

THE GERMANN ROAD FIRE

MAY 14, 2013

**AFTER ACTION REVIEW
FINAL REPORT**



The Germann Road Fire After Action Review
Final Report released March 2014
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The Wisconsin Department of Natural Resources would like to acknowledge the following fire departments, agencies/organizations, and individuals for their participation on the Germann Road Fire. Thank you for your service, teamwork, and cooperation during this incident.



Amnicon Fire Department
Ashland Fire Department
Barnes Fire Department
Bass Lake Fire Department
Bennet Fire Department
Brule Fire Department
Cable Fire Department
Chicog Fire Department
Dairyland Fire Department
Danbury Fire Department
Drummond Fire Department
Glidden Fire Department
Gordon Fire Department
Gordon-Wascott Fire Department
Grandview Fire Department

Hawthorne Fire Department
Hayward (City of) Fire Department
Hayward (Town of) Fire Department
Highland Fire Department
Iron River Fire Department
Jackson Fire Department
Lac Courte Oreilles Fire Department
Lake Nebagamon Fire Department
Lakeside Fire Department
Maple Fire Department
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Mellen Fire Department
Marengo Fire Department
Namekagon Fire Department
Oakland Fire Department

Port Wing Fire Department
Poplar Fire Department
Parkland Fire Department
Round Lake Fire Department
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Solon Springs Fire Department
Spider Lake Fire Department
Spooner Fire Department
Stone Lake Fire Department
Summit Fire Department
Superior Fire Department
Wascott Fire Department
Webb Lake Fire Department

American Red Cross
Ashland County Sheriff's Department
Barron County Sheriff's Department
Bayfield County Emergency Management
Bayfield County Sheriff's Department
Bayfield Electric
Bureau of Indian Affairs
Burnett County Forestry
Dahlberg Power & Light
Douglas County Emergency Management
Douglas County Forestry

Douglas County Highways Department
Douglas County Sheriff's Department
East Central Energy
Gordon-Wascott Emergency Medical Service
Iron River Police Department
Lake Nebagamon Police Department
Menonite crew
Michigan Department of Natural Resources
Minnesota Department of Natural Resources
Polk County Sheriff's Department
Price County Sheriff's Department

Province of Ontario
Sawyer County Sheriff's Department
Select Industry
Siren Police Department
Solon Springs Police Department
Superior Department of Transportation
United States Forest Service
Washburn County Sheriff's Department
Wisconsin Emergency Management
Wisconsin State Patrol

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TABLE OF CONTENTS

INTRODUCTION.....	2
EXECUTIVE SUMMARY.....	4
SAFETY.....	6
ORGANIZATION	11
COMMUNICATIONS.....	29
WILDLAND FIRE SUPPRESSION	35
STRUCTURAL PROTECTION.....	40
AIR OPERATIONS.....	47
LAW ENFORCEMENT	55

APPENDICES

FIRE WEATHER FORECAST.....	61
FIRE WEATHER - DOUGLAS COUNTY	62
FIRE WEATHER - BAYFIELD COUNTY	63
BRULE AREA DAILY OPS PLAN.....	64
FIRE BEHAVIOR FORECAST	65
OBSERVED FIRE BEHAVIOR.....	66
PREDICTED FIRE PROGRESSION	68
ACTUAL FIRE PROGRESSION	69
DIVISION BREAK MAP.....	70
ORGANIZATIONAL CHART	71
RADIO COMMUNICATIONS PLAN	72
AIR OPS FLIR SYSTEM.....	73
NATIONAL WEATHER SERVICE REPORT.....	74
COMMUNITY PREPAREDNESS ASSESSMENT	77
POST-FIRE STRUCTURAL ASSESSMENT	82
RADIO DISPATCH LOGS	86

The Germann Road Fire, Wisconsin’s largest forest fire in 33 years, occurred on May 14th, 2013. The fire originated in the Town of Gordon (Douglas County), grew to 7,442 acres over the course of two days, and caused extensive loss and damage to natural resources and structures.



Phil Miller, WDNR

As a result of the incident, a formal After Action Review (AAR) led by the Wisconsin Department of Natural Resources (WDNR) – Division of Forestry was conducted to ascertain the sequence of events that transpired during the suppression of the fire. The AAR team would also identify recommendations to improve overall program efficiency and effectiveness, and develop ‘lessons learned’ for the benefit of sharing the issues and successes of the incident so others may learn from the experience.

During its discourse, the team gathered a vast amount of fire information in an effort to gain an understanding of what was occurring, from the time the fire originated to the demobilization of the Northwest District (NWD) Incident Management Team (IMT). Information ranging from weather and dispatch records, to accounts of experiences (written and verbal) from those who were involved in the suppression of the fire,

and several post-fire debriefings were used as the basis for the team’s discussions and formation of its recommendations and conclusions.

AFTER ACTION REVIEW TEAM

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Colin Nowaczyk, WDNR

To help facilitate the framework, and ultimately the development of the final AAR report, the team identified seven main subjects to focus on:

- Safety
- Organization
- Communications
- Wildland Fire Suppression
- Structural Protection
- Air Operations
- Law Enforcement

Addressing issues, recommendations, and lessons learned in this report will be an important step in the overall continuous improvement process. A combined effort involving teams (Forestry Operations Team, specialist teams, ad-hoc teams), training, and effective policy will be used to ensure changes are implemented accordingly and become part of the WDNR Forest Protection Bureau's standard operating procedures.

Generally speaking, the 2013 spring fire season was relatively uneventful, in that above-average precipitation and late-season snowfalls had significantly tempered fire occurrence throughout the state. Approximately ten days prior to the Germann Road Fire, the area within the fire boundary was covered with 10–12 inches of snow. In the days preceding the Germann Road Fire, weather in the Brule Area had been somewhat variable, but the overall area was generally considered to have had a ‘wet’ season.

The Germann Road Fire was a wind-driven event that occurred on a day with significant fire potential. The Canadian Forest Fire Danger Rating System (CFFDRS) indices displayed fire danger ratings anywhere from ‘low’ to ‘very high’ during the previous two weeks; on May 14th, the rating was listed as “high” for the Brule Area.

On the day of the Fire, morning fire weather observations (recorded at 09:07) at the Barnes Ranger Station indicated a temperature of 58° F and 57% relative humidity with light winds; similar weather observations were noted at 10:24 and 11:18, with winds increasing slightly. The National Weather Service fire weather forecast for Douglas County predicted temperatures of 77 – 82° F, 27 – 32% relative humidity and winds from the south at 3 – 7 mph increasing to 7 – 12 mph. At 14:19, the temperature had climbed to 82° F, relative humidity was at 26% and the winds were sustained at 12 mph, gusting to 21 out of the south-southeast.

The Germann Road Fire was initially reported at 14:45 to the Brule Area Dispatch as ‘small white, growing’. WDNR initial attack response was immediate, with resources on-scene within ten

minutes. Despite this rapid initial response, the “wind-driven” fire burned 7,442 acres near the Town of Gordon (Douglas County) before it was declared contained the following day (May 15th) at 21:00. Over 100 buildings were destroyed, including 22 primary residences. Another 350 structures were threatened, but either survived the fire or were directly saved by firefighter assistance.

A list of resources involved in the suppression effort follows:

- 167 WDNR personnel
- 96 WDNR engines
- 31 WDNR tractor plows/heavy units
- 1 WDNR heavy dozer
- 13 total aircraft
- 44 fire departments
- 4 private heavy dozers
- 2 US Forest Service engines
- 1 hand crew
- 32 other agencies & organizations
- \$602,766 in total suppression costs

HIGHLIGHTS

- The response and suppression of the Germann Road Fire involved a tremendous regional cooperative effort between numerous local, state, and federal agencies. Indeed, the value of having long-established, strong relationships with partners and cooperators proved hugely beneficial.

- This fire saw the single greatest use of aerial assets (fixed and rotor wing) for fire suppression purposes in Wisconsin's history, a result which can largely be attributed to the relationship with the WDNR's Great Lakes Forest Fire Compact (GLFFC) partners, which allows for easy cross-border resource sharing on wildfire incidents within the Compact area.
- Management of the fire by the NWD IMT, along with extensive training and preparedness by WDNR personnel and external partners proved invaluable, as no identified issues led to a further escalation in fire severity or scale. In fact, the fire progression model from the Canadian Forest Fire Behavior Prediction System displayed a potential spread of 22,300 acres (almost 3 times the actual fire acreage), based on the local fuel type, wind speed/direction, and rates of spread from that day.
- Preparation, training, and participation of local fire departments also played a vital role, as many more structures were saved than lost. Again, the investment in structure/zone map books proved beneficial, in knowing where resources were located and assisting with prioritizing structure protection.
- The use of social media (Facebook, Twitter) and other technologies (smartphones) was hugely successful, in that the WDNR's ability to effectively communicate information broadly to a wide audience in a timely manner was enhanced significantly. Cellphones demonstrated their applicability by enabling personnel to communicate directly via text messaging. Several

personnel reported using various map applications on their smartphones for orienteering and location purposes.



Leo Bunderson, WDNR

The most important result of this incident is that there were no reported injuries, accidents or fatalities of any firefighter or public citizen associated with the fire, despite the high complexity of managing a project class fire involving significant personnel, equipment and multiple aircraft. This successful focus on firefighter and private citizen safety also happened even with evacuation of citizens and movement of both the location point for evacuees and the Incident Command Post during the peak of the incident. Strong decision-making, planning, and organization were key in overcoming these unexpected challenges and the main factors leading to a flawless safety record on this incident.

No matter the size, scope or complexity of any forest fire, providing for safety is the number one objective for any incident within the State of Wisconsin. This includes both firefighter safety and public safety. Initial attack resources responded to the fire origin and immediately mitigated safety issues by assuring that logging crew personnel were accounted for and safe. Initial size-up and observed fire behavior indicated that the fire would be a large incident, and safety of firefighting personnel and citizens in the path of the fire were considered before any actions were taken.

Throughout the incident, safety remained a high priority and the number one determining factor in decision-making. The sheer volume of resources involved in the suppression effort – including volunteer fire departments, law enforcement, emergency management, and other local county officials – required lead personnel to consider safety as the top priority in all decisions affecting the outcome of this event. The first Incident Action Plan (IAP) for the Germann Road Fire shows:

- Objective 1: Safety is our #1 priority; therefore we will continually monitor and mitigate safety concerns of the general public and our staff.*
- Objective 2: Ensure safe conditions before allowing civilians back into homes.*

In large incidents, there is also an expectation within the Incident Command Post that all work is completed and all decisions are made with

safety as the highest priority. The plan was to minimize firefighter/public injuries and structural loss related to the incident. In addition, medical plans and hazard analysis checklists and guidance were to be utilized and enforced.

During line firefighting, mop up and follow-up actions, safety continued to be the number one priority for all involved. All agencies, including Emergency Medical Service (EMS) personnel, volunteer fire department (VFD) personnel, and WDNR, county, and U.S. Forest Service (USFS) personnel stressed the need for safety and communications. Specifically, the concept of Lookouts, Communication, Escape routes and Safety zones (LCES) was maintained by personnel on the fireline, and when decisions needed to be made to change tactics, safety was the number one consideration. From plowing against the grain, to burn out operations, to moving towards the head, safety remained the determining factor in implementing operations.

Challenges encountered during the incident included the need to identify where structures were in the path of the fire and when the need to evacuate would occur. This was mitigated very effectively by utilizing the Law Enforcement (LE) structure of the Incident Management Team (IMT) and utilizing local, State and WDNR LE officers and units.

Large-scale incidents such as the Germann Road Fire are typically associated with adverse weather conditions, which contribute significantly to fire behavior. A dramatic wind shift that occurred during the fire was predicted in the daily fire weather forecast. When the wind direction shifted, it triggered the need to relocate the Incident Command Post (ICP).

When the predicted wind switch occurred, the movement of evacuees from the Barnes Town Hall to the Drummond High School was conducted in a safe and well-directed manner with Douglas County Department of Emergency Management (DEM) taking the lead. The evacuation was coordinated with Douglas County Sheriff Department, WI State Patrol, and WDNR with great efficiency and without chaos or issue.

During the incident, there was heavy use of aerial resources, including SEATs (Single Engine Air Tankers), Blackhawk helicopters, CL-415s, lead planes and Air Attack. There were some communications issues between air & ground operations, which are spelled out more clearly in the Communications and Air Operations section of this report.

KEY ISSUES IDENTIFIED

Communications

- Private heavy dozer on the fireline with no radio communication. This was mitigated by the Group Supervisor by keeping the private dozer between WDNR units or in close proximity to WDNR units with radios.

Line Safety

- There was a goal of “work until containment” – long hours by most initial attack personnel (>24 hours).
- Several instances of “plowing against the grain” occurred, all being done after assuring safety of firefighters, and was well communicated to Line and Operations.

- Several burn out operations occurred – again after assuring safety of firefighters and after good communication between field staff, Line and Operations.
- A private heavy dozer operator was present on line with no Nomex or other PPE.
- Night operations were performed by some staff in country not seen in daylight.
- Fuel and hot food, especially during the first night shift, was not provided in a timely manner or in sufficient quantities to the incident crew.



Phil Miller, WDNR

Law Enforcement

- Law enforcement was present at the ICP to ensure safety & security of IMT personnel and the public.
- In the time period following the major run of the fire, but before there was total containment of the fire, local law enforcement officials decided to allow locals and residents inside the fire perimeter to their residences/structures. There were no reported injuries or incidents, but the safety of

personnel was compromised somewhat by these actions.

- A miscommunication occurred in the process of allowing evacuees back into residences.
- There was a reported moving vehicle accident on HWY 27 involving non-fire resources, and not associated with the incident. This incident did not affect any suppression or mop up actions but did involve 3 ambulances and some local LE officer involvement. This required a revision to the medical plan to cover the Germann Road Fire needs.

WHAT WENT WELL AND WHY?

- The most important result of this incident is that there were no injuries reported of any firefighter or anyone from the public. This happened even with evacuation of citizens and movement of both the location point for evacuees and ICP during the peak of the incident.
- The use of GPS units (both Department owned and personally owned) was not only key to line construction and providing the best intelligence for ground personnel, but was also key to LCES and looking ahead for safety concerns and considerations.
- There were only 2 WDNR units that had equipment failure. In both instances, the problem was hydraulic and didn't impair the ability of the units to proceed in a safe manner to a safe location.
- Relocating the ICP was a challenge, but was conducted in an orderly, timely and safe

manner, which resulted in minimum disruption to line operations or to the overall operation of the incident.

- Public Information Officers (PIOs) handled the public and media very well regarding the dissemination of fire information and alerting locals of fire danger near the incident.
- Incident Commander (IC) and Operations remained calm and focused on the big picture. Span of control was reasonable, and actions followed appropriate guidelines.

LESSONS LEARNED: RECOMMENDATIONS

- The availability of GPS units was key to providing live information and intelligence to plan ahead and decide where to safely construct line and how to use natural barriers effectively.

Recommendation – Provide and maintain GPS units for all WDNR initial attack equipment.

- The morning after the fire, a decision was made by local LE authorities to allow some evacuated residents back into their homes before total containment of the fire, contrary to the guidance of the NWD IMT.

Recommendation – Coordination between local law enforcement and IMT should occur regarding this issue on future incidents to avoid compromising firefighter or public safety. During annual training and communications with local LE agencies, establish protocol and key criteria to meet

before allowing admittance back into a fire perimeter.



WDNR

- The majority of initial attack personnel began the work day at 09:00 and, as a result of working on the Germann Road Fire, worked through the afternoon, evening, night and into the next morning without a significant rest period. Additionally, some personnel worked the second day without a significant rest. This was discussed within the IMT (including the IC and Safety Officer) and determined it was acceptable due to the crews' anticipated workload.

Recommendation – It is imperative for personnel safety that the established statewide work/rest guidelines are adhered to in order to provide adequate rest periods, especially for initial attack personnel. Work/rest guidelines should be heavily considered when requesting statewide resources for incident response and support.

- Some “volunteer” and other contracted equipment operators do not have PPE or

proper communication when arriving at the incident and being assigned to the incident.

Recommendation – Assure that contracted equipment and personnel are properly supplied with PPE and communication equipment prior to the fire season and trained to meet anticipated fire duties and responsibilities.

- Availability of food, water and fuel is needed early on during extended Initial Attack (IA) incidents and incidents that will obviously extend to the next operation period.

Recommendation – As Logistics is established, assure that one of the first duties is to provide food, water and fuel to fireline personnel and establish a procedure for efficiently and effectively delivering food, water and fuel to fireline staff. IA personnel need to arrive on-scene with enough readily available food and water to get them through the first shift. Assurance of local sources of food and water is essential and needs to be made readily available to logistics personnel.

- All food sent to the field that was not bought prepackaged was not labeled with the time and date (ex. sandwiches).

Recommendation – All food assembled/sent to the field should be labeled with a preparation or expiration date to aid in timely disposal of uneaten goods.

- When the wind shift occurred, it compromised the ICP at the Barnes Ranger Station, and it was decided to evacuate and move the IMT and IMP to the Gordon Fire Hall.

Recommendation – When an incident is first building, before decisions are made on an ICP location, plan ahead for the “worst case scenario”. In retrospect, locating the ICP at Gordon Hall from the beginning of the incident would have lessened safety concerns and provided for a more seamless management of the incident. It is important to gain knowledge from County DEMs of where pre-planned evacuation centers in the county are located. It is recommended that the ICP and evacuation center are located nearby to each other, but *not* in the same facility.

- Safety Officers felt it was hard to be proactive; safety was more in a reactive mode in the first 1 or 2 operation periods.

Recommendation – Additional safety officers should be requested for an incident this size. Active Safety Officers should prioritize safety issues in order to work as effectively as possible during an incident.

The purpose of this section is to study the organizational structure used during the Germann Road Fire in order to identify positive situations to be re-enforced throughout the WDNR Forestry Division, and to identify potential programmatic changes or improvements.

However, all staff that participated in the incident and on the Incident Management Team deserve a commendation for the excellent job they did in the organization and management of the Germann Road Fire. It was truly a team effort that was recognized internally within the Department, by outside entities and the general public.

Pre-Fire Preparation

To develop a strong effective organization, an Incident Management Team must train, exercise and be prepared prior to the unexpected emergency need. Advance preparation is the key to any organization's success. Needless to say, any emergency situation also requires extensive training to provide the basis on which to make sound decisions in the limited time frame that an individual has. The Northwest District Incident Management Team demonstrated these principles of advance preparation and training being utilized effectively during an emergency situation. Recent incident management training included a training session in 2012 with the West Central District IMT and an annual IMT pre-fire season refresher training in 2013.

At a pre-season blowdown meeting regarding ordering and use of SEAT aircraft for the NW storm damaged area, it was determined that it would be most effective and efficient to have both SEATs based in Siren under a single SEAT

base manager. An agreement was also made that SEAT satellite bases would be made operational for an existing fire, or if weather conditions at Siren required a SEAT relocation.



Sue Krantz, WDNR

Pre-Fire Organization

Pre-established Incident Management Team (IMT). One of the goals of the Division of Forestry's Strategic Direction is to replace Area Incident Management Teams with District Incident Management Teams. The Northwest District was a pilot for the new IMT construct in 2012, and personnel completed initial training provided by West Central District IMT members. Follow up training for individual IMT sections was completed in late winter 2013. The Germann Road Fire, which occurred in Douglas County within the Brule Area, was the first opportunity for the Northwest District IMT to manage an incident.

IMTs have great pride and camaraderie that develops over time through training together and in its abilities to manage emergency situations. Several positive experiences can be gleaned from the Germann Road Fire that will benefit other teams across the state. These include training

with partners and encouraging their participation with WDNR IMTs.

Incident Command Post (ICP). The pre-selected site, Barnes Ranger Station, was close and functional to the incident, approximately 1/2 mile away from the fireline when it crossed Highway A. The Brule Area IMT trailer was notified to relocate to the Barnes Ranger Station within the first 15 minutes of the initiating fire.

The ICP was relatively easy to find in light of the appropriate signing and location to the incident. The ICP was equipped with pre-established communication towers and with the Area's ICP trailer. The wind shift compromised the ICP at the Barnes Ranger Station, and it was decided to evacuate and move the IMT and ICP to the Gordon Fire Hall.



Pete Wisdom, DNR

KEY ISSUES IDENTIFIED

This section assesses the issues within the various components of the Incident Command System structure as they developed and functioned during the Germann Road Fire.

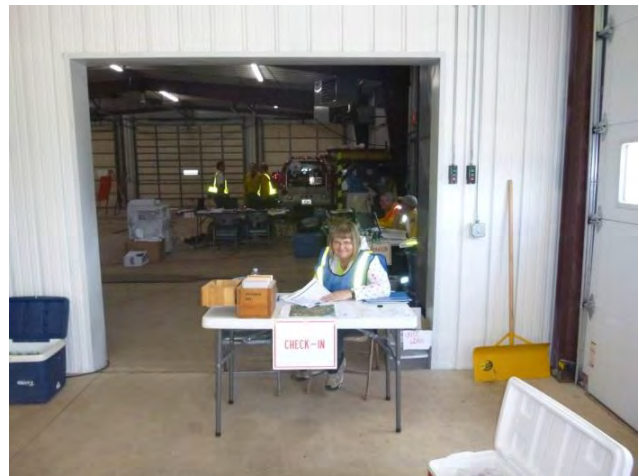
Forestry Command Center (Madison)

- There was a delay in notification by the Brule Area to the Northwest District (NWD) Forestry Leader, and subsequently the Bureau of Forest Protection, of a fire in a high hazard area with potential to be a project fire. Prompt notification is critical to the success in establishing communications statewide to support the fire suppression effort. Even a heads-up in regards to a fire in these critical fire landscapes allows staffing and pre-planning to begin, even if they are not needed.
- Having the NWD Forestry Leader being physically located in the ICP, while being the primary contact with the Forestry Command Center, was detrimental to the success of the interactions between the Region and the Command Center due to communication issues in the area of the incident. Additionally, having the District Forestry Leader at the ICP risked the loss of overall situational awareness in the Area and District.
- Team members were made aware the day before the fire that the National Weather Service fire weather forecast had indicated that Tuesday, May 14th, was forecast to be a critical fire weather day. Team members were asked to let Cumberland Dispatch know of their availability for the following day. When the call came for the team to be activated for the fire, the Cumberland Dispatch Office called team members to respond to the Barnes Ranger Station Incident Command Post, but not all team members were contacted promptly.

- The decision by the Command Center to freeze all forest fire suppression personnel at their stations on a statewide basis until the situational needs at Germann Road could be determined needs to be assessed. This is especially true in light of the benefits gained by releasing the personnel far from the scene of the fire (4-5 hour drive) to eat supper, rest and/or pack for deployment.
- The recommendation from the Cottonville Fire AAR was that the Command Center staff should be restricting the air space on a large forest fire. During a large fire, the local pilot and dispatch center are extremely stretched in regards to handling a multitude of tasks concurrently. The institution of temporary flight restrictions was initiated by the Forestry Command Center on the Germann Road Fire, and should continue to be a part of the normal activation procedures of the Forestry Command Center in the future.
- Personnel within the Command Center reported that their responsibilities and/or assignments were reasonable and able to be fulfilled. The information within the Command Center was readily available and resources (e.g. GIS map, person with mapping skills, fire stats, map books) needed to complete assignments were up-to-date. PDFs of each Area are being ordered with updates to the magnetic maps. This will help with overall situational awareness for people in the Command Center as these could be projected at a large scale.
- Command Center attempted to meet work/rest requirements for CC staff by establishing split shifts and staggered

start/end times for personnel.

- Coordination, information sharing, and assistance to one another in the Command Center was commendable. There was also good coordination with the District Forestry Leaders to mobilize resources not only to the incident, but to other Areas to backfill for initial attack.



WDNR

- The support from the Administration, both within Forestry and for the WDNR, was tremendous. They made it very clear that they would do everything within their powers to help support the incident.
- Policy on expectations of personnel mobilized to a forest fire in another region through the Command Center in regards to length of assignment and work/rest guidelines prior to release to their home station was implemented by the IMT. Issues with personnel mobilized late to the fire and encountering work/rest guidelines needs to be clearly communicated to the IMT in how it impacts ETA's of resources mobilized.

Command and General Staff

- In order for Incident Management Teams to effectively deal with these emergency situations, the Department needs to commit to supporting the Division's IMTs and encouraging individuals from across the agency to participate as members of the Incident Management Teams. The list of Northwest District IMT members represents excellent cross-Area and cross-Program membership on this team. Throughout the following three days and nights, several additional members of this team, along with members of the Southern and West Central District IMTs assisted with the management of the fire.
- The Initial Attack Incident Commander (IAIC) made good decisions early on, recognizing this to be a project class fire and notifying the proper personnel of the potential resource needs. Transition of command from the IAIC to the Extended Attack IC consisted of a face to face briefing along with a description of resources deployed and ordered. The Brule Area IAIC's checklist was beneficial in facilitating this transitional meeting. The Extended Attack IC then established clear objectives that were shared with the Operations Section and ultimately with the rest of the IMT.
- With an incident of this magnitude there will be significant media coverage and most likely a visit to the site by the Governor and other dignitaries. There needs to be thought placed on how to appropriately deal with these events prior to the incident occurring. During the incident, appropriate objectives

and operational plans need to be developed to handle the increased media exposure and traffic congestion caused by this type of event, which was truly an incident within an incident.



