Incident Narrative

Bullards Incident

Tahoe and Plumas National Forests Nevada Yuba Placer Ranger Unit

August 27 - September 2, 2010



Northern California Interagency Incident Management Team 2

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Mobilization

On Saturday, August 28 at approximately 0900, Northern California Interagency Incident Management Team 2 (NorCal Team 2) received a "short team" activation notice to assume command of the Bullards Incident. The fire originated below the dam of the Bullards Bar Reservoir within the Tahoe National Forest and quickly spread onto private lands under the jurisdiction of the Nevada Yuba Placer (NEU) Ranger Unit Direct Protection Area (DPA). The fire eventually continued onto public lands within the Plumas National Forest that are also within the NEU DPA.

The Northern California Geographical Area Coordination Center confirmed that the intent of TNF's request for a short team was to limit the incoming team's roster to 28 positions. At that time the fire was being managed by an extended attack organization under a Unified Command between the USFS and CALFIRE.

On August 28 at 1400 a team in-briefing was held at the Nevada County Fairgrounds in Grass Valley, California. After the in-briefing the team's Command and General Staff began interfacing with their CALFIRE and federal agency counterparts. At the conclusion of the in-brief, NorCal Team 2 personnel began reconciling resource orders and establishing a check-in facility for resources arriving at the Fairgrounds. At their request, the team also assigned operational overhead directly to the Bullards fire to assist the extended attack organization.

NorCal Team 2 assumed command of the Bullards incident at 1800 that evening. The Unified Command structure with CALFIRE was retained by the incoming team. The unified Incident Commanders were Joe Molhoek (NorCal Team 2) and Jeff Brand (CALFIRE).

Agency In-briefing

The Agency Administrator's in-briefing was facilitated by Tahoe National Forest Fire Management Representative Jean Pincha-Tulley. At the time of the in-briefing, the fire size was estimated at 850 acres with approximately 10% containment achieved. The primary issues mentioned at the in-briefing included:

- Ensuring the safety of those assigned to the fire, local citizens and Forest visitors
- The presence of steep, rugged terrain

- Areas of active burning and spotting locations
- The evacuation of approximately 40 residences, the current road closures in effect and the Yuba County disaster declaration
- Ongoing marijuana surveillance and eradication operations within the area
- General area fire history and characteristic local fire weather patterns
- The location of sensitive habitat requiring protection
- Existing infrastructure including suspended mining cables over waterways

At the time of the in-bring, the suppression force assigned to the incident under the extended attack organization was estimated to be in excess of 300 personnel.

Transition of Command

A Delegation of Authority was presented to the Incident Commanders after the in-briefing. Transition of command of the Bullards incident from the extended attack organization to a Unified Command between NorCal Team 2 and CALFIRE occurred at 1800 on August 28.

The transition of command proceeded smoothly without significant problems or issues. Because overhead and operational resources from CALFIRE and the USFS were already committed to the incident, the Command and General Staff of NorCal Team 2 had sufficient opportunity to interface with their counterparts. Operational overhead from NorCal Team 2 had adequate time to assess operational objectives and discuss pre-transition suppression accomplishments with their counterparts.

Prior to the transition of command, a significant amount of suppression resources and overhead had been ordered by the extended attack organization. Consequently, immediate efforts by the incoming team focused on establishing the status of outstanding resource orders.

The decision to locate the Bullards Incident Command Post and Base Camp at the Nevada County Fairgrounds was made by the Agency Administrator prior to the transfer of command. In order to immediately begin producing Incident Action Plans and incident mapping products, a clerical service was ordered. The contractor's quick response enabled the team to produce their initial IAP and incident maps in time for the following morning's 0600 operational briefing. The decision to locate the incident ICP/Base at the fairgrounds proved to be insightful and cost-effective as the incident workforce and corresponding support functions expanded.

NorCal Team 2 continued to manage the Bullards incident through September 1. Transfer of command to incoming Type III Incident Commanders Eric Petterson (USFS) and Kurt Williges (CALFIRE) occurred at 0700 on September 2. At 0900, a close-out meeting that included presentations by outgoing Unified Command Incident Commanders Molhoek and Brand was held on September 2 at the Tahoe National Forest Headquarters in Nevada City, California.

Cooperating Agencies

Cooperating agencies during the suppression effort included CALFIRE, CalTrans, the California Highway Patrol, the Yuba County Sheriff's Department, North San Juan FD, California Department of Corrections, Dobbins-Oregon House FD, Camptonville FD, Linda FD and the Pacific Gas and Electric Company. Representatives from cooperating agencies attended all operational briefings and most of the planning meetings.

