

**Scoping/Notice of Opportunity to Comment**  
**for**  
**Terror Creek Applied Silvicultural Assessment**  
**February 2008**

U.S.D.A. Forest Service  
Grand Mesa, Uncompahgre, and Gunnison National Forests  
Paonia Ranger District  
Delta County, Colorado

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## Introduction

Comments are being solicited on the following proposal to conduct an “applied silvicultural assessment” to study the rapid decline of aspen stands in the Terror Creek drainage on the Paonia Ranger District, Gunnison National Forest. Comments regarding this proposal must be received within 30 days following the publication of a legal notice in the Delta County Independent. Please refer to the Public Involvement section for additional information about submitting comments.

## Background

In Colorado, aspen is the dominant forest cover on 2,635,000 acres. In 2007, Forest Health Management aerial surveys documented approximately 12.8% of Colorado’s aspen stands to have rapid crown dieback and stem mortality occurring. Within the Terror Creek area these aerial surveys documented approximately 32% or 4,300 acres of the aspen cover on National Forest System land in a state of rapid decline.

This rapid decline in aspen is attributed to the following group of biotic agents: Cytospora canker (usually caused by *Valsa sordida*), aspen bark beetles (*Trypophloeus populi* and *Procryphalus mucronatus*), poplar borer (*Saperda calcarata*), and bronze poplar borer (*Agrilus liragus*) (Worrall et al., 2007). Recently this type of rapid decline in aspen has been termed “Sudden Aspen Decline” (SAD) to distinguish it from other types of aspen declines attributed to fire suppression and the associated succession of conifer species, and extreme browsing pressure from large ungulates like deer and elk (Romme et al., 1995; Kay, 1997; Bartos, 2001; Ripple and Larsen, 2000; Kulakowski et al., 2004; Kaye et al., 2005; Smith and Smith, 2005).

Aspen typically regenerates by profuse root suckering following a disturbance. It is not uncommon to have aspen clones produce over 1.4 million suckers per hectare following clearcut harvesting (Shepperd 1993). Uncut, intact aspen stands typically have about 2,500 suckers per hectare in southwestern Colorado (Crouch, 1983). In stands with heavy mortality attributed to SAD, Worrall et al. (2007) found sucker densities at or below the range typical of uncut stands, indicating that there has been little to no suckering response to the overstory mortality. This lack of a suckering response raises questions regarding the root condition of SAD-impacted stands and their ability to regenerate. Shepperd et al. (2001) found that the root systems of non-regenerating aspen do decline when the clones do not periodically self regenerate. In stands affected by SAD, entire aspen clones could be lost in a short amount of time since initially it appears that self regeneration is not occurring.

The potential loss of aspen clones in some aspen dominated landscapes, like the Terror Creek area, could be quite profound to aspen ecosystems and local economies. Aspen has long been recognized for its rich diversity of understory plant species and diversity of bird and mammal habitats. Aspen is also extremely important to many local economies for its scenic value, production of forage for domestic livestock, production of wood products and water absorption capacity for downstream domestic and agricultural purposes. If affected aspen clones are to persist on the landscape then intensive management activities may be needed to induce a more severe disturbance and initiate a sprouting response from the remaining “healthy” portions of the clone.

## **Purpose and Need**

The purpose and need of this project is to conduct an applied silvicultural assessment to determine aspen sprouting response and survival following clearcut harvesting of aspen stands with varying levels of crown dieback and mortality attributed to SAD; and, based on results, develop management guidelines to prioritize aspen stands for treatment.

An applied silvicultural assessment means “any vegetative or other treatment carried out for information gathering and research purposes”, as defined in the Healthy Forest Restoration Act (HFRA), HR 1904, Title IV Insect Infestation and Related Diseases, Section 404.

## **Proposed Action**

The proposed action is to implement an applied silvicultural assessment as described in a research study plan being developed in cooperation with the Rocky Mountain Research Station, Colorado State University and the Forest Service’s Gunnison Service Center for Forest Health Management. This applied silvicultural assessment is located in Terror Creek, Alder Creek and Lower Hubbard Creek 6<sup>th</sup> order watersheds of the Paonia Ranger District, Gunnison National Forest (T. 12 S., R. 92 W. sections 23 – 27, 34 – 36 and T. 12 S., R. 91 W. sections 7, 8, 16 – 32) (Map 1).

The specific study design is to select for treatment mature aspen stands which are stratified into three levels of crown dieback and mortality (e.g, 0-20%, 20-60% and 60+%). Dieback categories will be determined on a basal area basis, e.g. 0-20% of the overstory basal area has died or is in decline (thin crowns, small chlorotic leaves). Based on local ground conditions and pre-harvest stand data, stands that are considered self-regenerating will not be suitable for treatment, regardless of overstory condition.

This will be a paired study in that stands selected for treatment will be split, so that one portion will be harvested and another will remain untreated. This will allow testing of harvest treatment effects across the three crown dieback categories. Pairing will also minimize site and genetic (clonal) variation in treatment response, as variation in those factors should remain constant within a selected stand. A minimum of three replications will be chosen for each crown dieback category, which will require a total of nine candidate stands. Selected stands will be on operable terrain (slopes less than 30%) within 1,300 ft of an existing road. Selected stands within each replication should be on similar elevation, aspect, soil type, and be within the same grazing allotment.

