

Issue: Date: 12/12/17

The Board of Directors halted the Forestry department controlled burn pile operations to review a cost analysis looking at options to address the green waste and associated burn piles produced through forest health management and defensible space programs on Tahoe Donner Association owned property.

#### **Background:**

At the November 18, 2017 Board of Director board meeting, the board put in place a temporary halt to the Forestry department's burn pile operations to review alternative options. The Board of Directors directed staff to prepare a cost analysis to further review and address the green waste and subsequent burn piles produced through forest health management and defensible space programs on Tahoe Donner Association owned property. Up until the November board meeting decision, the Forestry department had burned 459 of 768 hand piles throughout the association this fall; 309 piles remain.

Tahoe Donner Association is a homeowner's association totaling over 7,000 acres. Tahoe Donner owns 5, 016 acres with 1,338 of those acres located in and around the developed portion of the property (approximately 5,900 homes). The forestry department manages these acres as fuel breaks and it is important to remove fuels from these areas. For the past 24 years the Forestry Department has piled and burned excess fuels to meet the fuel objectives of a fuel break. Burning locations are on association owned lands with limited access. An expanded description and detail of Forestry Department Controlled Burn Plan and Procedures is included for reference.

For the purposes of a cost analysis, management approached several vendors who perform burning activities and green waste off-haul to procure rough estimates and no actual site visits by the vendors due to narrow window to obtain data and vendor schedules. General scope of work discussed, based on review of Board of Directors meeting video, with vendors was as follows:

- Tahoe Donner will be responsible for permits and smoke management plan.
- Burns must comply with plans and permits, Tahoe Donner will notify agencies on any given burn day.
- Piles must be accessed through association owned property.



- The piles will already be constructed, a portion covered with plastic and an 18" scratch line around each pile.
- The piles are generally 4'X4'X4' to 6'X6'X6'with 10 to 20 piles /acre.
- Control burn signs must be placed at major intersections near burn sites
- No burning on weekends, holidays or Fridays
- People conducting the burn being professional (USFS red card or equivalent)
- All material in a pile needs to be fully consumed, some material in a pile may be up to a foot in diameter (see pictures).
- Piles being managed 24 hours a day until dead out or put out completely with water.
- Each person managing no more than 5 piles.
- Fire-fighting equipment including fire truck and tanker on site.
- Base bids on 1,000 piles per year.
- Burn season from November to mid-December.
- Distance to piles from drivable road:
  - o 100' 35%
  - $\circ$  300' -40%
  - $\circ$  600' + -25%

After review and discussions with several vendors management put together the following cost analysis:

### 1. Current Practice - Tahoe Donner Forestry department costs to conduct controlled burns:

- a. Piles lit by 8:00 a.m. with piles burned down to coal and white ash (dependent on what is in the pile) by 3:30 p.m.
- b. 5 piles/person with oversight until 6:30 PM on the day of ignition
- c. Piles being checked daily until they are dead out
- d. Never lite piles after noon
- e. \$39/pile or \$450/acre
- f. Total TDA Forestry Burn Expense \$45,000

#### 2. Outside Vendor to Conduct Controlled Burns:

a. One oral bid from North Tree Enterprises, Inc. (did not feel comfortable providing a written quote)



- b. Per above scope of work:
  - i. \$550/pile or \$8,250/acre
  - ii. Total Estimated Cost \$550,000

#### 3. Outside Vendor to Oversee Tahoe Donner Forestry Department Burning

- a. Vendor to oversee Tahoe Donner Forestry staff burning.
- b. Vendor staff 1-2 individuals to provide oversite, expertise and suggestions for improvement during burning activities
- c. Total Estimated Cost: \$60,000

#### 4. Off-Haul of Existing Piles by Outside Vendor

- a. \$20,000 to \$25,000/day with total 15 potential days to off-haul
- b. \$375/pile or \$5,625/acre
- c. Total Estimated Cost: \$375,000

#### 5. Future Practice Option: off-haul over piling for burning or Tahoe Donner chipping:

This information is provide as a reference, as management intends to request for Current Treatment and Off-Haul pricing in 2018 Project Request for Proposals.