Incident Objectives

Based upon information obtained during the Agency in-briefing, the Delegation of Authority and the Wildland Fire Decision Support System (WFDSS), Unified Command established the following *Management and Control Objectives* (ICS-202, #5) for the incident:

Control Objectives

On the TNF keep the fire:

- North of the Middle Fork of the Yuba River
- West and South of the Moonshine Road

On the PNF keep the fire:

- South of the Burnt Bridge Creek
- North of the old Dobbins Burn
- East of the Oregon Hill Road

Management Objectives:

- Provide for the safety of the public and firefighters through the application of the risk management process.
- Protect cultural resources and critical habitat
- Protect private property and infrastructure within and adjacent to the fire area
- Continue the timely demobilization of excess resources
- Identify fire suppression repair work and continue implementing the incident fire suppression repair plan

Control and operational objectives were reviewed at each planning strategy meeting. When changed conditions warranted modification of the objectives, all personnel were informed of revisions at the following planning meeting and operational briefing. Operational briefings were held daily at 0700 and 1800 at the ICP. Planning meetings were held daily at 1000 and 2000. Incident Action Plans were prepared and distributed at the ICP/Base, delivered to the Grass Valley ECC, the Grass Valley Air Attack Base, and the Incident Helibase. Additionally, they were electronically posted on the Team's FTP site.

Wildland Fire Decision Support System (WFDSS)

Tahoe National Forest Deputy Forest Supervisor Judie Tartaglia published the initial WFDSS decision for the Bullards Incident on August 28 and the revised decision on August 30, 2010.

Fire Behavior Summary

At 1611 on August 27, the Bullards Fire ignited near the bottom of the North Yuba River drainage approximately ¼ mile below the New Bullards Bar Reservoir dam. Due to the steep topography and adverse fire weather conditions, the fire grew rapidly up both sides of the drainage. NorCal Team 2 entered Unified Command with CALFIRE on August 28 at 1800 to manage the incident.

Fuels

There were two distinct vegetation types within the fire area. They were mixed conifer stands with a moderate dead and down and shrub understory, and mixed brush consisting of manzanita, chinquapin, and several other shrub species. The fire behavior prediction system fuel models best representing the area are "Timber with litter and understory (FM 10)" for the timbered stands and "Brush (FM 5)" for the mixed brush. The majority of the FM 5 was located in the drainages and burned during the first two burning periods. The live fuel moisture at that time was 125% based on Yuba River Ranger District sampling data.

Topography

The most prominent topographic features within the fire area are the North and Middle Yuba River drainages. Slopes in the vicinity (within 1/4 mile) of the Yuba River drainages were 80 to 100%. Outside the drainages slopes moderated to 20 to 40%. Elevations ranged from 1,200 feet at the bottom of North Yuba River drainage to near 3,000 feet near Summit Hill. All aspects were represented.

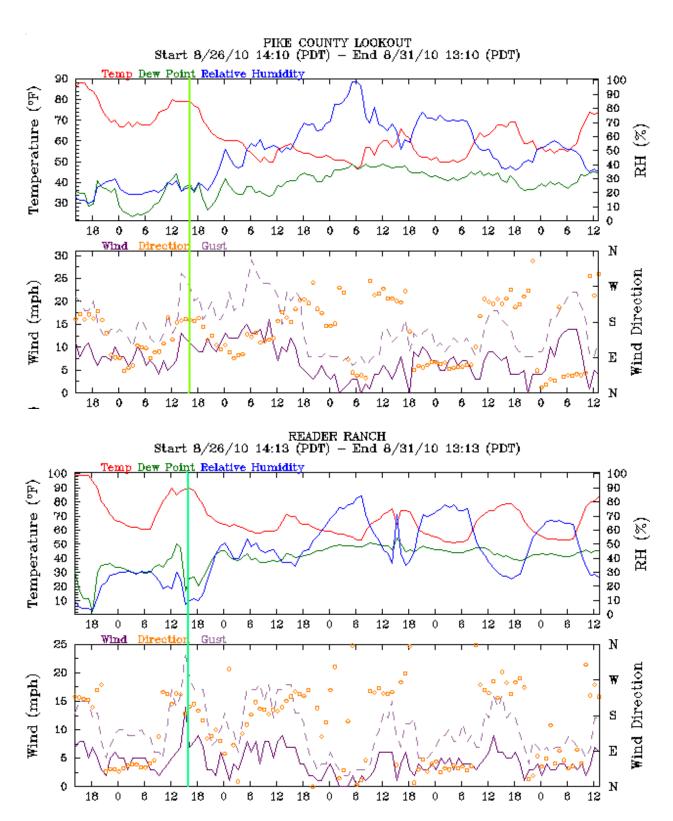
Weather

On August 27 the National Weather Service predicted a moist cold front would move on shore producing strong gusty winds within an existing hot, dry airmass prior to its passage. The Bullards Fire started during this frontal transition period.