Ann Loechler, WDNR

Public Information Officers (PIO) & Outreach Efforts

- The use of numerous Public Information Officers (PIOs) from across the state was a positive for the IMT. However, there was never a designated lead PIO for the incident, which led to some question of who is in charge among the PIOs.
- Use of social media sites for sharing of information with the impacted public and media was a success. Personnel adapted immediately to meet various information needs as they arose.
- The ability to respond to inquiries with information and compassion added to the human element, and personnel managing these social media accounts provided a great “face” to the fire.

- Creation of the Germann Road Fire website was critical to the overall success on the fire in regards to communicating what is occurring on the incident to the public and media. The webpage was visited approximately 25,000 times on the first day. WDNR personnel were able to test the Inciweb program, and determined that using the WDNR website was more effective. This led to the creation of a template for use on future incidents.
- Even though they were in different locations, Office of Communication (OC) staff kept in contact and maintained good communications. It worked well for OC to release information due to their distribution capability. Internal communication was strong and was evident in media reports as well.
- Training was helpful. Personnel were reminded from S-403 to request additional Public Information Officers early (the greatest needs in terms of public information were on day 2), and they had more than adequate support in this area.

Evacuation Center

- Having a WDNR Liaison Officer at the evacuation center worked well for providing fire updates to the public.
- Evacuees wanted current maps, which were eventually available through a teacher's email, and the Plans Section converted these to a format that could be emailed and printed at the Drummond School.

- IMT tried to get an update every hour to evacuees at the center.
- Red Cross came at 02:00 to set up cots; provided snacks.
- Drummond High School provided breakfast and lunch for evacuees.
- The decision to hold a public meeting on the first morning after the fire started was beneficial, in that it helped open channels of communication and sharing of information to the impacted landowners. Fire and local officials were also at the evacuation center for the briefing, which was well-received.
- Press was showing up to interview people; Red Cross stepped in to manage.



Sue Krantz, WDNR

Operations

- The decision to establish line construction groups initially was appropriate. Resource deployment by the Operations Section was timely during the incident, and continued emphasis on assigning additional resources to the fire in a timely manner were

accomplished. The lack of resources, both personnel and equipment, within the WDNR to adequately staff divisions behind the line construction groups became evident during this incident, especially when the entire state was in critical fire weather during the initial two days of the fire.

- Use of the White Golf repeater as a command frequency to the ICP worked well once issues were resolved and it was established. Adapting and overcoming difficult radio communication issues early in the fire is commendable, i.e. use of BLUE for Operations in the evening.



Phil Miller, WDNR

Law Enforcement

- The Initial Attack IC saw early into the fire that law enforcement assistance for traffic control, evacuation and protection of the origin was needed. County sheriff's deputies were made responsible for ensuring roadblocks, evacuations were safely under way, and a conservation warden did an excellent job of initial fire investigation and securing the origin. Utilization of two Forestry Law Enforcement Specialists to conduct the fire investigation was extremely beneficial in the overall scope of the fire.
- Once a local conservation warden arrived at the ICP, he worked effectively with the Law Enforcement (LE) Branch to integrate Department law enforcement officers into the overall effort. Having a resource locator board and the appropriate training was beneficial to the Law Enforcement Branch in tracking the resources and their assignments in the branch.
- The structural maps proved very useful for managing the evacuations of the area impacted by the fire by the Law Enforcement Branch. A larger map earlier in the fire would have been beneficial. A couple points need to be addressed regarding evacuations, such as the need to develop an evacuation checklist for the Law Enforcement Branch to utilize, which would include the five P's of evacuation (Purse, Pets, Paperwork, Phones, and Prescriptions). There also needs to be a process developed to provide information on the number of residences evacuated to allow Red Cross and Salvation Army to appropriately plan on facilities for evacuees and meals.
- There is constant pressure on the Incident Commander and Law Enforcement Branch to re-open the evacuation zone. This incident again demonstrated that the pass system did not work as planned and in reality once the area was opened everyone had access.

Structural Protection

- For a Structural Branch Director (SBD) to be successful, they need a wide variety of information (current and expected fire activity, current and expected fire spread rates, structure locations, access, road limitations, hazards, fuels, existing safety zones, escape routes, communications, suppression resource availability and incident objectives). The Structural Branch Director operated in the field for an extended portion of time. Once the ICP was established at the Gordon Town Hall, the SBD was relocated in conjunction with the IMT.
- The training done with the Structural Branch Team and fire departments paid dividends on this fire as “in the black” tactics were utilized successfully with the zone concept. It was commented on several times by structural firefighters that the structural zone maps were critical to the success of the Structural Branch during the Germann Road Fire.
- Issues were identified with initial work assignment length by fire department members, specially the leaders in the Structural Branch. Planning for relief of personnel, both leadership and firefighters is critical.

Plans

- The primary function of the Plans Section is to provide fire maps, have an accurate resource accountability system and facilitate IMT briefing meetings. Use of computer technology has truly benefited the Plans Section and the Incident Management Teams.

The issue of administrator privileges on computers for IMTs needs to be resolved, as difficulties in utilizing the available technology to the fullest was once again hindered.

- Intelligence information requests were made to WDNR Air Attack by the Plans Section via radio. Due to competing demands and coordination of aerial suppression missions required of WDNR Air Attack pilots, providing an accurate account of the fire’s progression throughout the fire run was challenging.
- The check-in function worked very smoothly as resources arriving at the fire were checked in and given an assignment within a short time of their arrival.



Ann Loechler, WDNR

- Often overlooked in current IMT organization and training are the needs for documentation of the incident and development of a demobilization plan. Even though a Demobilization Unit Leader was ordered for the incident, there are still improvements to be made in the process regarding coordination and communication.

- In addition, the Plans Section was cognizant that even though the IMT has been demobilized, there are still several agencies, including WDNR, still actively involved in providing assistance to the landowners affected by the incident. Use of the fire website to provide useful informational of where to go for resources needs or who to contact for certain situations helped ease this transition from the WDNR IMT to local control of the incident.



Colin Nowaczyk, WDNR

Logistics

- The primary function of the Logistics Section is to ensure all resources, both tactical and non-tactical, are ordered as requested and/or needed. The ICP trailer was prepared and well stocked to support the activities of the IMT during the incident. However, the Fire Action Plan within the ICP trailer was not updated and lead to issues in procuring food, water and fuel for the incident in a timely manner.

Finance

- Utilization of Finance Section personnel as part of the IMT has improved the Department's ability to track costs of personnel, equipment and supplies utilized during an emergency incident. Early establishment of a fire activity code assisted greatly in capturing these costs for the Germann Road Fire. WDNR personnel were able to generate an approximate cost of the fire suppression effort daily, a question often request by agency administrators, media, partners, etc.

WHAT WENT WELL AND WHY?

- There was early recognition by the Initial Attack Incident Commander that this fire would quickly become an extended attack fire.
- For its first assignment, the Northwest District IMT performed exceptionally well overall on the fire.
- Mobilizing a large number of Public Information Officers to the incident proved invaluable in working with the public and disseminating information.
- Cooperation from the regions to support the Germann Road Fire with personnel and equipment was outstanding.
- Written incident objectives were developed and communicated by the Incident Commander shortly after taking command.
- Having only a single ICP, with all agencies under a single roof (WDNR IMT, County Emergency Management, Law Enforcement)

was very beneficial to communications and the coordination of efforts during this incident.

- Excellent job of providing timely updates by the Command Center to Wisconsin Emergency Management, Governor's Office, impacted legislators, federal agencies, compact partners, etc.
- The Forestry Team Leaders in the NWD played critically key leadership roles on the IMT and incident during the fire.
- Use of Southern District IMT for relief of the NWD IMT worked well in providing key trained personnel to maintain management and operations of the fire.



Cal Wise, Barnes WI

- The Governor's visit was treated as an incident within an incident with Southern District IMT taking lead. The Governor and others were given a press packet (with copies of releases, list of agencies involved), along with a WUI program folder to read on the helicopter ride. The Governor's visit was a success from all perspectives.
- Law Enforcement and Structural Branch worked even better than it often has in training, and both branches settled into their roles, made tactical decisions, and resource orders per their training in an efficient and effective manner. Comments such as, "we can do this, we've done this before" were made by Structural Branch personnel, referring to past training WDNR had provided.
- Internal Department partners from across the agency played key roles (Law Enforcement, Public Information Officers, Finance, Safety Officers and IMT members) in support of the incident.
- The ICP at the Gordon Fire Hall was well equipped to take care of the fire crew needs and provided the necessary support for the safe handling of the situation. Moving the ICP went better than expected.
- Management of the evacuees by the IMT, Douglas County DEM, Bayfield County DEM, Douglas & Bayfield County Health & Human Services, and Red Cross helped ensure the success of the overall mission. Deploying a WDNR Liaison Officer to the evacuation center also paid significant dividends in keeping key internal and external partners, legislators, and especially the public informed of the incident. Those people were the most stressed and agitated, having been directly displaced by the fire, and had the most immediate need for information. While the WDNR Liaison Officer wasn't always able to give them direct information about their specific property, it helped to have a connection

directly from the fire staff to the evacuees as the fire was progressing, and to ensure them that every effort was being taken to protect their property.

- The decision to hold a public meeting on the first morning after the fire started was extremely beneficial. Folks had just gone through a long night and this meeting offered them a chance to hear directly from fire command staff what had happened, what the current status of the fire was and what the immediate plan was for the day.
- A community meeting was held on Saturday to inform property owners and community members about the details of the fire, to answer questions, to let people know about upcoming assistance, and to let property owners know that a crew of fire prevention staff would be in the area to conduct a research project on structure survivability during a forest fire. This again offered an opportunity for fire command personnel, local fire departments and town officials, and several state politicians to address the local community and media and to present information on the current state of the fire, exactly what occurred, what was the response, and what could be done in the future to prevent loss of property in the event of a fire in the area.
- Providing information directly to the local community helped in a great way to prevent the second-guessing and negative comments that can be a result of an uninformed public.
- Fire departments were successful partially due to a concerted effort locally by WDNR personnel to train continually for this type of

fire. This success can be attributed to close personal working relationships developed by mutual trust in a common goal, the definition of a “team”.



Phil Miller, WDNR

- The Structural Branch was very successful in protecting structures safely. “In the black” tactics, while utilizing zones, is the strategy of choice in crown fires.
- In 2010, Division of Forestry fire control staff brought together board members from the Douglas County towns of Gordon, Highland, Wascott and the Village of Solon Springs along with fire department personnel and other community stakeholders to create a Community Wildfire Protection Plan (CWPP). The CWPP was created to address wildfire potential and mitigation strategies in the communities. Education and fuels reduction projects were being implemented even prior to the plan’s completion and adoption in 2011. Positive working relationships were already in place prior to the fire, creating the foundation for community leaders to work with WDNR staff to begin accessing resources and assisting property owners affected by fire.

- The structure assessment after the fire provided an excellent assessment of the structural impacts of the fire and factors leading to structure loss for future wildfire/urban interface education efforts. Several homeowners agreed to be interviewed; a few on camera, for us to gain insight regarding the level of wildfire knowledge and wildfire preparedness measures that were in place prior to the fire. The opportunity to conduct research will add to the WDNR's knowledge base and ability to reinforce recommendations related to property preparedness for forest fires in the future.
- There was very good coordination between the personnel managing Facebook and Twitter posts. Tweets were an excellent way for the public to get information and easily forward it 24 hours a day and no tweets went out without approval.



WDNR

- The hotline established for the public to obtain information on the fire and its impact on their property was a success.

- The transitions between day and night shifts were well thought out and executed. Replacements were given excellent in-person briefings on status of fire, safety concerns and lookout situations. Assignments were clearly articulated.

LESSONS LEARNED: RECOMMENDATIONS

- The size and complexity of incidents the Incident Management Teams are dealing with continues to grow.

Recommendation – The District Teams needs additional positional training and IMT simulations to continue to develop skills sets and experience as teams. To be most effective, IMTs should train and practice as a team and with external partners (fire departments, local law enforcement and emergency management, Red Cross, Salvation Army, amateur radio clubs, etc.) and internal partners (fisheries, wildlife, conservation wardens and other non-fire forestry staff) prior to fire season.

- There is no set protocol on contacting IMT members for an incident, and no protocol set on testing the ability to contact IMT members.

Recommendation – There needs to be a process developed to test the ability to contact each IMT member in a timely fashion. During spring fire season, this should be a weekly test process – activation of the pagers at a pre-designated time (i.e. Friday morning at 10:00). When needed,

IMT members should be notified by a written document (Operations Plan) as well as another media (e. g., cell phone, pager, e-mail or voice message) that they are on call, and that needs to be confirmed and the procedure tested throughout the fire season.

- There were numerous key roles filled on the NWD IMT by individuals from other functions within the agency. Recruiting individuals from other programs could alleviate depth issues in WDNR IMTs; however, budgetary issues exist relating to standby and overtime payment for other programs.

Recommendation – The Department needs to make the investment in IMTs a priority and commit to their continual development by encouraging all individuals across the agency to participate as members of Incident Management Teams. Support for, and participation on the IMT involves a commitment to availability and training. The Department needs to resolve the issue of funding standby and overtime payments for individuals assigned to IMTs from outside the Forestry Program and Department.

- The NWD IMT was not ordered by the Brule Area until almost 1 ½ hour after the fire began.

Recommendation – Order the District IMT early in the process of forest fires in high hazard landscapes. When these situations occur, early notification (within the first fifteen minutes of the fire being reported) of the Bureau of Forest Protection by the district

is extremely beneficial in allowing Bureau staff to make needed contacts in order to staff the Command Center and notify other districts of the situation.



Phil Miller, WDNR

- The significant drawback to both of these Incident Command Post (ICP) sites was the lack of land-line phone lines for communication purposes or VPN connections.

Recommendation – Pre-established ICP should have multiple land phone lines for use in an emergency situation and internet computer connections would be beneficial as the use of technology by IMTs continues to expand.

- There was never a hard phone line for media calls, only for the hotline.

Recommendation – Make sure that there is a dedicated phone line for media and for internal use of public information function at each pre-planned ICP.

- The operation of the Command Center seemed very much dependent on the presence of trained and experienced personnel.

Recommendation – Continue to provide experience and training of staff to assume lead roles in the Forestry Command Center. This can be done through simulations and in support of incidents. The Command Center staff could benefit from having identified roles prior to the “next” project fire. Training in those roles and perhaps some kind of mock fire would also be beneficial.



Phil Miller, WDNR

- Command Center staff should have a specific person at the ICP that is their primary contact.

Recommendation – Select 1-2 key individuals at ICP, the Command Center, and the District to establish a defined communications link between those entities. That linkage would have been beneficial in the coordination of media inquiries, the release of ‘sensitive’ information to the public/media (ex. the cause of the fire), and the creation of up-to-date situation reports. Additionally, a list of people in the ICP, their

role and contact information should be shared with the Forestry Command Center.

- Daily situation reports were not always produced in a timely manner.

Recommendation – Situation reports need to be completed more promptly in order to be fully effective. 11:00am is too late in the day (especially for a 2 page report) to let the rest of the state resources know what is going on, not only for the fire still burning from the previous day, but also for initial attack needs. Getting situation reports out was an improvement from previous Command Center activations when no information was let out to the field.

- The importance of informational updates from the ICP to the Command Center need to be emphasized.

Recommendation – The ICP needs to provide the Command Center with timely information and updates. With an incident of this magnitude, the need for the Command Center to coordinate and disseminate information (to Administration, Wisconsin Emergency Management, etc.) is great. Some of this issue is due to the communication infrastructure available at the ICP. There was 1 hard phone line to the ICP and cell coverage was sketchy at best. Multiple phone lines and/or a cell phone booster at the ICP would be beneficial, not only for communication to the Command Center, but for the ICP to communicate to the field, dispatch, local governments, etc.

- There was no designated Lead PIO for the incident, which caused some confusion at times. Additionally, roles and responsibilities of public information staff were not clear to all involved.

Recommendation – A Lead PIO should be appointed by the Incident Commander to provide a clear direction and understanding to the PIOs assigned to the fire.

- There was no easy way for PIOs to get the info the media wanted at the ICP from other functions without interrupting their work. Inadequate cell phone reception, access to printing, and lack of a public information land line also made this job difficult.

Recommendation – Each PIO should have their own smartphone, portable printer, and air card, and the IMT trailer should contain a cell booster. PIOs and the key players in the Office of Communications (OC) statewide should have an annual pre-fire season meeting to address concerns, express ideas, and plan for the upcoming fire season. IMTs should also discuss a better way for PIOs to get updated information on resources on the scene.

- Some initial information was slow to get out, including a fire map, a public-friendly fire map for the website, initial press release, and evacuation information. There was also an overall lack of good quality photos early on in the incident.

Recommendation – Information flow from Plans Section personnel & PIOs need to be a priority in order to keep the fire personnel,

general public, and Administration informed of the fire’s progression and related events.



Cal Wise, Barnes WI

- There was concern regarding both the Office of Communications and Command Center reviewing press releases, whether issued by the IMT or central office, before they went out.

Recommendation – Discuss coordination and sharing of information across the Office of Communications, Command Center, and ICP regarding roles and responsibilities, including role of Lead PIO. The approval process for outgoing information (tweets, press releases, etc.) needs to be clearly identified, especially the release of sensitive information (i.e. cause of the fire). The idea of transitioning post-fire media requests to the local area/region and/or identifying a spokesperson should be discussed as well.

- Private homeowners were stressed and agitated and needed information about their respective properties. Homeowners who had pets were not allowed to utilize the

evacuation center and had to sleep in their cars.

Recommendation – Incident Commanders need to recognize the value of meeting with the impacted individuals of the incident early in the incident to provide them with information on the situation. Additionally, the issue of evacuees with pets or livestock needs to be addressed and coordinated with Wisconsin Emergency Management (WEM), Liaison Officer, Red Cross, Humane Society, etc., in order to meet private citizen needs prior to an incident.

- There was no plan or protocol in place for high-profile individuals to tour the ICP or fire.

Recommendation – IMTs need to recognize the likelihood of the Governor and dignitaries visiting an incident and the increase in media coverage these events bring. The IC needs to establish objectives and operational plans to deal with these types of events occurring in conjunction with the incident.

- Personnel working the hotline dealt with a shortage of resources necessary to answer the wide variety of questions asked and information requested.

Recommendation – The hotline received every question imaginable. Personnel working the hotline in the future need to anticipate questions that will be asked and make sure that the necessary information is in front of them (ex. road closures and an accurate map). Having an additional person

knowledgeable about the local vicinity would have been beneficial as well, especially in interpreting local references like “2nd cabin around the corner from the resort”.



Colin Nowaczyk, WDNR

- Issues were identified with initial work assignment length (30+ hours) by fire department members, specially the leaders in Structural Branch.

Recommendation – Planning for relief of personnel, both leadership and firefighters is critical. Continue to recruit and train fire department personnel to fill the positions of Structural Branch Director and Fire Department Boss as part of the IMT and to provide depth for extended operational period fires. Emphasize the need for early planning of relief of FD personnel on a fire that has the potential for extended operational periods so as to meet acceptable work/rest guidelines for all personnel assigned to the fire.

- Several agencies, including WDNR, were still actively involved in providing assistance to the landowners affected by the incident,

requiring continued use of the fire website for post-fire information.

Recommendation – Encourage knowledge of and use of the Department fire website for key information for landowners affected by the fire. Examples of information provided were lists of heavy equipment companies; charred timber salvage; best management practices for water quality; reforestation; emergency cost sharing available; where to obtain forestry assistance; etc.

- A lack of staging/check in near the fire led to delays in some crews engaging the fire.

Recommendation – IMTs should develop and train a Staging Area Manager position to service Operations Section needs.

- There is a lack of detailed, set protocol for the demobilization process.

Recommendation – A process and number of set criteria need to be developed for the IC to utilize during an incident. These criteria should include when to initiate the demobilization process and in what order crews should demobilize. Demobilization plans needs to be developed prior to resources being considered for release from the fireline. This begins with clearly stated demobilization objectives by IC.

Expectations should also be clarified for personnel from outside the region deployed to a fire in regards to their ETA to the fire; length of assignment and demobilization procedures to be utilized by the fire, all regions and the Command Center.

- A Documentation Unit Leader is needed on the Incident Management Team.

Recommendation – Identify and train appropriate personnel to fulfill role as Documentation Unit Leaders on the IMTs. The Documentation Unit needs to be started on Day 1 of the incident and each position within the organization needs to understand the needs of the Documentation Unit.



Phil Miller, WDNR

- The Fire Action Plan within the ICP trailer was not updated and lead to issues in procuring food, water and fuel for the incident in a timely manner.

Recommendation – WDNR ICP trailers must have hard copies of the most current versions of the Fire Action Plan available for use by the Logistics Section. Logistics staff from each of the IMTs should meet annually to review the logistical informational needs they have. Food and fuel need to be made readily available to those on the fireline.

- Logistics failed to support Structural Branch Team in food, fuel and drop points.

Recommendation – Utilize the general message form ICS-213 or a pre-made logistical request form to document requests. Update logistical lists/sources for large incident response. Utilize local landmarks for drop point locations in addition to mapping.

- The Liaison Officer had difficulty with communication and connectivity issues throughout the incident. Communication between ICP and evacuation center could be improved.

Recommendation – Provide cell phone booster and air card to Liaison Officer for use during the fire. Define role of Liaison to evacuation center and strengthen communication link between evacuation center and ICP.

Additional Recommendations

- Having an Air Operations position in the Forestry Command Center to coordinate all of the aviation needs for the incident was invaluable and should be incorporated into future Command Center operations as a standard operating procedure. This would be in addition to an Air Operations Branch Director at ICP.
- Demobilization of resources mobilized by the Command Center from a forest fire should occur in consultation between the district and the Command Center to improve communication, expectations and coordination statewide.
- The Division needs to place a higher priority in completing structural zone maps in the

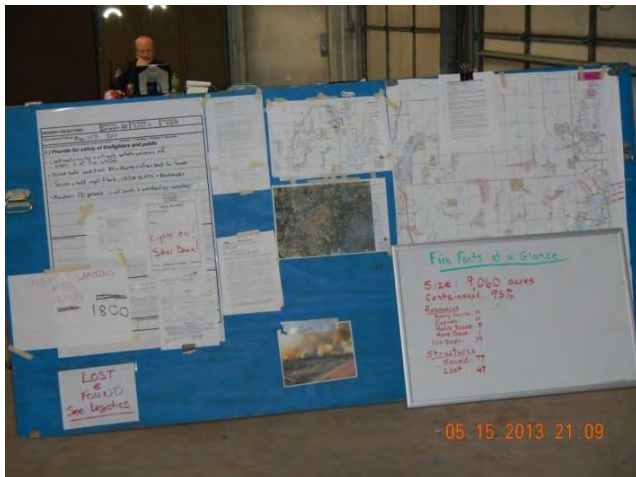
high hazard areas of Wisconsin and in the commitment to keep these maps updated. Need to provide additional structural zone maps (5) in the structural branch ICP kit and with LE personnel

- Incident Commanders should continue to assign personnel to do a structural assessment the first evening of the fire, as this information was of high value at the evacuation center, to the media, etc.
- Establish an e-mail distribution list for Command Center use prior to spring fire season. Key names should include government officials, agency & Compact partners, etc.
- Establish another dedicated telephone line for PIOs in the Information Section and do not give out the number for public use. This line would be the phone to use for making “outgoing” calls only and for “internal” communication. It would be used for such things as: making return calls to media, communicating with the Forestry Command center, and other fire staff, etc.
- Establish Office of Communications in Command Center (Madison).
- The Department's Incident Management Teams should continue to recruit and train members for development of a Finance Section within each IMT. Personnel in Finance Section positions should be thoroughly trained and exercised in the role to promote a thorough understanding of their role in the incident and to develop the Section as a part of the overall team. Utilization of a Finance Section as part of mock fire exercises, simulations or IMT

training will be critical to the successful development of this section.

- Address permissions for dealing with computer issues during an incident. Consider the need to have a web coordinator on standby during the fire season.

This section describes after action review (AAR) items pertaining to communications during the Germann Road Fire. The purpose is to identify communication problems that occurred during the incident so that mitigation strategies can be developed to address these issues, minimizing the likelihood of having similar problems on future incidents. This section will discuss some of the issues identified through narratives, debriefs and review team discussions.



Ann Loechler, WDNR

Aside from safety, establishing and maintaining the vital communication link between all resources is the most important aspect to ensuring safe and successful incident response. Like any large scale incident, communication challenges inevitably will occur. The Germann Road Fire saw its fair share of challenges, with some fairly significant communications issues that were problematic – albeit short-term in nature, but nonetheless critical at the time they occurred – for the Incident Management Team, line operations and firefighters on the fire.

