Summary of events related to the Danskin/Gallagher Fuels Reduction Prescribed Burn Project, Emmett Ranger District, Boise National Forest

The Decision Notice and Finding of No Significant Impacts for the Danksin/Gallagher project was signed on February 27, 2001. This allowed the Forest Service to treat approximately 5,100 acres of land by using prescribed fire. This decision also included research of the effects of prescribed fire over the landscape. A joint effort was instituted to complete the research with the Forest Service and the Joint Fire Science Program.

The project began in the spring of 2002. Approximately 3,600 acres were treated by using prescribed fire. Approximately 400 research trees were being monitored. The burn was a success met the objectives of the burn plan, and the research on the 400 trees had been complete for this year.

The spring of 2003

The spring of 2003 had been a particularly wet one. The Fuels Specialists, burn boss (Tam Cook-RXB1) had been vigilantly monitoring weather patterns and predictions since the end of February. Although the snow pack below 6,000 feet was virtually non-existent this year, there had been significant precipitation (including some late snow) throughout the end of March and all of April. It had carried on into May, yet we had not experienced a period where we had enough drying to find a window of opportunity to burn. For the reasons below the Danskin/Gallagher prescribed burn was not implemented in this year. The monitoring of the additional 400 research trees would have to be delayed until the following spring.

- Green-up was in full swing in the lower block of the 2003 proposed project area (determined by the burn boss, and the zone fire management officer).
- The trees seem to be coming into their growing period showing significant bud "break"
- It is late in the season (will most likely be late May before we would have been in prescription).
- Approximately 4.50 inches of precipitation since Mid March to May. This information was documented by Little Anderson Raw station, and confirmed by Boise Fire Weather Forecasters.
- Attempting to burn with green-up at this time would result in:
    - NOT meeting the described objectives.
    - Effectively Top killing 50-75% of the existing shrubs within the burn treatment blocks.
    - Very incomplete burn pattern that would result in significant expenditures for prolonged mop-up and patrol as we come into fire season.
    - Effectively reduce the 0-3 inch size class fuels by 60% because fuel moisture contents had been above average.

Spring of 2004

The spring of 2004 had been particularly hot with unseasonably high temperatures early in the season. Once again the Fuels Specialists, burn boss had been monitoring weather patterns and predictions since the first of February. The snow pack was better this year than last in that the site had moderate levels of snow below 5,600 and moderately high levels above. There was very little precipitation throughout March and April. This pattern continued into early May. Beginning May 11, 2004, the area received approximately 4 inches of rain over the next three weeks.

The lower Danskin unit (elevation 4500) was in prescription and was successfully burned April 13-14, 2004, approximately 1598 acres were treated. The lower block wasn't considered for monitoring purposes as there wasn't any access to the area. At this time the upper Danskin unit (elevation 5800-6000), where the research plots were located, was still under snow. The upper Danskin unit was reviewed on the ground on April 23, 2004 by T. Jackson (District Silviculturist-Project coordinator) and the burn boss, it was determined that site conditions were out of prescription, see notes below, and our recommendation is to reschedule the burn for the spring of 2005. On April 27, 2004, a test burn was started on another project near by but was put out because of flame lengths and rate of spread being out of prescription. Following are some of the reasons that it would not be prudent to attempt burning at this time:

The upper unit of Danksin still under partial snow, 4/19/2004. The temperatures were above normal during the spring of 2004, and the snow pack left extremely fast. This combination of high temperatures and rapid snow melt caused the fuels to dry out at a rapid rate.

Had a field review on site with Tom Jackson, silviculturist, on 4/23/04 to check on the tree physiology and determine tree growth, bud elongation etc., and to measure fuel and duff moistures. Additional observations were made on the way to the site and we found that we were loosing the moisture of extinction outside of the burn blocks on the north aspects; this was also verified by aerial flights. The fuels in the burn block were measuring 6% on the average or less. The 100 hours fuels and above were also extremely dry. These fuel moisture conditions indicated that all the fuels would burn including the dead dying brush component. The duff moisture was at 70% (needs to be above 80%) and out of prescription. The trees were in their second week of growing and had new growth averaging 6-7 inches with many trees 8-10 inches. The extended forecast called for more dry weather, above normal temperatures, with expected thunderstorms and associated high winds. This scenario was setting the site up for another escape (After Action Review 2002), and undo mortality to the trees. The burn boss called the burn off and will try again next spring. There were only three burns planned on the District in the spring of 2004 and the Danskin burn was a high priority for the District and the Forest, (Letter informing the principal investor of the joint fire science grant for the project from the Forest Supervisor, May 13, 2004).

Spring of 2005.

This spring the district received a lot of moisture (6-inches from March to May, tracked by the weather station near by the burn). Burn site which contained the research trees never had the opportunity to dry out properly. When the rains did cease, green-up immediately occurred, bud break of the trees, and we lost the moisture of extinction of the north side of the burn block, this meant we had no control lines to burn to. This information was relayed to the principal investigator of the research project from a letter by the Forest Supervisor on September 27, 2005. The forest was still in very much support of completing the burn project. Burn was delayed once again to the spring of 2006.

Spring of 2006

Successfully completed another portion of this project on 4/28/06 for approximately 450 acres. This burn was below the research blocks at approximately 4600 foot elevation. Burn went well and burn plan objectives were met. The research burn block is located at a higher elevation, approximately 5800-6000 feet, at this time the block was still under snow. The road into the research block had been plowed once again, and the block was being monitored daily, both by the air and on the ground. The snow finally was receding by this time it was mid May, and the trees were showing signs of bud break. As soon as the snow recedes off of this area green-up occurs almost immediately. We were once again up against the wall in meeting burn plan prescription for this area. Discussed with the District Ranger and the Zone Fire Management Officer about the situation, time of year, and the decision was made to not burn. The project coordinator, Tom Jackson was consulted as well as the principal investor of the joint fire science's project (Rob Progar), about the future of the research, (this areas was the last of the project to be treated approximately 100 acres). The question was asked if we had other areas we could monitor and research the same objectives? We did but there is no access to any of the future burn blocks on the district. The idea came up if we could cease the research on this district, retain what we had got completed and use the rest of the joint fire science grant money on another forest? The project team concluded that was a feasible idea and to go this direction and not to pursue this project any further.

/s/ Tam L Cook
District Fuels Specialist and Burn Boss responsible for implementing this project
12/11/06