Two nearby remote area weather stations (RAWS) stations were identified as being representative for the fire area. These included Pike County Lookout (NWS#041701) located 5 miles northwest at an elevation of 7,200 feet, and Reader Ranch (NWS#041809) located 4 miles southeast at an elevation of 2,000 feet.

At the time of ignition graph printouts indicate the Pike County Look Out RAWS temperature was 79°, RH 22%, with winds south at 11 mph with gusts to 26. Reader Ranch RAWS temperature was 90°, RH 10%, with winds from the south at 15 mph with gusts to 26 mph. The frontal passage occurred several hours later with a corresponding decrease in temperatures, an increase in humidity, and with eventually decreasing wind speeds. Precipitation occurred in the fire area during the night operational period of August 28 and during the day operational period of the 29th. A warming and drying trend began on August 31st.

The graphs showing temperature, relative humidity and wind speeds for the two RAWS stations are shown below. The vertical green line indicates the time of ignition of the Bullards Fire.



Spot weather forecasts from the National Weather Service Sacramento Office were utilized for the duration of the incident. An incident weather forecast was included in the Incident Action Plan for each operational period and was presented at each operational briefing and planning meeting.

Fire Behavior

At the time NorCal Team 2 assumed command of the fire on the evening of August 28, the Bullards Fire had grown to approximately 900 acres. During the initial run on the first day it is estimated that the brush fuel types burned at a rate of 110 chains per hour with flame lengths of over 20 feet. Timber types burned at approximately 13 chains per hour with 6 foot flame lengths within the drainage then decreased to approximately 8 chains per hour with 5 foot flame lengths once out of the drainage. One significant sustained crown run occurred on the east side of the North Yuba River near the Bullards Bar dam causing spotting distances over a mile. The moist conditions after the frontal passage significantly reduced fire growth and enabled suppression personnel to contain the fire in a timely manner. The final fire size was estimated at 1,307 acres.

Operations

Upon the incoming team's arrival, the Operations Section of NorCal Team 2, in conjunction with CALFIRE'S day shift Operations Section Chief, jointly established the following strategic priorities:

- Containment
- Resource Accountability
- Mop up to Turnback Standards
- Fire Suppression Repair
- Control

NorCal Team 2 organized the Operations Section with Steve Raymer as Day Operations Section Chief and Rick Young as Night Operations Section Chief. Planning Operations was staffed by Dan George and Dale Shippelhoute with Dale functioning as a trainee. In preparation for the transition to Unified Command, NorCal Team 2 Division Supervisors coordinated with the extended attack Division Supervisors to recon and assess the fire. The incoming team's Division Supervisors worked together with the extended attack Division Supervisors to form the operational assignments for the Team's initial Incident Action Plan for the August 29 day operational period.

Upon assumption of command, Division Supervisor positions were staffed with CALFIFE, local government, and Forest Service resources that had been assigned under the extended attack organization. NorCal Team 2 worked in collaboration with CALFIRE representatives to ensure their forces could continue working on a 24 hour work schedule throughout the incident. To maximize efficiency, the Team's Operations Section crafted a staffing plan that included an equitable representation of crews and overhead for both agencies on day and night shifts.

The fire had the potential to grow much larger than it did due to existing fuel types, the dry, windy conditions and steep slopes. Taking full advantage of the frontal precipitation event, the operational strategy was immediately modified to include a direct-attack strategy. The result was 100% containment by 1800 on August 31. Type 1 hand crews were used for mop-up on steep slopes until the transition to the incoming Type III organization.

Fire Suppression Repair

TNF Resource Advisor Terri Walsh led a contingent of USFS resource advisors to ensure the successful completion of repair work. Steve Garcia was the lead resource advisor for lands within the CALFIRE DPA. Division Supervisor Tom Browning was assigned to fill the Repair Group Supervisor position. His role was to coordinate suppression repair efforts with fire suppression activities on all Divisions. Repair work was initiated using two dozers, two excavators and hand crews to rehabilitate dozer and hand firelines.