The Brule Area did have a pre-planned communication strategy for large complex forest

fires. Some of the communication preparedness for project class fires included:

- Establish permanent White Golf repeaters to be utilized as a command channel for the Wildland Branch of the Operations Section. These repeaters have the capability to be turned on and off remotely and are to be turned on only when needed.
- The tactical frequency for wildland firefighting resources would be WDNR RED with the ability to utilize additional tactical channels as needed such as WDNR BROWN.
- As extended attack progressed, WDNR Air-to-Ground would be utilized between Air Attack and ground forces.
- The Structural Branch of the Operations Section would utilize Fire Ground Blue as the frequency for communications between Group Supervisors (Active, Overhaul and Advanced) with Zone Leaders.
- Low band radios were pre-established at Incident Command Posts (ICPs) and in certain vehicles for a command channel between the Structural Branch in the ICP and Group Supervisors.
- Cell phones would supplement communications for all resources.
- Law enforcement agencies, including the Law Enforcement Branch of the Operations Section planned to use the MARC 1 repeated frequency.
- Radios for use in the Operations Section at ICP were pre-planned to be made available.

- The Situation Unit of the Planning Section was to utilize 122.925 for intelligence information from Air Attack.

The best of pre-planning never goes perfect. As an incident unfolds, staff and Incident Management Teams have to adapt to get the job outlined by leadership accomplished. The next part of the review is meant to identify what worked well and what can be improved for future incidents.

KEY ISSUES IDENTIFIED

General Communication Issues

- Early communication issues between the fireline and the Command Center made it difficult to get accurate size-up information on the magnitude of the fire and resource needs.
- Training in the Brule Area dictated that all communication from divisions to ICP would funnel through the Deputy Wildland Branch Director (Line) or the Deputy Line position. This is not the statewide training standard, which allows divisions to communicate directly with ICP if needed.
- Situation Unit had difficulty getting intelligence from Air Attack. Only one WDNR plane was on the fire initially, and was in heavy demand.
- County 911 dispatch centers were overwhelmed with phone calls from the public requesting information about the fire and their properties. A phone line was established for property owners to call to get information. This worked well and relieved

some of the pressure. It was noted that local people with local knowledge would be best in providing this assistance on future incidents.

- Gordon Fire Hall ICP had very minimal phone line and cell reception, which was partially mitigated by adding a phone line.

Radio Issues

- The pre-planned radios to be used in ICP by the Operations Sections were available, but two did not work for unknown reasons.
- Resources from Michigan were able to get their radios programmed by doing it themselves and with their own cloning cable. Radio techs were there for support and did a good job overall, but didn't have the appropriate equipment on hand to do the programming.
- WDNR resources working the night shift later on in the suppression effort did not have local county frequencies programmed into their radios. Therefore, they did not have the capability of contacting county dispatch. Rather than send a radio tech from Spooner, this was mitigated by providing a contact to call and a local WDNR radio.

Frequency/Channel Utilization

- White Golf failed to function as a command frequency. After about 12 hours, the problem was diagnosed as two White Golf repeaters located on the Lampson and Highland towers were on simultaneously, which caused interference. Once Brule Dispatch operations closed during the first evening of the fire, the repeated WDNR BLUE was used as the

command frequency.

- WDNR RED was the tactical frequency assigned to the Right Line Construction Group and subsequently to all divisions formed on the right side of the forest fire. WDNR BROWN was assigned to the Left Line Construction Group and all divisions on the left side of the forest fire. This worked well but it did require Line to monitor RED, BROWN, Air-to-Ground and the command frequency. No other tactical frequencies were known to be utilized by the Wildland Branch. It was also noted in reviews that line construction groups had difficulty communicating with divisions following up behind them.
- Fire Ground Blue worked well for the Zone Leaders and the Active Group Supervisor of the Structural Branch. Initially, Fire Ground Blue was also being used within the zones until radio traffic became too congested. There was not a pre-planned process to assign frequencies within zones. Each Zone Leader found tactical frequencies that worked for all resources in the zone, usually a local Fire Dept. channel or a statewide mutual aid frequency. This self-assigning did not seem to cause significant problems.
- Law enforcement utilized MARC 1 and no issues were identified.
- The low band radios and frequency worked poorly and was not utilized as a command channel for the Structural Branch. Low band was considered ineffective as a command channel possibly due to antenna interference, range issues or just preference to use cell phones.



Cal Wise, Barnes WI

Cell Phones

- Cell phones were the primary communication link for Structural Branch Director (SBD) and Active Group Supervisor (ACGS), and worked well. Texting was utilized and determined to be a good tool to relay resource lists and assignments. The texting also provided documentation with accurate time lines. AT&T was the provider for the fire departments performing Structural Branch duties. It is important to note that if the fire had been further to the west, the cell phone tower for AT&T at Highland would be impacted and would have resulted in little to no cell phone coverage.
- Cell phones used by WDNR staff were reported as less dependable with intermittent coverage. Verizon was the primary provider for WDNR staff from east of the fire area. Local WDNR staff had AT&T and good overall coverage.
- Personal smartphones were utilized by some WDNR staff. This provided them with maps,

accurate GPS locations and the ability to take pictures.



WDNR

WHAT WENT WELL AND WHY?

- Establishing the public phone line for general public to call for information.
- Wireless internet was available at the ICP and invaluable for all functions.
- Use of smartphones on the fireline to provide accurate locations and ability to take pictures.
- Assistance of the DOT radio technicians.
- Overall communication with the evacuees.
- Overall communications with the public in general. Including use of social media.
- Utilization of texting in cell phone operation.
- The battery life of the new portable radios was reported to have worked well.

LESSONS LEARNED: RECOMMENDATIONS

- Communication issues with Air Ops on tactical frequency. Utilization of Air-to-Ground frequency is seldom used on a regular basis.

Recommendation – The WDNR Air-to-Ground frequency should be used as the primary frequency for communication with the aircraft on all initial attack fires. Current practice dictates that all units (including aircraft) responding to a fire communicates on the tactical frequency. Experience has shown that fires which pose serious containment problems also generate extensive use of the tactical frequency by ground personnel, making critical communication with the aircraft difficult. Routine use of the WDNR Air-to-Ground frequency as the primary frequency for communication with aircraft will help create a more disciplined and practiced environment when attacking fires that grow quickly.

- Close coordination with local, State and WDNR LE personnel requires heavy radio communication and needs to have dedicated frequencies/bands.

Recommendation – Establish standard and pre-determined frequencies/bands for LE and evacuation uses.

- Chargers for radio batteries and cell phones were important to have at ICP and were in heavy demand. Some units have in-truck battery chargers.

Recommendation – This should be further

looked at for application to all fire units.

- ICP had inadequate cell phone reception and access to internet connection. Calls were dropped multiple times. The preference is to provide adequate cell coverage so that staff are not tied to a hard line and can remain mobile.

Recommendation – Explore tech solutions for the issue with poor cell reception, e.g. Investigate use of cell phone boosters for the ICP trailer or for IMT members.

- While initiating this AAR process, it was discovered that the dispatcher recorder in the Brule Area Dispatch Center had not functioned since Oct 24th, 2012. It was requested to be fixed prior to the 2013 fire season but no solution was found.

Recommendation – All dispatch recorders should be annually tested, maintained, and/or replaced prior to the beginning of the fire season.

- Heavy dispatcher workload during the initial phase of an incident may lead to miscommunication of critical orders for air suppression.

Recommendation – Use of preplanned or standard orders would give clarity to lapses in communication. Requests for suppression aircraft from GLFFC partners should always be understood as an “order for air suppression aircraft”. Orders should include whether structures are threatened or involved and the incident location given in the

appropriate Latitude/Longitude in DM format (degrees/minutes/decimal minutes).

Availability of Minnesota aircraft are posted on a daily basis. Additionally, the Madison Command Center must be notified as soon as possible when GLFFC air assets are ordered. The Command Center can both assist and help track orders for air suppression.

- There were some radio communication issues at the ICP that were resolved with the assistance of the DOT radio technicians.

Recommendation – Recognize communications problems early and have communication specialists (DOT radio technician) as part of the IMT. Continue to identify and develop pre-established ICP locations in high hazard areas throughout the state. Ensure enough land line connections and VPN sites are available for an IMT to fully function

- Low band radio communications failed and was ineffective for Structural Branch.

Recommendation – Seek alternative-repeater high band frequencies for Structural and conduct regular checks. Explore the use of text and photo messaging as a supplement communication.

- Lack of Fire Ground frequencies in communications plan.

Recommendation – Utilize preplanned statewide fire ground frequencies. Develop pre-incident ICS-205 communications plan. Emphasize the use of a Communications Unit

Leader (COML) position for incident frequency assignments.

- Private dozers will consistently need to be provided with radios on every incident.

Recommendation – Heavy dozer kits should be developed and part of training to be provided to private contractors. Radios should be part of the kit. Again review and consider mounted mobile radios for heavy suppression equipment.

- Peltor headsets were used for this incident, however some were not functioning properly.

Recommendation – Replace existing headsets. Extra headsets should be available in the cache trailers.

- Due to radio frequency issues and faulty equipment, a significant amount of responsibility was placed on the performance of personal cell phones and smartphones.

Recommendation – Cell phone signal boosters should be considered for each IMT. Evaluate the value and costs of smartphones for staff. Also, continue to explore a use for amateur radio operators. Uses to consider include logistics drop point contacts and traffic control points.

- There was some delay and confusion during the assignment of radio frequencies to divisions and other tactical units.

Recommendation – Pre-plan and train on how to assign tactical frequencies to zones as they are established. Evaluate the best option

for assigning wildland tactical frequencies.

Move forward on the utilization of WISCOM, including trunking capabilities.

Low band should also be re-evaluated for best use if any. Need to determine the command channel needs and pre-plan for Structural, Wildland and LE Branches.

Another option to consider is assigning RED to Line and H-Division. Assign BROWN to the divisions. Allow divisions to go direct to Operations in ICP for logistical needs, etc.

- There were reports of SEAT drops being made near volunteer fireman engaged in structural protection. Pilots are trained to communicate with fire departments (FDs) on Fire Ground Blue. However, direct communication with FDs during aerial suppression is generally only done when a FD is the only ground unit on a fire. Once the IC is on scene, communication for clearing the drop zones normally runs through the IC or Line, who may not be aware of FDs engaged in structural protection.

Recommendation – A protocol needs to be developed for pilots and ground units to follow when the IC is directing aerial suppression engaged in structural protection.

- The failure of White Golf as a command frequency had major implications to the overall management of this fire.

Recommendation – Conduct regular radio checks for this frequency, particularly prior to the spring fire season.

The purpose of this section is to not to find blame or fault with this fire operationally, but to review the decisions and actions made on the fire and produce conclusions to enhance future operational decisions and improve Division staff readiness.

The ground-based wildland fire suppression effort was primarily a flanking action, using tractor plow units in a direct attack mode with burnout followed by resources to hold the line. Line construction groups were formed to construct the initial line along both the left and right flanks with divisions formed behind the groups to hold, reinforce, and mop up the fire perimeter. Firefighters encountered intense fire behavior conditions with rapid spread rates, crowning, and spotting. The fire was contained during the 2nd evening of the fire after making a run of seven miles, and was up to 1 ½ miles wide through highly volatile pine timber types.

Tactical and operational actions taken on the Germann Road fire were all within the guidelines of WDNR handbooks and training. It is important to note this fire provided the suppression resources with challenges which were foreseeable but were unknown during the incident. This fire challenged the fire fighters fatigue factor due to the fact that containment wasn't achieved until the next burn period, which is unusual in most project class fires in Wisconsin.

The information presented was gathered at debriefing meetings, narratives written by individuals at the incident, individual oral accounts of actions taken on the incident, and dispatch log notes.



Adam Stegmann, WDNR

KEY ISSUES IDENTIFIED

- The Brule Area's normal practice was to issue one operations plan per day. The plan would be developed and delivered the evening before the operational period with the intent to update the evening operations plan during the following morning if forecasted weather conditions had changed. However, this plan was only functional if the preparer would catch all potential changes in weather. On the morning of the Germann Road Fire, the plan was not changed or updated even though a significant wind shift was predicted in the morning fire weather forecast for 18:00 that day. It is important to note some fire fighters did read the morning forecast and did recognize the expected weather pattern.

- Although this fire had 17 heavy units (HU) within 1 hour response and 13 HUs within 2 hour response time, it should be noted not all resources were staffed with qualified staff due to employee turnover or deployment to other fires. Regardless of availability, resource ordering needs to be improved early into the incident to be more concise and large enough to meet the initial and extended attack needs.
- Tactical deployment of initial attack resources was 2 HU per flank. Both rangers discussed the deployment of the HUs and it was decided to keep operators from the same Fire Response Unit (FRU) together, where the Barnes FRU with 2 experienced operators would take the right flank and the Gordon units with one newer operator taking the left.
- It is unclear why the most experienced ranger was not assigned the Line role. NWD IMT had pre-assigned personnel for Operations Branch Director (OBD) and had training in this very issue; however, no personnel were pre-assigned to fill the Line position.
- Line construction groups had many challenges, mainly low ground on the right flank and larger diameter timber and low ground on the left flank, which caused a slower than expected line production rate. During the first 2.7 miles on the left flank the Left Group produced line at the rate of 37 chains/hr., which was due to a tractor plow breakdown with no replacement and a delayed division establishment behind the Group. The Left Group continued to produce line the rest of the shift with 2 tractor plows (TPs) and one private dozer at a rate of roughly 40 chains/hr. The first 2.2 miles on

the right flank the Right Group produced line at 54 chains/hr. While this was some of the fastest production rates on the whole fire it did not last long. The Right Group was challenged all night long with inaccessibility in low ground conditions. It was difficult to determine the actual production rate on the right flank as the Group did their best but left pockets of open line in the low ground. The Right Group continued with 3 TP and one WDNR operated heavy dozer.



Rodney Fouks, WDNR

- There was an expectation by individuals ordering a heavy dozer that it would be a D-6 class or bigger. The Left Group requested a heavy dozer and received a Case 650, which is similar in size class to Wisconsin DNRs John Deere 450J.
- Although there was communication challenges via the radio, the tactical operational use of aerial resources need to have an air attack plan thought out prior to the aircraft arriving on scene. The initial attack IC told Air Attack “use the SEATs as you see fit.” This could be problematic when there is no directive to the use of the SEATs.



Mark Braasch, WDNR

- Due to the size of this fire (roughly 7 miles long and 4 miles wide at its widest point), common simplex radio frequency and an ineffective repeated frequency, lead personnel developed a nontraditional organization to accommodate this challenge. Normally there would be an Operation Section Chief, Wildfire Branch Director, Deputy Wildfire Branch Director (line boss), Group Supervisors, Division Supervisors, and single resources. This fire added a Deputy Line Boss to accommodate the span of control and radio range issues. Although most fire fighters adapted to this organization it presented some issues from firefighters who had never been trained or heard of the deputy line position. Usually the Line Boss position manages the Left and Right Groups and H Division resources on the fire. But adding a Deputy Line created a new position which many were not familiar with and left some line staff confused to who was in charge of divisions and groups.
- Tactically there was early recognition the fire was burning in the direction of a large block of hardwoods and that suppression efforts

could use the change in fuel types to stop the fire, or at least narrow the head. While this was an excellent recognition of using existing barriers, it may have delayed the NWD IMT initial call up thinking the fire might be contained with the use of this barrier.

- After the wind shift, and due to the poor production rates and the new “left flank” near a dense populated structure location, Wildfire Branch Director (WFBD) & Line decide to insert multiple divisions which would “plow against the grain” to meet up with the initial Left Group. The against-the-grain tactic was carefully discussed and mitigated any safety concerns by line staff that was involved in the operation. The tactic was used when the fire behavior subsided in an area which had mostly backing fire. The fire behavior was more like the heel of the fire.
- The initial request to the National Weather Service for a spot weather forecast was sent at 17:17 and was completed at 17:35 and sent to Logistics in Barnes at 17:43. Due to the fast approaching cold front, an updated SPOT forecast was sent at 19:13 to emphasize the wind shift that would occur at the fire. The Duluth WFO issued a total of 8 SPOT fire weather forecasts for this wildfire between the dates of May 14th and May 17th.

WHAT WENT WELL AND WHY?

- The fire initiated near the fire response line of the Barnes and Gordon FRUs. Due to this fact, both response units responded with all the resources of the two stations, which included 4 heavy units and 2 Type 6 engines.

All resources arrived at the fire roughly the same time. Coordination by the 2 rangers early in the fire to determine resource deployment locations and tactics was due to excellent communication. These individuals should be commended for their extraordinary actions despite obstacles that were they were faced with.



Rodney Fouks, WDNR

- After the NWD IMT took over the fire, the wind shift information was shared to all fireline staff prior to the event occurring. The team should be commended for the early warning even though they took over the fire only hours prior to the wind shift. It should be noted every wildland fire fighter confirmed they knew of the event prior to the wind shift.
- Placing the most experienced HU operators on the right flank of the fire was a solid strategic decision due to unfavorable ground conditions.
- Coordination and cooperation with state, provincial, and federal partnering agencies, such as USFS, Minnesota, Ontario, and

Michigan DNR proved to be valuable in suppression efforts.

LESSONS LEARNED: RECOMMENDATIONS

- The Brule Area did not update a written morning daily operations plan the morning of the fire to reflect the substantial wind shift predicted for later that day at 18:00. The fire behavior forecast, which does not have the same distribution list, was used to acknowledge the wind shift.

Recommendation – All areas should create two daily operation plans per day, morning and evening, when the staffing level is predicted to be greater than 4 to ensure field staff is working from the latest available information. All areas should continue to provide fire behavior forecasts.

- Operational responsibilities for the overall Area during the fire were not clearly communicated or met.

Recommendation – With the deployment of the District IMT during a developing project class fire, the Area Forestry Leader (AFL) duties need to reflect the larger Area responsibilities, such as supporting the Area/District and dispatch, ensuring the requested resources are arriving at the fire, and managing the operational needs of the Area. The AFL should not be directly involved with the operational fireline responsibilities, as they have a broader role either as a part of the IMT or operational management of the Area. If part of the IMT,

the AFL needs to then delegate their duties to ensure continuity of Area operations.

- Initial resource orders need to match expected containment requirements while considering fire behavior, forecasted weather and fire fighter fatigue.

Recommendation – Large mock fires or simulated incidents should be initiated every 3 years to provide familiarity of expectations to Initial Attack ICs.

- A number of firefighters were placed in roles that did not match their skills and firefighting experience level.

Recommendation - Areas should establish general expectation of individual's fire positions on project fires based on experience and qualifications.



Rodney Fouks, WDNR

- SPOT forecasts were not requested from The National Weather Service until 2 hours into the incident.

Recommendation – SPOT forecasts should be initiated by dispatch as soon as possible.

- The initial suppression tactics were anchor and flank with line construction groups. Each group received a “heavy dozer” but the Left Group dozer did not meet the expected Type 2 classification (100hp to 200hp), which caused a slowdown in line construction.

Recommendation – When filling a “heavy dozer” request, it should be with a Type 2 class. The field resource making the order should specify the size class. If unable to fill the order with that size class requested, it should be confirmed with the ordering resource what size is actually being dispatched.

- During the initial and second burn period the fire used wildland resources from partnering agencies such as USFS and Michigan DNR,

Recommendation – Wildland fire agencies surrounding and within Wisconsin should be invited to WDNR live simulation training sessions so they will become more accustomed to WDNR suppression organization.

Pre-Incident

As a member of the emergency services community, structural fire departments have authority, suppression resources, personnel and expertise to collaboratively integrate into forest fire suppression response with the priority objective to provide structural protection of improvements threatened by wildfire.

Structural protection begins with an intense effort of preparedness primarily by fire departments in or adjoining high risk fire landscapes prior to the fire incident. A part of this preparedness is a suite of wildland fire training specific to structural protection tactics, organization, safety considerations, and position roles and responsibilities in the Incident Command System (ICS) organizational structure. WDNR staff have used training curricula and program policies to deliver a standardized system of training, development of ICS positions, and expectation of fire department leadership during a wildfire incident requiring structural protection efforts.

To increase efficiency and to have opportunities to practice classroom-taught knowledge, several scenario based training exercises are delivered in the form of simulations and full scale exercises, or mock fires. These realistic training events foster team building and trust within the organizational structure, a sense of ownership in the outcomes, and confidence within their roles. Continuous efforts are made to recruit and train fire department members to increase knowledge and depth of staff for key leadership roles within the Structural Branch.



Anna Martineau Merritt, Gordon WI

An additional effort in preparedness is to have the associated facilities, supplies and communication devices used in providing structural protection ready for deployment. Specific items aid in this preparedness, such as the identification of Incident Command Post (ICP) facilities, predetermined radio and communication plans, and storing supporting forms and office materials in ICP equipment trailers.

Incident Response

The development of an incident can be divided and considered in stages of initial attack, extended attack and demobilization. Each of these stages have both commonality and unique traits that need to be considered by all responders. For the purpose of decision-making, these stages all have a common need to address the elements of situational awareness, incident objectives, organization, tactics, communications and safety. The understanding of these elements directly influences decision-making by the organizational leadership. Due to the uniqueness between these stages, as the incident transitions from one stage to the next there is the potential

disruption of continuity or change in any or all of these elements.

To ensure good decision-making, briefings, maps, Incident Action Plans (IAP) and IMT planning meetings are used to provide continuity and recognition of change in the elements of situational awareness, incident objectives, organization, tactics, communications and safety throughout the duration of the incident.



Tom Michalek, Wascott FD

KEY ISSUES IDENTIFIED

➤ Representative fire chiefs who served in the role of Active Group Supervisor (ACGS) and Structural Branch Director (SBD) and their assistants (Structural Branch Team – SBT) have received 13 consecutive years of

training sponsored by local and Area WDNR Forestry staff. This training varied on a rotating annual basis between structural protection tactics and organization using the WDNR Structural Protection Module training package and simulations. SBT also participated in mock fires and full IMT training 3-5 times over the last decade.

- In the past, the SBT had participated in training with the former Brule Area IMT, as well as on the Cumberland/Brule Area Mock Fire (2005) prior to the development of the Northwest District (NWD) IMT in 2012. Because of this prior training, the SBT had familiarity with some of the NWD IMT personnel. Given this familiarity and the standardization of IMT positions, the SBT was comfortable in functioning within the new NWD IMT. The position identifier vests, color coding system, and use of standard ICS positions aided in this performance.
- The SBT, due to their IMT training, were familiar with the office supplies, low band radio, resource locator and resource cards found within the IMT trailer. As a part of the SBT guidebook, and in addition to the resource locator cards, a list of fire departments by increasing radial distance to the incident with contact information by county dispatch proved to be an invaluable asset in ordering and tracking fire department resources.
- The communications plan, as known and practiced, was to use low band as the frequency between the Structural Branch Director (SBD) at the ICP and Group Supervisors in the field. The Active Group

Supervisor would communicate with Zone Leaders on Fire Ground Blue. Within the zones, Zone Leaders would communicate with resources on a common frequency determined upon assignment that was available by the resources in the zone. During the initial establishment of the ICP in Barnes, the low band radio was not found as a part of the ICP set up. When the ICP was re-established in Gordon, the low band radio was found, set-up, and did not function properly due to an issue with the low band antenna interference with other antennas on the same tower. To mitigate this communications failure, the SBT utilized cellphones. Over 150 phone calls and text messages enabled both direct communication and a recorded timeline of events.

- During initial attack, the local fire chief later identified as the ACGS met face-to-face on scene with the Initial Attack Incident Commander (IAIC) and discussed several issues. Information was exchanged regarding the potential growth of the fire to project status. Structural protection needs were recognized early on; however, only two structural sites were immediately threatened. Incident objectives were not articulated but assumed by the ACGS. Given the active crown fire, the ACGS decided to use ‘in the black’ tactics with zones for organization and structural protection. At this time, a total of four fire departments were assigned to the fire.
- After the immediately threatened structures were dealt with, a significant amount of time was available to consider additional structural protection needs. The ACGS contacted the

then to-be-assigned SBD for assistance. They met face to face on the fire to discuss the current situation. SBD grew the organization from initial attack to extended attack using Zone Leaders, Active Group Supervisor and Structural Branch Director. Fire Department resources were organized into zones operating in the black and on the flanks of the fire in the unburned areas. Advanced Groups or Strike Teams were not used by the SBT.

