

Findings of Contributing Factors and Recommendations

A. Fire Behavior and Environmental Factors

fuels

Due to a wet winter and spring, the fuel loading in northern Nevada was abnormally heavy. Throughout the 1999 season, normal tactics were found to be ineffective. In particular, direct attack and burning operations during the heat of the day had failed repeatedly on previous fires. The Incident Management Team (IMT) operations section was aware of this condition - they had been briefed on it by the Elko Field Office and encountered the conditions on previous fires this season in the Great Basin.

weather

The weather and fire behavior forecasts for August 9 predicted extreme burning conditions. A Red Flag Warning had been issued for that day for high winds, single digit humidity, and a Haines Index of 6. The backfire operation began at approximately 1515. The most current weather observations were taken at 1400 by the GNP#3 crew boss at the west end of the dozer line, 1.3 miles away from the starting point. The temperature was 85 degrees F and the relative humidity was 13%.

At 1511, the nearby Crane Springs RAWS site recorded a temperature of 84 degrees, 7% RH, and a wind speed of 16 mph out of the southeast. At 1611, the temperature was 84, RH was 8% and wind speed was 13 mph from the south.

topography

The topography at the entrapment site was relatively gentle, open rolling terrain. The aspect was north-facing, with several north-south trending shallow drainages and low ridges. The dozer line where the entrapment took place was located on the break between hilly country covered with dense grass and pinon-juniper woodlands and an open, less densely vegetated flat.

predicted versus observed fire behavior

The forecast for fire behavior on August 9 called for extreme fire behavior with high rates of spread. Dry conditions with increasing southerly winds were expected in the afternoon. The minimum RH was expected to be 6 to 12%, and a Haines Index of 6 was forecast. The fire behavior forecast called for fine fuel moisture of 3%.

The observed fire behavior was consistent with the forecast. On 8/9, the observed rates of spread were 140 to 160 chains per hour, which was close to the predicted rates of spread of 156 to 211 chains per hour. The observed flames lengths were 10 to 20 feet, which was close to the predicted flame lengths of 13 to 15 feet.

smoke

Smoke was not a factor in the conditions leading to the entrapment.

visibility

The visibility was adequate, except where blocked by terrain, and the smoke at the time of the entrapment.

B. Incident Management

Air medical transport into Incident Command Post (ICP) and ambulance transport into Elko was quickly arranged for two of the injured crewmembers. The rest of the crew followed by ground transportation. A Critical Incident Stress Debriefing Team (CISD) was ordered. Notification by the Incident Commander (IC) to the NDF and BLM Agency Administrators and fire staff took around 4 hours.

objectives

The objectives listed on the Incident Action Plan were 1) Firefighter and public Safety, 2) Protection of structures, 3) Suppression of the fire in the most cost-effective manner, 4) Protection of historic cultural sites, 5) Protect archeological sites in Aiken Canyon and Mineral Hill, 6) Protect livestock.

There was considerable pressure from local ranchers and elected officials to do more on the Sadler Fire; this was a contributing factor to the strong sense of urgency on the line the day of the entrapment.

strategy

The strategy developed on August 9 for Branch II, Division Q was inappropriate. The dozer line across the head of the fire was located so that the view of the main fire was obstructed by hills. The dozer line was also located between the main fire and a flat area with lighter fuel loading where conditions would have been much less hazardous. The flat area with the lighter fuels was still approximately two miles away from the Lucky Nugget Subdivision.

The initial plan called for two Hotshot crews, Smokey Bear and Dalton, to backfire the 3.3 mile unsecured dozer line along the northeast flank and across the head of the fire, supported by the Golden Gate #3 Crew. The Hotshot crews declined that assignment and instead stated that approximately 2+ miles along the east flank to the south of the 'Y' should be anchored before backfiring the dozer line.

tactics

Backfiring the head of a 170,000+ acre fire in the afternoon during Red Flag Warning and extreme fire behavior conditions was a hazardous tactic. A squad from an untested Type 2 crew supported by a single engine was a poor choice of forces for that action. Anchoring and flanking with dozers, handcrews, engine support and aerial supervision was the only viable tactic on a day when extreme fire behavior was expected. The line that was backfired was unsecured behind the firing squad, and the operation was not directly supervised by either the Division Supervisor or Branch Director.

safety briefings and major concerns

The weather forecast and fire behavior forecast was not given adequate consideration in strategic or tactical planning for the shift, or during the day.