Aviation Operations

Aircraft assigned to the Bullards Incident:
☐ 3 Type 3 Helicopter
☐ 2 Type 1 Helicopters
☐ 5 Type 2 Helicopter
☐ 5 Air Tankers
☐ 2 Air Attacks
Aircraft assigned after transition to the Type III organization:.

Helicopter 514 will be assigned to the incident after transition to the Type III organization. The Type 2 aircraft will be stationed at the White Cloud helibase.

Aviation Accomplishments*

Flight Hours	Passengers	Cargo Delivered	Water Applied	Retardant		
84.7	55	2690	238,222	32,855		

^{*}Totals represent all aviation missions flown from August 27 through August 31, 2010.

Aviation Overview

Helicopters were located at the Brownsville and Oroville Airport. The Brownsville Airport served as the main helibase for the Bullards Incident. The Brownsville Helibase is now closed.

All of the retardant was applied prior to NorCal Team 2's management of the Incident. No retardant was applied after August 27. NorCal Team 2's decision to discontinue its use reduced environmental impacts and suppression expenditures.

The Tahoe and Plumas National Forests maintained Initial Attack responsibilities, however aviation resources assigned to the incident were made available to both Forests if needed to support new fires.

The Bullards Incident TFR was canceled at 1900 on 08/31/2010.

There were two SAFECOMs filed during this incident. One was for a helicopter contacting a tree with its water bucket. The other SAFECOM was initiated after a small private airplane, upon landing at Brownsville Airport, came within ten feet of the main rotor blade of a Type 1 helicopter. After that incident the decision was made to move the Type 1 helicopters to the Oroville Airport.

Key Events: August 28 through September 2, 2010.

Date	Time	Event				
8/28/10	0900	IC Molhoek receives order to mobilize NorCal Team 2 for management of the Bullards Incident.				
8/28/10	1400	 NorCal Team 2 receives agency in-brief at the Nevada County Fairgrounds. Unified Command is established to manage the incident. Decision is made to establish ICP/Base Camp at Nevada County Fairgrounds in Grass Valley, CA. Bullards fire is reported to be approximately 850 acres with 10% containment. 				
8/28/10	1800	NorCal Team 2 assumes unified command with CALFIRE.				
8/28/10	Night Operational Period	Precipitation received on fire and direct-attack suppression strategy deployed.				
8/29/10	Night/Day Operational Periods	 Fire line completed around fire perimeter. Fire Suppression Repair Plan signed. Demobilization plan signed. Extensive mop-up operations initiated. Cost Share Agreement signed between USFS and CALFIRE. 				
8/30/10	Night/Day	Repeaters installed at Banner and Oregon Pk. and incident				

	Operational	specific frequencies established.			
	Periods	PG&E initiates transmission line repairs.			
		• All residents allowed to return to their homes.			
8/31/10	Night/Day Operational Periods	 Over 500 suppression personnel are demobilized from the incident. 100% containment declared at 1800. 			
	Terrous	 Fire in patrol status for night operational period. All road restrictions lifted. 			
9/01/10	Night/Day Operational Periods	 Final Incident Status Summary (ICS-209) submitted. Transition meeting held at 0900. Significant demobilization continues. 			
9/02/10	Day Operational Period	 Transition of command to Type III organization occurs at 0700. Repeaters removed and Bullards Incident returns to TNF frequencies. Closeout meeting scheduled for 0900. NorCal Team 2 demobilized. 			

Team Close-Out Meeting

At 0900 on Thursday September 2, NorCal Team 2 facilitated the incident close-out meeting with CALFIRE representatives at the Tahoe National Forest Headquarters in Nevada City, California. Incident Narratives were distributed to Forest staff and other key personnel. Representatives from CALFIRE, along with the Planning Section Chief and the Incident Commander from NorCal Team 2 voiced comments and suggestions pertaining to the management of the Incident.

The Incident Documentation Package was submitted to the Tahoe National Forest at the conclusion of the close-out meeting.

Attachments to the Narrative

Incident Cost Summary
IMT Cost Containment Measures / Fire Management Efficiencies
Key Decision Log
Narrative Map Package
After Incident Report (AIR)

Incident Cost Summary

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IMT Cost Containment Measures / Fire Management Efficiencies

Key Decision Log

Narrative Map Package

After Incident Report (AIR)

NorCal Team 2

Bullards Tahoe National Forest/CalFire-NEU CA-TNF-1579 August 28, 2010 - September 2, 2010 AFTER INCIDENT REPORT (AIR)

In conjunction with the Lessons Learned Process, an After Incident Report (AIR) will be prepared at the conclusion of this incident. The Team will answer the three questions presented below. The final AIR will be presented to the host agency as part of the Team narrative package and closeout.