- For a significant period of time, the SBD operated in the field from his vehicle as there was no ICP established. The SBD communicated with the transitioned Type 3 Incident Commander (T3IC) and indicated the operations were going well. Once the Operations Section Chief (OSC) was in place, he requested the SBD through communications with the T3IC to report to the Barnes ICP. The OSC ensured that information regarding a potential wind shift was transmitted and known by SBD and ACGS. The exact timing of the wind shift was not known, but rather a range of time was described.
- In reaction to the wind shift occurring, SBD focused intently on planning, given the current containment status of the right flank. The wind shift significantly increased the structural protection needs as the fire spread direction would now threaten several structures in Potawatomi community and the developed area around the lakes where the head fire was contained. SBD placed a significant resource order through Douglas County 911 Dispatch Center.
- Before SBD at the Barnes ICP was fully functional, the wind shift threatened the ICP

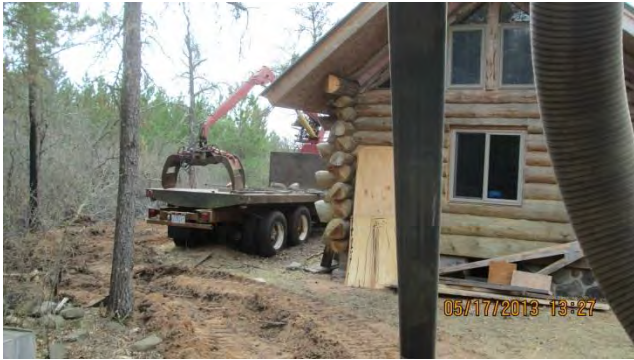
location. The order was given to move the ICP to Gordon Fire Hall. Using pick-up trucks and other vehicles available, ICP materials were transported to Gordon. As ordered resources arrived to the incident some had not received the message that the ICP location had changed. To mitigate the situation of lost resources, Wildfire Branch Director and IC chose to stay at Barnes ICP to intercept these resources. A combination of this effort and resources going direct with ACGS at the Polar Staging Area recovered the situation. ACGS checked in and assigned ordered resources by communicating directly with SBD now at Gordon ICP.

- The severity and immediate change in wind direction caught zone resources assigned to Rock Lake Zone off guard. Rock Lake Zone was bifurcated by uncontrolled flanking fire. The northwest part of the zone had burned and the remainder had not. Assigned zone resources were actively triaging and implementing structural protection tactics in the burned and unburned area of the zone when the wind shift occurred. The uncontrolled flank abruptly became head fire, causing these resources to effect an escape and move to their safety zone to the east.
- The head fire had intensely impacted the zones in Potawatomi community and the surrounding developed lake area; however, given the time of day and the change in fuel type, the advancing head fire intensity was thereafter reduced. This, coupled with a significant amount of structural and wildland firefighting resources deployed at the head to gain control of the line, helped to prevent any further structural damage.



WDNR

- Although not formally identified as such, an on-scene fire chief was re-assigned as an Overhaul Group Supervisor for four fire departments and several zones late in the fire event.
- SBT and related fire resources continued taking action and were relieved 30+ hours into the incident. The relief resources (shift change) were expected to maintain surveillance in the affected zones until 0600 hours on day three, at which time they would be relieved by the original SBT. Relief fire department personnel and resources arrived in their department's apparatus. No consideration was given to staff existing apparatus on the fire, as this event of shift change or multiple duration days was not considered in previous trainings.



Tim Banaszak, WDNR

WHAT WENT WELL AND WHY?

- Training was essential in the preparation of the SBT members in their roles, allowing them to complete objectives thoroughly and effectively.
- Cross training in SBT roles strengthened their functionality and ability to coordinate with partnering agencies.
- All firefighter personnel understood the concept and use of zones.
- Firefighters were trained and prepared operationally for ‘in the black’ tactics.
- Limited structural involvement early on allowed time for planning and resource ordering.
- Single point resource ordering through Douglas County Dispatch increased efficiency.
- The fire department resource list with radial proximities contained in the SBT kit was invaluable for ordering and tracking resources.
- Bundling resources (engine, brush truck and tender) into task forces simplified ordering and assignments.
- Leapfrogging task force resources simplified zone reassignments.
- Continued surveillance of zones over multiple shifts ensured structure survival.
- Use of brush trucks and tenders versus Type 1 structural engines in the home ignition zone (HIZ) allowed greater access and mobility.
- Structural map books were essential for success in the organization and coordination of resources.
- Use of cellphones, texting and photo messaging supplemented or replaced radio communications.
- SBD in concert with the Safety Officer developed an Incident Medical Plan.
- SBD had sufficient medical resources to respond to an emergency. This enabled SBT to respond to an unrelated vehicle accident near the incident.
- The initiation of a post-fire structural assessment and the communication of results to the call center was extremely helpful for homeowners.
- ‘Team concept’ – multiple individuals supporting SBD and ACGS in their duties was essential for the effectiveness and efficiency of the structural protection organization.
- Branch members shared trust and familiarity with each other, enhancing team performance.

- Given SBD and ACGS experience, training and flexibility overcame barriers in logistics, communications and operations.
- SBT were safe, effective, and satisfied with their successes.

LESSONS LEARNED: RECOMMENDATIONS

- Structural fire department ICS training and wildfire readiness is to be commended, but training and experience is still limited in certain areas, including communication efforts between Structural, Wildland Fire, and Air Ops.

Recommendation – The use of “in the black” tactics implemented through the structural zone concept proved effective and needs to be emphasized in future FD training efforts. Encourage the use of Department personnel as a liaison to the Structural Branch as a part of the IMT. Develop and provide training to fire department personnel on the Department's aerial fire suppression resources.

- WDNR does not currently provide sufficient training to fire departments on working with or around aerial fire suppression resources. As these wildland urban interface fires occur, the interaction of fire department personnel on the ground and aerial suppression resources dropping to protect structures will occur more frequently.

Recommendation – Training should include aspects of aerial resource organization within the incident, safety for fire department

personnel during an aerial drop, and how to request a drop on or near a structure.

- Critical fire weather information of the passage of a cold front was not reacted to appropriately by Structural Branch Team (SBT). The anticipated wind shift was known but the tactical and planning implications of the cold front passage were not fully understood.

Recommendation – Gain better awareness through fire behavior training of the effects a cold front passage has on safety, fire behavior, tactical operations and planning.

- Mop up plans involving Structural Protection need to be refined for increased efficacy and efficiency.

Recommendation – We need to encourage the reassignment of fire departments back to the zones they were originally assigned for rehabilitation efforts, as they are familiar with the roads and structure locations already. Structural Branch should also create a list of lost or damaged structures, including addresses, as they rehabilitate a structural zone.

- Relief shift abandoned the fire prematurely.

Recommendation – Ensure shift assignments and expectations are clear and understood. Emphasize the need to maintain surveillance in zones for extended periods. Coordinate with Operations Section Chief the duration of zone staffing needs.

- WDNR Type 4 engines limited SBT use due to a lack of trained, available operators.

Recommendation – Train adequate personnel to operate Type 4 engines independent from tractor-plow operations. Reinvest in developing seasonal LTE engine operators staffing WDNR heavy units.



Lance Burns, WDNR

- Shortage of qualified personnel to staff key overhead positions in SBT.
Recommendation – Develop additional depth in key positions by geographically expanding the audience for overhead position training. During check-in, have personnel identify additional structural protection qualifications. Encourage trained personnel to offer to staff key SBT organizational positions.
- ACGS span of control was too large.
Recommendation – Utilize incident management concepts by maintaining the 5:1 span of control ratio. Continue to train utilizing the predetermined structural

protection organization. Emphasize the use of an Overhaul Group Supervisor.

- Inadequate vehicle type for the ACGS.
Recommendation – Encourage the development of an appropriate vehicle for the ACGS. Suggested features include 4 or greater passenger, with communications and all-wheel drive.
- The Preplanned flagging system to mark structures for structural triage actions was not followed due to a shortage of appropriate flagging.
Recommendation – Adequately supply and utilize pre-planned color coded flagging for structural protection actions.

Over the course of 2 days, 13 separate aircraft were utilized in conducting the aerial suppression of the Germann Road Fire. This ranks as the largest use, as well as the largest variety, of aircraft on any fire in Wisconsin history. All air operations were conducted in accordance with Fire Suppression Handbook - Standard Operating Procedures, resulting in an orderly and safe aerial attack. There were no accidents, incidents or reported "SafeComs" relating to air operations on the fire.

Initial attack aerial resources consisted of a WDNR fixed wing aircraft (Cessna 180) and a contracted Single Engine Air Tanker (SEAT) (Air Tractor 802). The WDNR Air Attack aircraft was on standby at the Hayward airport approximately 19nm (nautical miles) by air from the fire origin. The SEAT was on standby at the Siren, WI airport SEAT base approximately 43.9nm from the origin. A second SEAT aircraft located at the Siren SEAT base was available but not immediately dispatched. A second WDNR aircraft (Cessna 182) from Siren also responded to the fire as it became available.

Air resources from Minnesota were requested within the first hour of the fire. Initially, a Minnesota CL-215 had been dispatched but was diverted to a higher priority fire in Minnesota. Minnesota was able to provide two Fireboss amphibious, water scooping aircraft (Air Tractor 802Fs). A lead supervisory aircraft (Cessna 310), was also provided, and consisted of a pilot and a trained observer, who would act as the Fixed Wing/Helicopter Coordinator called ATCO. One Fireboss aircraft (T891) and the supervisory aircraft were located at the Brainerd Lakes Airport (approximately 107nm from the fire).

The second Fireboss aircraft (T851) was located at the Anoka County/Blaine Airport (approximately 97nm from the fire).

On the second day, the WDNR pilot and aircraft from Siren was again used as an Air Tactical Group Supervisor (ATGS). Resources from Ontario were requested and they provided a 'package' for one operational cycle consisting of a Bird-dog (lead) aircraft and 2 CL-415's.

Additionally, the Wisconsin National Guard provided 2 Blackhawk helicopters equipped with buckets. The WDNR FLIR aircraft, a Cessna 337 based in Oshkosh, was requested and flew a visual and infrared survey flight at 18:55.

Summary of all Air Assets Used on the Germann Road Fire:

- 2 WDNR Air Attack aircraft
- 2 WDNR contracted Air Tractor 802 SEAT aircraft
- 1 Minnesota 'lead' aircraft
- 2 MN DNR contracted Air Tractor 802F Fireboss aircraft
- 1 WDNR Cessna 337 FLIR aircraft
- 1 Ontario Bird-dog 'lead' aircraft
- 2 Ontario CL-415 Bombardier aircraft
- 2 WI National Guard Blackhawk helicopters with buckets

What Was Planned or Supposed to Occur?

Within the scope of this review, three primary activities are pre-planned and laid out within formal handbooks, memoranda and agreements. The three areas of activity are – the pilot’s role, WDNR use of SEAT aircraft, and plans for use of GLFFC partner aircraft.

The Pilot’s Role

The pilot’s role is multi-faceted. The pilot’s ability to relay vital information to ground personnel and take on additional duties as a fire grows and becomes more complex is essential. As a fire situation intensifies and more ground and aerial resources are sent to the fire, the pilot must be able to prioritize and manage their responsibilities to ensure the safety of all personnel on the fire.

The fire control pilot’s roles and responsibilities are fully defined in the Aircraft Operations Handbook – 9248, Chapter 60.

The primary functions of the fire control pilot are to:

- Detect and report locations and descriptions of smokes and fires.
- Provide intelligence to ground fire fighters.
- Manage airspace over a fire when multiple aircraft are present.
- Direct and supervise aerial suppression aircraft.
- Ensure operations are carried out in a safe and efficient manner.
- Coordinate the air attack with the ground attack.



WDNR

WDNR Use of SEAT Aircraft

The WDNR use of SEAT’s as an initial attack tool is fully described within the SEAT Protocols Memo dated and distributed on May 10, 2013.

“The primary role of the SEAT is to provide early suppression action on small, initiating fires that have potential for rapid development into large fires. In addition to initial attack uses, SEATs may also be used to protect high value resources, support line construction by tractor plows or other ground suppression apparatus, or assist with general suppression on working fires. But their greatest value remains in initial attack assignments to limit fire spread on small fire incidents with high potential for rapid, large fire development. Since early initial attack is vital, all attempts will be made to deploy a SEAT from the SEAT base closest to the developing fire.”

Plans for Use of Aircraft From GLFFC

Partners

The information excerpted below comes from the Aircraft Operations Handbook – 9248, Section 60-30.

“As a member of the Great Lakes Forest Fire Compact, aerial suppression aircraft from other Compact members may be ordered to assist on larger fires in Wisconsin. To ensure consistent and safe aerial operations the following protocol will be followed:

Arrival Procedures

- *Once airborne and established en route, Minnesota and Ontario air attacks should relay an updated ETA to their respective flight desks and have the ETA forwarded to those in Wisconsin who ordered the aircraft.*
- *Minnesota and Ontario Air Attacks should attempt to establish contact with the Wisconsin Air Attack Pilot as soon as practicable on AM frequency 122.925.*
- *Unless otherwise requested, Wisconsin Air Attack pilots will use 500 foot increments of vertical separation when giving altitude assignments for the Fire Traffic Area.*
- *Arriving suppression aircraft can expect to be assigned an altitude which will give them a minimum of 500 feet clearance above the canopy of surrounding terrain rounded up to the next 500 foot MSL altitude.*
- *Fixed Wing/Helicopter Coordinators will be assigned the next 500 foot MSL altitude above suppression aircraft.*

Duties and Responsibilities

- *Wisconsin Air Attack Pilots will retain the position of Air Tactical Group Supervisor.*
- *Minnesota Air Attacks and Ontario Air Attack Officers will be assigned as Fixed Wing/Helicopter Coordinators and be responsible for the coordination of all suppression aircraft on the fire.*
- *Wisconsin Air Attack Pilots will be primarily responsible for communication with ground personnel to develop and coordinate air and ground attack plans.*
- *Wisconsin Air Attack Pilots will communicate ground objectives and targets to the Fixed Wing/Helicopter Coordinator.*
- *The Fixed Wing/Helicopter Coordinators will be responsible for tactically accomplishing the air attack plan.*
- *Both Wisconsin and visiting Air Attacks will be responsible for evaluating the effectiveness of the air attack plan and ensuring safe operations over the fire.”*



Kevin Feind, WDNR

KEY ISSUES IDENTIFIED

- Prior to the day of the Germann Road Fire, a staffing plan had been developed by the lead Siren pilot that assigned aircraft and pilots to the Brule and Cumberland fire routes. The morning of the fire, a maintenance discrepancy was observed on one of the 2 WDNR patrol/Air Attack aircraft located at Siren. After consulting with the DOA in Madison, the aircraft was removed from flight status by the DOA Director of Maintenance. In accordance with procedure, alternate plans were made to cover the Brule and Cumberland routes. These plans included the possible use of the Park Falls aircraft and pilot. A replacement aircraft from Madison would be available later that day and arrived in Siren at approximately 16:00.
- The Hayward Air Attack aircraft was on the fire scene within 15 minutes of the fire being reported. The first of the contracted SEAT's, T812, made its first drop at 15:12, 27 minutes after the fire was reported. The second contracted SEAT, T814, self-dispatched from the Siren SEAT Base towards the fire at 16:42, 1 hour and 57 minutes after the first report of the fire. The MN lead aircraft arrived on the fire-scene at 17:14. The initial SEAT loads delivered by the AT 802's were 'Thermo-gel'; however, when loading operations were conducted from the Solon Springs airport, straight water was used. The Fireboss aircraft dropped foam.
- Response time for the Minnesota package was approximately 1 hour and 40 minutes. Minnesota dispatch received the request for aerial resources at 15:34 and they were on-scene at 17:14. The initial attack WDNR aircraft operated as Air Attack, providing direction for the early SEAT drops and giving size-up and intelligence information to the Incident Commander. When the MN aircraft arrived on the scene they took on the role of coordinating all fixed wing operations. The WDNR Air Attack retained the position of Air Tactical Group Supervisor (ATGS). Initial SEAT drops were directed to the right flank and were used to support line construction and structural protection.
- The second WDNR aircraft (from Siren) arrived on the scene at 17:30 and initially was directed to take on the role of intelligence aircraft, working directly with the situation unit at the ICP. At 19:00 the second aircraft was briefed and took over the role of Air Attack and continued in this role throughout the operational period.
- On the second day the WDNR aircraft from Siren was again used as Air Attack. Resources from Ontario were requested and they provided a 'package' for one operational cycle consisting of a Bird-dog (lead) aircraft

and 2 CL-415's. Additionally, the Wisconsin National Guard provided 2 Blackhawk helicopters equipped with buckets. The WDNR FLIR aircraft, a Cessna 337 based in Oshkosh, was requested and flew a visual and infrared survey flight at 18:55. The results and observations from this flight were presented immediately upon landing back at the Solon Springs airport.

WHAT WENT WELL AND WHY?

- No reported incidents, accidents or SafeComs resulted from the fire.
- As a direct result of aerial suppression efforts, 2 structures on Sand Road and 4 to 7 structures on Red Pine Train Road were saved.
- Air Attack Pilot Training: Current training is aimed at providing a 'baseline' of understanding that all pilots who respond to any size incident should have. In this case, senior pilots were prevented from initially responding to the fire. Even so, the pilot responding understood his role and responsibility. That understanding was achieved through training in standardization, simulation and training in GLFFC procedures. This training should be continued and built upon.
- A clear and simple air attack plan was developed and employed early in the incident. The Air Attack Pilot was instructed to use the SEAT aircraft "as he saw fit" with the right flank identified as the priority. The air attack plan was in accordance with the Aircraft Operations Handbook – 9248

Chapter 60-18, "Once air suppression has been ordered an air attack plan should be formed. Based on the set of objectives and the current fire situation the Air Attack Pilot and IC should develop an air attack plan." Factors to be taken into consideration include; fire behavior, flight conditions, fuels, available air resources.



Jack & Barbara Gribble, Barnes WI

- A Temporary Flight Restriction (TFR) was quickly put in place and helped provide a safe environment for air operations. There were no reports of unauthorized aircraft intruding into the airspace.
- Staffing an Air Operations position at the Command Center provided valuable support and assistance throughout the incident in establishing TFR air space and coordinating aviation resource ordering.
- Air-to-Ground and Air-to-Air communications occurred as planned. All preplanned radio frequencies were utilized and monitored by pilots on the incident.
- The FLIR aircraft was valuable in helping ICP determine if the fire could be declared "Out".

- WDNR aircraft using “Spidertracks” along with SEAT and MN aircraft utilizing the Federal AFF system, provided an excellent means of monitoring all aircraft on the fire.



Kevin Feind, WDNR

LESSONS LEARNED: RECOMMENDATIONS

- SEAT operations did not achieve the stated goal “*to provide early suppression action on small, initiating fires that have potential for rapid development into large fires*”. Multiple reasons for this exist. In short, the SEATs were based too far away and the immediate dispatch of both SEATs did not occur. The two SEATs were placed at the Siren base to mitigate potential problems with blowdown areas and the Solon Base was a designated secondary SEAT base for the blowdown area. On the day of the fire, the Solon Springs SEAT base was not fully functional. However, area personnel did work to make the base functional and reload operations began with Tanker 814 departing Solon Springs at 17:22.

Recommendation – Use and location of SEATs and SEAT bases are already well documented. Justifiable prediction of fire

conditions for areas with large fire potential needs to occur if effective deployment of SEATs is to be accomplished. All designated SEAT bases need to be operationally ready for use. More specific criteria should be developed for defining what an ‘operational’ SEAT base is and when it will be required. All personnel that are expected to work at a SEAT base during operations are to be properly trained in SEAT base operations, including mixing fire retardant and reloading the SEAT aircraft. An inspection by a qualified SEAT Base Manager should be part of the declaration of the base being “fully operational”.

- There was limited organizational connection between Operations Section Chief and Air Operations. There is a need for 2 WDNR aircraft on an incident of this complexity, one to work as Air Attack and another to provide intelligence, situation/status and to provide relief as required. The second WDNR aircraft self-dispatched and arrived on the fire at 17:30.

Recommendation – The best practical solution to this issue is the development of an Air Operations Branch Director (AOBD) position that reports directly to the Operations Section Chief and is physically located at the ICP. This would also assist in providing the linkage between aerial resources and the Structural Branch. The AOBD responsibilities would include (from the National Wildfire Coordinating Group AOBD Task Book):

- Determine personnel, aircraft and support equipment needs; order as necessary
 - Identify existing and ordered aircraft status.
 - Ensure pilot and aircraft capabilities meet mission objectives.
 - Obtain initial briefing from Operations Section Chief.
 - Establish and maintain positive interpersonal and interagency working relationships.
 - Establish line authority and identify decision-making process.
- Guidelines for ordering the SEAT aircraft were established at the pre-season blowdown meeting - both SEATS would be launched on initiating fires in high hazard landscapes. SEAT aircraft are most effective in the early stages of a fire and when they work in tandem. A second SEAT was not requested to be dispatched from the Siren SEAT base. While both SEAT aircraft were requested by the Initial Attack IC, neither the IC nor Air Attack realized that a second SEAT had not been dispatched. Once the magnitude of the Germann Road Fire was understood, the SEAT base manager, after seeking authorization, dispatched a second SEAT departing Siren at 16:42.
- Recommendation** – SEAT protocols need to be adhered to since SEAT aircraft work best in tandem on early initiating fires and should be ordered and dispatched in tandem when available.
- The SEAT base at Solon Springs was not planned to be manned on the day of the Germann Road Fire. Foam was available at the base for suppression operations; however, it was not used.
- Recommendation** – SEAT bases need to be operationally ready prior to and during spring fire season. While Area Forestry Leaders (AFL and local Fire Response Unit (FRU) personnel are responsible to ensure the base set up and provide for manning satellite bases when conditions warrant, SEAT Base Managers should be given the responsibility of declaring a base operational. This would include checking the physical setup of the base and ensuring that personnel associated with the base are trained and available.
- The map of hot spots developed by use of the FLIR was not accurate enough.
- Recommendation** – The FLIR aircraft is best used for directing ground crews directly to hot spots during daylight hours. The WI DNR is currently exploring technological solutions (i.e. advanced geo-referencing) to increase the capabilities of the FLIR on project fires.
- Neither Canadian or WI National Guard helicopters currently participate in the Federal Automated Flight Following (AFF) program.
- Recommendation** – Efforts should be made to incorporate or gain access to their automatic flight following systems.

- Canadian aircraft were not preauthorized to refuel in Superior.

Recommendation – Superior, WI and Duluth, MN should be added to WDNR Quick Strike Agreements.



Jack & Barbara Gribble, Barnes WI

- The Air Guard helicopters were hard to see while en route to the fire.

Recommendation – If possible, additional striping should be added to the rotor blades. Pre-positioning on high fire danger days would be critical for a timely response.

- WDNR Air Attack pilots exceeded flight and duty times.

Recommendation – Pilots are required to self-monitor their flight time, and need to be requesting relief prior to exceeding flight and duty times. Flight and duty time guidelines are provided to enhance the safe operation of aircraft, and will be followed when developing schedules and making flights. Since flights are made in changing environments, a pilot may deviate from this policy and exercise good judgment in

conducting a flight while balancing fatigue considerations (excerpt from Aircraft Operations Handbook – 9248, Section 10-23).

- WI Air Attack was at times unable to support needs of ground units on the right flank.

Recommendation – Ground units engaged in large fires need to acknowledge the limitations of Air Attack to serve as a lookout, especially during aerial suppression operations. Aerial suppression dictates that Air Attack climb to a higher altitude and diverts their attention to the other aircraft. This, along with smoke conditions on larger fires, limits a pilot's ability to serve as a lookout. A clear acknowledgement of the situation by the pilot should be expected and mitigated by ground units.

This section describes the after action review (AAR) items pertaining to the Law Enforcement (LE) Branch of the Operations Section during the Germann Road Fire. The key to successfully managing any large incident is to protect the public by establishing a Law Enforcement Branch staffed with trained local sheriff's deputies, State Patrol, and WDNR LE Officers.

The information contained within the AAR was gathered from personnel that either worked as part of the Law Enforcement Branch or from others assigned to the fire that provided observations related to law enforcement actions. The information below addresses evacuation, traffic control, and investigation.

In early 2013, the Division's Forestry Leadership Team (FLT) endorsed the concept of having Four District Incident Management Teams (IMT), instead of Area Teams. The Northwest District combined Area Teams from Brule, Park Falls, and Cumberland to staff the new Northwest District IMT. A Law Enforcement Branch (LE) under the Operations Section staffed with LE personnel from across the District was identified as part of this IMT.

In evaluating the performance of the Germann Road Fire IMT, and focusing on the actions of the LE Branch, it should be noted that public safety was priority and the absence of personal injuries or motor vehicle accidents is commendable. Homeowners were safely evacuated under adverse exigent circumstances, which included an uncontrolled wildfire, heavy smoke, night operations, and shifting winds.

When the fire was first reported, responding law enforcement personnel from Douglas County, Bayfield County, Wisconsin State Patrol, WDNR

conservation wardens, fire departments, and WDNR Fire Control took independent actions to alert and evacuate homeowners. These actions were necessary to protect the public and are to be expected until a management team is in place to coordinate the overall LE activities.



WKOW 27 - Madison

The District IMT did have a pre-planned radio communication plan, which identified that all law enforcement agencies assigned to the incident were to use the MARC 1 repeated frequency. During the incident, this generally worked well, with no major issues identified. At times LE responders used other radio frequencies to communicate among themselves.