The briefing held prior to lighting the backfire was inadequate, and failed to address lookouts, communications, and chain of command adequately. Though escape routes and safety zones were established and identified, the safety zones were too far apart for forecasted and observed burning conditions.

instructions given

The Incident Action Plan (IAP) for August 9 was incomplete, contained a number of errors, and was not distributed to all of the crews and

overhead on Division Q. The Branch Directors were not named, Division O and Division Q were listed with Division Supervisors assigned, but on the line there was only Division Q. No instructions were given under the ``Control Operations'' section of any of the Division Assignments - the only comment was ''will be announced at briefing.'' This might be expected on the first day a team was on a fire, but the Type 1 IMT had taken over the fire from a Type 2 team that had put out a complete IAP for the previous shift.

There were insufficient IAPs available for line overhead and crew supervisors. The Branch Director received only four IAPs for the August 9 day shift. The Division Supervisor and GNP#3 did not receive an IAP. The people on the line that day reported persistent confusion throughout the day over division locations and designations, resource numbers, and assignments.

The morning operational briefing for the forces on the east side of the fire was conducted at Jiggs around 0600. No announcement was made prior to commencing the briefing and some line personnel missed all or part of it. The investigation team got conflicting statements on the length and content of that morning's briefing. Because of the shortage of IAPs, some line personnel did not read the weather and fire behavior forecast for the day.

The Operations Section Chiefs gave the Branch Directors responsibility for making the operational assignments and tactical decisions. The Operations Section Chiefs did not make an operational plan for August 9 and were not supervising operations on the branch at the time of the entrapment.

The Operations Section Chiefs and the Planning Section Chief failed to insure that adequate instructions were given and that critical information was available to all the people that needed it.

See Recommendations below.

C. Control Mechanisms

span of control

Numerous resources arrived on Division Q throughout the day, some of which had not been given an assignment or briefing. Some checked in with the Division Supervisor, some with the Branch Director, and some did not check in with any overhead. By the time of the entrapment, there were far too many resources for one Division Supervisor to track or utilize. The Division Supervisor reported being overwhelmed trying to locate, track, and make assignments for all the resources on the division. The Division Supervisor's unit log for Division Q on August 9 shows 14 engines, 2 water tenders, 3 handcrews, 4 dozers, 5 dozer bosses, 2 other Division Supervisors, 1 Division Supervisor trainee, 1 Field Observer, and 1 Safety Officer.

The Operations Section Chiefs told the investigation team that during the first shift on a fire, their practice is to send whatever resources they found unassigned in camp out to the line. This contributed to the overwhelming workload experienced by the Division Supervisor.

radio communications

At the time of the entrapment, there were two burnout operations and one backfire operation being conducted on the same tactical frequency. The tactical channel was grossly overloaded and the command channel was clogged with logistics traffic. In the minutes before being overrun, the GNP#3 crew boss did not hear repeated radio calls directing the

squad to move to a safety zone. This was due in part to heavy radio traffic.

ongoing evaluations

On August 9 on Branch II there was confusion throughout the shift over division locations, division assignments, and chain of command. Operational coordination between Branch II and Division Q was poor. The Operations Section Chiefs were not supervising operations on Branch II. Command and control was compromised on this part of the fire

The two Hotshot crews, Dalton and Smokey Bear, recognized the hazard inherent in backfiring the north dozer line and insisted on securing the east flank of the fire before they would proceed with the backfire.

During the backfiring operation, the fire forced the firing crew to move so fast that they could not bring the black with them. This should have been a warning that the operation was becoming dangerous.

10 & 18/LCES

Most of the Ten Standard Firefighting Orders and the Eighteen Watch Out Situations were compromised. See the accompanying Appendix 10 & 18.

LCES was inadequately addressed prior to lighting. Though there were several miscellaneous overhead in the area, none participated directly in the backfire and none were clearly designated to serve as lookouts. The safety areas were too far apart for the burning conditions. The overloaded tactical radio frequency made communication difficult.

