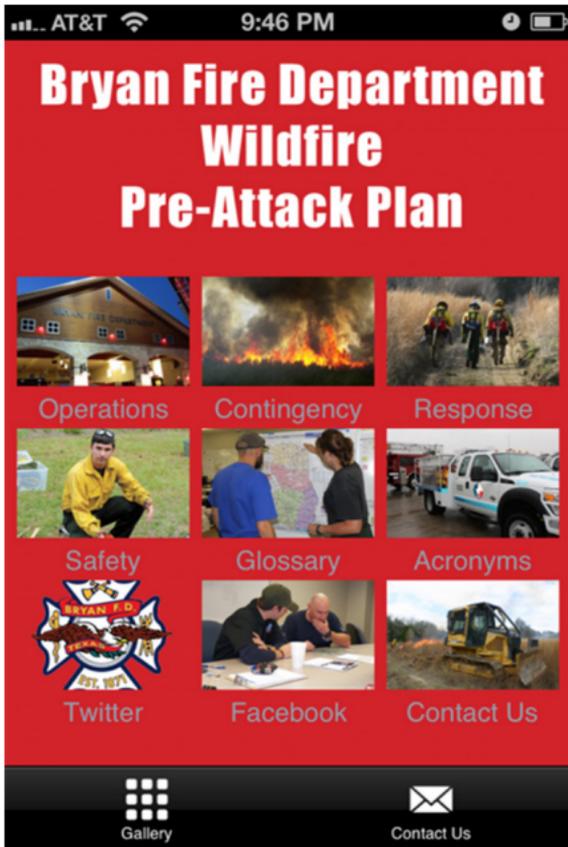


Wildfire Pre-Attack Plan



*Preparedness Strategies for
Emergency Response*



The Bryan Fire Department Wildfire Pre-Attack Plan can be downloaded as a smartphone app at the iTunes App Store.

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PREPAREDNESS STRATEGIES

INTRODUCTION

Mitigation and response functions directly affect each other. By developing preparedness strategies, the transition from mitigation to response becomes smoother. Additionally, critical information is identified that can assist responders who are not familiar with the community.

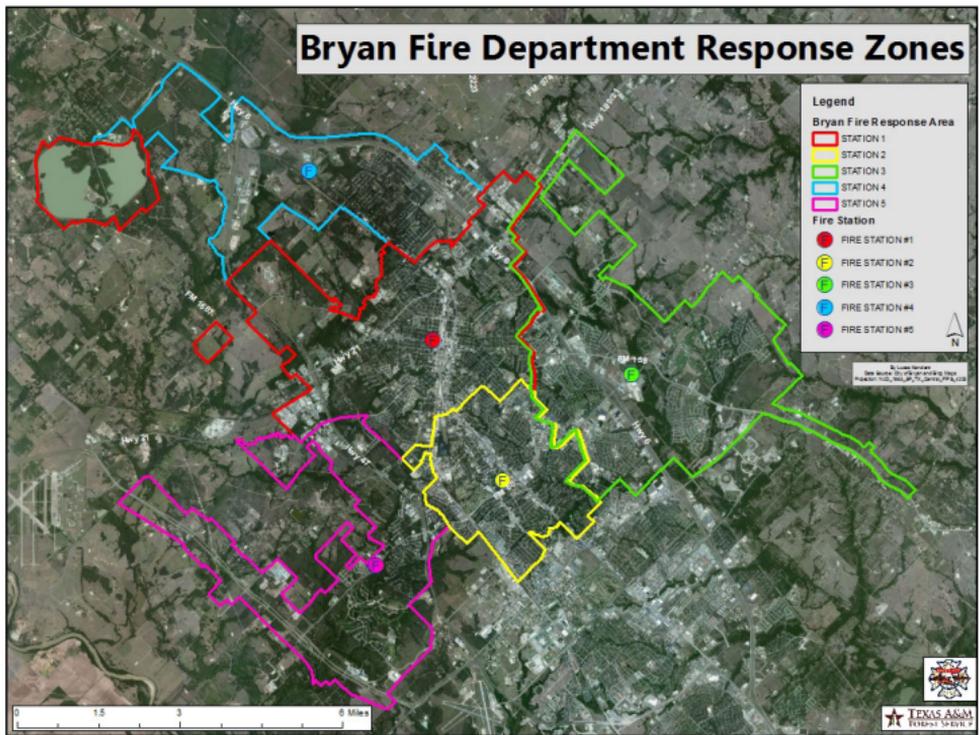


Bryan Fire Department's Wildfire Pre-Attack Plan is tailored to suit the needs of the community and can be used as one of many tools to guide emergency responders in wildfire suppression efforts.



PREPAREDNESS STRATEGIES INTRODUCTION

The City of Bryan has five fire stations, each of which has a designated response zone. The Wildfire Pre-Attack Plan includes detailed information for each response zone.



WILDLAND URBAN INTERFACE FIREFIGHTING

Structure protection is inherently dangerous because it involves indirect firefighting.

Do not commit to stay and protect a structure unless a safety zone for firefighters and equipment has been identified at the structure during size-up and triage. Move to the nearest safety zone, let the fire front pass and return as soon as conditions allow.

Fire Behavior Prediction:

- Base all actions on current and expected fire behavior. Do this first!
- An estimate must be made of the approaching fire intensity to determine if there is an adequate safety zone and time available before the fire arrives.
- Due to the dynamic nature of fire behavior, intensity estimates are difficult to make with absolute certainty. It is imperative that firefighters consider the worst case and build contingency actions into their plan to compensate for the unexpected.

Source: Incident Response Pocket Guide, a publication of the National Wildfire Coordinating Group

INCIDENT OBJECTIVES

- Provide for responders' safety, health, welfare and security.

- Provide for the public's safety, health, welfare and security. When necessary, provide for the safe evacuation and care of the displaced and their animals.



- Limit the amount of homes and land lost to wildland fire.

- Provide for security and investigation of wildfire cause.

- Provide for search and rescue of the trapped and missing; contain, control and mitigate all fires and hazardous substances.

- Protect and maintain access to vital infrastructure and utilities.

- Ensure compliance with the agency administrator and stakeholders' priorities.

COMMAND CONSIDERATIONS

The City of Bryan will maintain command of all incidents within the city limits.

The Incident Commander will:

- Establish an Incident Command Post (ICP) and direct and control emergency operations at the scene.
- Determine the need for and implement public warning and protective actions at and in the vicinity of the incident site.
- Determine whether EOC should be activated.
- Provide periodic situation updates to the EOC, if that facility is activated.
- Identify resource requirements to the EOC, if that facility is activated.

The Emergency Management Coordinator will:

- Develop and maintain the Emergency Operations Center (EOC) staff roster and EOC operating procedures.
- Activate the EOC when requested or when the situation warrants.
- Serve as an EOC Manager.
- Coordinate resource and information support for emergency operations.
- Coordinate emergency planning and impact assessment.
- Coordinate analysis of emergency response and recovery problems and development of appropriate courses of action.

Source: Brazos County Interjurisdictional Emergency Management Plan, Annex N, Direction and Control

COMMAND CONSIDERATIONS

General Command Considerations:

- Structure protection groups should be created when high-risk areas are threatened.
- The City EMC may begin staffing Incident Management Team (IMT) positions as an incident transitions into extended attack.
- Any incoming resources should be checked in and demobilized during extended attack.
- All resources should be accounted for while at the incident.
- Heavy smoke over the city may require evacuations for special populations.
- The City of Bryan EMC will establish shelter locations and coordinate the process for notifying evacuees of locations.
- The closest local Texas A&M Forest Service dozers are staged in Huntsville and LaGrange.
- PHI Air Medic, which provides helicopter transport for medical purposes, is permanently housed at St. Joseph Regional Health Center, 2801 Franciscan. PHI also can provide reconnaissance flights to locate or assist with mapping a wildfire.
- Air One, a two-seat Cessna, can provide reconnaissance flights when available.

TACTICAL CONSIDERATIONS

Information provided in the Tactical Considerations section can be used when making decisions about the best strategies for suppressing a wildfire.

General Tactical Considerations for the City of Bryan:

- Some neighborhoods are vulnerable to structure-to-structure ignition because of the close proximity of homes.
- Some mobile home parks do not have hydrants.
- Most high-risk areas have combustible attachments and will require attention before and after the head fire passes.
- A significant amount of neighborhoods have dead-end streets and cul-de-sacs that make escape difficult during structure triage.
- Responders should attempt to protect the ignition point to allow the Bryan Fire Marshal's Office to investigate.
- Temperatures can exceed 100° F in the summer. Firefighters should stay hydrated and a firefighter rehab group should be established to ensure responder safety.
- When in a drought situation, using water lines should be done carefully and minimally. Pipes can break when the ground is hard and dry. Valves on hydrants and trucks should be opened and closed slowly.
- Remote Automated Weather Stations (RAWS), which can observe potential wildfire conditions, are housed at Easterwood Airport in College Station and Coulter Airfield in Bryan.

TACTICAL CONSIDERATIONS

An Incident Command Post normally will be established at the incident scene, according to the Brazos County Interjurisdictional Emergency Management Plan, Annex N, Direction and Control.

Options for Incident Command Posts include:

- Bryan Fire Department's Battalion Chief suburban, housed at Station One, 300 West William J. Bryan Parkway. It can accommodate up to three people and has wireless capabilities, Brazos Valley Wide Area Communications System (BVWACS) radio access and VHF radio access.
- Bryan Fire Department's Mobile Command Post (MCP), housed at Station One, 300 West William J. Bryan Parkway. It has seven work stations and a conference room. It has wireless capabilities, Brazos Valley Wide Area Communications System (BVWACS) radio access and VHF radio access. Satellite connectivity also is available.



TACTICAL CONSIDERATIONS

Fuel Model	Description	Rate of Spread	Flame Length	% of Land in City Limits	Acres of Land in City Limits
NB 91	Urban/Developed Land	n/a	n/a	54.7%	15,213
GR 1	Short, patchy, normally heavily grazed grass	Moderate	Low	16%	4,447
FM 9 HWD	Hardwood timber litter, with fluffy duff layer	Low	Low	10.7%	2,967
GR 2	Moderately coarse continuous grass (1 foot)	High	Moderate	10.2%	2,829
FM 8	Closed timber litter	Low	Low	6.8%	1,891

Peak Fire Seasons:

Primary – July through September with summer drying

Dry vegetation due to little or no rain, combined with temperatures of 98° to 105° F on a daily basis. Hurricanes or tropical storms close to Southeast Texas bring in dry, strong to gusty winds from the north and northeast.

Secondary – December through March with cured grasses and wind events

Cold front moves in from the north ushering in drier air. Relative humidity drops below 20 percent during the afternoon hours with winds gusting anywhere from 25 mph to 50 mph.

TACTICAL CONSIDERATIONS

Fuels:

The primary fuel group within and surrounding the City of Bryan is short to tall grasses mixed with stands of hardwood. There are pockets of yaupon, juniper and oak throughout the city.

Under normal fire weather conditions, the grass fuel group will ignite and burn more intensely than timber litter. Under these conditions the rate of spread normally drops dramatically once it enters the timber, giving firefighters a better chance of extinguishing it.

Under more extreme fire conditions the grasses will ignite, burn intensely and spread rapidly. Hardwood stands also may produce group torching and, in the most extreme conditions, running crown fires. Since fires burn so intensely under these conditions, initial attack may be less successful.

Local Thresholds – Watch Out (combinations of any of these factors can greatly increase fire behavior):

- Winds – Greater than 15 mph *
- Relative humidity – Less than 25 percent
- Temperature over 90° F
- 100-hour fuel moisture – Less than 13 percent

** To best determine wildfire behavior, analysts calculate windspeeds 20 feet above the forest canopy. This calculation is commonly referred to as “20-foot winds.”*

TACTICAL CONSIDERATIONS

Past Experience:

When grass fuels are cured, rapid rates of spread can be expected on windy days when:

- 10-hour fuel moistures are below 7 percent
- Energy Release Component values above 46 exceed the 90th percentile
- 1,000-hour fuel moistures are less than 13 percent and below the 10th percentile
- Live woody fuel moistures are less than:
 - 90 percent in juniper
 - 120 percent in southern yellow pine
- KBDI values of 648 are at the 90th percentile



Information on fuels and fire danger is monitored by Texas A&M Forest Service and can be found at the Texas Interagency Coordination Center (TICC) website at

<http://ticc.tamu.edu/PredictiveServices/FuelsFireDanger.htm>

TACTICAL CONSIDERATIONS



COMMUNICATION

Communication is critical on wildfire incidents. Identifying the channels that will allow multiple resources to communicate will limit the amount of confusion and potentially dangerous situations on an incident. Narrowband VHF frequencies include:

Channel #	Channel Name	Receive	RX PL	Transmit	TX PL
1	Brazos County VFD	155.940	N141.3	153.9800	N141.3
2	Brazos County T/A	155.940	N141.3	155.940	N141.3
4	Bryan E.M.				
5	VCALL10	155.7525	N156.7	155.7525	N156.7
6	VTAC11	151.1375	N156.7	151.1375	N156.7
7	VFIRE21	154.2800	N156.7	154.2800	N156.7
8	VLAW31	155.4750	N156.7	155.4750	N156.7
9	VMED28	155.3400	N156.7	155.3400	N156.7

VCALL10 is typically used to communicate with incoming resources. VFIRE21 is typically used by operations on the scene during wildland incidents. Additionally, the Mobile Command Post has capabilities that allow resources to communicate by radio on different frequencies.

WATER SOURCES

There are approximately 414 miles of pipe, 6,107 valves and 2,037 fire hydrants in the city's distribution system.

The largest body of water in the area is Lake Bryan. Managed by Bryan Texas Utilities, the lake has a surface area of about 829 acres and a maximum depth of 45 feet. The surface elevation is 356 feet. The lake serves as a cooling reservoir for the Dansby Power Plant.

There are numerous small ponds and bodies of water throughout and surrounding the City of Bryan. Some of these water sources may be available to draft from but could potentially not have enough capacity to assist with wildfire suppression during dry conditions.