At the Incident Command Post (ICP), the LE Branch had a mobile radio set up to communicate with the units in the field. However, there was not a dedicated person assigned to monitor and handle all of the law enforcement traffic, which at times burdened the LE Branch Director who was busy with meetings and directing overall law enforcement activities.

KEY ISSUES IDENTIFIED

Evacuation

- The LE Branch focused on the evacuation of homeowners and traffic control in the early stages of the fire and throughout the second day of the incident. LE responders used flagging on driveways and fire numbers as a way of indicating that a residence had been evacuated. The LE Branch conducted most of the evacuations, but not all of the LE responders had flagging or ribbon in their vehicles. The LE Branch had a small supply at the ICP, but ran out and used whatever methods they could to indicate that a residence had been evacuated. Multiple color ribbons caused some confusion with some of the Fire Department flagging code. The pre-printed Evacuation tags were never used.
- In the ICP, the LE Branch was using 11x17 maps printed by the Situation Unit to coordinate evacuation and roadblocks. This worked well, but they were eventually given a wall-sized Douglas County structure map which provided a much better visual display of the structures and roadblocks and was easier to work with.
- Emergency response zone books, which indicated structures, pre-planned zones, and roads, were invaluable both in the ICP and in the field, however not all LE responders had one. Also, since the fire impacted two counties there was a need to have books for both Douglas and Bayfield Counties.
- During the early stages of evacuation, fire evacuees were told to go to the evacuee “muster point” at the Barnes Town Hall.

Evacuees were eventually sent to Drummond High School as the Evacuation Center.

- On the second day of the fire, the LE Branch believed no one was authorized to be in the evacuated area around Ellison Lake. As a result, LE started to re-contact people and tell them to leave, however residents said they were told they could come back to their homes earlier.



Kevin Feind, WDNR

Traffic Control

- On the day of the fire, WI Department of Transportation (DOT) personal arrived at the fire without being asked and offered to help. They provided changeable message boards for alerting traffic of road closures and driving conditions related to smoke. This was excellent from a traffic control and public safety standpoint.
- The LE Branch placed roadblocks at key intersections around the fire to keep out sightseers and the general public. Some of these were manned while others were merely barricaded with no one at the roadblock due to a shortage of LE officers. Where roadblocks were unmanned, people did drive

around the road closures into areas that were to be evacuated.

Investigation

- On the day that the fire was first reported, the Initial Attack ranger responded to the general origin of the fire along with the local conservation warden. The ranger and warden worked together to determine their roles which included a cursory investigation and interview of subjects. It was decided that the warden should find out what happened and interview subjects at the origin, while the initial attack ranger organized suppression resources. There was good recognition that time spent and information gathered early on was critical in determining cause and responsible parties.
- Later on, another warden was assigned to make contact with the responsible parties and take written statements. The general origin was protected using fireline tape and the logging equipment that caused the fire was secured until further directions were given.
- In the early evening of the first day of the fire, two WDNR Forestry Law Enforcement Specialists were requested to conduct the investigation of the fire. The two LE Specialists arrived the next morning and checked in at the Incident Command Post. They were briefed by the LE Branch Director and assigned to the cause and origin investigation. All information gathered and statements taken by wardens the day prior was turned over to them.

- The two Forestry LE Specialists worked as a team during the investigation. This worked very well and led to a more thorough investigation being completed that would not have happened with just one investigator assigned to this fire.

WHAT WENT WELL AND WHY?

- Safe evacuation of private homeowners on two separate days. No personal injuries and no motor vehicle accidents; an excellent job under very adverse conditions of an uncontrolled forest fire, heavy smoke, night operations and shifting winds.
- There was great cooperation between all of the responders ensuring the safe, swift evacuation of the residents.
- The local warden knew the area well and independently evacuated some residents early on that would have been more immediately impacted.
- The movement of the ICP from Barnes to Gordon occurred without compromising public safety.
- The LE Branch deployed the use of electronic message boards to warn motorists of traffic hazards ahead of them.
- There was early, on-the-scene investigation by the local conservation warden who followed the initial attack units to the fire origin.
- Having both sheriffs at the Incident Command Post was valuable in coordination of resources.

- Good coordination with DEMs from both counties.
- Effective and efficient WDNR Forestry LE Specialist teamwork in collecting evidence and conducting the investigation.



Mary Flamang, Gordon, WI

LESSONS LEARNED: RECOMMENDATIONS

- Lack of coordination by LE personnel in utilizing radios and radio frequencies.
Recommendation – Train and exercise WDNR Law Enforcement, State Patrol, and sheriff’s deputies in the use of the pre-planned communications plan to ensure that all agencies have communication capabilities

in using assigned radio frequencies according to the pre-planned communications plan.

- Lack of adequate maps for incidents and emergencies.

Recommendation – Provide essential maps to LE Branch for their exclusive use. Consider providing plat books, emergency response books, and large dry/erase maps.

- Lack of LE personnel with IMT training, leading to a shortage of depth in the Northwest District IMT.

Recommendation – Train additional individuals, such as State Forest LE personnel, to provide depth in staffing the LE Branch. Train WDNR staff to provide support in coordinating LE actions and to serve as a dedicated radio operator at the Incident Command Post.

- There was no set protocol for the Law Enforcement Branch to utilize during the evacuation process.

Recommendation – Encourage the use of the structural map zones for evacuation purposes. There should be an evacuation checklist developed, including the five P’s of evacuation – Purse, Pets, Paperwork, Phones, and Prescriptions. Also included should be a process to provide the number of houses evacuated to Red Cross and Salvation Army, allowing them to appropriately plan on facilities and meals for evacuees.

- Misinformation and confusion regarding the re-opening of the evacuation zone prompted the need for defining re-opening criteria and protocol.

Recommendation – The development of criteria for the re-opening of the evacuation zone needs to have some additional thought process and discussion. There is a delicate balance between the needs and safety of the suppression resources and the needs of the evacuees to return to their property.

Guidance and direction provided to the IC prior to an incident would be extremely useful in making the decision to re-open an evacuation zone. Area leaders need to have discussions with the local county sheriff in regards to evacuation procedures, and when it is appropriate to allow the general public back into the fire perimeter.

- Communication issues and inconsistencies with flagging protocol on evacuated homes.

Recommendation – Develop a checked residence indication system to indicate that a residence has been contacted and evacuated and train in its use. Work with emergency management personnel to ensure the consistent universal recognition of the system developed.

- Lack of Law Enforcement Branch depth in Northwest District IMT.

Recommendation - Train State Forest LE personnel to serve on the District IMT to provide additional LE staffing to support the LE Branch. Train WDNR conservation

wardens and Fire Departments to assist with evacuation.

- There were traffic and personnel safety issues during mop up. Unmanned roadblocks led to the public crossing into previously evacuated areas.

Recommendation – Road closures need to be staffed and maintained. It is important to have manned roadblocks (not just barricades) when doing evacuations in an area, to protect the public from entering evacuated areas. If there are not enough personnel for roadblocks, it is suggested to at least assign a roving patrol to keep people out of the evacuated area as much as possible. There may be a need to maintain road closures or LE presence longer into mop up stage.

Additional Recommendations

- Future incidents should ensure that WI DOT is notified of State Highway road closures. Also should be contacted to provide electronic, changeable message boards.
- The team of WDNR Forestry LE Specialists worked well. Develop and train additional investigative teams similar to Minnesota.
- Consider training all LE personnel in fire behavior and evacuation.
- Enforce the use of ICS 214 form, Unit/Activity Log would be useful in documenting and recalling sequence of events.

APPENDICES

FIRE WEATHER FORECAST

GERMANN ROAD FIRE

FIRE WEATHER PLANNING FORECAST FOR NE MINNESOTA AND NW WISCONSIN
NATIONAL WEATHER SERVICE DULUTH MN
651 AM CDT TUE MAY 14 2013

...RED FLAG WARNING TODAY FOR NORTH CENTRAL MINNESOTA...
...DRY COLD FRONT PASSAGE LATE TODAY...
...LOW RH VALUES EXPECTED WEDNESDAY...

.UPDATE...BASED ON CURRENT RADAR IMAGERY HAVE INCREASED CHANCE
FOR THUNDERSTORMS THIS MORNING ACROSS NORTH CENTRAL MINNESOTA. AT
645 AM...AN AREA OF STORMS WITH STRONG WINDS AND OCCASIONAL
LIGHTING WAS PUSHING EAST ACROSS THE NORTHWEST HALF OF MINNESOTA.
THESE THUNDERSTORMS ARE EXPECTED TO QUICKLY DIMINISH IN COVERAGE
AND INTENSITY AFTER 900 AM.

.DISCUSSION...
A STRONG COLD FRONT WILL SWEEP OVER NORTHEAST MINNESOTA LATE THIS
AFTERNOON...MAINLY AFTER 1500. THE FRONT WILL REACH THE MN
ARROWHEAD AND NW WISCONSIN ZONES AFTER 1800.

AHEAD OF THE FRONT TEMPERATURES WILL WARM WELL INTO THE 70S AND
80S /INLAND FROM LAKE SUPERIOR/ WITH MINIMUM RH VALUES IN THE
25-30 PERCENT RANGE. WINDS WILL BECOME GUSTY OUT OF THE SOUTH TO
SOUTHEAST BY NOON...ABRUPTLY SHIFTING OUT OF THE NORTHWEST WITH
THE FRONTAL PASSAGE. A PERIOD OF NORTHWEST WINDS GUSTING AROUND
30 MPH CAN BE EXPECTED THROUGH THE LATE AFTERNOON AND EARLY
EVENING OVER NORTH CENTRAL MINNESOTA...INCLUDING THE CHIPPEWA
NATIONAL FOREST AND BRAINERD LAKES AREA.

THERE IS A CHANCE FOR SCATTERED THUNDERSTORMS TODAY ALONG THE
BORDERLAND AND ACROSS THE SUPERIOR NATIONAL FOREST. A FEW
THUNDERSTORMS WILL ALSO BE POSSIBLE THIS EVENING OVER NORTHERN
WISCONSIN.

WEDNESDAY WILL BRING HIGH TEMPERATURES IN THE 70S...GUSTY
NORTHWEST WINDS...AND CRITICALLY LOW RELATIVE HUMIDITY VALUES
OF 20-30 PERCENT OR LOWER. THE LOWEST RH READINGS AND
STRONGEST WINDS WILL BE FOUND ACROSS THE SUPERIOR AND CHEQUAMEGON
NATIONAL FORESTS.

9AM @	B	59°	51%	E	3-6
	M	59°	54%	E	4-7
	W	56°	53%	SE	3-5
	G	59°	50%	SE	1-6

DOUGLAS-
INCLUDING THE CITIES OF...SUPERIOR
651 AM CDT TUE MAY 14 2013

.TODAY...

SKY/WEATHER.....MOSTLY SUNNY UNTIL 1100...THEN PARTLY CLOUDY,
ISOLATED SHOWERS AND THUNDERSTORMS AFTER 1600.
CHANCE OF PRECIPITATION 20 PERCENT.
MAX TEMPERATURE.....77-82 INLAND...AND 51-56 NEAR LAKE SUPERIOR.
MIN HUMIDITY.....27-32 PERCENT INLAND...AND 60-65 PERCENT NEAR
LAKE SUPERIOR.
20-FOOT WINDS.....SOUTH WINDS 3 TO 7 MPH INCREASING TO 7 TO 12
MPH IN THE AFTERNOON.
HAINES INDEX.....5 OR MODERATE.
HOURS OF SUN.....11 HOURS.
PRECIPITATION.....NONE.
MIXING HEIGHT.....AROUND 2600 FT AGL (AVE 12-6 PM).
TRANSPORT WINDS.....SOUTHEAST AROUND 14 MPH (AVE 12-6 PM).
SMOKE DISPERSAL.....AROUND 38000 OR GOOD (AVE 12-6 PM).

.TONIGHT...

SKY/WEATHER.....PARTLY CLOUDY UNTIL 2000...THEN MOSTLY CLEAR.
MIN TEMPERATURE.....43-48.
MAX HUMIDITY.....82-87 PERCENT.
20-FOOT WINDS.....SOUTHWEST WINDS 4 TO 9 MPH BECOMING WEST 6 TO
11 MPH. GUSTS UP TO 29 MPH.
PRECIPITATION.....NONE.

.WEDNESDAY...

SKY/WEATHER.....MOSTLY SUNNY UNTIL 1500...THEN PARTLY CLOUDY.
MAX TEMPERATURE.....67-72.
MIN HUMIDITY.....20-25 PERCENT INLAND...AND 25-30 PERCENT NEAR
LAKE SUPERIOR.
20-FOOT WINDS.....WEST WINDS 8 TO 13 MPH.
HAINES INDEX.....5 OR MODERATE.
HOURS OF SUN.....11 HOURS.
PRECIPITATION.....NONE.
MIXING HEIGHT.....AROUND 8800 FT AGL (AVE 12-6 PM).
TRANSPORT WINDS.....NORTHWEST AROUND 17 MPH (AVE 12-6 PM).
SMOKE DISPERSAL.....AROUND 154000 OR EXCELLENT (AVE 12-6 PM).

BAYFIELD-
INCLUDING THE CITIES OF...WASHBURN
651 AM CDT TUE MAY 14 2013

.TODAY...

SKY/WEATHER.....MOSTLY SUNNY UNTIL 1000...THEN PARTLY CLOUDY.
ISOLATED SHOWERS AND THUNDERSTORMS AFTER 1600.
CHANCE OF PRECIPITATION 20 PERCENT.
MAX TEMPERATURE....80-85 INLAND...AND 55-60 NEAR LAKE SUPERIOR.
MIN HUMIDITY.....25-30 PERCENT INLAND...AND 55-60 PERCENT NEAR
LAKE SUPERIOR.
20-FOOT WINDS.....SOUTHWEST WINDS AROUND 5 MPH INCREASING TO
SOUTHEAST.
HAINES INDEX.....5 OR MODERATE.
HOURS OF SUN.....10 HOURS.
PRECIPITATION.....ISOLATED TRACE TO 0.05 INCH AMOUNTS.
MIXING HEIGHT.....AROUND 2400 FT AGL (AVE 12-6 PM).
TRANSPORT WINDS.....SOUTHEAST AROUND 14 MPH (AVE 12-6 PM).
SMOKE DISPERSAL.....AROUND 32000 OR GOOD (AVE 12-6 PM).

.TONIGHT...

SKY/WEATHER.....PARTLY CLOUDY UNTIL 2200...THEN MOSTLY CLEAR, A
SLIGHT CHANCE OF SHOWERS AND THUNDERSTORMS
UNTIL 2400. CHANCE OF PRECIPITATION 20 PERCENT.
MIN TEMPERATURE....43-48.
MAX HUMIDITY.....85-90 PERCENT.
20-FOOT WINDS.....SOUTH WINDS 5 TO 10 MPH BECOMING WEST 6 TO 11
MPH. GUSTS UP TO 30 MPH.
PRECIPITATION.....ISOLATED TRACE TO 0.05 INCH AMOUNTS.

.WEDNESDAY...

SKY/WEATHER.....MOSTLY SUNNY UNTIL 1500...THEN PARTLY CLOUDY.
MAX TEMPERATURE....71-76 INLAND...AND 61-66 NEAR LAKE SUPERIOR.
MIN HUMIDITY.....18-23 PERCENT INLAND...AND 32-37 PERCENT NEAR
LAKE SUPERIOR.
20-FOOT WINDS.....WEST WINDS 8 TO 13 MPH.
HAINES INDEX.....5 OR MODERATE.
HOURS OF SUN.....11 HOURS.
PRECIPITATION.....NONE.
MIXING HEIGHT.....AROUND 7800 FT AGL (AVE 12-6 PM).
TRANSPORT WINDS.....NORTHWEST AROUND 19 MPH (AVE 12-6 PM).
SMOKE DISPERSAL.....AROUND 143000 OR EXCELLENT (AVE 12-6 PM).

FIRE OPERATIONS PLAN

GERMANN ROAD FIRE

Brule Area

Statewide Preparedness Level: 2

Area Staffing Level: 5

DATE: 05/14/2013

TIME: 16:30 (05/13)

Operational Period: DAY

County:

DOUGLAS

BAYFIELD

ASHLAND/IRON

Adjective Level:

HIGH

HIGH

MODERATE

****Safety Message:** Unsettled weather predicted for Tuesday – chance of T-Storms. Standard Order #1 – Keep informed on fire weather conditions.

Start-up Time (05/14): Stations: 09:00 LTE Firefighters-Riders: Yes 10:00 Lookout Towers: Yes 12:00

Shutdown Time: (05/13) Stations: 17:30 Riders: 17:30 Patrol: 17:00 Towers: 17:00

Fire Duty Readiness: Yes Evening of 05/13 - 1 & 1 All Stations

AERONAUTICS: Patrol: Available @ Solon by 12:00 Detection Flight – See Below

SEAT: Available @ Siren Blackhawks Unavailable

Comments: Patrol to fly a Detection route just before noon when flying up to Solon.

Additional Info: Predicted CFFDRS numbers below seem a little low for tomorrow - as of tonight we will plan @ Level 5.

STAFFING PLAN (Check as needed): All those checked below fire ready by 11:00.

Supervisory Contact: GALLAGHER				
BRULE FRU	BARNES FRU	GORDON FRU	Area Staff	
<input checked="" type="checkbox"/> 6x Eng.:	<input checked="" type="checkbox"/> 6x Eng.:	<input checked="" type="checkbox"/> 6x Eng.:	Jay Gallagher AFS	<input checked="" type="checkbox"/> On Duty
<input checked="" type="checkbox"/> HU:	<input checked="" type="checkbox"/> HU:	<input checked="" type="checkbox"/> HU:	715-372-8539 (111)	<input type="checkbox"/> Avail. by cell
<input checked="" type="checkbox"/> HU:	<input checked="" type="checkbox"/> HU:	<input checked="" type="checkbox"/> HU:	218-248-0404 (Cell)	<input type="checkbox"/> FDR
<input type="checkbox"/> 8x Eng.:	<input checked="" type="checkbox"/> 8x Eng.:BLAYLOCK	<input type="checkbox"/> 8x Eng.:	Beth Bartol	<input checked="" type="checkbox"/> On Duty
	<input type="checkbox"/> 8x Eng.:	<input checked="" type="checkbox"/> 8x Eng.:LUEBBE	Brule Dispatch	<input type="checkbox"/> FDR
			Backup Dispatch	<input checked="" type="checkbox"/> On Duty
ASH/WSB FRU	MELLEN FRU	MERCER FRU	Douglas TL	<input checked="" type="checkbox"/> On Duty <input type="checkbox"/> FDR
<input checked="" type="checkbox"/> 6x Eng.:	<input checked="" type="checkbox"/> 6x Eng.:	<input checked="" type="checkbox"/> 6x Eng.:	Bayfield TL	<input type="checkbox"/> On Duty <input type="checkbox"/> FDR
<input checked="" type="checkbox"/> HU:	<input checked="" type="checkbox"/> HU:	<input checked="" type="checkbox"/> HU:	Ashland/Iron TL	<input checked="" type="checkbox"/> On Duty <input type="checkbox"/> FDR
		<input type="checkbox"/> 8x Eng.:	Area Staff Spec.	<input type="checkbox"/> On Duty <input type="checkbox"/> FDR
		<input type="checkbox"/> 8x Eng.:	Incident Mgmt. Team	
		<input type="checkbox"/> Gator w/ Water Tank:	NWD IMT	<input checked="" type="checkbox"/> Available <input type="checkbox"/> FDR
Pattison FRU	BRULE RIVER S. F.	DOUGLAS CO. FOREST	<input checked="" type="checkbox"/> IMT Trailer	
<input checked="" type="checkbox"/> 6x Eng.:	<input type="checkbox"/> Gator w/ Water Tank:	<input type="checkbox"/> D 5H:	Other Area Resources	
<input checked="" type="checkbox"/> HU:	<input type="checkbox"/> NRO:	<input type="checkbox"/> D 6:	<input type="checkbox"/> Area Mechanic	
		<input type="checkbox"/> 6X6 Engine:	<input type="checkbox"/> Northland College Crew	
		<input type="checkbox"/> IMT Personnel:	<input type="checkbox"/> Solon/Minong High School Crew	
			<input type="checkbox"/>	
Pre-Positioning: No				
Lunch Break Staffing: Yes For those checked above.				

Precipitation Received:

Brule RS: Barnes RS: Gordon RS: Wash. RS: Mellen: Mercer: Minong:

Burning Permit Status: BURN PERMITS CANCELLED

PREDICTED CFFDRS INDICES: TOMORROW

Minong: FFMC 88.6 DMC 25 DC 67 ISI 7.4 BUI 26 FWI 13

FORECASTED STAFFING

TOMORROW NEXT DAY
5 5

Brule Area Fire Behavior Forecast

Date: Tuesday 5/14/13

Location: Barnes Weather Station

Input values (1300): Temp: 73 ° RH: 33 % 20 foot wind speeds: 10 mph Precip: 0

See your local NWS Fire Weather Forecast for more details

Fire Behavior Predictions for 1700

FUEL MODEL	O1a SHORT & MATTED GRASS (2 ton/acre)	O1b TALL STANDING GRASS (4.5 ton/acre)	C4 IMMATURE JACK PINE	C3 MATURE JACK PINE	M1 BOREAL MIX (no leaf) (30% conifer)	S1 JACK PINE SLASH
HEAD FIRE ROS (ch/hr)	99	108	33	12	14	32
CRITICAL ROS	X	X	54	151	47	X
FLAME LENGTH HEAD (ft)	11-12	18-19	6-7	4	6	18-19
FLAME LENGTH FLANK (ft)	4-5	7-8	3-4	2	3	10
PROBABILITY OF IGNITION (%)	94	94	50	76	32	93
SPREAD AREA (acres) 15 minute 60 minute	15 244	17 269	3 51	0.4 6	0.6 9	3 49

Today's Predicted Canadian Indices:

Station	FFMC	DMC	DC	ISI	BUI	FWI
Barnes	90.7	21	46	11	21	16
Minong	91.8	27	68	14	27	21
Washburn	90.1	17	25	8	18	8
Glidden	90.7	21	43	10	21	14

Notes: All models predict surface fire. C4 could experience some torching at the head with gusty winds.

Any rain this morning is so light and scattered it will have a very small impact on the fire behavior shown above. Dry cold front passage after 1800; expect gusty winds to switch to the west and northwest.

Grass fuel models are run at 100% cured.

Critical ROS is the minimum needed before the crowns will become involved in the fire.
Flame lengths given are for the surface only and do not account for any torching or crown involvement.

