection leading to a house, use characters that are at least four inches high, and be made of reflective, noncombustible material.

4.5 Driveways and Clearance: Flammable vegetation should be cleared for at least 10 feet on both sides of the driveway. Overhead obstructions, such as overhanging branches, should be cleared for at least a 15 foot vertical clearance.

4.6 Driveway Characteristics: Houses located at the end of long driveways (greater than 300 feet) should have turnaround areas suitable for large fire equipment.

Literature Review

California Department of Forestry and Fire Protection. 1993. Fire safe guides for residential development in California. 97p.

International Fire Code Institute. 1997. Urban-Wildland Code. 49p. Moore, H.E. 1991. Protecting residences from wildfires: a guide for homeowners, law makers, and planners. USDA Forest Service. GTR: PSW-50. 43p. National Fire Protection Association. 1991. NFPA 299 Protection of life and property from wildfire. 19p. Slack, P. Undated. Firewise construction design and materials. Colorado State Forest Service and Federal Emergency Management Agency. 38p. Smith, E.G. and J.A. Skelly. 1999. Living with fire – a guide for the homeowner (2nd edition). University of Nevada Cooperative Extension and Sierra Front Wildfire Cooperators. UNCE Special Publication: SP-99-01. Tahoe Regional Planning Agency. 2003 (as revised). Code of ordinances.

North Tahoe Fire Protection District offers tree removal permits under an agreement with the Tahoe Regional Planning Agency. These permits are available to homeowners in the North Tahoe Fire District for tree removal that relates to defensible space only. **Tree removal permit cost is \$25 for each property.** A defensible space inspection is required in order to obtain a permit. Please see the other sections on our website to learn more about defensible space clearing and maintenance.

Here is how our process works.

1. **GET YOUR PROPERTY INSPECTED FOR DEFENSIBLE SPACE.** Call our Forest Fuels office at 530-546-2212 and request a Defensible Space Inspection for a developed lot. Leave your name, physical address in Tahoe, your phone number and indicate if you want to meet with the inspector on site. An inspection will occur within two weeks and you will be notified by phone or mail as to the outcome. If tree removal is needed, we will indicate this on the inspection form. If you already had an inspection within 6 months, then proceed to step two.
2. **FILL OUT A TREE REMOVAL PERMIT.** If you are present during the Defensible Space Inspection, you can discuss tree removal with the inspector and complete a tree removal permit on site. Tree removal permits are available at the North Tahoe Fire Station at 300 North Lake Blvd in Tahoe City [or by clicking here](#). Please complete the application and submit to the North Tahoe Fire Station in Tahoe City or mail it to NTFPD PO Box 5879, Tahoe City, CA 96145. Don't forget to sign your application include the \$25 permit fee or your application will not be processed. You can attach flagging or tape to the trees you wish to have

considered for removal. Do not put paint on your trees.

3. **GET YOUR TREES MARKED.** Only our Forest Fuels Manager is authorized to mark trees. If a tree removal permit is requested, you will have a visit by the Forest Fuels Manager and your trees may be marked, and a permit issued for their removal. You can request an on site meeting with the Forest Fuels Manager. Please indicate this on your permit. We will mail your completed permit to the address listed on the permit form within one week.

We can not mark trees in the following situations:

- Lake-front properties*
- Trees over 30 inches diameter at 4.5 feet from the ground (on the high side of tree)*
- Outside of 100 feet from any building*
- Vacant lots*
- On property ownerships not owned by the applicant*

We will mark trees ONLY for defensible space reasons which include dense grouping, trees close to the house, or trees that create a ladder fuel into larger trees. For other tree removal needs, please contact Tahoe Regional Planning Agency at 775-588-4547 and ask for the Forestry staff or go to www.trpa.org.

To schedule chipping services, please complete and submit our Chipping Request Form below or call our chipper hotline at (530) 546-4347