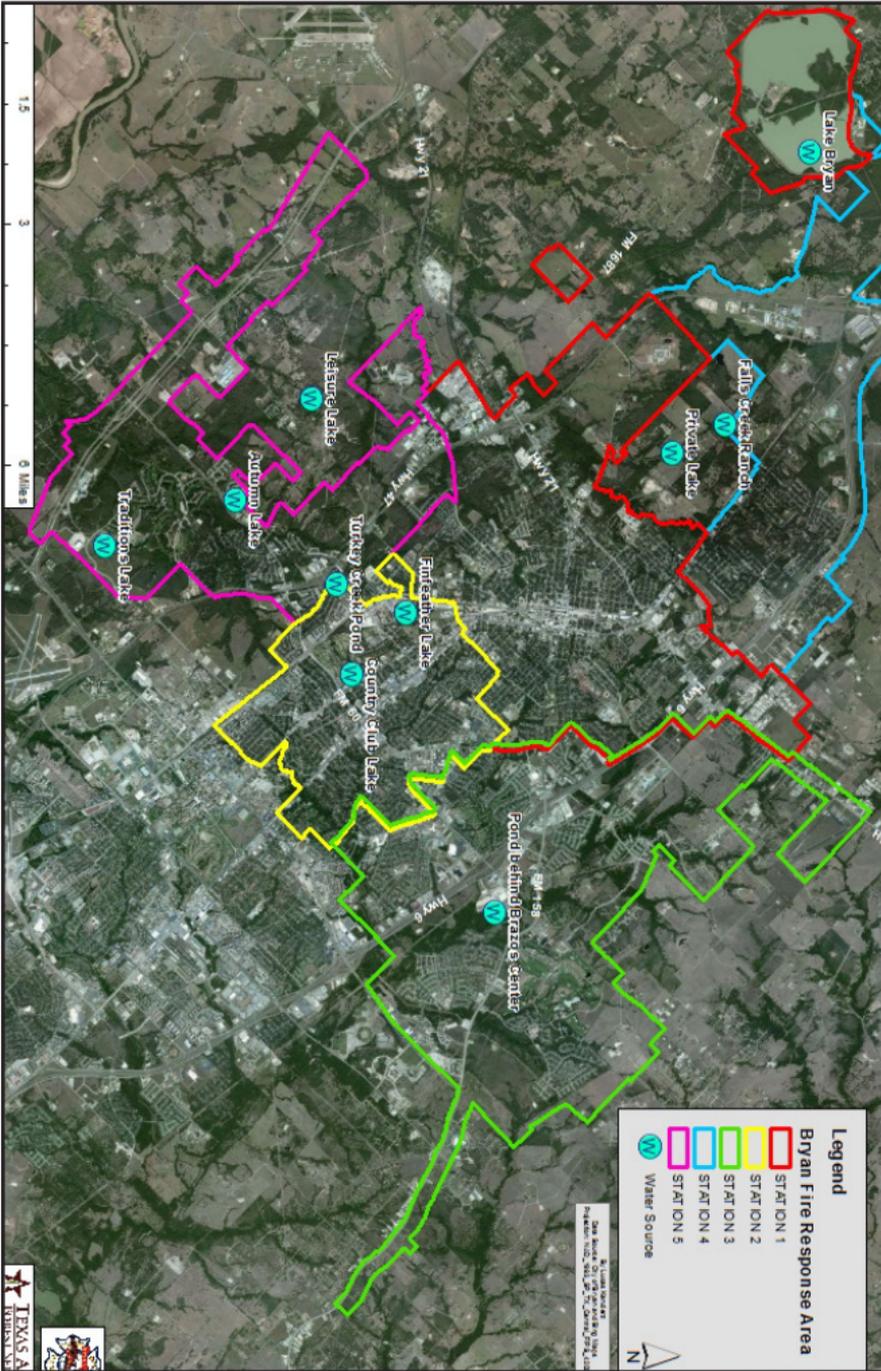


Lake Bryan

WATER SOURCES

Water Source	Lat/Long	Address	Draft	Dip
Autumn Lake	N 30° 37' 20" W 96° 23' 43"	Bordered by Chick Lane, Turning Leaf Drive	X	
Country Club Lake	N 30° 38' 29" W 96° 21' 44"	Travis B. Bryan Municipal golf course, Villa Maria Road	X	
Falls Creek Ranch	N 30° 42' 01" W 96° 24' 24"	Access from Mumford Road	X	
Finfeather Lake	N 30° 39' 00" W 96° 22' 23"	Access from Fountain Avenue	X	X
Lake Bryan	N 30° 42' 33" W 96° 28' 19"	8200 Sandy Point Road	X	X
Leisure Lake	N 30° 38' 06" W 96° 24' 41"	Near Leonard Road	X	
Pond behind Brazos Center	N 30° 39' 54" W 96° 19' 08"	3232 Briarcrest Drive	X	X
Private lake	N 30° 41' 33" W 96° 24' 06"	4581 Saunders	X	X
Traditions Lake	N 30° 36' 14" W 96° 23' 17"	3131 Club Drive	X	X
Turkey Creek Pond	N 30° 38' 19" W 96° 22' 40"	Turkey Creek Road		X

Bryan Fire Department Potential Water Sources



Legend

Bryan Fire Response Area

- STATION 1
- STATION 2
- STATION 3
- STATION 4
- STATION 5

Water Source

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 Prepared by: Bryan Fire Department
 Date: 10/11/11



AIR RESOURCES

- The Brazos County Expo Center could serve as a helibase for air resources on the west side of the city.
Lat/Long: N 30° 37' 17" / W 96° 24' 57"
Address: 5827 Leonard Road
- Coulter Airfield could serve as a helibase for air resources on the east side of the city.
Lat/Long: N 30° 39' 24" / W 96° 25' 37"
Address: 6120 East Highway 21



Coulter Field

HELICOPTERS

Type I Helicopters (Helitankers)

- Similar to a military Chinook helicopter, a helitanker is the most common aircraft used by Texas A&M Forest Service. They are equipped with snorkels that allow them to draw from shallow water sources such as stock tanks, swimming pools, small creeks, lakes and ponds.
- Generally carries 800 to 1,500 gallons of water.

Type 2 Helicopters

- Similar in size to a military Huey helicopter, these aircraft can be used to haul water or transport passengers.
- While some are tanked and snorkeled, most used in Texas have 300- to 350-gallon buckets. They generally are used in East Texas where buckets can dip out of ponds or lakes.

Type 3 Helicopters

- Similar to a civilian Jet Ranger helicopter or civilian Life Flight helicopter, these aircraft can be used to haul water or carry two to three passengers for reconnaissance flights.
- The aircraft can haul between 100 to 180 gallons of water, but are primarily used in Texas for recon missions by command or operations personnel or for mapping purposes.

EVACUATION CONSIDERATIONS

State law provides a county judge or mayor with the authority to order the evacuation of all or part of the population from a stricken or threatened area within their respective jurisdictions. Hence, the mayor of Bryan may order an evacuation of the city upon issuing a local disaster declaration.

The Incident Commander or, for large-scale evacuations, the EOC shall assess the need for evacuation and plan the evacuation effort. Evacuations that must be conducted because of incidents that occur without warning may have to be planned quickly and carried out with only those resources that can be mobilized rapidly. The decision to recommend an evacuation in and around the area of an incident site rests with the Incident Commander. In general, the county judge and/or mayor shall issue the order for large-scale evacuations.

General Evacuation Considerations:

- When necessary, a law enforcement group should be established to develop an evacuation plan that covers traffic control, security issues and how best to safely evacuate residents, special needs populations and non-English speakers.
- Provide for safe evacuation of residents while also considering access for incoming resources (structure protection).
- Shelter locations should be identified during evacuations.
- If evacuation routes are cut off, safety zones should be considered.

EVACUATION CONSIDERATIONS

Re-Entry Considerations:

- Initiate return of evacuees, when it is safe to do so.
- Coordinate temporary housing for those who cannot return to their homes.
- Provide traffic control for return.
- Initiate recovery activities for evacuees who have suffered loss of or damage to their homes or businesses.
- Carry out appropriate public information activities.

Source: Brazos County Interjurisdictional Emergency Management Plan, Annex E, Evacuation



SPECIAL POPULATIONS

Special populations to consider for smoke management and evacuation include schools, hospitals and nursing homes.

Bryan ISD Schools:

Bryan High School, 3450 Campus Drive

Rudder High School, 3251 Austin's Colony Parkway

Bryan Collegiate High School, 1901 E. Villa Maria Road

Stephen F. Austin Middle School, 801 S. Ennis Street

Arthur L. Davila Middle School, 2751 N. Earl Rudder Freeway

Jane Long Middle School, 1106 N. Harvey Mitchell Parkway

Sam Rayburn Middle School, 1048 N. Earl Rudder Freeway

Bonham Elementary, 3100 Wilkes Drive

Bowen Elementary, 3870 Copperfield Drive

Branch Elementary, 2040 W. Villa Maria Road

Carver Early Childhood Center, 1601 W. Martin L. King

SPECIAL POPULATIONS

Crockett Elementary, 401 Elm Avenue

Fannin Elementary, 1200 Baker Avenue

Henderson Elementary, 801 Matous Street

Houston Elementary, 4501 Canterbury Drive

Johnson Elementary, 3800 Oak Hill Drive

Jones Elementary, 1400 Pecan Street

Kemp Elementary, 750 Bruin Trace

Milam Elementary, 1201 Ridgedale Street

Mitchell Elementary, 2500 Austin's Colony Parkway

Navarro Elementary, 4619 Northwood Drive

Neal Elementary, 801 W. Martin L. King

Sul Ross Elementary, 3300 Parkway Terrace

SPECIAL POPULATIONS

Private Schools:

Brazos Christian School, 3000 West Villa Maria Road

Allen Academy, 3201 Boonville Road

St. Joseph Catholic School, 600 South Coulter Drive

St. Michael's Episcopal School, 2500 South College Ave.

Higher Education:

Blinn College, 2423 Blinn Blvd.

Texas A&M Health Science Center, 8441 Highway 47

Treatment Centers:

St. Joseph Regional Health Center, 2801 Franciscan Drive

- 303 licensed beds; 36-bed medical/surgical ICU; 14 operating rooms
- MRI scanner, two CT scanners, dialysis unit (five machines)
- Emergency room: four trauma rooms, 16 exam rooms, five minor care/urgent care exam rooms, six-bed observation area
- 18 isolation beds
- Emergency power for indefinite number of hours (up to 96 without refueling)

SPECIAL POPULATIONS

The Physicians Centre Hospital, 3131 University Drive

- 16 licensed beds; no ICU; four operating rooms and two minor procedure rooms
- MRI scanner, CT scanner, no dialysis unit
- Unstaffed first aid suite with on-call doctor, no emergency rooms
- Emergency power for 24 hours

Nursing Homes:

Brazos Oaks Assisted Living, 8733 North Highway 6 North

- 16 beds; emergency power for eight hours (diesel power)

Carriage Inn, 4247 F.M. 158

- 85 rental apartments (one to two people/apartment); no emergency power backup except for lighting

Crestview Court Nursing Home, 2505 E. Villa Maria Road

- 85 beds; emergency power for four hours (diesel)

Crestview Place Apartments, 2505 East Villa Maria Road

- 247 occupants between Place and Terrace; 44 apartments

Crestview Terrace Apartments, 2501 E. Villa Maria Road

- 100 apartments; no emergency power backup

The Grand Court, 2410 Memorial Drive

- 180 rental apartments (one to two people/apartment)

SPECIAL POPULATIONS

Isle at Watercrest, 4081 Eastchester Drive

Lamp Stand Health and Rehab, 2001 E. 29th St.

- 144 beds; emergency power for 24 to 48 hours

Millican House, 2601 East Villa Maria Road

- 30 beds; emergency power backup; three hours for lighting

Sherwood Health Care Facility, 1401 Memorial

- 246 beds; emergency power for indefinite hours; gas and/or propane

St. Joseph Manor, 2333 Manor Drive

- 48 nursing beds; 33 Alzheimer's beds; emergency power for 65 hours at 25 percent

St. Joseph Manor Assisted Living, 2345 Manor Drive

- 42 beds; emergency power for 65 hours at 25 percent; 40 hours at 50 percent

St. Joseph Rehabilitation Center, 1600 Joseph

- 60 beds; emergency power for 65 hours at 25 percent; 40 hours at 50 percent

Watercrest at Bryan, 3801 East Crest Drive

POSSIBLE SHELTER LOCATIONS

Sheltering efforts should be coordinated with the Bryan Emergency Management Coordinator and American Red Cross.

Forty-six locations within Brazos County have been identified as available for sheltering. Of those, 35 are designated for general purposes, four are designated for local needs, four are designated for special needs and three are designated for responders.

The Emergency Management Coordinator can provide a list of available facilities upon request.

Evacuations will require coordination with:

- EMC
- Fire Department
- Police Department
- Mayor's Office
- City/Incident Public Information Officers
- Dispatch
- Public Works

CONTINGENCY PLANNING

Contingency Planning:

Contingency plans identify high-risk neighborhoods and areas with the potential for large wildland incidents. These plans contain information that may be beneficial to incoming resources, including fuel types, water sources, staging areas and ICP locations.

A map of each high-risk neighborhood also is provided to give users an elevated view of the area and its potential threats.