The proposed action involves clearcut harvesting on National Forest System lands. Resource aerial photographs and insect and disease aerial survey data from 2007, 2006 and 2005 have been used to tentatively select potential treatment areas affected by varying levels of SAD (Map 2). These treatment areas will be refined based on site specific stand data to be collected in June 2008. A total of nine paired treatment units will be selected for inclusion in the study. Half of each treatment unit will be clearcut harvested. The acreage to be clearcut within each treatment shall not exceed 40 acres. So, the maximum amount of area that could be affected from clearcut harvest activities is 360 acres.

Timber will be harvested using ground-based logging systems. The Terror Creek area is well roaded with open and closed system roads, including National Forest System Roads (NFSR) 701, 701.3B, 701.3C, 701.3E, 703, 703.1A, 701.3A, and 705.1A. Previously closed roads will be re-closed by the timber sale purchaser/contractor.

Portions of the Terror Creek area are within the 1979 Priest Mountain Inventoried Roadless Area (IRA) (Map 3). The Forest Service is currently directed to manage these lands according to the 2001 Roadless Area Conservation Rule, known as the “Roadless Rule”. According to the Roadless Rule timber may be cut, sold or removed in IRAs if the Responsible Official determines that specific conditions have been met (36 CFR 294.13(b)(4)(2001)). The conditions applicable to this proposal are: the cutting, sale or removal of timber is expected to be infrequent and the timber to be cut, sold and removed only occurs in the substantially altered portions of an IRA. The harvesting associated with the Terror Creek Applied Silvicultural Assessment is considered “infrequent” because harvesting will occur over a very short time period (1 to 2 years) and there are no other future proposals to harvest timber within Priest Mountain IRA. Proposed treatment units are all within substantially altered portions of the Priest Mountain IRA as determined in 2005 during Forest Plan Revision. The Roadless Rule also specifies that a road may not be constructed or reconstructed in IRAs except under specified conditions. No roads will be constructed in the Priest Mountain IRA to access treatment units so the road construction restrictions listed in the Roadless Rule (36 CFR 294.12 (2001)) have been met.

The timber sale associated with Terror Creek Applied Silvicultural Assessment would follow established procedures regarding protection of soil, water, wildlife and other resources as required in the Forest Plan, Watershed Conservation Practices Handbook and standard timber sale contract provisions. Additional design features not covered in these documents are as follows:

#### Wildlife

- Goshawk surveys would be conducted each spring before logging starts.
- If a goshawk nest is discovered then a 30-acre no-harvest buffer would be provided. No activities shall be allowed within ¼ mile of an active northern goshawk nest from March 1 to July 31 if they will cause nesting failure or abandonment (Forest Plan standard and guideline). No more than 25% of the post fledging area around the nest would be disturbed until August 30.
- Logging operations would be prohibited from April 1 to June 15.

#### Roads, Travel Management and Recreation

- Winter hauling and snowplowing may be permitted so that treatment units within the same replication can be reasonably harvested in the same year thus reducing variation of research results due to differing site conditions between harvest years. The winter haul route would be on Stevens Gulch Road (NFSR 701) which is also a designated snowmobile trail. Colorado state law prohibits the use of snowmobiles on roads open to wheeled traffic. To comply with this law, the Stevens Gulch snowmobile trailhead would be relocated further up the road to Windy Point and the Forest Service would issue a closure order for snowmobile use on the plowed section of the Stevens Gulch Road up to Windy Point. Other restrictions that would apply if winter hauling and snowplowing were approved are:

- The purchaser/contractor would be responsible for posting signs along the Stevens Gulch Road advising the public of closure restrictions.
- The purchaser/contractor would be required to maintain access to the Windy Point snowmobile trailhead during operations. If snowplowing operations create berms that block access to the snowmobile trail then the purchaser/contractor would be required to remove the berms so that snowmobile riders can safely enter and exit the trail.
- The Stevens Gulch Road would be plowed to its full width or turn outs plowed open so that public vehicles and log trucks could safely pass.
- Log hauling and snowplowing would not be allowed on the following dates to avoid conflicts and safety concerns during periods of heavy winter recreational traffic:
  - \* All day Thanksgiving Day, the following Friday, Saturday, and Sunday.
  - \* All day December 24 through January 1.
  - \* Friday, Saturday and Sunday of the annual Snowmobile Poker Run held generally on the second weekend in February.
- To avoid conflicts with hunter use in the area, log hauling would not be allowed on Thursday, Friday, Saturday and Sunday of the opening weekends of the muzzleloader season, the first big game rifle season and the second big game rifle season.