D. Involved Personnel

training/qualifications/physical fitness

Though fitness was not a direct influence on the entrapment, the physical fitness level of several members of the GNP#3 crew was questionable. The GNP#3 Crew Boss elected to leave them in a safety zone during the firing operation, which diminished the firing squad's capability.

experience levels

Overall, there was a notable lack of experience on the GNP#3 crew, especially for the backfiring assignment. The crew boss had been working for the National Park Service for only three months and had not previously served as a crew boss for an NPS Type II crew. Of the 20 crewmembers, seventeen were qualified only as Firefighter (FFT2), only three were qualified as squad boss (FFT1). It was the first wildland fire for at least 5 of the crewmembers. No one on the crew was highly experienced, and the crew boss was only moderately experienced. A number of the GNP#3 crewmembers did not have a realistic idea of what would be encountered or expected on fire assignments.

A number of the GNP#3 crewmembers believed that their prescribed fire experience equated to fire suppression experience. This is not the case, as demonstrated when one of the entrapped crewmembers wasted precious time trying to extinguish a drip torch as the fire was overrunning the firing squad.

The lack of experience and fitness made the GNP#3 crew vulnerable to an accident. The GNP#3 crew boss over-represented his crew's experience to the Branch Director and Division Supervisor, who in turn gave the crew a difficult and hazardous assignment. Few of the crewmembers recognized the hazards facing them, and lack of experience contributed to mistakes

and panic.

operational period length/fatigue

This was not a factor at the time of the entrapment.

attitudes

There was an overwhelming sense of urgency on the part of the Branch Director and Division Supervisor to complete the backfire before any more line was lost. Several key factors were overlooked or ignored in the rush to complete the line:

- The GNP#3 crew was not highly experienced.
- The fire had been exhibiting extreme behavior, the weather was worsening, and the backfiring operation took place at the height of burning conditions during a Red Flag Warning.
- The dozer line was unsecured on the east.
- The terrain and fuels farther to the north of the dozer line were more conducive to fighting the fire. As it turned out, after the fire overran the dozer line it was flanked and pinched off in the evening at least two miles from the closest structures in the Lucky Nugget Subdivision.
- There was inadequate support (lookouts, engines, and aviation) for the firing squad.
- No one involved with the backfire could see the main fire's location.

The Branch Director displayed minimal concern for the firing squad's well being. Immediately after the entrapment, he had them provide for their own medical care and transportation to the helispot, while he saw to the completion of the firing.

The Operations Section Chiefs did not give appropriate consideration to planning or oversight for line operations given the extreme conditions forecast for the day. They instructed the Branch Directors to develop the plan for the shift, and did not oversee fireline operations in Branch II.

The Safety Chief did not instigate an effective inquiry into the entrapment, overlooked the injuries, and downplayed the incident in his report and to the investigation team.

The Incident Commander approved, and the Planning Section Chief issued an inadequate and incomplete Incident action Plan.

In summary, several key members of the IMT did not have adequate concern for the existing conditions, and this was a contributing factor in the entrapment.

leadership

The GNP#3 crew boss made a number of mistakes:

- He told the Division Supervisor and Branch Director that his crew had ``lots of burning experience,`` yet he left 15 crewmembers in a safety zone during the firing operation because of their lack of experience and training and low fitness level. He overestimated the capabilities of his crew, and over-represented the crew's capabilities to the fireline overhead.
- He became so engrossed in the firing operation that he compromised several basic safety procedures. He did not provide for the safety of his crew, had no communication with lookouts, and was unaware of the location of the main fire. He should have been monitoring radio traffic, weather, and fire behavior, rather than actively participating in lighting.

- He disregarded the conditions the firing squad encountered during the firing operation which made the available safety zones inadequate.

The GNP#3 crew boss needs a better understanding of the role and responsibilities of a crew boss before he takes another crew out.

The experience and capabilities of GNP#3 were not consistent with the assignment they were given by the Branch Director and Division Supervisor. The Crew Boss did not accurately communicate the crew's level of experience to the Division Supervisor or the Branch Director. Neither the Division Supervisor nor Branch Director did an accurate job of assessing the capabilities and experience of the GNP #3 crew.