1. What was the most notable success at the incident (in relation to the deployment) that others may learn from?

Incident Commander

NC2: The relationships established with cooperating agencies (CAL FIRE and Local Government) prior to the incident provided the ground work for an excellent interagency operation. There was an obvious mutual respect and understanding of agency specific issues between CAL FIRE and the Tahoe National Forest. The investment in these relationships allowed the IMT to operate efficiently and safely and facilitated good communication throughout the incident.

CAL FIRE:

- UIC's were united and communicated well through-out Incident.
- ICs understood each agencies policies and procedures
- Dep. IC Tim Fike recognized that early on the incomplete team order needed to be addressed immediately. He pulled the team together and held a meeting to address the issue, so that internal team cohesion would not be affected.
- The IC's delegated workload to ensure that all needs of the team and Incident were met.
- The Team IC was responsive to the needs of the Local Forest and the CAL FIRE Unit. The entire team also recognized the importance of the long standing positive relationship of the USFS and CAL FIRE in the area and strived to ensure that was not compromised.

Operations

The cooperation between the Tahoe National Forest and the Nevada-Yuba-Placer CAL FIRE Ranger Unit was a key to the success of the incident. The integration and cooperation between the Team and CAL FIRE was seamless. The CAL FIRE IC and deputy offered recommendations and assistance in integrating CAL FIRE resources into the operational assignments and the 24 hour shift cycle.

Air Operations

The close coordination with the Tahoe National Forest Aviation Officer with local knowledge of the complex terrain and infrastructure in the Bullards Bar area assisted in the safe aviation operation. Her coordination in dealing with special missions for law enforcement and power company flights were beneficial for safe operations in the canyon.

Logistics

The Nevada County Fairgrounds facilities identified for the incident base camp allowed for a smooth setup and a functional base camp in a short amount of time. The working relationships with fairgrounds staff was in place when NorCal Team 2 arrived. These relationships were fostered by Darren Taylor, Logistics Support Liaison from California Incident Management Team #3, and eased the transition to NorCal Team 2.

Planning

The Tahoe NF assigned a qualified RESL to initiate check-in and tracking of resources right at the start of the incident. Her ability to capture resource information allowed for a more manageable transition and set —up of the Resources Unit.

Finance

The incident base allowed for co-locating CAL FIRE and NorCal Team 2 finance sections in the same area. This facilitated the sharing of information and resolving issues efficiently and effectively. Additionally, the Incident Business Advisor was able to set up in the incident base camp which assisted in resolving numerous issues.

2. What were some of the most difficult challenges faced and how were they overcome?

Incident Commanders

NC2: There was some confusion regarding the mobilization of NorCal Team 2. The concurrent order for both NorCal teams (NorCal 1 & 2) and the modified team

composition request likely played a role. NorCal Team 2 was not on two hour call and consequently delayed in delivering a current roster to NOPS. A team roster is on file with NOPS and current in ROSS and should be utilized "as is" in the future if an update is not readily available.

Excluding trainees from being mobilized with the team conflicts with conventional wisdom with regards to succession planning. Modified team configurations are not adequately identified in the California Mobilization Guide for GACC-level deployment and direction should be sought through CWCG.

CAL FIRE

- Incomplete Team- Order entire team. The whole team concept is just that. A Management Team is used to work together, draw and support each others strengths and weaknesses. When components of a team are not present, then that affects the entire team performance. This incident had extreme potential due to fire history and its location. With this in mind, the team needs to loaded for success. With-out the entire team, this will not occur. There is also an understanding that external influences will always be present when these types of decisions are made. Success of the team needs to be overriding priority.
- GACC Ordered Resources let the incident order the resources. The boots on the ground have the best understanding of the incident!
- Map symbology /accuracy FOBS/DIVS/IR Intel downloaded early on to the GIS/Plans Section. Operations needs to understand that symbology on a map needs to reflect the current situation during briefings and meetings. The map is also used behind the scenes such as incident prioritization, FMAG, resource allocation, historical information, progression, cost share and criminal/civil litigation.

3. What issues were not resolved to your satisfaction and need further review? Based on what was learned, what is your recommendation for resolution?

Information

A Congressional (Herger) regarding timely dissemination of detailed information occurred. While the Forest PAO responded to the individual and Congressman's office, in the heat of battle, it may be difficult to provide all public information requests. In this case the individual wanted far more detail regarding assigned resources than is possible at an early stage of the fire. The recommendation is to develop a response that provides what information we can provide at the moment and offer to provide more detail as later as time allows.