Prepared by Nicky Martin, WIDNR Brule on 5/14/13 at 10:03 am

OBSERVED FIRE BEHAVIOR

GERMANN ROAD FIRE

Barnes RAWS Weather Data						
TIME	TEMP	RH	AVG WIND	MAX WIND	WIND DIR.	10-hour FUEL
1406	82	26	12	21	SSE	10
1506	85	22	11	21	S	08
1606	87	20	13	27	S	08
1706	87	21	12	29	SW	07
1806	87	23	09	24	SW	06
1906	85	26	07	20	S	06
2006	82	32	11	25	W	07
2106	67	32	11	30	NW	06

← Predicted wind shift

Minong Live Fuel Measurements		
	Red Pine	Jack Pine
<u>DATE</u>	<u>LFM %</u>	<u>LFM %</u>
05/01/13	117.0	122.6
05/10/13	101.4	109.0
05/13/13	104.8	107.1
05/17/13	94.7	104.1
05/23/13	94.8	104.2



Fire Behavior				
TIME	FUEL MODEL	RATE OF SPREAD (chs/hr)	PROB. OF IGNITION (%)	TYPE OF FIRE
1406	C4	34	51	Surface
1406	C4*			Intermittent at head and flank
1506	C4	35	52	Surface
1506	C4*			Intermittent at head and flank
1606	C4	47	66	Intermittent at head
1606	C4*			Continuous at head, intermittent at flank
1706	C4	47	65	Intermittent at head
1706	C4*			Continuous at head, intermittent at flank
1806	C4	38	56	Surface
1806	C4*			Continuous at head, intermittent at flank
1906	C4	28	44	Surface
1906	C4*			Intermittent at head and flank, torching on backing
2006	C4	38	55	Surface
2006	C4*			Continuous at head, intermittent at flank
2106	C4	29	45	Surface
2106	C4*			Intermittent at head, torching at flank
2206	C4	11	24	Surface
2206	C4*			Intermittent at head, torching at flank

C4 is calculated with the default value for crown base height (13')

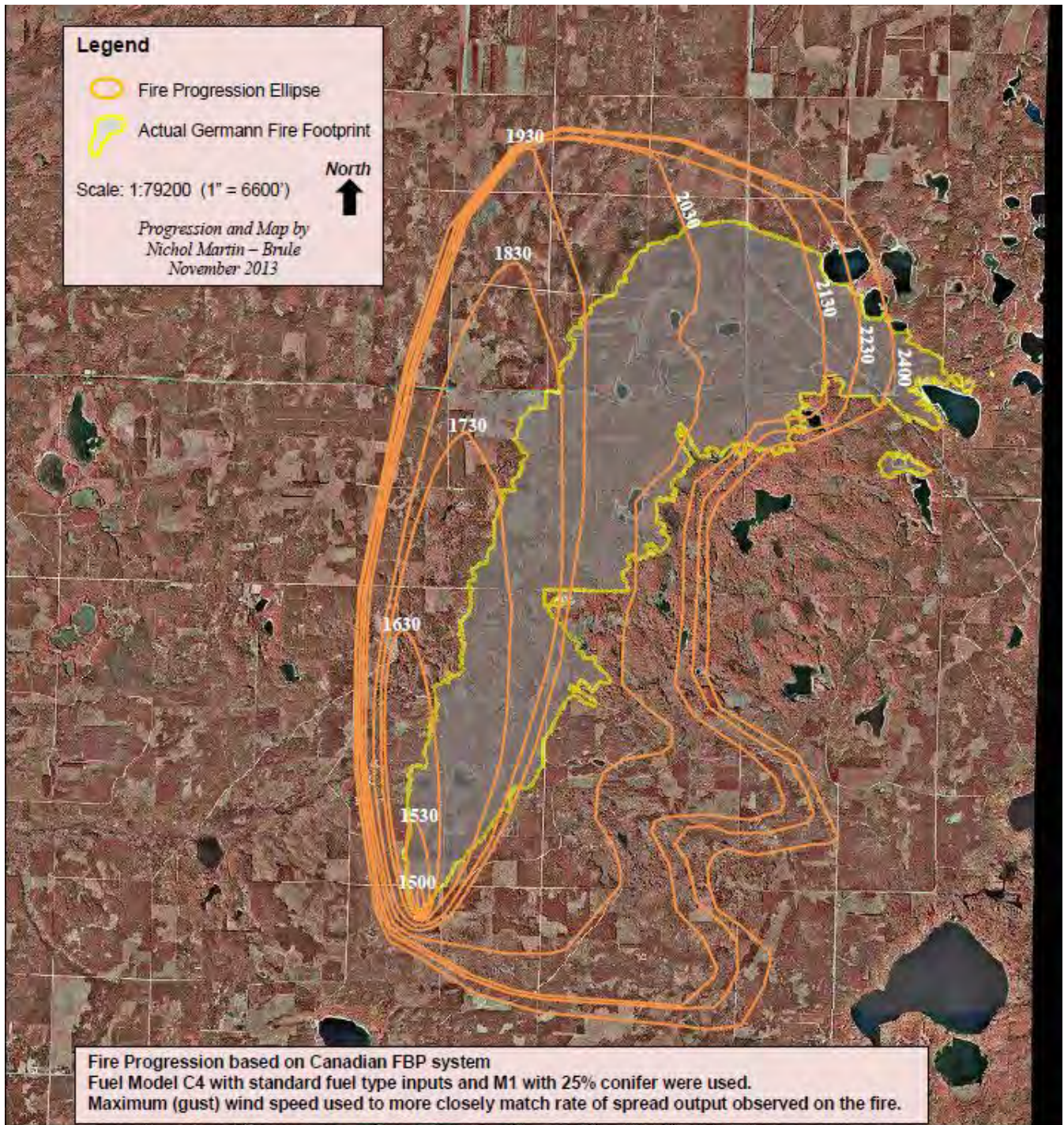
C4 is calculated with an adjusted crown base height value of 3.3'-estimated height at origin area and other points in the fire.*

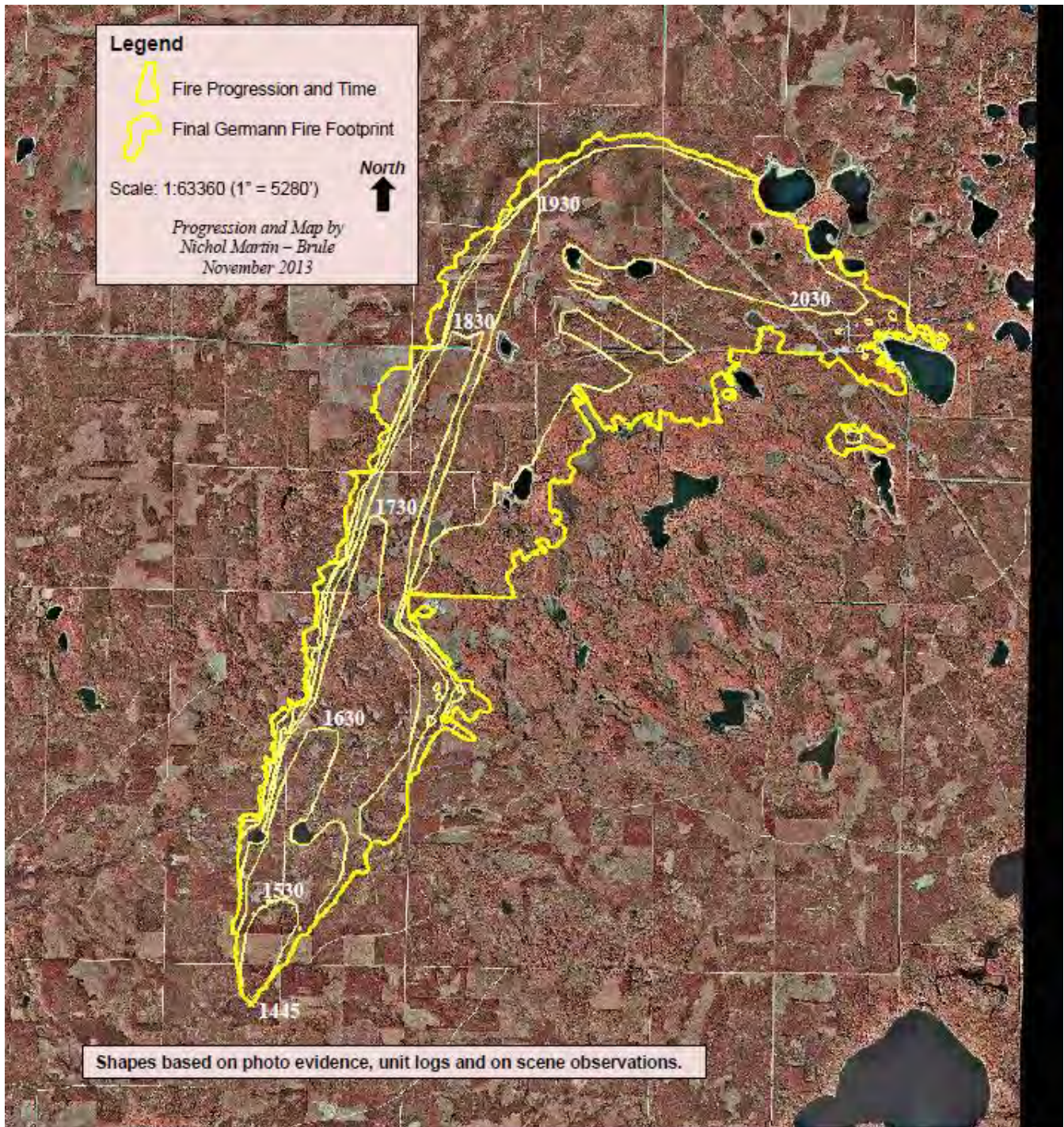
ROS and PIG was the same for both models, the only difference in adjusting crown base height was to the type of fire descriptor.

107% was used as the foliar moisture content for both models

Spotting Distance did not change over time through the day. Calculations are based on a torching clump of 10 Jack Pine, 50' tall, with a DBH of 8", and a downwind canopy height of 50'.

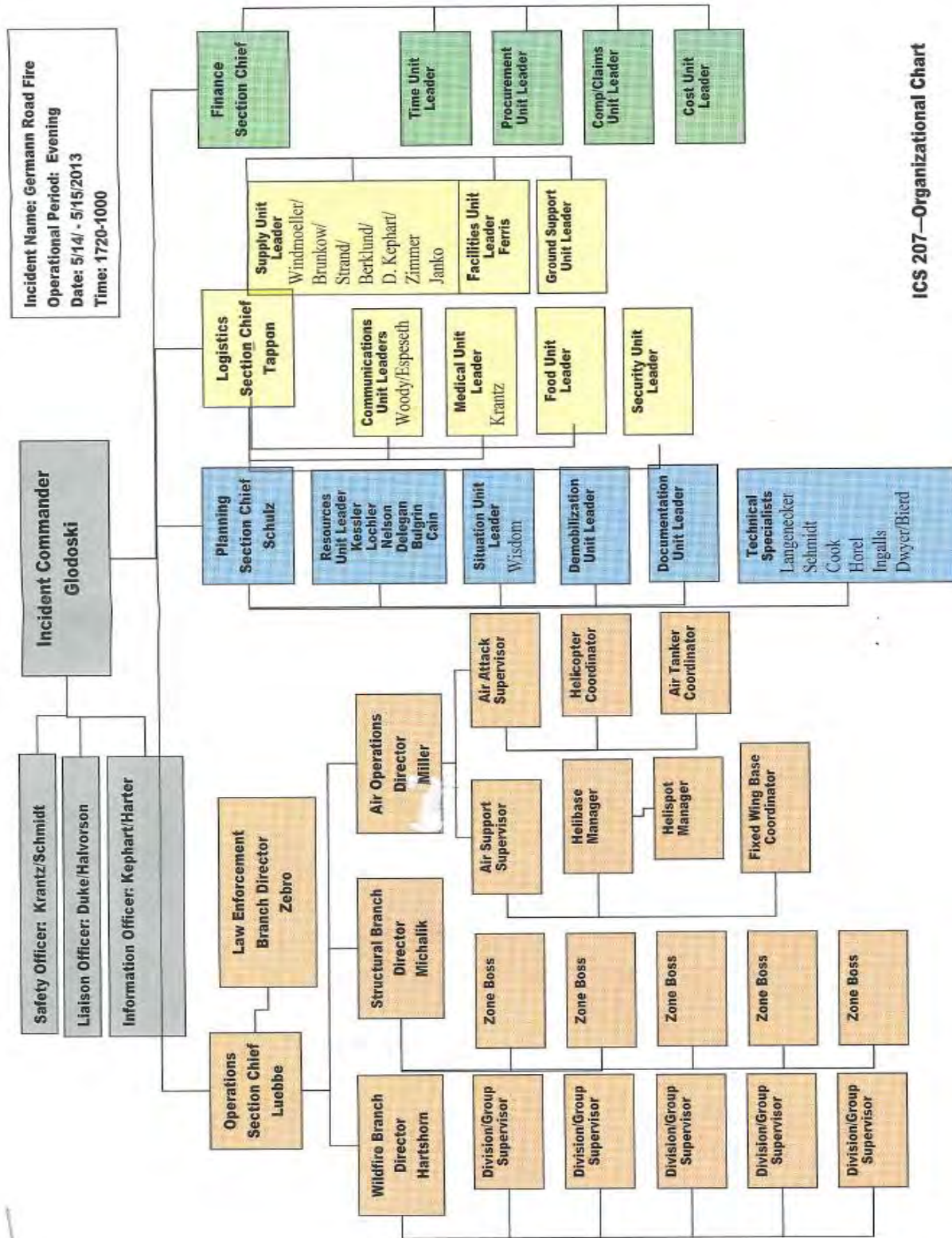
Spotting Distance ranged from 0.2 mi with a 10mph wind, up to 0.7 mi with a 30mph wind.





ORGANIZATIONAL CHART

GERMANN ROAD FIRE



ICS 207—Organizational Chart

RADIO COMMUNICATIONS PLAN

GERMANN ROAD FIRE

INCIDENT RADIO COMMUNICATIONS PLAN		1. INCIDENT NAME	2. DATE/TIME PREPARED	3. OPERATIONAL PERIOD DATE/TIME	REMARKS
		Germann Rd		5/14 1524hrs - 5/15 0600hrs	
4. BASE RADIO CHANNEL UTILIZATION					
SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY/TONE	ASSIGNMENT	REMARKS
DNR Blue OST	Zone:1 Channel:1 Zone:13	Command/ Repeater Command Backup	Rx: 151.3550 Tx: 159.3300 CG: 127.3 (Charlie)	Command/ Operations	*DNR White-Golf* ineffective all Command Wildland Branch Communication on DNR Blue Charlie.
DNR Red	Zone:1 channel:2	Point to Point Tactical	Rx: 151.4300 Tx: 151.4300	Right Construction Group Divisions: Delta, Fox, Head, Indy, Kilo, Head	*Low Band* not able to reach Gordon ICP still used as Point to Point on the Fire.
DNR Brown	Zone:1 channel:9	Point to Point Tactical	Rx: 151.4000 Tx: 151.4000 CG: 146.2	Left Construction Group Divisions: Charlie, Echo, Juliet, Alpha, Bravo, Golf	*Cell Phones* used as Communication link between Structure Branch and Active Group Supervisors
DNR Air-Ground	Zone:4 channel:16	Point to Point Tactical	Rx: 170.475 CG: 156.7 Tx: 170.475 CG: 156.7	Air Attack	
DNR White-Golf	Zone:12 channel:13	Command/ Repeater/ Command Primary	Rx: Tx:	Command/ Operations	
Fire Ground Blue	Zone:1 channel:13	Point to Point Tactical	Rx: 154.2950 Tx: 154.2950 CG: 154.2950	Structure Branch Group Supervisors to Zone 8, 9, 10, 11, 12, 13	
Low Band	N/A	Command Point to Point	Rx: Tx:	Structure Branch Command	

PREPARED BY (COMMUNICATIONS UNIT) Eric J Martin IAIC

NFES 1330

5 ICS 0/66

On Tuesday, 14 May the Germann Road fire was ignited by faulty logging equipment; on the evening of Wednesday, 15 May the fire was 100% contained; on Thursday, 16 May the focus shifted to fire control and mop up. To assist with this last phase of wildfire operations, a new thermal detection tool in the DNR inventory was called upon: airborne **F**orward **L**ooking **I**nfra**R**ed - FLIR. On Thursday afternoon, a request was sent to the Oshkosh DNR hangar, base for one of the states two FLIR aircraft (the other is based in Rhinelander) to fly over the fire and use the FLIR's heat-sensing capability to map any remaining active fire and hot spots. After returning from other fire patrol and air attack duties, the pilots readied the FLIR aircraft and departed Oshkosh to the fire. By sunset, the crew, pilot and Tactical Flight Officer (TFO) had mapped the fire's 8000+ acres, locating several ongoing small fires within the fire perimeter as well as numerous hotspots. While en route to Solon Springs airport, the data was saved to a DVD which was viewed by the Germann Road Fire Incident Commander (IC) immediately after landing. Upon viewing the FLIR video, the IC was delighted at being able to see exactly where he needed to focus his suppression and mop up resources instead of spending many hours searching an area approximately two miles by ten miles in size to locate hot spots.

On Wednesday, May 29th the FLIR crew made a second survey of the entire Germann Road Fire. This patrol found no hot spots within the fire perimeter.



FLIR image from Germann Road Fire



Wisconsin DNR Cessna Skymaster with FLIR system

Germann Road Wildfire

Northwest Wisconsin

2013 May 14th -15th

Amanda Graning

Fire Weather Program Leader, Duluth WFO

A significant wildfire began in the Town of Gordon in Douglas County the afternoon of May 14, 2013. According to the Duluth News Tribune, the fire was first reported just after 2 p.m. Tuesday near Germann Road (southeast of Solon Springs, WI) at an active logging site.



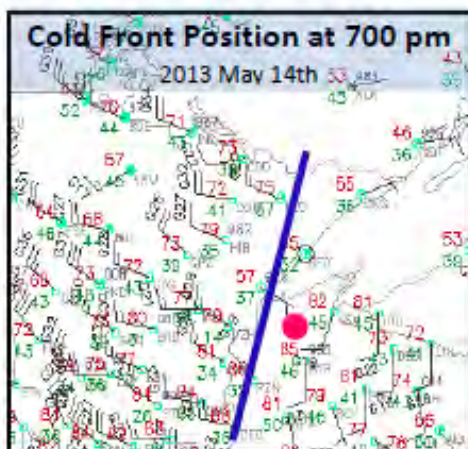
The fire made a run into the town of Highland and destroyed several dozen structures. At last report by the Wisconsin Department of Natural Resources (DNR) the fire had claimed a total of 47 structures, including 17 homes and cabins, 15 garages, 9 outbuildings, and 6 unknown. No injuries were reported as firefighters battled the largest forest fire in northern Wisconsin has seen in 33 years. The cause of the fire is listed as equipment associated with logging operation.

The fire was declared 100 percent contained at 900 p.m. on May 15th with all public roads open. The Wisconsin Department of Natural Resources currently reports the size of the burned area to have been 8,495 acres.

Wednesday evening, May 15th, Governor Scott Walker, signed executive order #103 declaring a State of Emergency in Response to the Forest Fire.

WEATHER

The fire season was slow to get going this spring due to a snowy and cool April and start of May. A National Weather Service (NWS) Cooperative Weather Observing Site at the DNR office in Gordon, WI recorded 26.1 inches of snow for the month of April with an additional 3.9 inches of snowfall through the first week of May. This site reported at least 1 inch of snow on the ground through May 5th. This May also began much cooler than normal with highs only in the 30s and 40s through the first week. The climatological normal high temperature at Gordon, WI during this time of year is in the low 60s. The cool spring led to the late green-up and record setting ice-out dates on many of the area lakes.



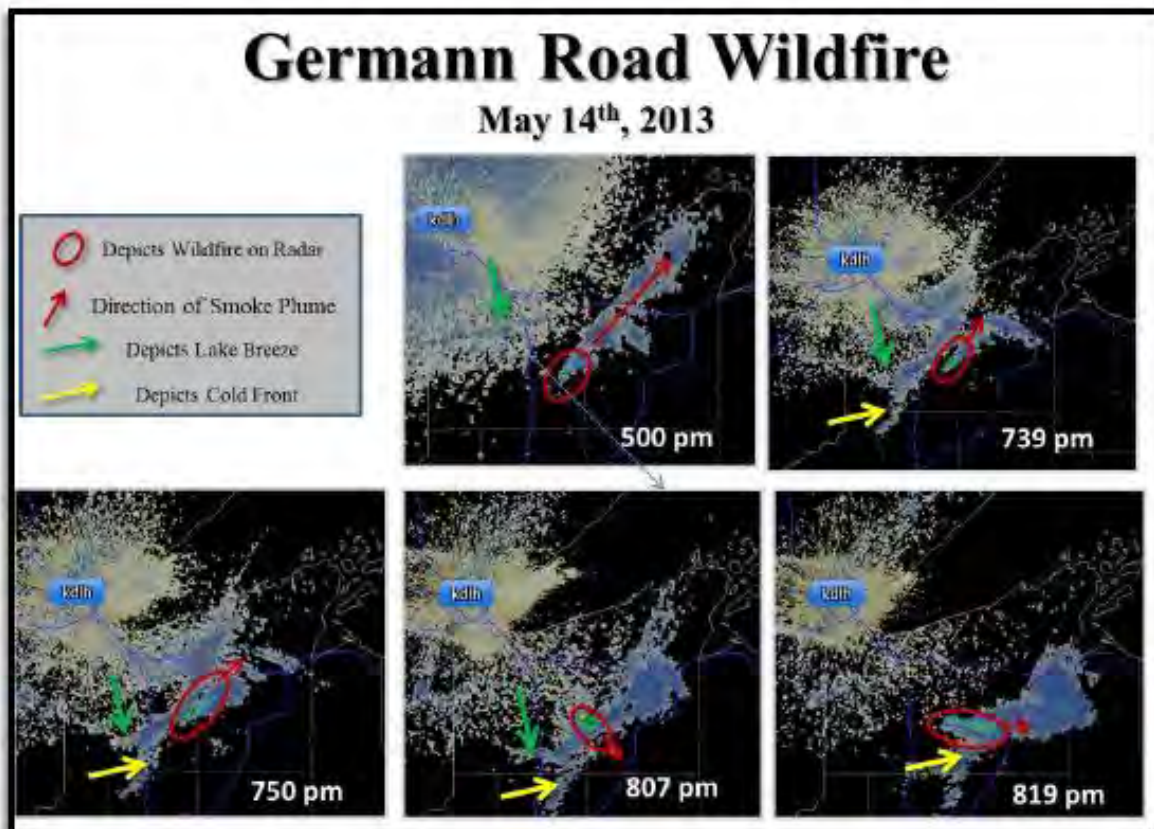
However, the weather pattern made an abrupt shift through the second week in May and high temperatures soared well above normal. A nearby automated weather station in Barnes, WI (BRNW3) recorded a high temperature of 87 degrees the afternoon of the Germann Road Wildfire. This is 20 degrees above the climatological normal and only 4 degrees shy of the record daily high for Gordon, WI for this date.

The very warm temperatures were the result of a surge of warm air from the south, ahead of a strong cold front. The nearest automated weather station to the fire at Barnes, WI showed winds were out of the south sustained 10-12 mph with gusts of 20-25 mph through the afternoon.

The cold front arrived at the fire around 730 p.m. and brought a wind shift to the northwest, along with higher gusts around 30 mph. The greatest sustained wind at the site for the day was 12 mph.

The near-record warm temperatures allowed relative humidity values to fall to the 20-25% range at the time the fire was detected. However, relative humidity increased to 30% with the frontal passage and arrival of stronger winds, and continued to rise into the 40-50% range through the evening. Poor relative humidity recovery and continued gusty west to northwest winds through the night of the 14th contributed to the growth of the fire.

The graphic below is a series of radar captures from the KDLH radar in Duluth, MN the evening of May 14th. These radar captures show the location of the wildfire, along with the interaction of the lake breeze and cold front.



NATIONAL WEATHER SERVICE DECISION SUPPORT

Lead forecaster on duty at the NWS Weather Forecast office (WFO) in Duluth, MN noticed the wildfire on the KDLH radar and visible satellite imagery around 1600 L. He made a call to the USFS dispatch to confirm they were aware of the fire and to offer any assistance with forecasts.

The first SPOT request for the Germann Road Wildfire was submitted to WFO Duluth at 1717 L and was completed and issued in less than 20 minutes. Due to the fast approaching cold front, an updated SPOT forecast was sent at 1913 L to emphasize the wind shift that would occur at the fire. The Duluth WFO issued a total of 8 SPOT fire weather forecasts for this wildfire between the dates of May 14th and May 17th.

After hearing of evacuations on social media and through local news sources, the lead forecaster on duty called the Douglas county sheriff to offer assistance with their evacuation by broadcasting a message on the All Hazards NOAA Weather Radio (EVI). The county dispatch said none was needed at that time. A call was then made to Bayfield County to again offer the use of the All Hazards NOAA Weather Radio to broadcast emergency evacuation information. The dispatcher stated they were too busy to send a fax with the evacuation details so the message was verbally relayed by phone. The Duluth WFO issued the first Civil Emergency for an Evacuation due to the rapidly growing wildfire at 2047 L. Updates to this message (EVI) were sent at 2102 L on the 14th and 0049 L on the 15th. Further follow-ups on road closure and evacuation information were sent via a Public Information Statement.

The lead forecaster made calls to the Public Information Officer and Safety Officer at the Incident Command the morning of May 15th in order to convey the main weather threat of the day. The forecast was calling for afternoon relative humidity of around 20% and gusty winds around 20 mph. This was the first verbal contact with anyone associated with the wildfire operations.

A link to information about the wildfire was posted in the News of the Day section of the Duluth NWS Homepage as well as on the Duluth Facebook Page.

The Duluth NWS office conducted three media interviews on May 15th regarding the Germann Road Wildfire; including Wisconsin Public Radio, Fox21 TV and the Milwaukee Journal-Sentinel Newspaper.

ADDITIONAL NEWS REPORTS

“The fire department crews worked all night, and they saved 77 structures, including 42 homes,” said Larry Glodoski, incident commander of the firefighting effort for the Wisconsin Department of Natural Resources. “They did their triage ... and then tried to save the homes and cabins they thought had a chance.”

In all, about 100 residents were evacuated from the areas around Rock Lake, Loon Lake, Murray Lake, Beauregard Lake, Sand Lake, Catherine Lake, Ellison Lake and from Potawatomi Estates and the Village of Barnes. The Red Cross helped shelter and feed about 22 people Tuesday night in the Drummond School, where Glodoski gave his update to homeowners eager for any news. The center was expected to stay open Wednesday night for anyone unable to return home, or with no home to return to.

All that remains of this home on Sand Lake near Barnes, Wis. is the fireplace after a wildfire swept through the area late Tuesday night, May 14, 2013. (Bob King / rking@duluthnews.com)

Read the article: [Wisconsin wildfire 95 percent contained, fire line is holding \(with video\)](#)

Read the article: [Wisconsin wildfire's wrath was swift, severe](#)



COMMUNITY PREPAREDNESS ASSESSMENT GERMANN ROAD FIRE

A forest fire of this magnitude gives the WDNR an opportunity to take a look at the fire prevention and community preparedness activities that have been conducted in the area at least five years prior to the fire. This can give a sense of how proactive the WDNR Division of Forestry has been in educating the public on the wildfire danger of the area, and to determine which activities the Division should conduct to teach people how to prevent wildfires and how to prepare their properties for the inevitable wildfire.