Immediately after the entrapment, the Branch Director turned over responsibility for assessment and first aid to the injured (one of the involved crewmembers) and returned to firing out the control line. This crewmember was later admitted to the Elko hospital and remained overnight. Immediately after this incident, he was not physically or mentally ready to take responsibility for others.

The Safety Chief overlooked the extent of the injuries, did not follow up at the hospital or instigate an investigation. There was no documentation in the final fire package dealing with his section's role in the incident.

The Division Q Supervisor made a substantial effort to assist and comfort the GNP#3 crew after the entrapment. He met with the crew in town that night to give what help he could. Late the night of the entrapment, he felt deeply stressed over the event, and contacted the IMT to tell them that he wanted to stay in town the next day to assist with the Critical Incident Stress Debriefing. The Planning Section Chief, the Operations Section Chief, the IC, and others from the IMT contacted him and told him to report to the line the next day. This indicates a lack of concern on the part of the IMT.

See Recommendations below.

E. Equipment

availability

The GNP#3 crewmembers had Nomex shrouds attached to their hardhats. The shrouds were not in use at the time of the entrapment. Use of the shrouds would have prevented most of the burns incurred by crewmembers.

performance

At least two GNP#3 crewmembers had difficulty removing their fire shelters from their packs as they ran. One crewmember broke the red ring off the vinyl fire shelter case while trying to open it. The design of the field pack fire shelter pocket and the vinyl case both contributed to the difficulty crewmembers had deploying shelters.

The bus used to mobilize the crew had numerous mechanical problems, culminating in a breakdown less than a mile from the fireline on the day of the entrapment. The crew told the investigation team that the driver mentioned he had problems seeing at night, yet he drove through the night from California to Nevada during the mobilization. After driving all night, the driver worked through the next day driving the crew to its fireline assignment.

See Recommendations below.

F. Management Support

The mobilization procedures followed by the NPS Pacific West Region for this Type II crew contributed to problems with crew cohesion, communication, chain of command, and overall level of experience. On this assignment, 21 firefighters from eight different park units were assembled at Golden Gate NRA and dispatched to Nevada. This led to a situation where inexperienced personnel from several parks were led by a moderately experienced crew boss. Several of the GNP#3 crew had no wildland fire experience or only some prescribed fire experience.

Additionally, some of the personnel on the GNP#3 crew were marginally fit, the Crew Boss trainee did not work well with the Crew Boss, and the Crew Boss expectation of the crew's capabilities was unrealistic. These factors all compromised the safety and performance of the crew.

See Recommendations below.

Recommendations

- Incident Management

The IMT failed to watch out for the safety of the firefighters on the line, and did not work under the premise that safety is the highest priority. The Incident Commander, Operations Section Chiefs, Planning Section Chief, Safety Chief, and the Branch Director were all deficient on this assignment in regards to firefighter safety.

Recommendation: The Incident Commander, the Operations Section Chiefs, the Planning Section Chief, the Branch Director, and the Safety Chief should not be allowed to perform in those positions until they have been recertified. The recertification should be overseen by qualified trainers with knowledge of this entrapment report.

- Involved Personnel

training/qualifications/physical fitness

Recommendation: The NPS Pacific West Region should insure that training is given to fire crewmembers that presents an accurate picture of the conditions and situations that can be expected on fire assignments. This is especially important for people that are not on fire suppression crews at their home unit. A number of people on the GNP#3 crew did not have a realistic idea of what would be encountered on fire assignments.

Recommendation: The NPS Pacific West Region should stress to the units the importance of fitness for fireline assignments, and insure that personnel available for fire assignments have maintained their fitness since being tested.

experience levels

Recommendation: The NPS Pacific West Region should evaluate the crew mobilization procedures and implement changes designed to provide sufficient experience and leadership on each crew for wildfire assignments. The crew boss and squad bosses should be well-experienced, and have demonstrated leadership ability. The number of people on each crew with no previous fire suppression experience should be limited to two. It should be stressed that prescribed fire experience does not equate directly to suppression experience.

leadership

Recommendation: The Division Supervisor was overwhelmed by the number of resources on his division, but did not take steps to delay operations until he gained control and could assure the safety of the people under his command. His qualification as Division Supervisor should be suspended until he is recertified by an experienced trainer that has knowledge of this entrapment report.