ZONE 1

CONTINGENCY PLAN

Keep the Fire:

North of Sandy Point
Road

West of F.M. 2818

Fuels:

Grass – High rates
of spread and flame
lengths

Juniper – High
flame lengths

Oak – High flame
lengths

Local Thresholds – Watch Out:

- Winds – Greater than 15 mph
- RH – Less than 25 percent
- Temperature – Over 90° F
- 100-hour fuel moisture – Less than 13 percent

Draft Site 1:

Finfeather Lake

N 30° 39' 14"

W 96° 22' 24"

Access from Fountain Avenue

Draft Site 2:

Falls Creek Ranch

N 30° 42' 01"

W 96° 24' 24"

Access from Mumford Road

Additional Water Sources:

Private lake

N 30° 41' 33"

W 96° 24' 06"

Access from Mumford Road

Lake Bryan

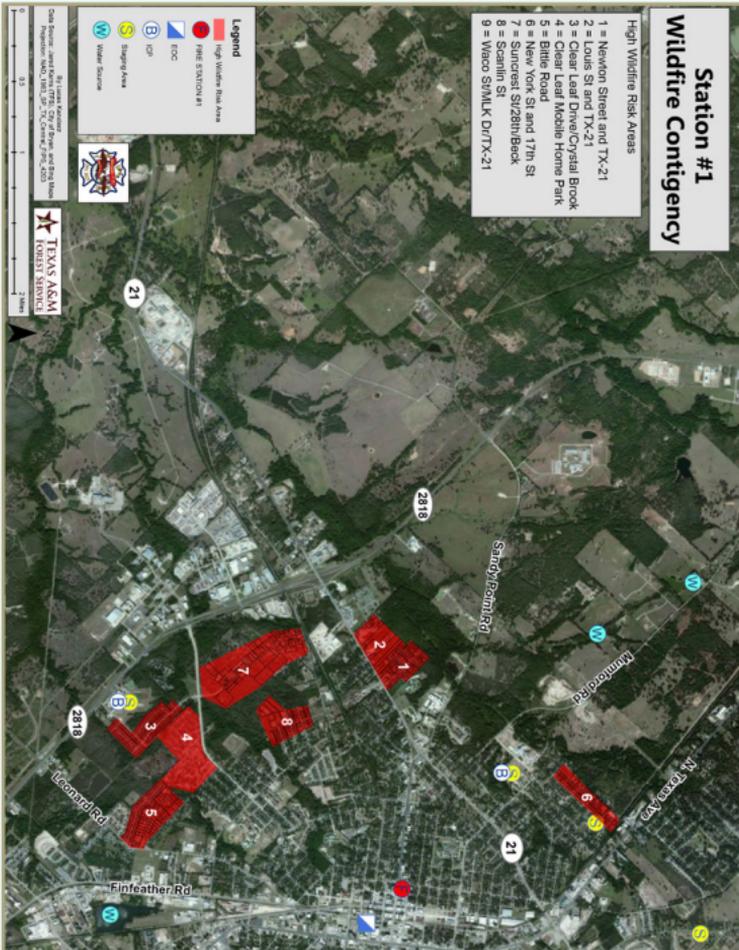
N 30° 42' 33"

W 96° 28' 19"

Access from Sandy Point Road

*Hydrants are located
throughout the high-risk areas
in Zone 1.

ZONE 1 CONTINGENCY PLAN



Tactical considerations for Response Zone 1

ZONE 1

CONTINGENCY PLAN

General tactical considerations:

Several facilities along Mumford Road contain hazardous materials.

Evacuation Trigger Points:

- Extreme fire conditions
- Fire jumps Highway 6 or F.M. 2818
- Heavy smoke within neighborhood

Evacuation Considerations:

R.J. Holmgreen Brazos County Juvenile Justice Center

N 30° 40' 28"

W 96° 23' 41"

Address: 1904 Highway 21

Special Considerations: Houses up to 48 youth, security concerns

J.W. Hamilton Unit

N 30° 41' 12"

W 96° 25' 05"

Address: 200 Lee Morrison Lane

Special Considerations: Large population (maximum capacity: 1,166), security concerns, 350-acre facility

ZONE 1

CONTINGENCY PLAN

Potential Staging and ICP Locations in Response Zone 1:

Jane Long Middle School

N 30° 39' 07"

W 96° 23' 43"

Address: 1106 N. Harvey Mitchell Parkway

Special Considerations: Good ingress/egress

Municipal Service Center

N 30° 40' 58"

W 96° 21' 16"

Address: 1111 Waco Street

Special Considerations: City-owned facility

Carver Early Childhood Center/ E.A. Kemp Elementary School

N 30° 41' 05"

W 96° 23' 09"

Address: 1401 W. Martin L. King/ 750 Bruin Trace

Special Considerations: Large facilities located adjacent to each other

Pleasant Grove Baptist Church

N 30° 41' 32"

W 96° 22' 56"

Address: 1401 Juniper Street

Special Considerations: Large facility near high-risk area (New York Street)

ZONE 1 CONTINGENCY PLAN

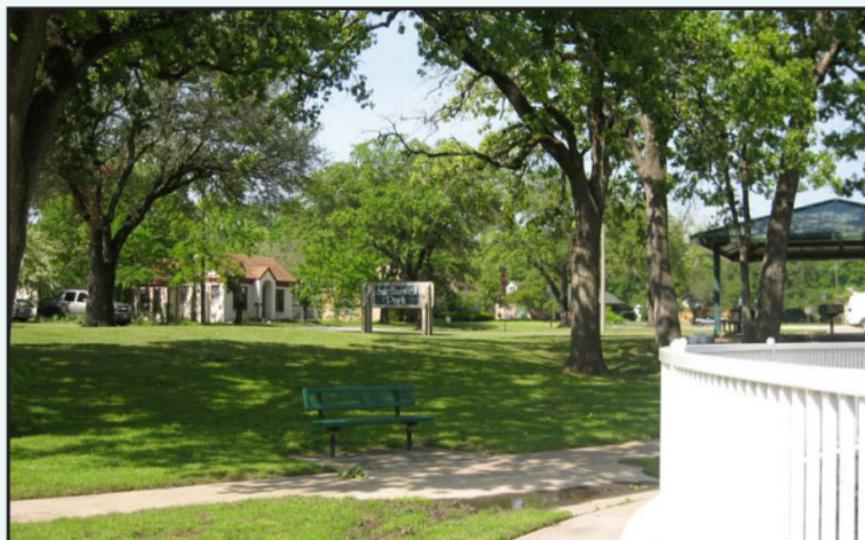
Sue Haswell Memorial Park

N 30° 40' 16"

W 96° 22' 17"

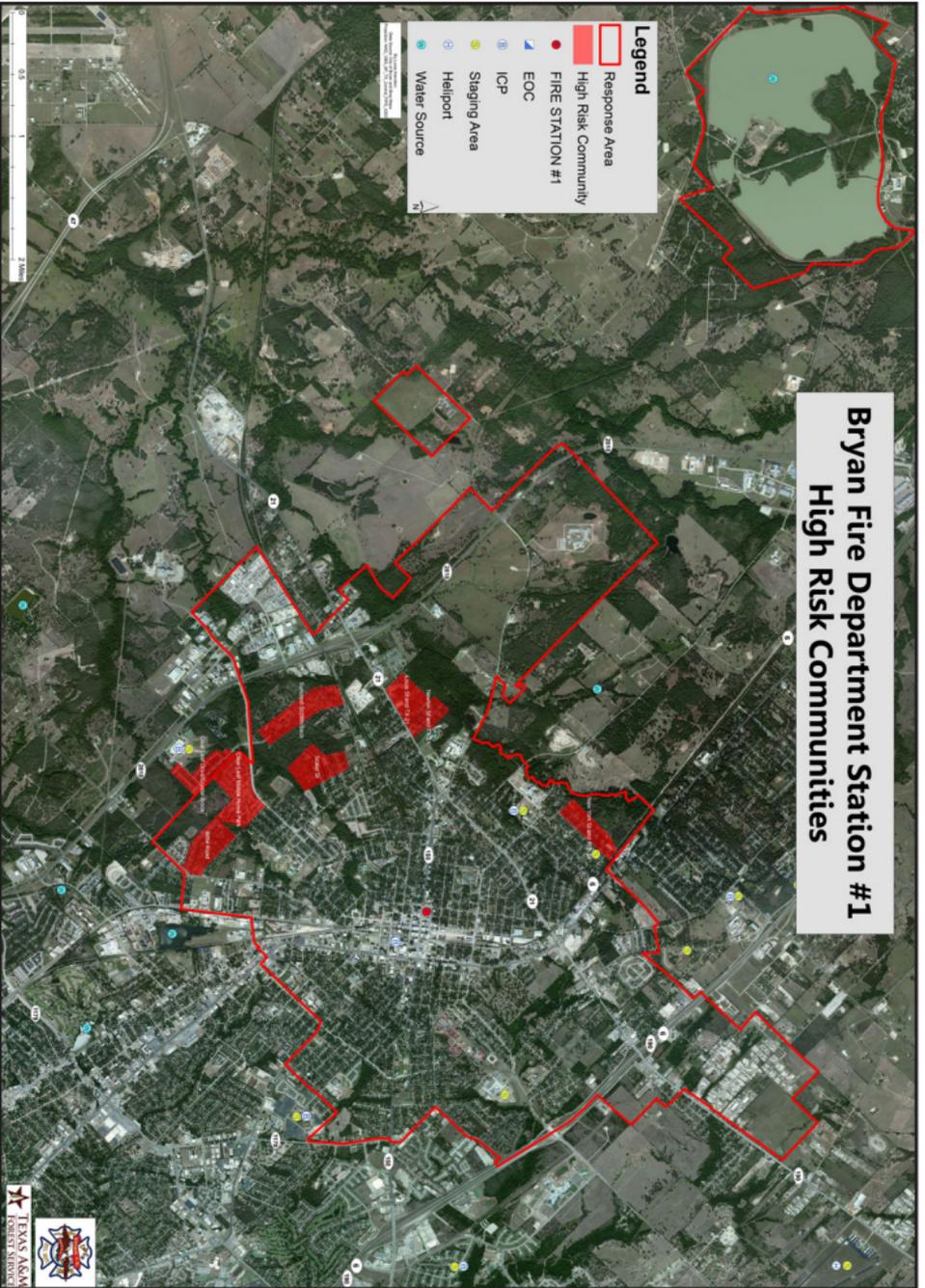
Address: 1142 East William J. Bryan Parkway

Special Considerations: City-owned, large facility with three covered pavilions, a gazebo/amphitheater, area lighting and restrooms



Sue Haswell Memorial Park

Bryan Fire Department Station #1 High Risk Communities



ZONE 1 HIGH-RISK AREAS

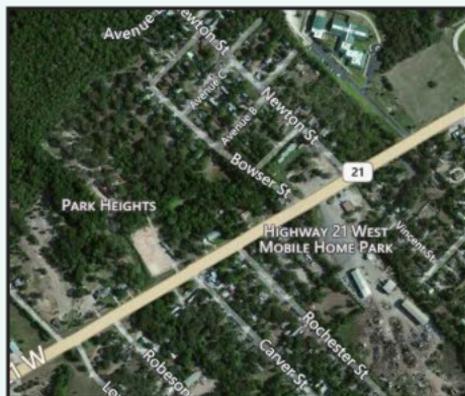
Newton Street and Highway 21

Location: Newton Street
and Highway 21

N 30° 40' 25"

W 96° 23' 45"

Responding Station: 1



Wildland Areas: Approximately 450 acres, N, NW, W

Fuels: Grass, juniper, oak (heavy fuel loading)

Primary Threats: Direct flame contact, ember intrusion (from N, NW, W)

Fire Behavior: Low-intensity grass fire – Extreme crown fire

Access: Two points (Newton Street and Bowser Street to Highway 21)

Home Construction: Ignition-resistant with **combustible attachments**

Defensible Space: Less than 30 feet/Not present

Fire Occurrence: Low

Estimated Values at Risk:

- 70 homes
- \$2,365,538 total value
- 19 acres

ZONE 1 HIGH-RISK AREAS

Clear Leaf Drive and Crystal Brook Drive

Location: Clear Leaf Drive and Crystal Brook Drive

N 30° 39' 07"

W 96° 23' 23"

Responding Station: 1

Wildland Areas: Approximately 160 acres, S, SE, E

Fuels: Grass, juniper, oak

Primary Threats: Direct flame contact, ember intrusion (from S, SE, E)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Two points (Clear Leaf Drive to F.M. 2818 and Silkwood Drive to Beck Street)

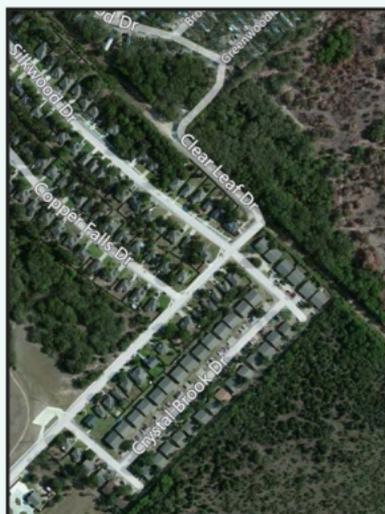
Home Construction: Ignition-resistant with **combustible attachments**

Defensible Space: 30 feet

Fire Occurrence: High

Estimated Values at Risk:

- 96 homes
- \$10,173,460 total value
- 25 acres



ZONE 1 HIGH-RISK AREAS

Bittle Lane

Location: Bittle Lane/Groesbeck
Street and Bittle Lane/Leonard Road
N 30° 39' 11"
W 96° 23' 04"

Responding Station: 1

Wildland Areas: Approximately 160
acres, SW, W

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion (from
SW, W)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Two points (Richard Street and Bittle Lane to Leonard
Road)

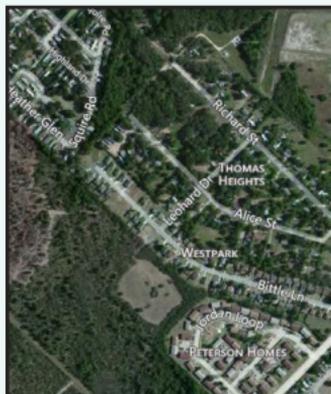
Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: 30 feet

Fire Occurrence: High

Estimated Values at Risk:

- 83 homes
- \$6,760,100 total value
- 38 acres



ZONE 1 HIGH-RISK AREAS

New York Street

Location: New York Street and
17th Street

N 30° 41' 23"

W 96° 23' 12"

Responding Station: 1

Wildland Areas: Approximately
800 acres, N, NW, W

Fuels: Grass, yaupon, juniper
and oak (heavy fuel loading)

Primary Threats: Direct flame contact, ember intrusion,
radiant heat (from N, NW, W)

Fire Behavior: Low-intensity grass fire – Extreme crown fire

Access: Several points from Highway 21

Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: More than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 79 homes
- \$2,463,204 total value
- 24 acres



ZONE 1 HIGH-RISK AREAS

Clear Leaf Mobile Home Park

Location: F.M. 158 and Austin's Colony Parkway
N 30° 40' 19"
W 96° 19' 59"

Responding Station: 1

Wildland Areas: Approximately 160 acres, SE

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion, radiant heat (from SE)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Two points (Clear Leaf Drive to F.M. 2818 and Crestridge Drive to Beck Street)