#### **Treatment Area Description**

#### **Cost Comparison**

1 acre flat with good access	Current Treatment Practice Pile for chip or burn \$2,500/acre  Off-Haul Estimate \$3,500 to 4,000/acre 1.4 to 1.6 X more than existing practice
1 acre downhill to access	Current Treatment Practice Pile for chip or burn \$3,000/acre  Off-Haul Estimate \$6,000 to \$8,000/acre 2 to 2.7 X more than existing practice
1 acre uphill to access	Current Treatment Practice



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	Pile for chip or burn \$3,600/acre
	Off-Haul Estimate
	Off-haul \$9,000 to \$12,000/acre
	2.5 to 3.3 X more than existing practice
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December 1	
Prepared By: Annie Rosenfeld, Director of Risk Management and Real Property	
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General Manager Approval:	Date:



### Forestry Department's Controlled Burn Plan and Procedures <a href="http://www.tahoedonner.com/controlled-burn-plan-and-procedures/">http://www.tahoedonner.com/controlled-burn-plan-and-procedures/</a>

#### Overview

Part of the defensible space/fire hazard mitigation program is controlled burning of brush piles, which is industry standard practice locally, statewide and at the federal level.

Burn season in Truckee typically runs Oct. 15 through May 1. CAL FIRE will lift the burn ban only after there's been a fair amount of precipitation with continued wet weather in the forecast.

Historically, Tahoe Donner has burned 90 to 100% of material created from forest management activities. Since the purchase of chippers beginning in 2006, Tahoe Donner now chips 50% of material. Due to high volume, access and desired fuel conditions left onsite, it is impossible to chip all material each year.

Tahoe Donner's Forestry Department meets with Truckee Fire and CAL FIRE on a regular basis to coordinate and discuss its forestry/controlled burn plan. A project burning permit from the Truckee Fire Protection District, CALFIRE, and a Smoke Management Plan and Air Pollution Permit from the Northern Sierra Air Quality Management District are required.

As a reminder, the Tahoe Donner Forestry Department was awarded Firewise Community® of the Year this year by the Fire Safe Council of Northern County for their dedication and energy to make its community safer from wildfire. <a href="https://goo.gl/G8oD7v">https://goo.gl/G8oD7v</a>.

#### **Burn Process and Procedures**

A controlled burn is one that stays inside the fire containment line. If the burn crosses the containment line, Tahoe Donner crews are required to notify the local firefighting agencies who will come out to review the circumstances.



- Tahoe Donner's controlled burning methods are through burn piles only, not broadcast fires.
- A burn unit (debris pile) is chosen depending on individual circumstances including weather and air conditions.
- Ignition of piles typically begins around 8 a.m. and stop around noon allowing enough time for embers to burn before nightfall.
- First, a test pile is lit to see how the pile reacts when burning with the current weather conditions before proceeding.
- Generally, a two-person crew is assigned 10 to 20 piles for a given day. Piles are monitored until approximately 7 p.m. and are inspected first thing in the morning and reviewed throughout the day until the piles are dead out.
- No burning takes place on Fridays. Crews will monitor any pile not dead out over the weekend.

#### **Fire Safety Preparedness**

- All crews carry firefighting tools and backpack water pumps. Tahoe Donner has a 2,000-gallon water truck, hose and nozzles, dozer and front-end loader on standby.
- A list of burn locations is provided daily to Truckee Fire and Member Services.
   Member notification of planned burns are listed online and via email. Signs are placed on the streets alerting neighbors of the burns nearby.
- Planned burning is controlled day by day by the regulation agency. Burns may be cancelled or delayed due to unfavorable conditions.

Continual review of our operations and programs occur prior each year's burn season. Truckee Fire and CAL FIRE participate in this review and provide recommendations when needed to ensure best management practices of controlled burning occurs.

In collaboration with Truckee Fire, Tahoe Donner is working with members to address concerns or questions through enhanced education and onsite staff resources.

#### **Contact information:**

Tahoe Donner Forestry Department | 530-587-9432 | forestry@tahoedonner.com

Truckee Fire |530-582-7850 | Submit your comment or question.