Recommendation: The GNP#3 Crew Boss' qualification as Crew Boss be suspended until he is recertified by an experienced trainer that has knowledge of this entrapment report.

Recommendation: The NPS Pacific West Region should stress that Type 2 crew leaders must make realistic assessments of their crew's capabilities, and that they have a responsibility to accurately communicate that capability to fireline overhead.

Recommendation: The GNP#3 crew went through a very stressful incident, made more so for many of them by their relative lack of experience. The NPS should insure that the crewmembers are be provided complete critical incident stress counselling services and comprehensive follow up care.

- Equipment

Recommendation: The vinyl packaging on GSA fire shelters should be redesigned to prevent difficulty when removing the shelter under stressful conditions or while running.

Recommendation: All wildland fire agencies should stress the critical importance of using all appropriate personal protective equipment during hazardous assignments. Had the GNP#3 crew been using their Nomex shrouds, the second degree burns might have been avoided.

Recommendation; All wildland fire agencies should evaluate the line packs used by their firefighters to ensure that it is possible to pull a fire shelter for deployment while running.

Recommendation: The NPS Pacific West Region should develop and implement guidelines for bus inspection, operator capability, and driver duty hours.

- Management Support

Recommendation: NPS mobilization procedures (see Recommendation above under Experience Levels)

Recommendation: A periodic review process for Type 1 Incident Management Teams should be established. The National Wildfire Coordinating Group should be tasked with establishing teams and review procedures for assessing the performance of Type I IMTs in the field on a regular basis, especially as it relates to safety. Each Type I IMT should be reviewed and critiqued at least once every 2 or 3 years.

THE 10 AND 18

The Ten Standard Firefighting Orders and 18 Watch Out Situations are designed to help firefighters to be aware of dangerous circumstances and reduce firefighting risks. They also serve as an analytical tool to help assess what errors might have occurred during an incident. Federal wildland firefighters are instructed in the 10 Standard Orders and 18 Watch Out Situations and are expected to recognize and know them.

TEN STANDARD ORDERS

Fight fire aggressively, but provide for safety first.

- ? The backfire conducted by GNP#3 was too aggressive a tactic for the existing conditions. The Branch Director and Division Supervisor did not adequately provide for safety - no lookouts, safety areas too far apart, the line behind the firing squad was unsecured.

- The Dalton Hotshots and Smokey Bear Hotshots Superintendents demonstrated strict adherence to this fire order.

2. Initiate all action based on current and expected fire behavior

- ? The Incident Commander, the Planning Section Chief, and the Operations Section Chiefs did not give sufficient emphasis to the observed and expected fire behavior when planning for the day operational period or during the briefing on August 9.

- The Branch Director, Division Supervisor, and GNP#3 Crew Boss did not appropriately consider observed and expected fire behavior when planning and initiating the backfire operation.

- ? Distribution of the fire behavior forecast for August 9 to line personnel was incomplete.

Recognize current weather conditions and obtain forecasts

- ? The Branch Director, Division Supervisor, and GNP#3 Crew Boss did not take into account changing fire behavior when planning and initiating the backfire operation.

? The Branch Director and Division Supervisor did not take the current weather into account when planning and initiating the backfire.

Ensure instructions are given and understood

- ? There were no operational assignments in the IAP.

- The Operations Section Chiefs did not give adequate instructions to the line overhead.

- ? The briefing given on August 9 in Jiggs was inadequate and was not attended by all operations resources.

- The briefing prior to initiation of the backfire did not address LCES adequately or clearly.

Obtain current information on fire status

- ? The Branch Director, the Division Supervisor, and the GNP#3 Crew Boss compromised this order. No one involved with the backfire had current information on the status or actual location of the main fire when the backfire was begun.

Remain in communication with crewmembers, your supervisor, and adjoining forces

- ? All operations supervisors involved in this entrapment compromised this order. The Operations Section Chiefs were not monitoring operations on Branch II and were unaware of the backfire plan or its initiation.

During the backfire, the Branch Director and Division Supervisor were not in contact with each other and they did not maintain contact with GNP#3 as they burned. The GNP#3 Crew Boss did not maintain communications with his supervisors.