The Germann Road Fire also provided an opportunity to study the developed properties within the fire perimeter to get a sense for why some homes survive a wildfire and others do not.

PRE-FIRE ASSESSMENT

The Towns of Gordon and Highland are on Wisconsin's list of 'communities at risk' (High and Very High risk, respectively). They also reside in Fire Landscape 15, a high priority area for wildfire education, planning, and fuels reduction efforts. An inventory of the efforts that have taken place in Gordon and Highland and the surrounding area over the past five years demonstrates an extensive array of methods used to educate the public and to better prepare the communities for wildfire.

Fire Prevention Education/Awareness Efforts

Fire prevention is traditionally defined as "those fire management activities concerned with the attempt to reduce damage from fire through education, engineering and enforcement." These activities are intended to reduce wildland fire ignitions and the risks they pose to life, property and natural resources. Fire prevention in Wisconsin is a state and locally integrated program. Fire prevention efforts typically occur in the spring months leading to annual fire seasons and target leading fire causes (e.g. debris burning and equipment).

Specific fire prevention efforts conducted by the Division in close proximity to the fire (2009-2013):

- Utilized "Wildfires Cost You" fire prevention campaign materials such as newspaper ads, posters, decals, banner, restaurant tents & placemats (2010-2012)
- Posted wildfire prevention billboards with focus on permit restrictions located on main highways in Solon Springs, Danbury, Spooner, and Grantsburg (2012)
- Partnered with Dept. of Transportation to use six electronic message board signs on main arteries in Douglas, Washburn, and Burnett Counties with fire prevention messages (2012-2013)
- Partnered with Minnesota to create a fire prevention campaign "Wildfire: The Next Storm" focused on increasing awareness associated with an increased fuel load in northwest Wisconsin due to the July 2011 wind storm (e.g. WPR radio ads, flyers, news releases, etc.) (2012)
- Implemented Emergency Burning Restrictions in storm damage area (2012)

- Purchased ads through a statewide newspaper buy with Customized Newspaper Association with messages focused on burning permits, storm damage and making sure fires are out (2012-2013)
- Utilized “Think your fire is out? Check again!” fire prevention campaign materials such as newspaper ads, restaurant placemats, flyers and roll-up banners (2013)
- Issued 6-10 statewide news releases every year targeted at media outlets, focusing mostly on times leading to elevated fire danger (annual)
- Coordinated a “Spark Your Knowledge” magazine ad through the Great Lakes Timber Producer Association (2009)
- Coordinated a “Create a fuel break” magazine ad through the Wisconsin Woodlands magazine (2009-2013)
- Maintain seven Smokey Bear adjective level signs in the towns of Gordon, Solon, Wascott and Barnes; eleven in Douglas and Bayfield counties combined (annual)
- Partner with eleven business Emergency Fire Wardens who issue DNR burning permits; 29 in Douglas and Bayfield counties combined (annual)
- Incorporated the weekly DNR Wildfire Report on the Town of Gordon website (2011-2013)
- Participate in 4th of July parade in Gordon and Solon Springs with Smokey and fire equipment (annual)
- Conduct regular fire prevention school programs in Solon Springs and Minong focusing on kindergarten-1st grade and 5-6th grades (annual)
- Maintain an estimated dozen poster boards in Gordon, Solon Springs, Wascott and Barnes (annual)

Home Ignition Zone Assessments and Structure Zone Maps

Modeled after historic fire-prone property assessments that were conducted periodically in the area for many years, Home Ignition Zone (HIZ) assessments have been completed on hundreds of properties in the area over the past ten years. Some were in preparation for the Cumberland/Brule Mock Fire (2005). Many others have been completed on an annual basis using State Fire Assistance – Hazard Mitigation funds. As developed properties are assessed, a GPS point and photo are taken. That information is linked to the structure zone map book for Douglas County.

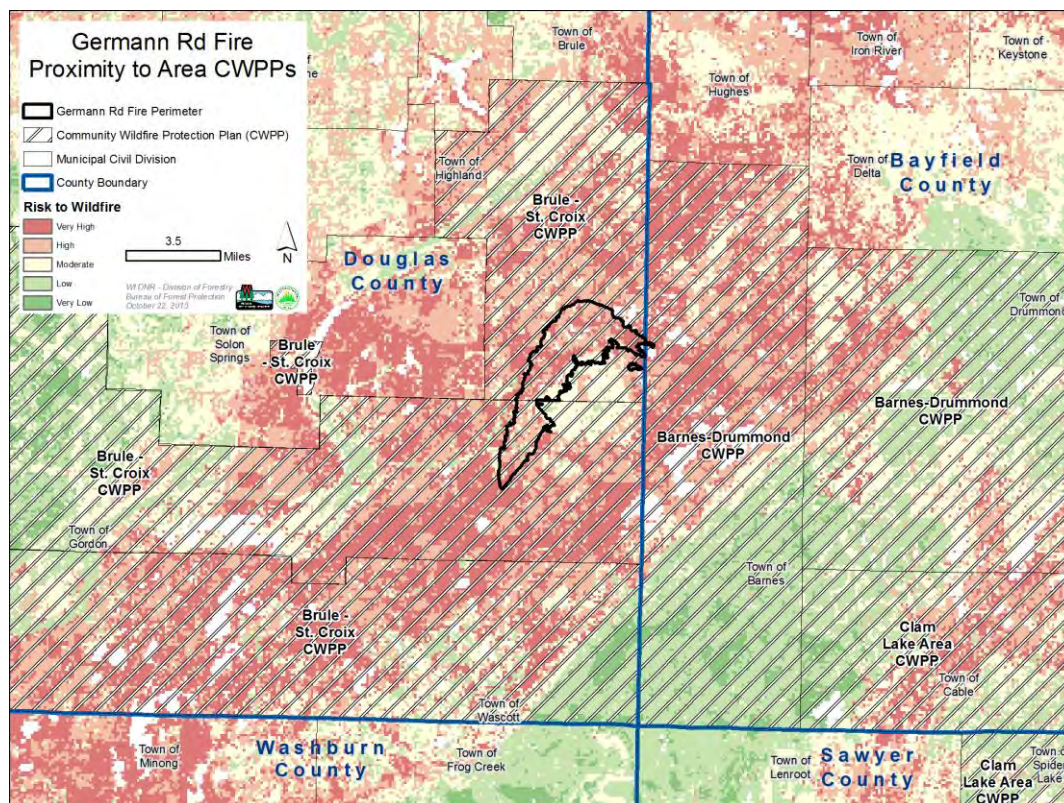
As a response to the July 2011 storm in NW Wisconsin, WDNR staff presented a training session called “Home Ignition Zone Training for Fire Departments” on Dec. 3, 2011 in Shell Lake. The training was presented to twenty-five firefighters from ten different fire departments representing Burnett, Douglas and Washburn counties. The session was presented as a train-the-trainer event which means that each participant received the necessary knowledge to do a complete and concise HIZ assessment of each

property, and then would be able to bring that training back to their respective fire departments. Some participants in that training session assisted with the completion of HIZ assessments in the Gordon-Highland area.

The 2007 Douglas County Emergency Response Map Book (a.k.a. structure zone map book) was updated in 2013 to reflect on-the-ground changes and integrate new ideas to the functionality of the book. The updates had just been completed when the Germann Road Fire occurred and map books had not yet been printed.

Community Wildfire Protection Plans in the Area

Community Wildfire Protection Plans (CWPP) have been created in Wisconsin since 2005. The plans bring community stakeholders (particularly Town boards, fire departments, and land management agencies) together to craft community solutions to wildfire problems. The Brule-St. Croix CWPP was completed in November 2011 for the Towns of Gordon, Highland, and Wascott and the Village of Solon Springs, all in Douglas County. The municipalities in this plan are directly to the west of the municipalities in the Barnes-Drummond CWPP in Bayfield County, completed in 2005. Most recently, the Clam Lake Area CWPP was completed for the municipalities of Cable, Grandview and Namekagon (Bayfield Co), Spider Lake and Round Lake (Sawyer Co), and Gordon and Shanagolden (Ashland Co). See the map below for CWPP locations in relation to the Germann Road Fire.



Brule-St. Croix Community Wildfire Protection Plan (CWPP) Mitigation Strategies

The interest for the creation of a CWPP in the area was the product of the Cumberland/Brule Mock Fire in 2005. The planning process began in early 2010 when the Brule Area WUI Specialist began presenting information about a CWPP to the local town board members. A formal presentation was given at the Gordon Town Hall June 10, 2010 with speakers from the DNR and participants from the Towns of Gordon, Highland and Wascott. By fall 2010, the three towns and the Village of Solon Springs began the CWPP process. Since the plan's completion in November 2011, town board, fire department, and Forestry staff have attended semi-annual meetings to implement mitigation strategies identified in the plan; the following are some examples:

Town of Highland Projects

1. Completed over 15 miles of right of way reclamation in areas of pine forest, removing all trees and brush within the 66 foot right of way and created a mowing schedule to hinder woody encroachment.
2. Educate residents about wildfire prevention and Firewise concepts through town events such as Firewise Fun Days and Town Hall meetings.

Town of Gordon Projects

1. Removed woody fuels in right of ways around some subdivisions in areas of pine forest.
2. Uses Fourth of July parade to promote Firewise and wildfire prevention.
3. Educate home and cabin owners about Firewise concepts via door to door contacts and home ignition zone assessments.
4. Created a brush collection site for area property owners.
5. Added links to weekly wildfire reports, national communities at risk report, wildfire cause and occurrence graphics, Fire Adapted Communities web page and the Point of Origin newsletter to the Town web site.
6. Created a Firewise Communities web page which includes information specific to the CWPP. <http://www.gordonwi.us/Firewise/index.html>

Town of Wascott Projects

1. Educate and inform property owners of the threat of wildfire and how to protect homes and cabins via town meetings and mailings.
2. Added links to weekly wildfire reports, national communities at risk report, wildfire cause

and occurrence graphics, Fire Adapted Communities web page and the Point of Origin newsletter to the Town web site.

3. HIZ assessments have been completed on all properties under the protection of the Wascott F.D. as a planning strategy for a large wildfire in their area.
4. Establishment of two brush collection sites.
5. Host an annual Fire Department Open House to meet the residents and discuss departments operation and Firewise and wildfire prevention concepts.

Village of Solon Springs Projects:

1. Sent a Firewise mailing to each property owner.
2. Conduct HIZ assessments by request of homeowners.
3. Held fuels reduction and chipping events in the Village area.
4. Promote Firewise and wildfire prevention messages with Town Hall presentations and Fourth of July festivities and parades.

Wisconsin DNR Projects:

1. Established wildfire prevention and Firewise educational classes and events in the Northwoods School District.
2. Provide Firewise and wildfire prevention materials to cooperating towns, villages, and agencies.
3. Provide an opportunity to share educational and mitigation strategies through the facilitation of semiannual CWPP meetings.
4. Assist in any way needed to complete goals of the CWPP for cooperating towns and villages.

On May 20th, six days after the Germann Road Fire, a team assembled at the Barnes Ranger Station to conduct post-fire research on structures within the perimeter of the fire. Two person teams were created, assigned to zones, and given the following handouts:

- Talking points about what we were doing, info about the fire, wildfire history of the area and contacts for community assistance resources.
- An outline for the assessment strategy.
- Burning and Disposal of Wood Wastes Fact Sheet.
- Structure Survival Checklist forms and instruction sheet.
- Maps of the fire, depicting the zones.
- Property owner question forms, should they be home at the time of the assessment and willing to answer some questions.

The purpose of the research was to assess structures and the home ignition zone within the perimeter of the fire to determine specific ignition causes resulting in the destruction of homes and to assess structure/vegetation conditions and firefighter assistance to determine reasons for structure survival, damage, or destruction.

The objectives of the research included:

1. Assess structures within the fire perimeter to determine building construction, vegetation type and configuration, topography, natural and man-made fuels, and property owner Firewise practices.
2. Collect photos (before, during and after) that will contribute to assessment findings.
3. Interview members of fire agencies on scene to gain insight as to what kind of firefighter assistance properties received.
4. Interview homeowners to gain insight on their knowledge and/or implementation of Firewise practices.
5. Inventory education, planning, and fuels reduction efforts that have taken place in the area in the past five years – both Hazard Mitigation grant funded and local staff activities.
6. Create GIS map of structure location and status (damaged, destroyed, survived).

WDNR communications specialist Matt Ahrens accompanied Division staff on May 20th to video b-roll of the fire and to interview property owners and fire control staff. Footage has since been used in the creation of a 4-minute video titled “Be Ember Aware.” <http://dnr.wi.gov/topic/ForestFire/property.html>

POST-FIRE STRUCTURAL ASSESSMENT RESULTS

Due to missing information in the forms, the term “at least” was used in the results below to describe what level of information is known. Lessons learned and recommendations are written below in *italics*.

Properties within a ¼ Mile Buffer around the Fire

For the purpose of determining how many structures outside of the fire perimeter could be considered threatened, WDNR staff used aerial photography to locate any structure that looked to have a roof or be a mobile home within a ¼ mile buffer around the fire. Staff counted 184 structures (93 Douglas County count using 2009 data, 91 Bayfield County count using visual count from 2013 imagery). Because of the varying ways the counts were made, an exact number should not be used, rather an approximation is preferred. The suggested wording of the approximation is, “200 structures were considered to have been threatened in a ¼ mile buffer outside the fire perimeter.”

Properties within the Fire Perimeter

There were estimated to be more than 270 structures on approximately 100 properties within the perimeter off the fire. For this research, WDNR staff were able to assess 96 of those properties. Property sizes ranged from small lake lots to parcels 39 acres in size (the average was 9.6 acres). The average land value was \$36,900. In some cases, the perimeter of the fire passed through a property and some or all of the structures were outside the perimeter. Those structures were all counted in this research, with the assumption that fire suppression efforts on those properties are what protected the structures. Given that those structures were counted in this project and may have also been counted as threatened structures within the ¼ mile buffer is another reason that approximate figures should be used rather than exact numbers when discussing the number of structures threatened by the Germann Road Fire.

The average driveway length was 378 feet (range: 6 to 2904 feet). The National Fire Protection Association (NFPA) recommends that driveways longer than 300 feet have turnouts or turnarounds to provide emergency vehicles the opportunity to quickly and safely exit a property. On more than one third of the properties, the primary structure could not be seen from the road.

There does not appear to be a connection between driveway length and primary structure survivability. For example, six homes were lost on properties with driveways shorter than 150 feet in length.

The average driveway width was 17 feet (range: 9 to 50 feet). Thirteen driveways did not meet the NFPA standard of 12 feet wide (6 of those homes were destroyed). *No primaries were lost on properties with a driveway wider than 20 feet.* At least 13 of the properties had less vertical driveway clearance than the 13.5 foot NFPA standard. *There does not appear to be a connection between primary structure survivability and vertical driveway clearance.*

Gates were documented on 15 properties. On five of those properties, the primary structure was destroyed (33%), compared to a 22% primary destruction rate on properties without gates.

Some quality of fuel break was visible on at least 67% of the properties. Most often cited were the lawn, driveway, or proximity to a lake as fuel breaks. In other cases the use of rock/cement landscaping materials or exposed soil from a recent improvement also functioned as a fuel break. The majority of features classified as fuel breaks did not seem to be intentionally constructed as a means to mitigate wildfire threat. The yard/lawn was mowed or otherwise kept short on at least 67% of the properties. Leaves were kept raked up on at least 42 of the properties (43%).

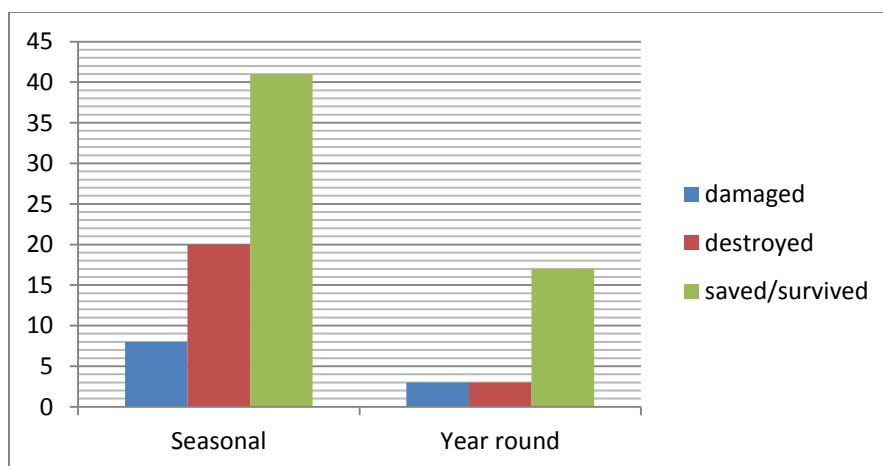
Some level of active fire suppression assistance was documented or presumed to have occurred on at least 38 properties. Assistance came in the form of structures being “pretreated,” fire actively suppressed, tractor plow furrow present, flammables cleared away from the areas adjacent to structures, drip used to back burn vegetation, or structures foamed. On these properties, 23 primary structures survived without damage, 8 were damaged, and 7 were destroyed.

Primary Structures (aka ‘homes’)

There were 48 cabins, 35 houses, 10 mobile homes, 1 bar, 1 commercial pole building, and 1 LP storage facility in the properties assessed. Average assessed value was \$80,000. Values ranged from a \$3,500 seasonal mobile home to a \$313,000 year-round residence (both destroyed). *There does not appear to be any correlation between assessed value and whether or not the primary survived or was destroyed.*

More seasonal homes were destroyed than year round residences (see table). Proportionally, 29% of the seasonal homes were destroyed whereas only 13% of the year round homes were destroyed. Many homes that were not destroyed were declared “saved” by fire suppression efforts.

A clearer understanding of what that term ‘saved’ means is desired.



The average distance between the primary structure and the nearest vegetation that could be considered unmanaged was 24 feet. *As expected, the greater the distance between structure and vegetation, the*

greater the survival rate of the primary. The average distance to vegetation on properties where the home was destroyed was 19 feet. The average distance to vegetation on properties where the home was damaged was 16 feet. *The average distance to vegetation on properties where the home survived was 27 feet.* NFPA recommends a fuel modification area extending at least 30 feet from structures. The assessment showed that six primaries with more than 30 feet of defensible space were destroyed. There was only one primary structure that was destroyed after the 37 foot clearance distance. That particular structure was a seasonal cabin in close proximity to outbuildings which also burned as a crown fire moved through.

The type of fire that occurred in the home ignition zone was documented on 69 properties (note: some properties had more than one type of fire on the property, e.g. surface fire and a building fire). The most common type of fire was surface fire (noted 44 times); 24 homes survived, 11 were destroyed and 8 were damaged. Crown fire was noted on 8 properties. On five of these, the home was destroyed. Firebrands (flying embers) were noted 14 times. Two homes were destroyed, three were damaged and 9 survived. One of the homes that was destroyed also had crown fire and exposure fire near the home.

Exposure (i.e. structures on fire near the home) was noted nine times. In five cases, the home was destroyed; the other four times, the home was damaged. *Buildings are considered to be 'long term heat sources,' with a tendency to burn much longer than vegetation. The structure-to-structure loss on this fire is significant and may cause for renewed emphasis on keeping structures more than 30 feet apart. In cases where that distance is not possible, emphasis needs to be placed on the creation of a 30-foot defensible space around garages and outbuildings in general and within 30 feet of homes in particular.*

Outbuildings

At least 171 outbuildings were in the path of the Germann Road Fire. Most of the buildings were tool sheds, garages, and outhouses, with an assortment of miscellaneous additional buildings (e.g. cabins, campers, pole sheds, wood sheds, etc.). In total, 81 were destroyed (47%), 22 were damaged (13%) and 62 were saved or survived (36%); information regarding the status of six outbuildings was not recorded. When conducting the assessments, it was easy to see why such a high percentage of outbuildings were destroyed, as they tended to be in close proximity to unmanaged vegetation. The average distance between outbuildings and unmanaged vegetation was ten feet. Broken down by survivability:

- Average distance between an outbuilding that was destroyed and unmanaged vegetation was six feet.
- Average distance between an outbuilding that was damaged and unmanaged vegetation was four feet.
- Average distance between an outbuilding that was saved or survived and unmanaged vegetation was 17 feet.

Beth Bartol – Primary Dispatch

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
1445		Highland Tower	223 degrees, small white, growing
		Brule Tower	201 degrees, 12 - 13 miles (initial cross)
----		(notes)	S19 T44N -R10W
----		Douglas/page	Gordon FD, Germann Road/Doetch Lane passerby, no structures
1451			plane launched (from Hayward)
----		(notes)	Med grey
----			1 mi. north
1456			C250
----			Barnes 1, Barnes 2 in service
----	Barnes Ranger	Brule Disp	Name? Germann Fire, IC? (Eric Martin)
----		Brule Disp	Washburn 1 to Brule
----		(notes)	Douglas Team Leader
----		(notes)	Patrol
----		Germann IC	Crownfire, 50 acres, 1/4 spotting
----		Germann IC	request Heavy Dozer (Disp filled thru CBL/@ Minong)
----		Germann IC	request 2nd Heavy Dozer
----	MIFC	Dispatch	Phone call with Sheldon Mack to order CL215. Lat/Long 46.2802193 91.6648668 122.925
----			Jay to fire from dispatch (will call Douglas County)
----	Mellen Ranger	Dispatch	Mellen Ranger move to Ashland
----		radio traffic	(heard Haskins dozer to Barnes - dispatch did not order that one)
1530			Sheldon & Ron
----	Dispatch	Germann IC	SPOT FCST
----			Kelly 3969 (Mercer Ranger en route to address, separate fire call)
----			Mellen
----			Air-to-Ground or RED
----			Brule Ranger to fire
----			Washburn Ranger to Brule
----			Additional Ranger from south
----			Pattison Ranger to Hawthorne
----			Washburn 1
-----		Ron Stoffel MIFC	Phone call/ CL215 diverted to MN fire. Two FIRE BOSSES available instead - one at Brainerd and one at Twin Cities. 800 gal/ea Tandem 1/2 hour ETA before leave location

Beth Bartol – Primary Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
-----		Brule Disp	Phone call to AFL (answered but no conversation with dispatch)
-----	Germann IC (Martin)	Brule Disp	CL215 diverted - authorization to order Fire Bosses? (YES)
-----		(notes)	Park Falls
-----		(notes)	4 HU
-----		(notes)	3 Rangers + 1
1635		Luebbe	(Gordon Forester)
1638		Ginger (MIFC)	confirming 2 Fire Bosses - first 25 minutes, second 37 minutes
-----		GOR Forester	At ICP (Ops Chief)
1642		(notes)	done with 2nd DNR SEAT, load & head north to rotate
1653		P.Falls Disp	Phone call, 2 Rangers, 2 Heavy Units, Hayward Ranger +1, Ldy 1 & Win 1
-----		Phil Miller	Phone? from chief pilot, Launching from Siren & talk to Air Attack
1703		Dan Crocker	218-722-9411 ext 12, 715-216-0119w, 216-6381 pcell, T. Duke - CBL & Spooner
1717		(notes)	Completed (SEAT?)
1720		Runstrom (CBL)	Phone call: Tanker 814 on ground Solon Springs filling, will flight follow with Phil Miller
1722		C250	At Rocky Lake - widening at the base/ evacuated
-----		FS 262	(forest service engine)
-----		(notes)	Catherine Lake
-----		Luebbe	Phone call from IMT (Ops Chief) Larry Glodowski = IC and ICP is at Barnes
1730		CA8	overhead Germann Fire and in contact with Air Attack
-----		Brule Disp	phone to RFL - who should get PIO calls?
-----	Brule Disp		return phone call from Tom Duke (RFL) I'm on the way yet - 1 hour ETA ICP PIOs: Kevin w/Neil Kephart 715-69-2514 cell
-----			Trent is backfilling
1746		Brule Disp	Phone call to Pattison 1: Disp contacted MN DNR Cloquet Fire (P. Wherly) to back you up if needed
1800	Brule Disp		Phone call: CBL, new lat/long? Call to Logistics
1801		CA8	Quick Strike??
1803		CA8	new lat/long 46.33952 91.64921
-----			Kessler - contact Air Attack (Don Luebbe)