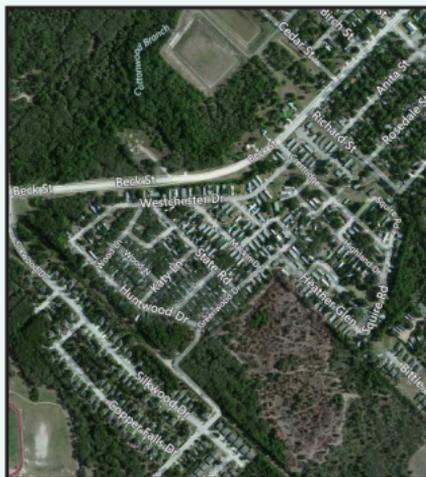
Home Construction: Vinyl skirting and **combustible attachments**

Defensible Space: 30 feet

Fire Occurrence: High

Estimated Values at Risk:

- No individual parcel data
- \$3,232,740 total value
- 65 acres



ZONE 1 HIGH-RISK AREAS

Suncrest Street

Location: Suncrest Street/28th and Suncrest Street/Beck Street
N 30° 39' 41"

W 96° 23' 53"

Responding Station: 1

Wildland Areas: Approximately 330 acres, intermixed

Fuels: Grass, yaupon, juniper and oak (heavy fuel loading)

Primary Threats: Direct flame contact, ember intrusion

Fire Behavior: Low-intensity grass fires – Group torching

Access: Two points (Suncrest Drive south to Beck Street, north to 28th Street)

*Access routes are lined with dense vegetation

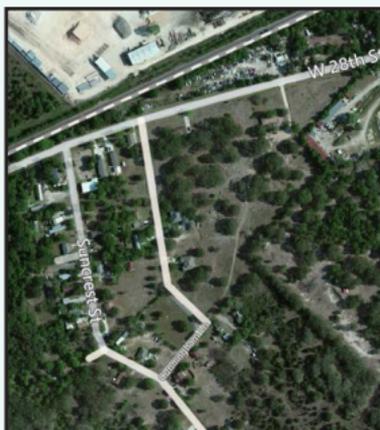
Home Construction: Ignition-resistant with **combustible attachments**

Defensible Space: Less than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 49 homes
- \$2,252,490 total value
- 32 acres



ZONE 1 HIGH-RISK AREAS

Louis Street

Location: Louis Street and
Highway 21
N 30° 40' 16"
W 96° 24' 05"

Responding Station: 1



Wildland Areas: Approximately
450 acres, N

Fuels: Grass, yaupon, juniper and oak

Primary Threats: Direct flame contact, ember intrusion,
radiant heat (from N)

Fire Behavior: Low-intensity grass fire – Extreme crown fire

Access: Two points (Louis Street and Dalton Lane to Highway
21)

Home Construction: Ignition-resistant/vinyl with **combustible
attachments**

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 32 homes
- \$1,427,890 total value
- 36 acres

ZONE 1 HIGH-RISK AREAS

Scanlin Street

Location: Scanlin Street and Kinnard Avenue

N 30° 40' 03"

W 96° 23' 34"

Responding Station: 1

Wildland Areas: Approximately 330 acres, W, SW

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion (from W, SW)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Several points to 28th Street and Palasota Drive

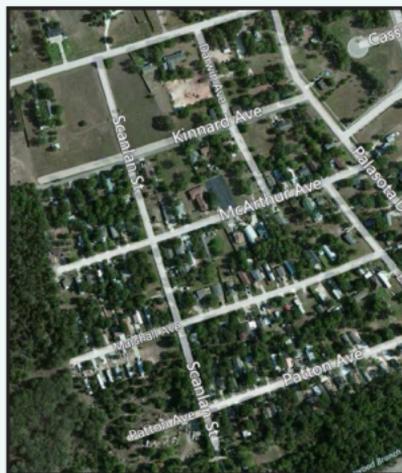
Home Construction: Ignition-resistant with **combustible attachments**

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 60 homes
- \$2,077,510 total value
- 40 acres



ZONE 1 HIGH-RISK AREAS

Waco Street

Location: Waco Street/MLK Jr.
and Waco Street/Highway 21
N 30° 41' 12"
W 96° 21' 42"

Responding Station: 1

Wildland Areas: Approximately
80 acres, intermixed

Fuels: Grass, juniper and oak

Primary Threats: Direct flame
contact, ember intrusion

Fire Behavior: Low-intensity grass fire – Group torching

Access: Several points north to Highway 21, south to MLK Jr.
Street

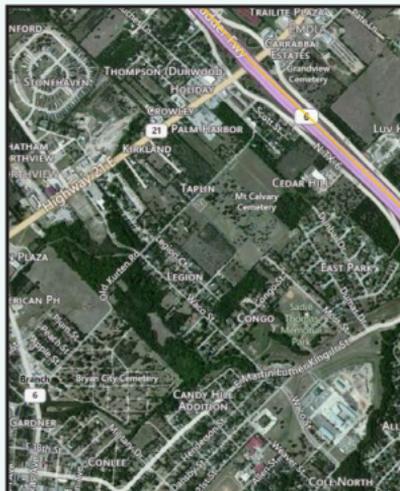
Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: 30 feet or more

Fire Occurrence: Moderate

Estimated Values at Risk:

- 95 homes
- \$4,136,600 total value
- 48 acres



ZONE 2 CONTINGENCY PLAN

Draft Site 1:

Country Club Lake

N 30° 38' 28"

W 96° 21' 35"

Access from College Avenue

Special Considerations: On Travis

B. Bryan Municipal Golf Course

property

Additional Water Sources:

Finfeather Lake

N 30° 39' 00"

W 96° 22' 33"

Access from Fountain Avenue

Turkey Creek pond

N 30° 38' 19"

W 96° 22' 40"

Access from Turkey Creek Road

*Hydrants are located throughout the Villa Maria West area.

Keep the Fire:

West of F.M. 2818

Fuels:

Primarily grasses –
High rates of spread
and moderate flame
lengths

Pockets of juniper
and oak southeast of
neighborhood – High
flame lengths

Local Thresholds –

Watch Out:

- Winds – Greater than 15 mph
- RH – Less than 25 percent
- Temperature – Over 90° F
- 100-hour fuel moisture – Less than 13 percent

ZONE 2 CONTINGENCY PLAN

General tactical considerations:

Access is difficult in some areas – particularly the Midtown Industrial Area from Dodge Street to Carson Street – because of the railroad.

Evacuation Trigger Points:

- Extreme fire conditions
- Fire jumps F.M. 2818
- Heavy smoke within neighborhood

Evacuation Considerations:

Federal Prison Camp (minimum security women's prison)

N 30° 40' 40"

W 96° 21' 39"

Address: 1100 Ursuline Ave.

Special Considerations: Large population, security concerns

West 28th Street

N 30° 39' 55"

W 96° 24' 26"

Address: West 28th Street

Special Considerations: Large population of non-English speakers

ZONE 2 CONTINGENCY PLAN

Potential Staging and ICP Locations in Response Zone 2:

Blinn College

N 30° 39' 40"

W 96° 20' 57"

Address: 2423 Blinn Blvd. (faces Villa Maria Road)

Special Considerations: Wooded area across from college campus

Jane Long Middle School

N 30° 39' 07"

W 96° 23' 43"

Address: 1106 N. Harvey Mitchell Parkway

Special Considerations: Good ingress/egress

Travis B. Bryan Municipal Golf Course

N 30° 38' 29"

W 96° 21' 44"

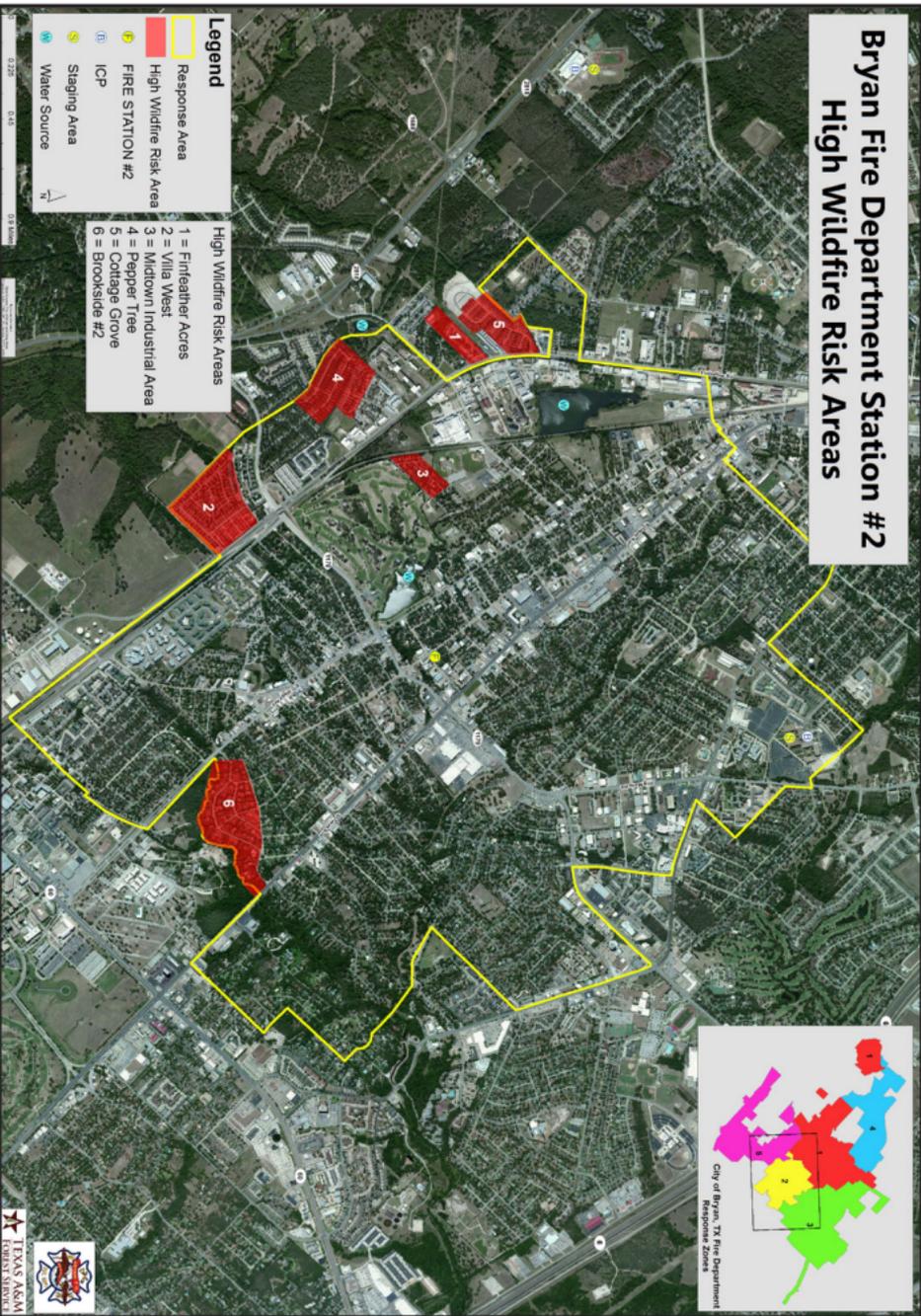
Address: 206 West Villa
Maria Road

Special Considerations:
Property includes a
lake



Country Club Lake at the Travis B.
Bryan Municipal Golf Course

Bryan Fire Department Station #2 High Wildfire Risk Areas

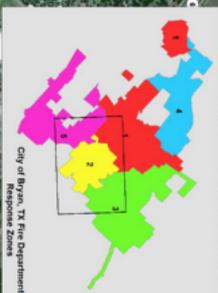


Legend

- Response Area
- High Wildfire Risk Area
- FIRE STATION #2
- ICP
- Staging Area
- Water Source

High Wildfire Risk Areas

- 1 = Finfeather Acres
- 2 = Villa West
- 3 = Midtown Industrial Area
- 4 = Pepper Tree
- 5 = Cottage Grove
- 6 = Brookside #2



ZONE 2 HIGH-RISK AREAS

Finfeather Acres

Location: Finfeather
Circle/Finfeather Road
N 30° 38' 44"
W 96° 22' 33"

Responding Station: 2

Wildland Areas:

Approximately 100 acres,
W

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion,
radiant heat (from W)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Two points (Finfeather Circle to Finfeather Road)

Home Construction: Homes have vinyl skirting and
combustible attachments

Defensible Space: Less than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- No individual parcel data
- \$628,930 total value
- 11 acres



ZONE 2 HIGH-RISK AREAS

Villa West

Location: Forestwood and Yegua

N 30° 37' 44"

W 96° 21' 58"

Responding Station: 2

Wildland Areas: Approximately
600 acres, SW, S, SE

Fuels: Grass with pockets of
yaupon, juniper and oak

Primary Threats: Direct flame
contact, ember intrusion (from
SW, W, SE)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Several points to Villa Maria Road and Finfeather Road

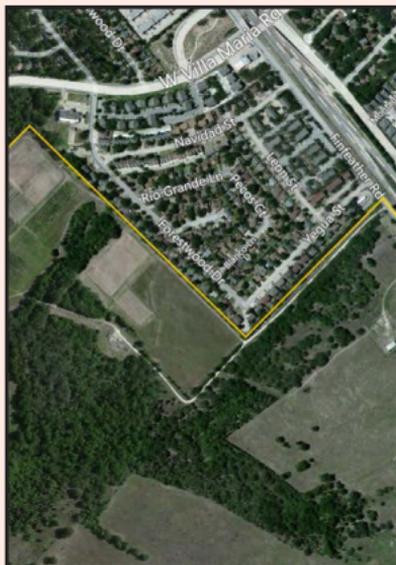
Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: Less than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 118 homes
- \$15,790,459 total value
- 31 acres



ZONE 2 HIGH-RISK AREAS

Midtown Industrial Area (Roosevelt neighborhood and PlyGem factory)

Location: Roosevelt Street and Churchill Drive
N 30° 38' 29"
W 96° 22' 09"

Responding Station: 2

Wildland Areas: Approximately 18 acres, S, W

Fuels: Grass with pockets of juniper and oak

Primary Threat: Ember intrusion (from S, W)

Fire Behavior: Low-intensity
grass fire – Group torching

Access: Several points to College
Avenue and Finfeather Road

Home Construction: Ignition-
resistant with **combustible
attachments**

Defensible Space: 30 feet

Fire Occurrence: High

Estimated Values at Risk:

- 35 homes
- \$1,984,660 total value
- 8 acres



ZONE 2 HIGH-RISK AREAS

Pepper Tree

Location: Pepper Tree and Sprucewood Street

N 30° 38' 17"

W 96° 22' 25"