Determine safety zones and escape routes

- Although safety zones and escape routes had been established and identified, the bulldozed safety zones were too far apart for weather and fire behavior conditions. The backfire was moving too quickly along the line for the crew to use the black as a safety area.

Establish lookouts in potentially hazardous conditions

- ? The Branch Director, Division Supervisor, and GNP#3 Crew Boss did not clearly designate or post lookouts during the backfire operation.

Retain control at all times

- ? The Operations Section Chiefs were not supervising tactical operations in Branch II.
- The Division Supervisor did not exercise sufficient control of tactical operations on his division.

Stay alert, keep calm, think clearly, act decisively

- ? A strong focus on the tactical mission caused key personnel to neglect calm, clear deliberation of the proposed tactics. In the face of numerous warning signs, no one acted decisively to interrupt the urgent, ``head-down'' focus on the tactical mission.
- The Branch Director made poor decisions regarding tactical operations.

Eighteen Watch Out Situations

1. The fire is not scouted and sized up.

- ? The main fire was not scouted and sized up prior to initiating the backfire. Its exact location was unknown by the people on the north dozer line.

You are in country not seen in daylight.

- ? This was not an issue.

Safety zones and escape routes are not identified.

- ? Safety zones and escape routes were identified. Safety zones were too far apart for observed and predicted weather and fire behavior.

You are unfamiliar with weather and local factors influencing fire behavior.

- ? This was not an issue

You are not informed of tactics, strategy, and hazards.

- ? There were no instructions on the Incident Action Plan, and the Operations Section Chiefs had the Branch Directors develop the plan and tactics for the day. During the course of the day there was extensive confusion about tactics, and insufficient information and discussion concerning hazards.

Instructions and assignment are not clear.

- ? During the course of the day, instructions and assignments were unclear from the Operations Section Chief level down to the Crew Boss and crewmember level.

No communication link has been established with crewmembers or your supervisor.

- ? The GNP#3 Crew Boss did not have communications with the Branch Director or Division Supervisor at the time of this entrapment. This was because the tactical frequency was overloaded and the Crew Boss was too actively involved in the burn operation.

You are constructing line without a safe anchor point.

- ? The ``Y'' safety zone used as the anchor point for the backfire was not tied into cold black or natural barriers. It was not capable of stopping the fire's spread or preventing flanking of the east-west dozer line.

You are building fireline with fire below.

- ? This was not an issue.

You are attempting a frontal assault on the fire.

- ? This backfire was an indirect attack across the head of the fire.

There is unburned fuel between you and the fire.

- ? When the backfire was initiated, there was approximately 1/4 to 1/2 mile of unburned fuel between personnel on the dozer line and the head of the main fire.

You cannot see the main fire and are not in contact with someone who can.

- ? As the backfire was begun, no one on the dozer line could see the main fire. There was no air support overhead. Because of intense radio traffic, most personnel on Division Q were not in contact with anyone who could see the main fire.

You are on a hillside where rolling material can ignite fuel below you.

- ? This was not an issue.

The weather is becoming hotter and drier.

- ? Virtually all line overhead involved in the entrapment ignored warning signs that the weather was becoming hotter, drier, and very unstable.

The wind is increasing and/or changing direction.

- ? The Branch Director, Division Supervisor and GNP#3 Crew Boss all observed that the wind was shifting direction and changing speed regularly as they prepared to initiate the backfire.

You are getting frequent spot fires across the line.

- ? This was not an issue until the time of the entrapment.

The terrain and fuels make escape to safety zones difficult.

- ? Extreme fire behavior in the light, flashy fuels involved made escape to the safety zones difficult, and for a brief time impossible. Only a fortuitous wind shift allowed the GNP#3 firing squad to escape the fire.

You are taking a nap near the fireline.

- ? This was not an issue.

On August 9, 1999, six member of the Golden Gate park #3 (GNP #3) Type 2 fire crew were overrun by flames while conducting operations on the head of a BLM incident, Sadler Fire, southeast of Elko, NV. At least two fire shelters were pulled from the cases.