Beth Bartol – Primary Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
1808		Brule Disp	Phone to Glodowski (IC) Quick Strike? YES
-----		Brule Disp	Call to Tom Duke Yes - dispatch call to Madison
-----		Brule Disp	Call with R. Sheffer (608-279-3621) Order 415s. Ralph initiating 209 - Fire number? (14)
1841		(notes)	Brule Dispatch putting towers down except no on-the-ground confirmation from Dairyland. (Cell call from Dairyland Tower - OK - flat tire)
1856		DNR SEAT base Mgr	(John Kiel) 2100 is sunset time, 715-566-4317w
-----		(notes)	T814
-----	Brule Disp	IMT Ops Chief	order 12 HU, 6 Rangers (+8)
-----	Brule Disp		Heather Berklund Logistics, her cell (715-439 3870)
-----	Brule Disp		Phone from Dairyland Tower, flat tire but have spare and called relative to help
1857		Woodruff Disp	Phone call: order from Command Center - 4 Heavy Units - sending TOM 1, TLK 1, RHN 1, MRL 1, WIN 1
1908	Brule Disp	ICP	Terry Trapp 715-532-7799
-----			order 2 mechanic to Barnes
-----			order palletized supplies (foam, hose, etc)
-----	Kessler(IMT)	Brule Disp	no answer
1951	Brule Disp		Phone from Dairyland Tower - tire fixed I'm back on the road
1954		BRF Disp	Scott Loveland BRF 1 - cancelled
2008		ICP	Heather Berklund: ICP moving
2019		CBL Disp	Minong Ranger, Minong 2, SPN 2 and Klahn as Ranger/ SEATs and CBL Patrol till 21:00
2029		Comm Center	R. Sheffer: OK - yes on ICP move from Barnes to Gordon
-----		notes	Circle Lk Rd & Moon Lk
2100		Patrol	(Phil Miller) Landing Solon and I can brief if someone picks me up. Leo over fire, only 1/2 hr - back to Eau Claire
-----			Brule Disp asked Hartshorn if he copied plane (no response)
2106		USFS	(J. Grant) Phone call - status of forward progress of fire - impact FS property in 45-8? (call ICP)
2109		Brule Disp	Phone Call to Tom Duke RE Phil's request to brief & be picked up (no answer, left msg.)
2915		Brule Disp	Phone Call to Pattison Station (O'Flanagan) - go home & get some rest
2200	IMT	Brule Disp	Phone Call to IMT (Paul Cook) RE Phil Miller

Beth Bartol – Primary Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
2240	IMT	Brule Disp	For incoming units - Logistics land line? 715-376-4351, East on Y, under train overpass, and creek, 1 mile
2315		ICP	Terry Trapp Request fcst for tomorrow, fax to 715-376-4351
----		notes	9547 County Y
----		notes	Mesowest @ 2306: 63 degrees 40% RH WNW 10-19 mph (.01 24 hr precip)
----		Brook	Call from. They hit their 16 hours. Motel it in Chippewa Falls Poy 1 & Wautoma 1
0028		Brule Disp	to ICP G. Kessler - Poy 1 & Wautoma 1 in Chippewa Falls
0041		ICP	Phone from D. Schulz, Gordon Fire Hall, 4 HU on the way Montello 1, Wausau 1, Bowler 1, Whiting 1, call them, report @ 07:00 Gordon Fire Hall.
----		Brule Disp	phone calls:
----		Brule Disp	Montello 1 - Jon Voight
0104			Waupaca 1 - Tim Banaszak
-----			Bowler 1 - Dave Marquette
----			Whiting 1 - Matt Schoonover
----	Dave Marquette	Brule Disp	Phone call, Tim will tie in with you & Scott F. (Bowler Ranger) - (OK)
----			Phone to Schulz, ICP Gordon FH, RE Bowler and Waupaca units
----			Schulz to Disp, Montello & Whiting showed up here
0115		Schulz	Phone: Dispatch can shut down
0120			Bartol out-of-service

Joseph LeBouton – Support Dispatch

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
1445		Highland Tower	223 degrees, small white, growing
		Brule Tower	201 degrees, 12 - 13 miles (initial cross)
1449		Douglas page	"Germann Road & County Y"
----		(DNR en route)	BAR 1
----		(DNR en route)	BAR 2
----		(DNR en route)	BAR R
----		(DNR en route)	GOR 1
----		(DNR en route)	GOR 2
----		(DNR en route)	(GOR R also responding)
----		(DNR en route)	PATROL - Leo Bunderson (@ Hayward)
1456		(DNR en route)	2 Seats ordered
----		(DNR en route)	BRULE HU to Barnes (Brule Ranger on deck to go)
----		(DNR en route)	WSB 1 to INO
1457	Brule Disp	BAR R	(E. Martin) Request Seats (Yes - will launch)
----	Brule Disp	MN DNR	smoke report 290 degrees over horizon MN (fire tower)
1459	Brule Disp	PATROL	(called Hayward by Brule dispatch) request launch
1459	Brule Disp	BAR R	Request Heavy Dozer (Brule Disp calling CBL)
----	BAR R	Brule Disp	(fire name?) Germann
----	Brule Disp	BAR R	Fire on west side of road
1500	Brule Disp	WSB 1	in service to Ino
----	Brule Disp	BAR 2	on scene switching to RED
1501	Brule Disp	Gordon FOR	on scene IA
1501	Brule Disp	GOR 1	on scene on RED
1502	Brule Disp	PATROL	En route
1503	Brule Disp	CBL Disp	(Phone) Minong Heavy Dozer, Chicog to Gordon
1503	Brule Disp	Douglas TL	at 27 & Y heading west
1504	Brule Disp	C250	on scene
----	Brule Disp	BAR R	Doetch Road, Crown Fire, 50 acres, 1/4 mile spotting
1505	Brule Disp	BAR 1	on scene
----	Brule Disp	BRU 1	in service to fire from Barnes
1507	Brule Disp	WSB 1	in service to Barnes from INO standby
(1503)		Patrol(who?)	5(?) acres in pine - torching- right flank one house may be threatened, fire moving NNW, Road .3 barrier
1510		Patrol(who?)	out of Eau Claire lakes return to CBL
1510	Brule Disp	MEL 1	in service to standby Ashland

Joseph LeBouton – Support Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
1512	Brule Disp	MCR 1	standby Hurley
1514	Bar R	C250	I have contact for cause - feller buncher
1515	Brule Disp	Douglas TL	approaching scene - RED
-----		notes	AFL Gallagher in service to scene from Brule
1516	Brule Disp	Dairyland Tower	Large Grey 160 degrees over the horizon (Germann Fire)
1518	Brule Disp	GERMANN IC	(E. Martin) Available CBL 2nd Heavy Dozer & CL215?
-----		notes	smoke report from CBL
-----		notes	2nd Heavy Dozer
1519	Brule Disp	Schulz	in service Germann Fire
1522	MN	Brule Disp	(Beth) Phone to request available CL215
1523	Brule Disp	Gordon FOR	in service to Solon Airport (DNR SEAT base)
1524	Brule Disp	Janko	IMT trailer to Barnes
1524	Brule Disp	BAR T8	in service to fire
-----		GERMANN IC	(E. Martin) Air Attack – Air-to-Ground
-----		C250	???tapy - checkin north of head of fire - Need help blocking Hwy S
1527	Brule Disp	BRU 1	on scene
1527	Brule Disp	Washburn Tower	225 degrees Large White 20 miles (Germann Fire)
1529	CBL Disp	Brule Disp	(Beth) Phone to request Heavy Dozer from CBL
1530	Brule Disp	MCR R	
1530		Gordon FOR	SEAT Base asdfkjsdflij??
1533	Brule Disp	MEL R	
1533		Gallagher	
1533	Brule Disp	MEL R	in service to Ashland
1534	Brule Disp	MCR R	to 3969 Wilson Lk Rd - reported fire
1536	GERMANN IC	Brule Disp	(E. Martin) CL215 Available
-----	GERMANN IC	Brule Disp	2 Heavy Dozers, 1 en route
-----	Brule Disp	WSB R	in service INO
1537	GERMANN IC	Brule DISP	CL215 ordered
1537		Gordon FOR	DNR SEAT to Siren to refill?
-----	Brule Disp	BRU 2	on scene
1540	Brule Disp	MCR 1	standing by Mercer (for fire on Wilson Lk Rd)
1543		Gallagher	Brule Patrol is Air Attack
1544			IMT Trailer @ Barnes
1545	Brule Disp	Gordon Tower	211 degrees over horizon (Disp - CBL area - OK)
1547	Brule Disp	MCR R	release MCR 1 (Wilson Lk fire)
1547	Brule Disp	GERMANN IC	(E. Martin) SPOT FCST use Barnes current wx

Joseph LeBouton – Support Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
-----	Brule Disp	MCR 1	requesting new orders
-----	Brule Disp	Gordon FOR	to Gordon
1551	MCR 1	Brule Disp	standby Hurley
1551	Brule Disp	MCR 1	in service to Hurley
-----	Brule Disp	notes	2 Seats ordered
-----	Brule Disp	notes	lots of HU
-----	Brule Disp	notes	CL215 ordered
-----	Brule Disp	notes	coming to fire
-----	Brule Disp	notes	Brule is empty
-----	WSB R	Brule DISP	cover IA east side Brule FRU from INO
-----	MEL 1	Brule DISP	standby Ashland, cover HU IA for Bayfield County and northern Ashland County
-----	MCR R & 1	Brule DISP	cover northern Iron County and Mellen
-----	Wood Disp	Brule DISP	back up Mercer south end? TLK HU?
-----	PAT R	Brule DISP	cover IA west side Brule FRU
-----	WSB R	Brule DISP	cover IA east side Brule FRU from INO
-----	Brule Disp	PAT Ranger	in service to standby
-----	Brule Disp	Gordon FOR	(Luebbe) back at station from Solon
1555	Brule Disp	WNT 1	at Barnes
-----	Brule Disp		Gallagher (phone) 2 more rangers - Nicky to fire, Rose to Brule
	Brule Disp		additional Ranger @ Gordon
	Brule Disp		Rochon to Hawthorne
1558	Brule Disp	BRU R + Sitrine	to fire from Barnes
1603	Brule Disp	WSB 1	at Maple turning on Germann Road?????
1605	Brule Disp	MIFC	CL215 diverted to MN fire
1606	Brule Disp	WSB 1	on scene
	Brule Disp	GERMANN IC	
1611	AIT TL	Brule Disp	AIT TL (Heather Berklund) at the station (Mercer) Beth - cover Mercer south end
1611		Brule Disp	2 Fire Bosses from MN
1611	Brule Disp	Gordon FOR	East to fire to Barnes RS
1611	Brule Disp	Gordon FOR	ICP @ BARNES
1612	Brule Disp	MEL R	standing by Ashland
1614	Brule Disp	media	(phone with Duluth Trib) PIO @ Barnes ICP
1615		Brule Disp	Ashland cover pages north side

Joseph LeBouton – Support Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
		Brule Disp	Mercer covered by Trout Lake
	Brule Disp	MESOWEST	Barnes (1606) 87 degrees, 20 %RH, 13mph S 27peak
	Brule Disp	GERMANN IC	ICP established @ Barnes
	Brule Disp	ORDER	4 more HU, 3 more Rangers from south
	Brule Disp		Berklund to ICP
1621	Glodowski	Gallagher	??
			Lost a couple structures, Minimal structures ahead of fire
1621	Brule Disp	P.Falls AFL	(Glodowski) at Barnes
1622	Brule Disp		(Requested) Heather Berklund to Barnes ICP
	Brule Disp	WSB R	arriving Brule
1624	Brule Disp	CBL Disp	(S. Runstrom) SEAT returned Siren, connected w/Luebbe Gordon Sta.
	CBL Disp	Brule Disp	Advised Rundstrum tell Kiel tender??
	Brule Disp		Fire Bosses, conversation MN 1/2 hour ETA
1629	Brule Disp		Washburn Ranger - Jay wants units to scene B/C
	Brule Disp		ICP not set up yet
1631	Brule Disp	Gordon FOR	Need 2 Solon FD @ Solon Airport assist w/SEAT
			Confirm through dispatch that ??? respond
	Brule Disp	CBL Disp	6+ CBL Karyn
1632	Brule Disp	WNT 1	to fire from Barnes
1634	Brule Disp	MCR R	standing by Hurley
	911	Brule DISP	Called Douglas 911 page 2 Solon FD members to SEAT base
1635	Brule Disp	BRL R	En route to fire from Barnes RS
1636	Brule Disp	WSB R	En route to fire from Brule
1636	MEL R	Brule DISP	standby @ INO, MEL 1 @ Ashland
1638	Brule Disp	PAT R	to Hawthorne
1640		Douglas 911	page Bennett FD en route Solon Springs
1641	Brule Disp	CBL Disp	CBL - Tanker 812 to Siren already, Tanker 814 landed
1643	Brule Disp		Phone call (Luebbe) at Gordon Station, initial attack
	Brule Disp		Park Falls working on sending rangers
	Brule Disp		CBL sending State Forest T8 Mike Wallace DIV SUP qualed
	Brule Disp		Minong Ranger cover Gordon FRU from Minong
	Brule Disp		Luebbe to ??? - responding to ICP
1650	Brule Disp	BRU R + Sirrine	on scene
1651		GERMANN IC	OPS
			HAY 1, HAY R, LDY 1, WIN 1

Joseph LeBouton, Support Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
1655	Brule Disp	PAT R	standing by Hawthorne
1700		91 5	lost transmission
1701	Brule Disp	Phil Miller	Launching from Siren & will talk to Air Attack
1701	Brule Disp	HAY 1	arriving dispatch area
1705	Brule Disp	MEL R	standing by INO
1707			Phone to ???Dut???please call media back Put ??????etc
1707	Brule Disp	WSB R	on scene switching to RED
1707	Brule Disp	MEL R	@ INO
1708	Brule Disp	LDY 1	in service to Barnes
1709	Brule Disp	HAY TL	@ Barnes
1713	Brule Disp	HAY Ranger	at Barnes RS SPOT WX Request
1714		Brule Disp	MESOWEST Barnes 87 degrees 21%RH 12mph SSW PK24
		Brule Disp	Minong 88 degrees 21\$ 1mph SSW PK 24
1716	Brule Disp	HAY 1	at Barnes
1720	Brule Disp	LDY 1	arriving Brule area
1721	Brule Disp	C250	Evac info and question
1722	Brule Disp	C250	Phone call from C250 (Lance Burns)
1723	Brule Disp	FS 262	at staging Area Barnes
1726	Brule Disp	(Gor For)	Luebbe phone call - Glodowski IC and ICP @ Barnes
1727	C250	Brule Disp	Dispatch advised C250 Emergency Mgt - Keith Kesler cell #
1730	Brule Disp	CA8	overhead in contact w/Air Attack
1731	Brule Disp	Duke	Phone call Tom Duke Question: Fire Towers till 1800? FDR Etc.
1735			(lost transmission)
1743	Brule Disp	Dairyland Tower	Phone from Dairyland Tower - how long towers?
	Dairyland	Brule Disp	will contact via Radio
1753	Brule Tower	Brule Disp	Phone to Jeff Kindel Brule Tower - no answer
1758	Gordon Tower	Brule Disp	Phone to Barb McDaniel - Gordon Tower shot @ 1448
1802	Brule Disp	CA8	Quick Strike (Ontario)
1803	Brule Disp	CA8	NEW Lat/Long 46.33952 (1.64921 (for Fire Bosses)
1804	Brule Disp	LDY 1	Leaving Barnes en route to fire
1808		notes	Phone from Dispatch to IC (Glodowski) Ontario Quick Strike? YES
1813	Brule Disp	WNT R	at Barnes
1820		scanner	(Douglas County page) evac Loon, Murrey, Sand Lakes

Joseph LeBouton – Support Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
1824		notes	Fire Towers released
1825	Brule Disp	PHONE	(Jeff) phone call with info for Beth
1828			(lost transmission)
1829	Brule Disp	Dairyland Tower	on the ground
1835	Brule Disp	Highland Tower	Phone with Highland Tower (first tower shot time? 1445)
1840		scanner	(Bayfield County page) Barnes, Hawthorn to Gordon Fire Hall
1843	Brule Disp	Dairyland Tower	Brule Disp/Chad Dairyland Tower? flat tire, will call back when done
1845		MESOWEST	Barnes 87 degrees, 23% RH, 9mph SSW PK24
		MESOWEST	Minong 90 degrees 22% RH, 8mph SSW PK 22
1849	Brule Disp	LOGISTICS	Phone from Heather) Logistics Fax to work
		ORDER	12 HU
		ORDER	6 R
1851		notes	(Beth) equip orders are going to area dispatcher from other ICP personnel - will sort out
1851	Brule Disp	Dairyland Tower	(Chad) Phone - Dad en route to help with flat tire
1857	Brule Disp	BARNES ICP	Logistics Ph 795-2565, FX 2624
1907	Brule Disp		Phone call - email Resource List to Comm Center
	Lehman	Brule Disp	Mike Lehman's cell #
1913	Lehman	ORDER	2 mechanics to Barnes
	Lehman	ORDER	Mechanics Trailer
	Lehman	ORDER	Palletized Supplies
	Lehman	Brule Disp	Forwarded Terry Trapp's phone #
			6 hours(?) will get back to Brule with
1916	Brule Disp	P.Falls Disp	(John) TLK1 flat tire arrival delayed
1917		MESOWEST	Barnes 85 degrees 26%RH, 7 mph S PK 20
		MESOWEST	Glidden 81 degrees 27%RH, 7mph S PK16
		MESOWEST	Minong 89 degrees 23%RH, 10mph SW PK22
		MESOWEST	WSB FS 84 degrees 25%RH, 8mph SSW PK26
1941	Brule Disp	MEL Ranger	in service to Ashland and will phone dispatch
	Pattison	Brule Disp	(to Jeff @ Pattison) dispatch coordinating FDR with ok from Tom Duke
	Pattison	Brule Disp	Jeff and Dale to cover all of Douglas County - can you catch all FRU pages? Yes
	Brule Disp	PAT R	Pattison Ranger returning to Pattison Station @ ????? to wait for shutdown

Joseph LeBouton – Support Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
1948	Pattison	Brule Disp	Phone with Pattison Ranger - stay, ICP moved
1951	Dairyland	Brule Disp	Phone with Dairyland Tower (Chad) back on the road heading home
2001	MCR R & 1	Brule Disp	Phone with MCR Ranger & MCR 1 (advise shutdown and FDR coverage)
2008	Brule Disp	Logistics	Phone from Logistics (Heather) Gordon Fire Hall will be new ICP
2014	Pattison	Brule Disp	Phone with Pattison Ranger - stay, ICP moved
2115		MESOWEST	Barnes 65 degrees, 57%RH, 10mph SSE PK15
		MESOWEST	Glidden 77 degrees, 31%RH, 6mph SSE
2017	Brule Disp	CBL Disp	Phone from CBL (Karyn) Sending Minong Ranger with rider to Gordon (Wascott FH)
2033		notes	(scanner) propane tank traffic
	OPS	LINE	Moving to Blue Charlie
		BAR Ranger	(E. Martin) Need HU/tp for Wallace
		BAR Ranger	No resources yet xxxxxxxxxx
		BAR Ranger	2 HU, 5 ? Anchor 27 N end of fire
		BAR Ranger	Secure division
2036	WF Branch	OPS	Where located? (at Barnes RS ICP)
2036	OPS	WF Branch	Moving to xxxxx
2037		?	All moving to Gordon Fire Hall/ ICP
2037	OPS	Line	
2038	Brule Disp	P.Falls Disp	(John) TLK 1 back en route, fixed flat tire
2040	Brule Disp	MEL Ranger	out of service Ashland
2040	LINE	OPS	let me know when the tire is there
	LINE	OPS	Division designation at that time
2041	LINE	LINE	(Gallagher) up Barnes Road, clear there
	OPS	LINE XXX	Resource orders, left 2 low ground units, drinking water both sides
	OPS	LINE XXX	Out of water
	OPS	LINE XXX	1 hour fuel both sides
	OPS	WF Branch	(Luebbe at Gordon ICP)
	OPS	WF Branch	Hooking radio up
	OPS	WF Branch	Have heavy dozer still sitting at Gordon
2043	WF Branch	Line	Need heavy dozer?
2043			(scanner - Douglas Co.) Flames @ Circle Drive & Loon Lake Rd ready to jump road

Joseph LeBouton – Support Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
2045		notes	Dave Zebro/WF Branch
2045	OPS	WF Branch	Structural Branch
		notes	In Process
	OPS	WF Branch	Info for Structural Branch
	OPS	WF Branch	Assigned FD to Potawatomi
	OPS	WF Branch	Drummond IP, Hay TN, Hay City
	OPS	WF Branch	Grand View going to Potawatomi estates
	OPS	WF Branch	Structural protection & evac
2046		WF Branch	FG BLUE, Wildfire info 2 HU assigned TMH, RH 1
2047	OPS	WF Branch	Form Division Hwy 27 to SE - I Division with fire left flank
2048	H DIV	LINE	IC with WF Branch, TMH 1/RHL 1
2050		WF Branch	Fuel truck arrive
		WF Branch	Fuel request left & right flanks
		WF Branch	Drop point county A & Hwy 27
2050		?	xxxxxx Lake Road/Hwy A
		BAR Ranger	drive on Sand Road to
2051	LINE	BCW FBR	(Gallagher) talked O move, 27 accessible? checking that out
2052	WF Branch	OPS	copy direct - confirm if 27 open
2052	LINE	L Gropp	XXX
2053	OPS	WF Branch	let know if 27 open
2054			(scanner) see fire west side Ellison Lake - flames
2057	WF Branch	XX Line	Fuel order 1)Germann Road @ Left flank 2) 44-10w Sec 9 swne
	WF Branch	XX Line	Food status?
	WF Branch	XX Line	Maps needed
2057	WF Branch	OPS	Cable Fire on site - assignment?
	WF Branch	OPS	No FD's 2 structures doing 27
	WF Branch	OPS	Send Cable to structures on 27
2058	WF Branch	OPS	Active fire.
2059	Brule Disp	MEL Ranger	In service return to Mellen
2059	Brule Disp	MEL 1	In service return to Mellen
2100	Brule Disp	Air Attack	heading Solon airport
	Brule Disp	Air Attack	Leo over fire
	Brule Disp	Air Attack	ICP - Pilot needs ride from Solon to Gordon
	Hartshorn	Brule DISP	hear pilot?
2103	Brule Disp	MCR Ranger	back to Mercer

Joseph LeBouton – Support Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
		WF Branch	2 units on xxxx
		WF Branch	Mike @ George Lake, once finished there can drive up 27
2104	OPS	WF Branch	xxxxxxx reassigned from H to I on Left Flank, 27 to SE = J Division
2105	WF Branch	LINE	Need more units for west side of Hwy, its backing fire
		XXX Ranger	plow back SW?
2108		Brule Disp	Left message on cell - Tom Duke pick up Phil Miller @ Solon? (no answer)
2108		Gallagher	at 27 South of Muck Lake Road
2109		Gallagher	3.2 miles north of Y East - Fire crosses Hwy 27
		(Blue C)	Spot fire east of ? Lake Road contained
2112		(Blue C)	RHL1 unit & TMK 1
2113		(Blue C)	Fuel truck heading Germann Road
		(Blue C)	cs ordered
2114	OPS	WF Branch	Warden request assignment from LE BR (645-0053)
	DEP LINE	WF Branch	
2120	WF Branch	LINE	Has O xxxxx
2120		notes	Dispatch phone call to Phil Miller @ Solon
2120		(Blue C)	Sending Minong Ranger & Minong 2 to
	WF Branch	LINE	O'Mara connected, set on Jay
		LINE	MIN R, MIN HU tying in
2129		MESOWEST	Barnes 67 degrees 32%RH, 11mph WNW, PK30
		MESOWEST	Minong 76 degrees 18%RH, 12mph NW PK32
		(Blue C)	Edward Division not yet staffed
		(Blue C)	Delta & Road & Connors Meadow Rd
2141		(Blue C)	Foxtrot Connors Meadows to Sand Rd
		(Blue C)	WSB 1 & BAR 1 on F Division
2141		(Blue C)	TMK Ranger & Heavy Dozer at ICP
		(Blue C)	Blaylock DIV SUP next dir
2142		(Blue C)	"I" Division Sand Road to Beaugrld Lake Road
		(Blue C)	For service engines
	OPS	WF Branch	reassignments just happened
		DEP LINE	Need MAPS
		(Blue C)	Fuel truck with maps
2144	Brule Disp	MEL 1	back at Mellen
2145	WF Branch	OPS	trying cell phone

Joseph LeBouton – Support Dispatch (cont'd)

<i>Time</i>	<i>To</i>	<i>From</i>	<i>Comments</i>
2146	Luebbe	WF Branch	Division termin: assignment B
		WSB	A & B Div Origin to Doetch Road
		HAY R	C Div Doetch Rd to Germann Rd
		(Blue C)	E Div Germann Rd to Hwy A, north assignments
		(Blue C)	suggest TMK Ranger
		(Blue C)	G Div from County A to
		(Blue C)	Minong Ranger
		(Blue C)	East of 27 going SE "J" Div Mike O'Mara
		(Blue C)	XXX HU, RH 1
		BRU R	D Div
		Wallace	E Div WSB 1, BAR 1
		Wallace	I Div FS engines
2152	Brule Disp	CA8	En route Siren
2152		Brule Disp	Phone with MEL R - cover Bayfield County pages - Have 4x4 at home
2152			LeBouton out-of-service