Responding Station: 2

Wildland Areas: Approximately 7 acres, S

Fuels: Grass

Primary Threat: Direct flame contact (from S)

Fire Behavior: Low-intensity grass fire – Rapidly-spreading grass fire

Access: Two points (one to Forestwood Drive and one to Finfeather Road)

Home Construction:

Ignition-resistant with

combustible attachments

Defensible Space: 30 feet

Fire Occurrence: High

Estimated Values at Risk:

- 95 homes
- \$11,157,760 total value
- 22 acres



ZONE 2 HIGH-RISK AREAS

Cottage Grove

Location: Cottage Grove
Circle and Finfeather Road
N 30° 38' 53"
W 96° 22' 34"

Responding Station: 2

Wildland Areas:

Approximately 120 acres, NW,
W, SW

Fuels: Grass, juniper and oak

Primary Threat: Ember
intrusion

Fire Behavior: Low-intensity grass fire – Extreme crown fire

Access: One point to Finfeather Road

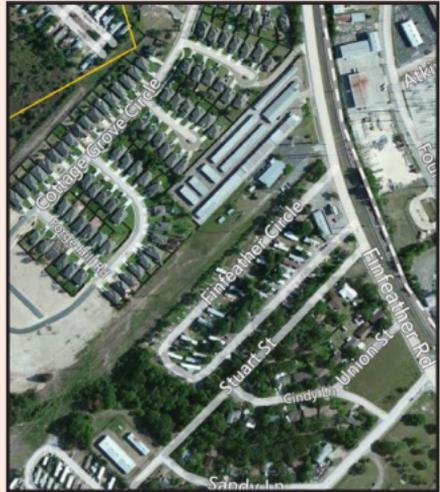
Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: More than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 91 homes
- \$10,039,500 total value
- 17 acres



ZONE 2 HIGH-RISK AREAS

Brookside #2

Location: Brookside Drive East/South College Avenue and Hensel Avenue/South Texas Avenue)

N 30° 37' 51"

W 96° 20' 44"

Responding Station: 2

Wildland Areas: Approximately 70 acres, S, SE (dried-up creek bed)

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion (from S, SE)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Several points to Texas Avenue and College Avenue

Home Construction: Ignition-resistant with **combustible attachments**

* Some solar panels in the neighborhood

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 52 homes
- \$12,082,810 total value
- 33 acres



ZONE 3 CONTINGENCY PLAN

Fuels:

Copperfield is intermixed with oak and juniper.

Large areas of grasslands surround the neighborhood.

Depending on grazing methods, grasses may range from short to tall and can produce extreme fire behavior.

Grass - High rates of spread and moderate flame lengths

Juniper - High flame lengths

Oak - High flame lengths

Local Thresholds – Watch Out:

- Winds – Greater than 15 mph
- RH – Less than 25 percent
- Temperature – Over 90° F
- 100-hour fuel moisture – Less than 13 percent

Keep the Fire:

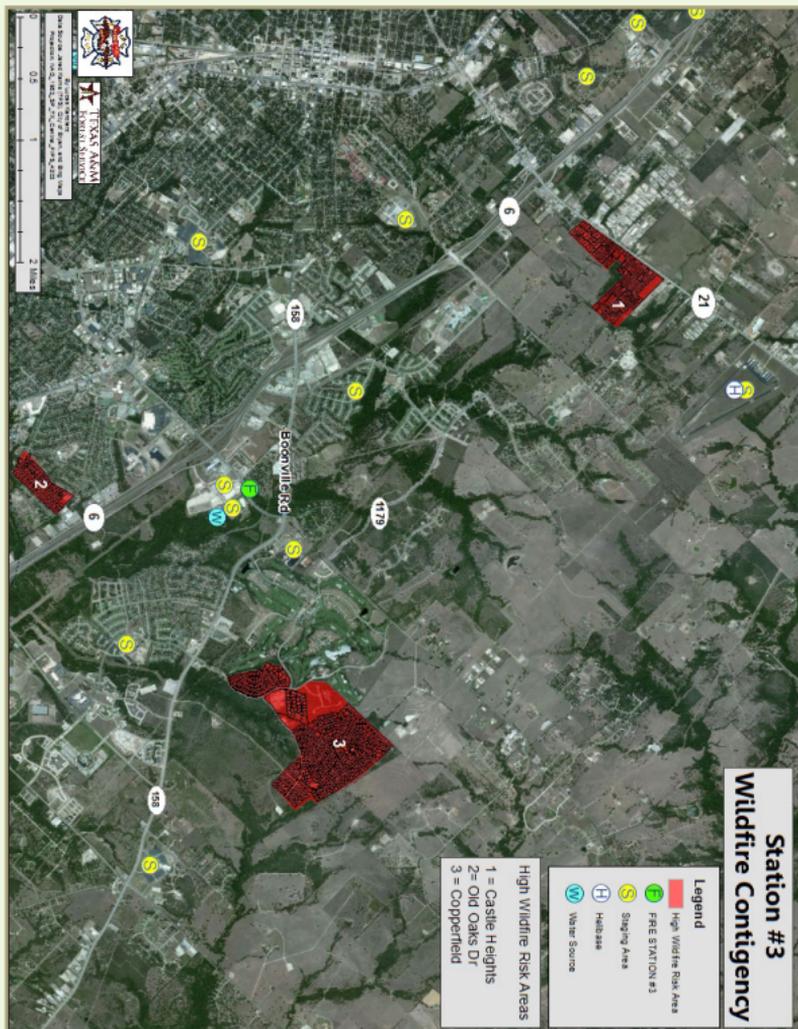
East of Wallis Road
East of Merka Drive
East of Steep Hollow
South of Highway 30

Draft Site 1:

Brazos Center pond
N: 30° 39' 52"
W: 96° 19' 08"
Access from Briarcrest Drive
Special Considerations:
Across the street from Fire Station No. 3, adjacent to potential staging areas (Brazos Center and Target parking lot)

*Hydrants are located throughout Copperfield and Castle Heights.

ZONE 3 CONTINGENCY PLAN



Tactical considerations for Response Zone 3

ZONE 3 CONTINGENCY PLAN

Evacuation Trigger Points:

- Extreme fire behavior and high rates of spread
- Heavy smoke within neighborhood
- Heavy smoke within school campuses

Evacuation Considerations:

Copperfield is a densely-populated area with several dead ends.

Potential Staging and ICP Locations in Response Zone 3:

Allen Academy

N 30° 40' 17"

W 96° 18' 56"

Address: 3201 Booneville Road

Mitchell Elementary School

N 30° 40' 41"

W 96° 20' 02"

Address: 2500 Austin's Colony Parkway

Special Considerations: School has an athletic complex.

Wooded area behind the school has significant historical fire occurrence. A large population of students could be exposed to smoke if a fire occurs.

ZONE 3 CONTINGENCY PLAN

Brazos Center/Target Parking Lot

N 30° 39' 52"

W 96° 19' 08"

Address: 3061 Wildflower Drive

Special Considerations: Facilities are located next to each other. Brazos Center can be used as ICP; Target parking lot can be used as a helibase. The facilities are across Briarcrest Drive from Fire Station No. 3.



Target parking lot

ZONE 3 CONTINGENCY PLAN

Central Baptist Church

N 30° 39' 26"

W 96° 16' 40"

Address: 1991 F.M. 158

Bowen Elementary School

N 30° 39' 18"

W 96° 18' 14"

Address: 3870 Copperfield Drive

Special Considerations: Close proximity to high-risk area
(Copperfield)

Coulter Airfield

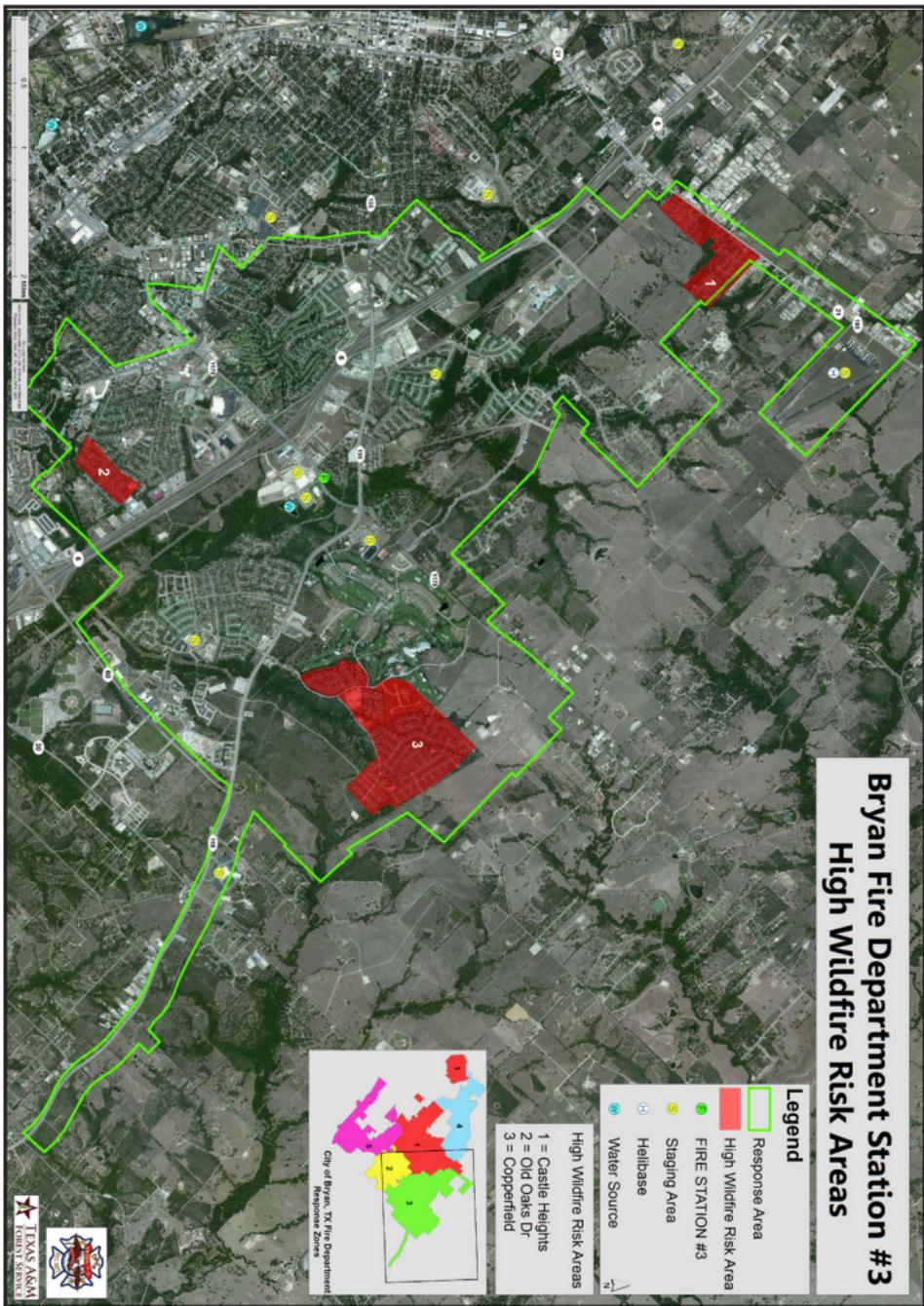
N 30° 39' 24"

W 96° 25' 37"

Address: 6120 East Highway 21

Special Considerations: 247-acre city-owned facility, could be
used to stage air resources and as a helibase.

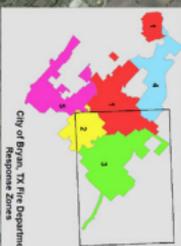
Bryan Fire Department Station #3 High Wildfire Risk Areas



Legend

- Response Area
- High Wildfire Risk Area
- FIRE STATION #3
- Staging Area
- Helibase
- Water Source

- High Wildfire Risk Areas
- 1 = Castle Heights
 - 2 = Old Oaks Dr
 - 3 = Copperfield



City of Bryan, TX Fire Department
Response Zones



ZONE 3 HIGH-RISK AREAS

Castle Heights

Location: Castle Avenue and
Clark Street

N 30° 42' 25"

W 96° 20' 47"

Responding Station: 3

Wildland Areas: Approximately
400 acres, S

Fuels: Grass, juniper and oak

Primary Threats: Direct flame
contact, ember intrusion,
radiant heat (from S)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Several points to Highway 21

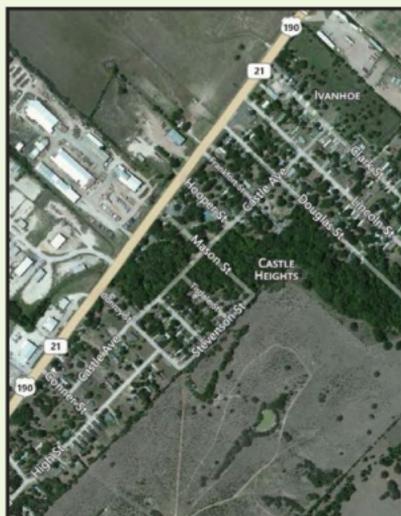
Home Construction: Homes have vinyl skirting and **combustible
attachments**

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 250 homes
- \$6,471,019 total value
- 82 acres



ZONE 3 HIGH-RISK AREAS

Old Oaks Drive

Location: Old Oaks Drive/Barak Lane and Old Oaks Drive/
Briar Oaks Drive

N 30° 38' 38"

W 96° 19' 28"

Responding Station: 3

Wildland Areas: Approximately 100 acres, SE, S, SW

Fuels: Grass, yaupon, juniper and oak

Primary Threats: Direct flame contact, ember intrusion (from SE, S, SW)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Several points to
Highway 6 and 29th Street

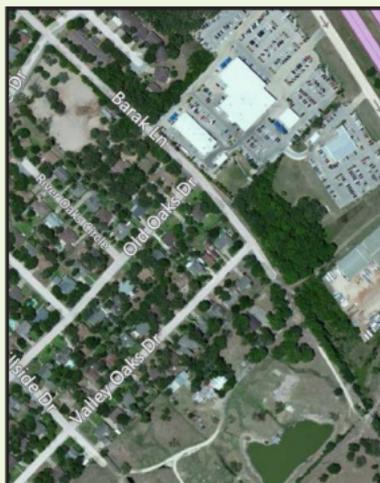
Home Construction: Ignition-
resistant with **combustible
attachments**

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 125 homes
- \$16,514,300 total value
- 34 acres



ZONE 3 HIGH-RISK AREAS

Copperfield

Location: Copperfield Drive and

Canterbury Drive

N 30° 40' 07"

W 96° 17' 52"

Responding Station: 3

Wildland Areas: Approximately

3,000 acres, NE, E, SE

Fuels: Grass with pockets of juniper and oak

Primary Threats: Direct flame contact, ember intrusion (from NE, E, SE)

Fire Behavior: Low-intensity grass fire – Group torching

Access: One point to Copperfield Drive

*Dense fuels along point of access

Home Construction: Ignition-resistant with **combustible attachments**

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 725 homes
- \$142,435,030 total value
- 250 acres



ZONE 4 CONTINGENCY PLAN

Keep the Fire:

East and North of
Highway 6
West of Texas Avenue

*Hydrants are located
throughout the high-
risk areas in Zone 4.