All six crew members were treated at the hospital in Elko for smoke inhalation. Two were also treated for second degree burns on their face and neck. Three crew members were kept overnight for observation and released the next day.

An accident investigation team was chartered by the NB BLM. The final report is being issued by National BLM Fire Director, Les Rosenkrance.

The report surfaced several significant violations of standard safe practices and operating procedures by five member of the command and general staff of Ed Storey's National Type 1 incident management team (IMT) and three other persons assigned to the Sadler incident. Specifically named in the report were the following positions: a) Incident Commander; b) Safety Officer; c) Planning Section Chief; d) both Operation Section Chiefs; e) Operations Branch Director; f) Division ``Q'' Supervisor; and; g) Crew Boss GNP #3.

Actions and omissions by the eight persons named in the report violated all ten of the Standard Fire Fighting Orders and compromise thirteen of the 18 Situation that Shout Watch-out.

The Great Basin Coordinating Group (GBCG) met with the command and general staff of Storey's Team and listened to their account of the accident. Based on this meeting and the findings and recommendation contained in the draft report, reaffirming firefighter safety as the highest priority, the GBCG has dissolved Ed Storey's national Type I Incident Management Team effective immediately.

This action in no way implies performance violations by team members not specifically mentioned in the report.

In deliberating this action, the GBCG considered simply replacing the culpable individuals and revitalizing the current team with new leadership. The chosen course of action was considered better in that it allows for a whole new team structure to be established by the new leadership. This action will honor the Great Basin commitment to field two Type I national incident management teams. Current team members not implicated in the report will be encouraged to apply to the new team.

The GBCG strongly advises actions be taken by affected agency replacement recommendations for remedial action with the named individuals per the report of the accident investigation team.

The GBCG will review all safety and operational procedures with all Incident Management Teams, both Type 1 and 2, in the Great Basin as well as review and clarify incident management team guidelines and expectation for the year 2000.

Six of the eight individuals named in the report are R-4 USFS employees. The other two are State of Utah and National Park Service employees.

The Great Basin Coordinating Group (GBCG) is an interagency group chartered by the National Wildfire Coordinating Group to manage and oversee Type 1 and 2 incident management teams within the Great Basin. The GBCG consists of representatives from : States of ID, NV and UT; Bureau of Land Management; National Park Service; U.S. Fish and Wildlife Service; Bureau of Indian Affairs; U.S. Forest Service.

The GBCG will review all safety and operational procedure with

Sadler Entrapment Key Personnel

Position	Name
Incident Commander	Ed Storey
Planning Section Chief	Jeff Luff
Operations Section Chief	Buz Vanskike
Operations Section Chief	Skip Hurt
Branch Director	Dan Huter
Safety Officer	Dee Sessions
Division Supervisor	Tom Shepard
Golden Gate Crew #3	
Crew Boss (fs*)	Tim Horton
Crew Boss Trainee	(fs) Alex Naar
Squad Boss	Chris Bradley
Squad Boss	Don Bowen
Squad Boss Trainee (fs)	Keren Christensen
Firefighter	(fs) Peter Giampaoli
Firefighter	(fs) David (Ty) Deaton
	Firefighter (fs) Derek Hyde
Firefighter	Brian Garrett
Firefighter	James Davis
Firefighter	Randy Larson
Firefighter	William Pickard
Firefighter	Jimmy Verescagin
Firefighter	Mike Seymour
Firefighter	Angela Hawk
Firefighter	Kevin Fitzgerald
Firefighter	Steven Westerman
Firefighter	Nelida Navarrete
Firefighter	Lydia Mingo
Firefighter	Richard Huntsberry
Firefighter	Rex Jennings

* fs - firing squad

Investigation Team

Lead	Bob Lee	BLM
Chief Investigator	New Mexico SFMO	
Operations Specialist	Vince Mazzier	Alaska Fire Service, Safety Chief
NDF Rep/Fire Behavior	Tom Boatner	BLM Montana, SFMO
Fire Behavior	Rob Ruffridge	Nevada Div of Forestry, Region Mgr.
NPS Representative	Bill Wallis	BLM Colorado, SFMO
Safety Specialist	John Kraushaar	NPS Pacific West Region Asst FMO
	Stan Palmer	BLM NIFC Safety