#### Silviculture and Slash Treatment

- Recent ( $\leq 5$  years) standing dead aspen would be required to be removed.
- Treatment replications would be grouped into one payment unit under the timber sale contract. The purchaser/contractor would be required to harvest an entire payment unit prior to opening the next payment unit. The purchaser/contractor would be required to harvest payment units in the same operating season.
- Tops and limbs would be lopped and scattered in harvest units to a maximum depth of 24 inches.
- Stumps would be cut to a maximum height of 12 inches.
- No more than 30% of the ground surface would be covered in large cull logs. Excessive amounts of cull logs would be piled at landings. A minimum of 10 to 20 tons per acre of large cull logs would be scattered through the harvest units.
- In order to control big-game browsing pressure that may influence aspen sucker survival, temporary big-game fences would be constructed around harvest units.

#### Noxious Weeds

- The timber sale purchaser/contractor would not move any “Off-Road Equipment”, which last operated in an area that is infested with one or more invasive species of concern onto the timber sale area without having first taken reasonable measures to make sure each such piece of equipment is free of soil, seeds, vegetative matter, or other debris that could contain or hold seeds.
- The purchaser/contractor would seed exposed areas of raw soil as designated by the Forest Service. Certified weed-free seed would be used. The seed mix would be prescribed by a Forest Service Range Management Specialist.

- The sale area would be surveyed and treated for noxious weeds in the second and third years after logging is completed.

## **Environmental Analysis**

The Paonia Ranger District is proposing to use the authorities under the Healthy Forest Restoration Act (HFRA), to rapidly assess the proposed silvicultural assessment to address SAD. Title IV – Insect Infestations and Related Diseases, Section 404, provides for applied silvicultural assessments, on Federal land that is at risk of infestation by or is infested with, forest-damaging insects. Assessments carried out under Section 404 on not more than 1,000 acres may be categorically excluded from documentation in an environmental impact statement or environmental assessment under National Environmental Protection Act (NEPA).

The Paonia District Ranger will be the Responsible Official. The following decisions will be documented in a Decision Memo:

- Whether or not to implement the research study plan developed to determine aspen sprouting response and survival following clearcut harvesting of aspen stands with varying levels of crown dieback and mortality attributed to SAD.
- Under what conditions would timber harvest occur to implement the research study plan.

## **Public Involvement**

This opportunity to comment will serve as both scoping under the requirements of NEPA, and the 30 day opportunity to comment period required at 36 CFR 215.3. Legal notice of this opportunity to comment will be published in the Delta County Independent. The comment period will end 30 days from the publication date of this legal notice in the Delta County Independent. The purpose of this comment period is to provide an opportunity for the public to provide early and meaningful participation on the proposed action prior to a decision being made by the Responsible Official. Those who provide comments during the comment period provided at 40 CFR 1503.1 are eligible to appeal the decision pursuant to 36 CFR 11(a)(1993).

Written, facsimile, hand-delivered, oral and electronic comments concerning this action will be accepted. Comments can be received at the following places:

<b>Written Comments via the U.S. Postal Service:</b> Levi Broyles, Paonia District Ranger P.O. Box 1030 Paonia, CO 81428 Attention: Terror Creek Applied Silvicultural Assessment
<b>Written Comment via e-mail:</b> TO: <a href="mailto:comments-rockymtn-gmug-paonia@fs.fed.us">comments-rockymtn-gmug-paonia@fs.fed.us</a> SUBJECT: Terror Creek Applied Silvicultural Assessment
<b>Written Comments via facsimile:</b> (970) 527-4151 Attention: Terror Creek Applied Silvicultural Assessment
<b>Written Comments hand delivered or Oral Comments via telephone or in person, during business hours (8:00 A.M. – 4:00 P.M., Monday – Friday, excluding federal holidays):</b> Levi Broyles, Paonia District Ranger 403 N. Rio Grand Ave. Paonia, CO 81428 (970) 527-4131

Electronic comments must be submitted in a format such as an e-mail message, plain text (.txt), rich text format (.rtf), or Word (.doc). In cases where no identifiable name is attached to a comment, a verification of identity will be required for appeal eligibility. If using an electronic message, a scanned signature is one way to provide verification.

It is the responsibility of persons providing comments to submit them by the close of the scoping/comment period. Only those who submit timely comments will have eligibility to appeal the subsequent decision under 36 CFR 215. Individuals and organizations wishing to be eligible to appeal must meet the information requirements of 36 CFR 215.6.

Comments received in response to this solicitation, including names and addresses of those who comment, will be considered part of the public record on this proposed action and will be available for public inspection. Comments submitted anonymously will be accepted and considered; however, those who submit anonymous comments will not have standing to appeal the subsequent decision under 36 CFR Part 215. Additionally, pursuant to 7 CFR 1.27 (d), any person may request the agency to withhold a submission from the public record by showing how the Freedom of Information Act (FOIA) permits such confidentiality. Persons requesting such confidentiality should be aware that, under FOIA, confidentiality may be granted in only very limited circumstances, such as to protect trade secrets. The Forest Service will inform the requester of the agency's decision regarding the request for confidentiality, and where the request is denied, the agency will return the submission and notify the requester that the comments may be resubmitted with or without name and address within 10 days.

For further information please contact Carol McKenzie at (970) 874-6618 or [cmckenzie@fs.fed.us](mailto:cmckenzie@fs.fed.us); or Levi Broyles at (970) 527-4131 or [lbroyles@fs.fed.us](mailto:lbroyles@fs.fed.us).

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