Fuels:

Short grass with
patches of tall grass
– Low to high rates
of spread

Juniper and yaupon
– Moderate to high
flame lengths

Oak – High flame
lengths

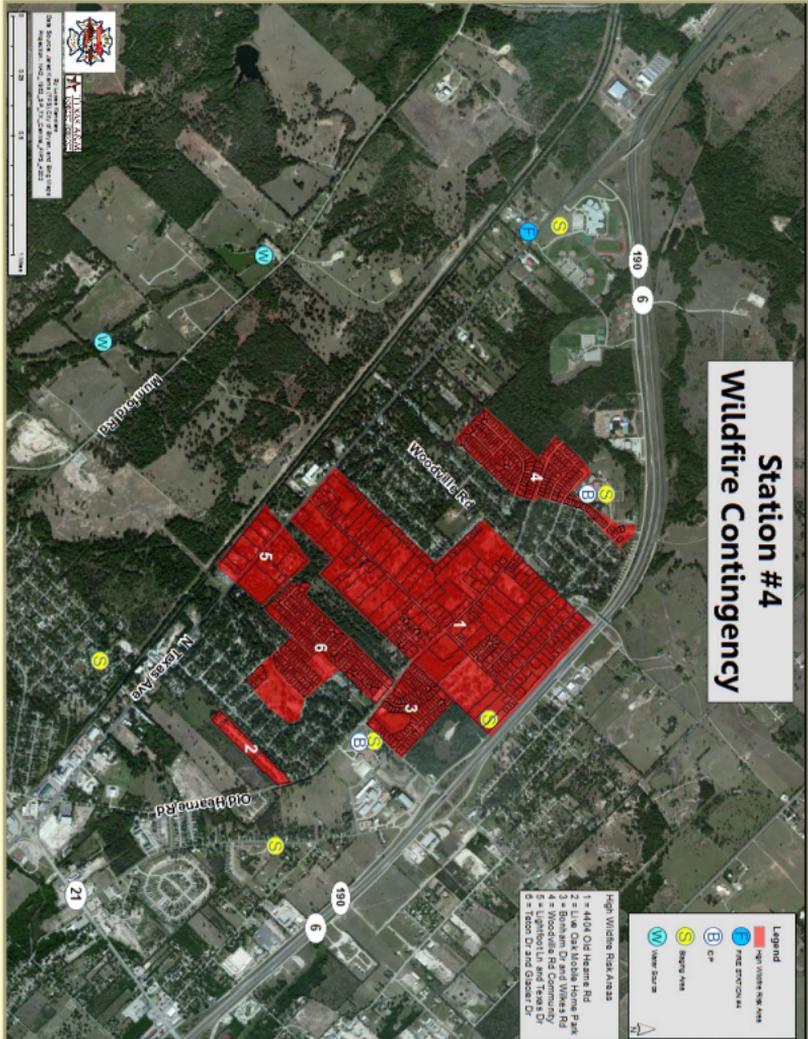


Fuels in Zone 4

Local Thresholds – Watch Out:

- Winds – Greater than 15 mph
- RH – Less than 25 percent
- Temperature – Over 90° F
- 100-hour fuel moisture – Less than 13 percent

ZONE 4 CONTINGENCY PLAN



Tactical considerations for Response Zone 4

ZONE 4 CONTINGENCY PLAN

General Tactical Considerations:

- A company on Mumford Road houses a significant amount of lumber.
- Dansby Power Plant, owned and operated by Bryan Texas Utilities, is within this response zone.
- Although the Texas Triangle Business Park is in the county, Bryan Fire Department is contracted to provide firefighting services for this industrial area, which is surrounded by woods near Response Zone 4.



Dansby Power Plant

Evacuation Trigger Points:

- Fire jumps Highway 6 or Texas Avenue
- Extreme fire conditions and high rates of spread

Evacuation Considerations:

Wilkes Road, Stevens Drive and Woodville Road provide access to Highway 6.

ZONE 4 CONTINGENCY PLAN

Potential Staging and ICP Locations in Response Zone 4:

Navarro Elementary School

N 30° 43' 06"

W 96° 23' 34"

Address: 4619 Northwood Drive

Special Considerations: Close proximity to neighborhood, Texas Department of Transportation office, Department of Public Safety office

Bonham Elementary School

N 30° 42' 25"

W 96° 22' 38"

Address: 3100 Wilkes Road

Special Considerations: Surrounded by area with large pockets of fuel

Arena Hall

N 30° 42' 07"

W 96° 22' 16"

Address: 2702 Tabor Road

Special Considerations: Large space, county-owned

ZONE 4 CONTINGENCY PLAN

New Beginnings Church

N 30° 42' 45"

W 96° 22' 43"

Address: 2177 North Earl Rudder Freeway

Special Considerations: Adjacent to a large wooded area with thick vegetation

Bryan Regional Athletic Complex

N 30° 42' 55"

W 96° 24' 31"

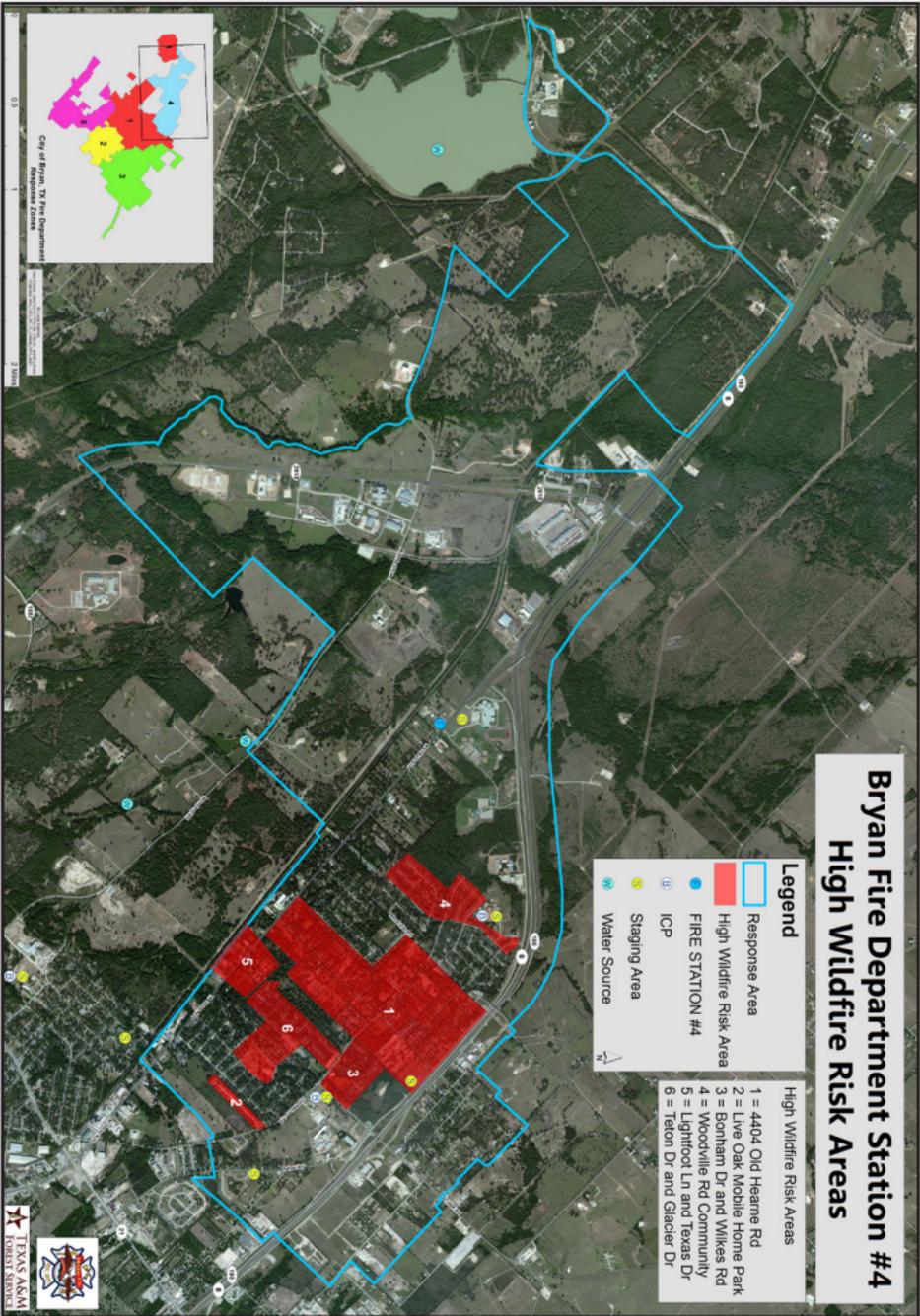
Address: 5440 North Texas Ave.

Special Considerations: City-owned, several lighted fields, two pavilions, restrooms, large parking lot



Bryan Regional Athletic Complex

Bryan Fire Department Station #4 High Wildfire Risk Areas

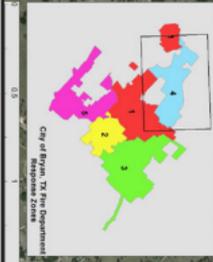


Legend

- Response Area
- High Wildfire Risk Area
- ④ FIRE STATION #4
- ④ ICP
- Staging Area
- Water Source

High Wildfire Risk Areas

- 1 = 4404 Old Heame Rd
- 2 = Live Oak Mobile Home Park
- 3 = Bonham Dr and Wilkes Rd
- 4 = Woodville Rd Community
- 5 = Lightfoot Ln and Texas Dr
- 6 = Taton Dr and Glacier Dr



City of Bryan, TX Fire Departments
 1 = Live Oak Mobile Home Park
 2 = Bonham Dr and Wilkes Rd
 3 = Woodville Rd Community
 4 = Lightfoot Ln and Texas Dr
 5 = Taton Dr and Glacier Dr
 6 = Live Oak Mobile Home Park
 7 = Live Oak Mobile Home Park
 8 = Live Oak Mobile Home Park
 9 = Live Oak Mobile Home Park



ZONE 4 HIGH-RISK AREAS

4404 Old Hearne Road

Location: 4404 Old Hearne
Road

N 30° 42' 42"

W 96° 23' 10"

Responding Station: 4

Wildland Areas: Approximately

1,000 acres, intermix

Fuels: Grass, juniper and oak

Primary Threats: Direct flame

contact, ember intrusion,

radiant heat

Fire Behavior: Low-intensity grass fire – Group torching

Access: Several points to Highway 6 and Texas Avenue

Home Construction: Homes have vinyl skirting and

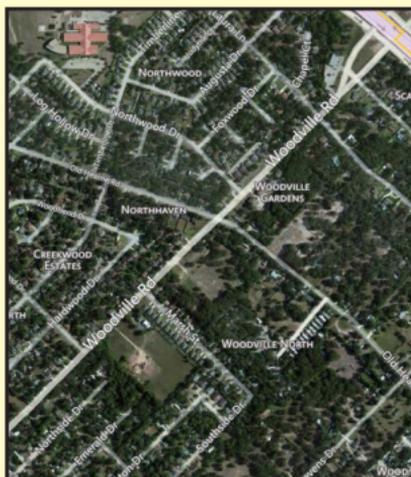
combustible attachments

Defensible Space: Less than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 160 homes
- \$17,933,229 total value
- 240 acres



ZONE 4 HIGH-RISK AREAS

Live Oak Mobile Home Park

Location: Old Hearne Road and Drew Drive

N 30° 42' 05"

W 96° 22' 29"

Responding Station: 4

Wildland Areas: Approximately 60 acres, S, SW

Fuels: Grass with pockets of juniper and oak

Primary Threats: Direct flame contact, ember intrusion, radiant heat (from S, SW)

Fire Behavior: Low-intensity grass fire – Group torching

Access: One point to Old Hearne Road

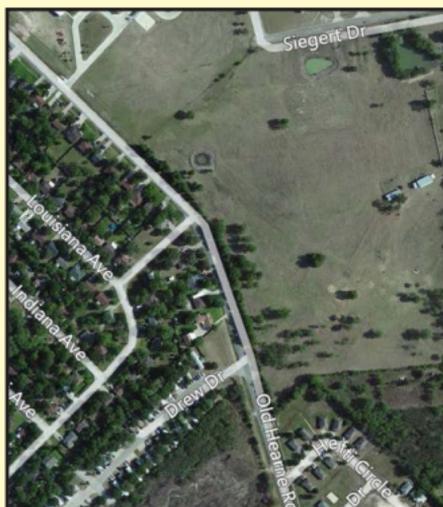
Home Construction: Homes have vinyl skirting and **combustible attachments**

Defensible Space: Less than 30 feet

Fire Occurrence: Moderate

Estimated Values at Risk:

- No individual parcel data
- \$734,000 total value
- 10 acres



ZONE 4 HIGH-RISK AREAS

Bonham Drive and Wilkes Street

Location: Bonham Drive and
Wilkes Street
N 30° 42' 26"
W 96° 22' 36"

Responding Station: 4

Wildland Areas: Approximately 35
acres, NE

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion (from
NE)

Fire Behavior: Low-intensity grass fire – Group torching

Access: One point to Wilkes Street

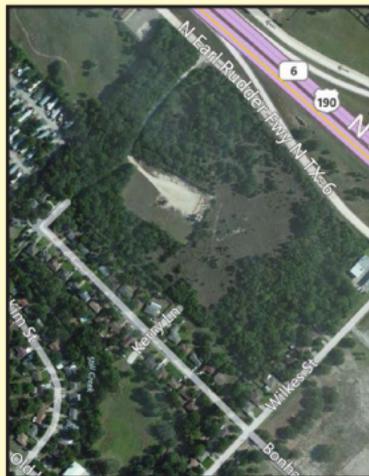
Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: Less than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 93 homes
- \$8,434,590 total value
- 28 acres



ZONE 4 HIGH-RISK AREAS

Woodville Road

Location: Woodbend Drive, Indian Trail, Timberline Court
N 30° 42' 56"
W 96° 23' 43"

Responding Station: 4

Wildland Areas: Approximately 140 acres, N, intermix

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion (from N)

Fire Behavior: Low-intensity grass fire – Extreme crown fire

Access: Several points to Woodville Road

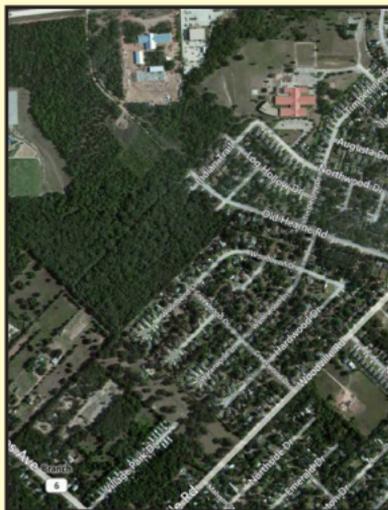
Home Construction: Ignition-resistant with **combustible attachments**

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 201 homes
- \$18,471,470 total value
- 181 acres



ZONE 4 HIGH-RISK AREAS

Lightfoot Lane and Texas Avenue

Location: Lightfoot Lane and Texas Avenue

N 30° 42' 02"

W 96° 23' 19"

Responding Station: 4

Wildland Areas: Approximately 85 acres, intermix

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion

Fire Behavior: Low-intensity grass fire – Group torching

Access: One point to Texas

Avenue

Home Construction:

Ignition-resistant with

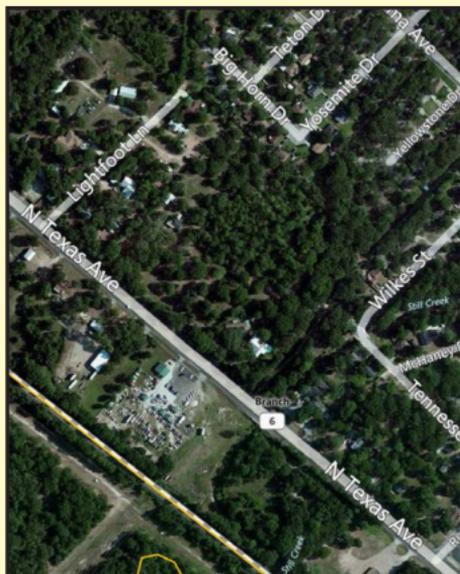
combustible attachments

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- Eight homes
- \$1,020,630 total value
- 28 acres



ZONE 4 HIGH-RISK AREAS

Teton Drive/Glacier Drive

Location: Teton Drive/Oklahoma Avenue and Glacier Drive/
Missouri Avenue

N 30° 42' 11"

W 96° 23' 06"

Responding Station: 4

Wildland Areas: Approximately 90 acres, NW

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion (from
NW)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Several points to Wilkes
Street

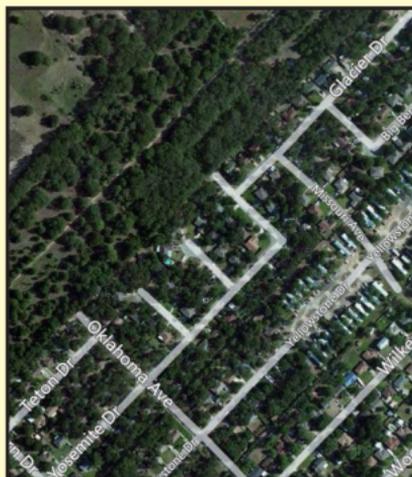
Home Construction: Ignition-
resistant with **combustible
attachments**

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 200 homes
- \$20,129,970 total value
- 50 acres



ZONE 5 CONTINGENCY PLAN

Keep the Fire:

North of Highway 21
West of Highway 47

Fuels:

Primarily grass fields intermixed with areas that have oak, juniper, yaupon and pine

Grass - High rates of spread and moderate flame lengths

Juniper – High flame lengths

Yaupon – Moderate flame lengths

Pine – High flame lengths

Draft Site 1:

Leisure Lake

N 30° 38' 06"

W 96° 24' 41"

Access from Charlotte Lane

Draft Site 2:

Traditions Lake

N 30° 36' 14"

W 96° 23' 17"

Access from Traditions Boulevard

Additional Water Source:

Autumn Lake

N 30° 37' 20"

W 96° 23' 43"

Bordered by Chick Lane, Turning Leaf Drive

Local Thresholds – Watch Out:

- Winds – Greater than 15 mph
- RH – Less than 25 percent
- Temperature – Over 90° F
- 100-hour fuel moisture – Less than 13 percent

ZONE 5 CONTINGENCY PLAN

Evacuation Trigger Points:

- Extreme fire behavior
- High rates of spread
- Group torching and crown runs
- Fire jumps Highway 47 or Highway 60

Evacuation Considerations:

The “Cottages and Casitas” section of Traditions subdivision is composed primarily of secondary residences (many of the homes in this area may be unoccupied).



Traditions subdivision

ZONE 5 CONTINGENCY PLAN

Potential Staging and ICP Locations in Response Zone 5:

Mary Branch Elementary School

N 30° 37' 31"

W 96° 23' 23"

Special Considerations: Close proximity to Fire Station No. 5

Brazos County Expo Center

N 30° 37' 17"

W 96° 24' 57"

Special Considerations: Could serve as helibase

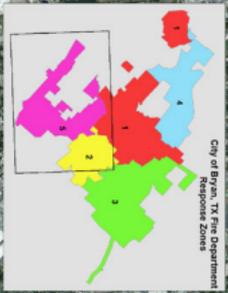
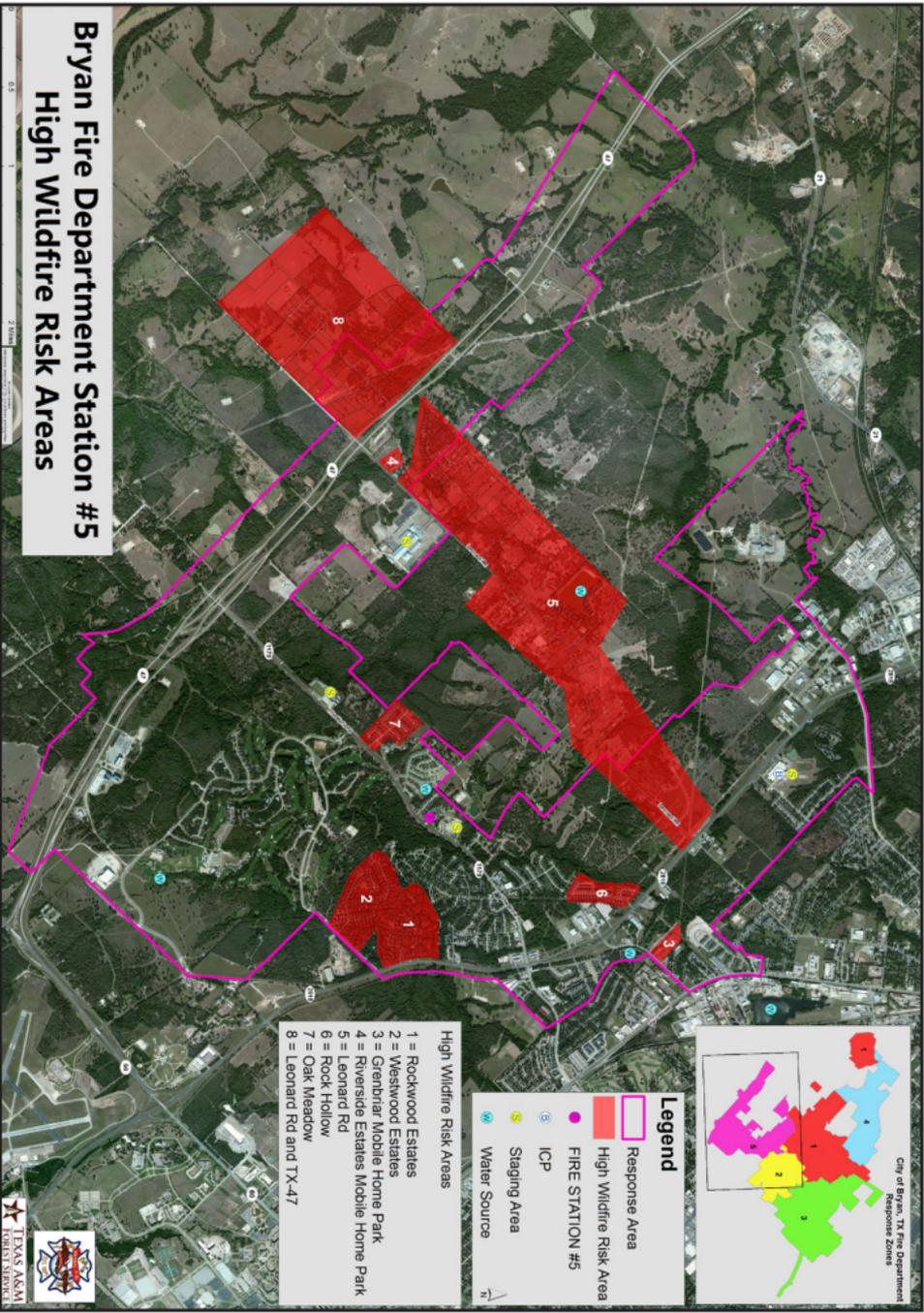
Brazos Christian School

N 30° 36' 56"

W 96° 24' 08"

Special Considerations: Close proximity to Fire Station No. 5

Bryan Fire Department Station #5 High Wildfire Risk Areas



Legend

- Response Area
- High Wildfire Risk Area
- FIRE STATION #5
- ICP
- Staging Area
- ⊙ Water Source

- High Wildfire Risk Areas**
- 1 = Rockwood Estates
 - 2 = Westwood Estates
 - 3 = Grenhar Mobile Home Park
 - 4 = Riverside Estates Mobile Home Park
 - 5 = Leonard Rd
 - 6 = Rock Hollow
 - 7 = Oak Meadow
 - 8 = Leonard Rd and TX-47



ZONE 5 HIGH-RISK AREAS

Westwood Estates

Location: Westwood Main and
Gabbard Road

N 30° 36' 57"

W 96° 22' 48"

Responding Station: 5

Wildland Areas: Approximately
400 acres, N, NW, W

Fuels: Grass, yaupon, juniper
and oak

Primary Threats: Direct flame contact, ember intrusion

Fire Behavior: Low-intensity grass fire – Extreme crown fire

Access: Two points (one to Traditions Drive, one to F.M. 1179)

Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: Less than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 120 homes
- \$19,092,967 total value
- 67 acres



ZONE 5 HIGH-RISK AREAS

Rockwood Estates

Location: Rockwood Drive and
F.M. 2818

N 30° 37' 15"

W 96° 22' 37"

Responding Station: 5

Wildland Areas: Approximately
400 acres, intermix

Fuels: Grass, yaupon, juniper
and oak

Primary Threats: Direct flame
contact, ember intrusion

Fire Behavior: Low-intensity grass fire – Extreme crown fire

Access: Three points to F.M. 2818

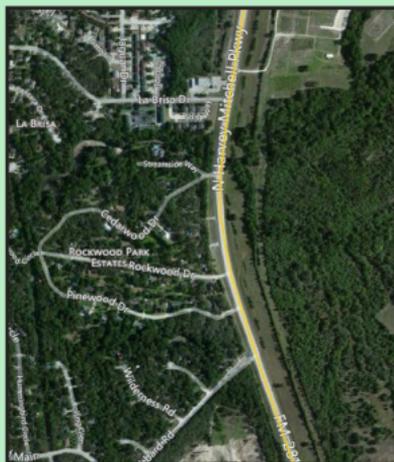
Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: Less than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 76 homes
- \$10,522,700 total value
- 65 acres



ZONE 5 HIGH-RISK AREAS

Greenbriar Acres Mobile Home Park

Location: Greenbriar Circle and Turkey Creek Road

N 30° 38' 28"

W 96° 22' 38"

Responding Station: 5

Wildland Areas: Approximately 100 acres, NW, W

Fuels: Grass, juniper, oak

Primary Threats: Direct flame contact, ember intrusion, radiant heat (from NW, W)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Two points to Turkey Creek Road

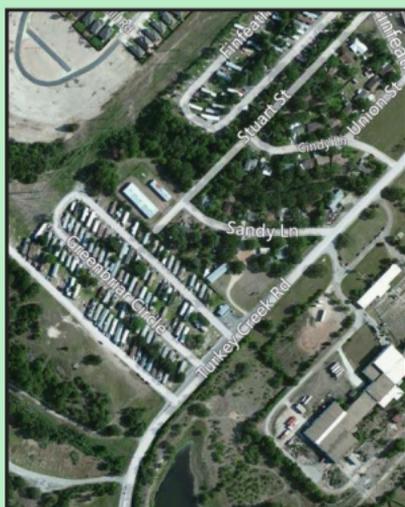
Home Construction: Homes have vinyl skirting with **combustible attachments**

Defensible Space: Less than 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- No individual parcel data
- \$332,620 total value
- 8 acres



ZONE 5 HIGH-RISK AREAS

Riverside Estates Mobile Home Park

Location: Leonard Road and Meg Lane

N 30° 37' 10"

W 96° 25' 22"

Responding Station: 5

Wildland Areas: Approximately 200 acres, N, NW

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion, radiant heat (from N, NW)

Fire Behavior: Low-intensity grass fire – Group torching

Access: Two points to Leonard Road

Home Construction: Homes have vinyl skirting with

combustible attachments

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- No individual parcel data
- \$837,390 total value
- 35 acres

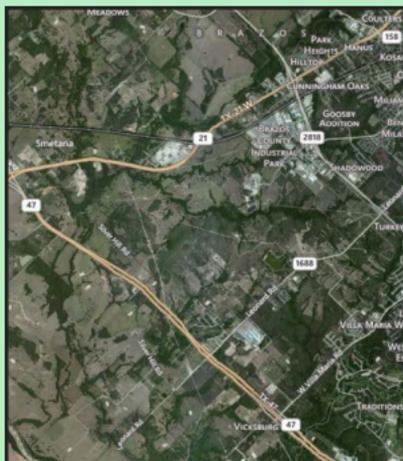


ZONE 5 HIGH-RISK AREAS

Leonard Road (East) and Highway 47

Location: Leonard Road/F.M.
2818 and Leonard Road/
Highway 47
N 30° 38' 03"
W 96° 24' 21"

Responding Station: 5



Wildland Areas: Approximately
300 acres, intermix

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion

Fire Behavior: Low-intensity grass fire – Group torching

Access: Several points to Highway 47

Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: 30 feet or more

Fire Occurrence: Low

Estimated Values at Risk:

- 125 homes
- \$18,102,030 total value
- 1,060 acres

ZONE 5 HIGH-RISK AREAS

Rock Hollow Place

Location: Rock Hollow Place and F.M. 2818

N 30° 38' 20"

W 96° 22' 56"

Responding Station: 5

Wildland Areas: Approximately 400 acres, W

Fuels: Grass, juniper and oak

Primary Threats: Direct flame contact, ember intrusion (from W)

Fire Behavior: Low-intensity grass fire – Extreme crown fire

Access: One point to F.M. 2818

Home Construction: Ignition-resistant with **combustible attachments**

Defensible Space: 30 feet

Fire Occurrence: Moderate

Estimated Values at Risk:

- 39 homes
- \$9,214,950 total value
- 16 acres



ZONE 5 HIGH-RISK AREAS

Oak Meadow

Location: Kingsgate Drive and
F.M. 1179
N 30° 37' 06"
W 96° 23' 49"

Responding Station: 5

Wildland Areas: Approximately
800 acres, N, NW, W

Fuels: Grass, yaupon, juniper
and oak

Primary Threats: Direct flame contact, ember intrusion (from
N, NW, W)

Fire Behavior: Low-intensity grass fire – Extreme crown fire

Access: One access point to F.M. 1179

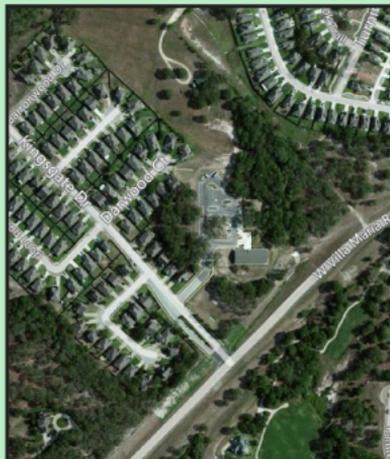
Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 112 homes
- \$17,973,320 total value
- 22 acres



ZONE 5 HIGH-RISK AREAS

Leonard Road (West) and Highway 47

Location: Leonard Road/
Highway 47 and Leonard
Road/Silver Hill Road
N 30° 36' 53"
W 96° 25' 41"

Responding Station: 5

Wildland Areas: Approximately
1,500 acres, intermix

Fuels: Grass, juniper and oak

Primary Threats: Direct flame
contact, ember intrusion

Fire Behavior: Low-intensity grass fires - Group torching

Access: Several points to Leonard Road

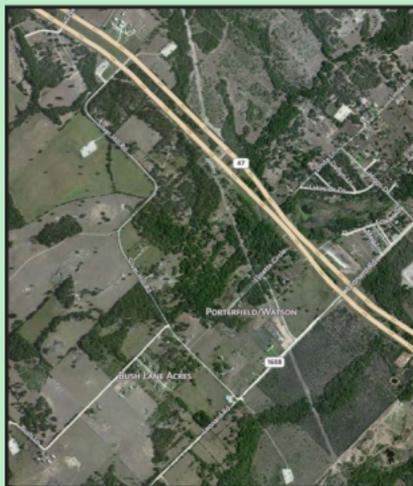
Home Construction: Ignition-resistant with **combustible
attachments**

Defensible Space: 30 feet

Fire Occurrence: Low

Estimated Values at Risk:

- 52 homes
- \$6,831,890 total value
- 389 acres



REGIONAL FIRE RISK LEVELS

Fire managers at the regional and state level use Fire Risk Levels as a planning and staffing tool. The state is divided into 18 fire risk regions. A regional fire risk level is determined for each region. One preparedness level is determined for the state.

Fire Risk Level I

- Low to moderate daily fire danger when critical fire weather is present
- Low to moderate fire occurrence
- Drought Monitor lists no drought levels in region
- Fuel dryness is at normal moisture (blue level)
- Herbaceous fuel moistures are above 150 percent and grasses are green
- 1,000-hour dead fuel moisture is above the 50th percentile
- ERC percentile is below the 50th percentile

Fire Risk Level II

- Moderate to high daily fire danger when critical fire weather is present
- Moderate to active fire occurrence
- Drought Monitor defines D1 (moderate) drought or abnormally dry areas within region
- Fuel dryness is at normal moisture (blue level) or dry (yellow level)

REGIONAL FIRE RISK LEVELS

- Herbaceous fuel moistures are cured or transitioning from green to cured
- 1,000-hour dead fuel moisture is between the 26th and 50th percentile (blue)
- ERC percentile is between the 50th and 75th percentile (blue)

Fire Risk Level III

- High to very high daily fire danger when critical fire weather is present
- Active fire occurrence
- Drought Monitor defines D1 or D2 (moderate to severe) drought in region
- Fuel dryness is at dry (yellow) or critically dry (orange) level
- Herbaceous fuels are cured
- 1,000-hour dead fuel moisture is between the 10th and 25th percentile (yellow)
- ERC percentile is between the 75th and 90th percentile (yellow)

Fire Risk Level IV

- Very high to extreme daily fire danger when critical fire weather is present
- Very active fire occurrence
- Drought Monitor defines D2 or D3 (severe to extreme)

REGIONAL FIRE RISK LEVELS

drought in region

- Fuel dryness is at critically dry (orange) or extreme (red) level
- Herbaceous fuels are cured
- 1,000-hour dead fuel moisture is between the 3rd and 10th percentile
- ERC percentile is between the 90th and 97th percentile (orange and red)

Fire Risk Level V

- Very high to extreme daily fire danger when critical fire weather is present
- Very active to extreme fire occurrence
- Drought Monitor defines D3 or D4 (extreme to exceptional) drought in region
- Fuel dryness is at critically dry (orange) or extreme (red) level
- Herbaceous fuels are cured
- 1,000-hour dead fuel moisture is at or below the 97th percentile (red)

Source: Texas Fire Response Handbook

STATE PREPAREDNESS LEVELS

Listed below are the criteria for determining State Preparedness Levels (PL). The PL is established by Texas A&M Forest Service's Planning and Preparedness Section in conjunction with the Risk Assessment Section.

Preparedness Level 1

- Fire activity is within the capabilities of local fire departments with minimal support from TFS.
- TFS fire expenditures are within budgeted funds.
- Consider when no more than two regions are in a Risk Level (RL) II.
- Supervisors should expect minimal impact on daily activities.

Preparedness Level 2

- Freeze-cured fuels are present in winter months.
- Fire activity may begin to exceed local capabilities.
- Mobilization of additional fire departments and TFS resources may be required.
- External fire resources may be required.
- TFS fire expenditures may begin to exceed budgeted funds.
- Consider when one or more regions are in a RL III or multiple regions are in RL II.
- Supervisors should be aware of regional risk levels when planning daily activities.

STATE PREPAREDNESS LEVELS

Preparedness Level 3

- Fire activity may exceed the capabilities of local fire departments and TFS.
- External fire resources may be required.
- TFS fire expenditures begin to exceed budgeted funds.
- Consider when at least one region is in RL IV or a significant number of regions are in RL III.
- Supervisors will consider regional risk levels when planning daily activities.

Preparedness Level 4

- Fire activity may exceed the capabilities of state agency resources.
- External fire resources are required.
- TFS fire expenditures exceed budgeted funds.
- Consider when a significant number of regions are in RL IV or higher.
- Supervisors will consider regional risk levels when planning daily activities.

STATE PREPAREDNESS LEVELS

Preparedness Level 5

- Fire activity exceeds the capabilities of state agency resources.
- The scope of fire operations typically requires multiple Zone Commands.
- External resources are required.
- TFS fire expenditures exceed budgeted funds.
- Consider when a significant number of regions are in RL IV or higher.
- Supervisors will consider regional risk levels when planning daily activities.

The State Preparedness Level may be elevated due to response to all-hazard incidents.

Source: Texas Fire Response Handbook

TEXAS WILDFIRE RESPONSE PROCESS

The State of Texas is composed of 254 counties with approximately 98 percent privately-owned land. The eastern one-seventh of the state is heavily forested with loblolly pine plantations, while the remainder of the state has a wide range of fuel models from coastal grasses to thick oak and mesquite stands to sparsely vegetated areas in parts of the west.

Fire seasons in Texas can occur any time of the year. A fall and winter fire season typically starts in grass fuels after the first hard freeze. In spring and early summer, fires mostly occur in West Texas, and the summer fire season occurs during periods of drought, strong winds and lower relative humidity.

The majority of wildfires in Texas are handled by the 1,900 fire departments throughout the state, 1,500 of which are volunteer departments. However, by Texas State statute, Texas A&M Forest Service has been given the authority to “... take any actions deemed necessary to prevent and extinguish forest fires.” Therefore, direct communication between local government and TFS is authorized. Additionally, all TFS employees and their representatives have the authority to enter onto privately-owned land whenever it is necessary to investigate or suppress forest and grass fires when they are known to be burning uncontrolled.

Source: Texas Fire Response Handbook

REQUESTING RESOURCES

For immediate resource requests on a Type 5, 4 or 3 incident, the on-duty Bryan Fire Department Battalion Chief should contact the Texas A&M Forest Service Regional Fire Coordinator either directly or through the Brazos County 911 Dispatch office.

As time allows during the response, the Battalion Chief or Incident Commander should notify the Bryan Emergency Management Coordinator of the request and advise if other state resources are needed. The Bryan EMC will contact the appropriate personnel at Brazos County for notification of additional requests and the information will be passed on to the Texas Division of Emergency Management District Coordinator and the Disaster District Chairman as needed.

Emergency responders assigned to an incident in the City of Bryan should consult with the Incident Commander about the preferred process for requesting resources, as it may vary depending on the complexity of the incident.

The Incident Commander is responsible for managing emergency resources at the incident site and may begin staffing Incident Management Team positions as the incident grows in scope or complexity.

REQUESTING RESOURCES

The Incident Command System (ICS) structure includes a Logistics Section which is responsible for obtaining and maintaining personnel, facilities, equipment and supplies committed to the emergency operation.

If the EOC is activated, the Incident Commander will continue to manage emergency resources committed at the incident site. The Resource Manager in the EOC will monitor the state of all resources, manage uncommitted resources and coordinate with the Incident Commander to determine requirements for additional resources at the incident site.

Source: Brazos County Interjurisdictional Emergency Management Plan, Annex M, Resource Management

TRANSITIONING INTO EXTENDED ATTACK

Incident Complexity:

A fire complexity analysis should be conducted as part of initial size-up and subsequent size-ups to ensure that the appropriate level of management is applied to an incident and to determine the need for transitioning into extended attack.

There are five levels of complexity that have been defined. Type 1 is the most complex and requires the highest level of skill and management. Type 5 is the least complex incident. Type 3 complexity requires a transition to extended attack.

The complexity analysis of an incident is not a completely objective process. There are many factors to consider that can influence the determination of incident complexity.

Some of the major factors that should be considered in an incident complexity analysis include the number and type of resources engaged or needed for suppression operations, values at risk, threat to life and property, jurisdictional boundaries, fuel types, fire behavior, significant fire potential and firefighter safety.

Type 5 Complexity:

- Generally a small fire or a larger fire with a high percentage of inactive perimeter.
- Two to seven firefighters with one to two units and the local

TRANSITIONING INTO EXTENDED ATTACK

fire department are an adequate number of resources to contain fire.

- Fire presents low resistance to control. Initial attack will be successful.
- Fire behavior and fire intensities allow for direct attack.

Type 4 Complexity:

- Fire is large enough to require multiple units and a designated supervisor with no collateral responsibilities.
- Local resources include two to five units and one to five fire departments.
- A reconnaissance aircraft and/or one to two tactical aircraft may be present.
- Fire behavior and intensities can cause containment problems near the head fire with slopovers and short-range spotting.
- Direct tactics are generally used but indirect tactics may sometimes be used to cross the head fire due to high fire intensities or high rate of spread.
- Fuel dryness levels may require extended mop-up after containment.
- Fire behavior drops off significantly with sunset and increased moisture recovery.
- Fires are contained in one burning period.

TRANSITIONING INTO EXTENDED ATTACK

Type 3 Complexity Transition Indicators:

The more indicators that are present increase the likelihood that you have transitioned to a Type 3 fire.

- Attempt(s) to contain head have failed.
- Indirect tactics are being used.
- Significant fire potential rating is high or very high.
- Peak burning period has yet to occur.
- Cannot see the entire fire.
- Tactical aircraft are engaged or ordered.
- Evacuations have occurred or are recommended.
- Number of resources (agency, fire departments, law enforcement) exceed span of control.
- Difficult to manage/monitor all communications.
- Fuels and/or terrain limit access.

Regardless of size or complexity, if any of the following are present an ICT3 must be ordered:

- Entrapment
- Shelter deployment
- Burnover
- Fatality or serious injury

Type 3 Complexity:

- Cannot see the entire fire or cannot gain access to the entire fire.
- Resources may include 20 to 50 responders from a variety of

TRANSITIONING INTO EXTENDED ATTACK

organizations including wildland agencies, fire departments, law enforcement and relief agencies.

- Regional resources may be dispatched to fill some of the command and general staff positions, usually at the division/group or unit leader level.



- Tactical aircraft are dispatched when available.
- Fire will be an extended attack fire.
- Containment in a single burning period will not be possible due to fuel types, dry to critically dry fuel conditions, active fire behavior or limited access to fire.
- Indirect tactics and structure protection are part of containment strategies.
- Public safety is at risk prompting evacuations or road closures.

Source: Texas A&M Forest Service State Fire Operations Plan

FMAG PROCESS

A Fire Management Assistance Grant (FMAG) offers federal financial assistance to states and local government for the mitigation, management and control of fires on public or private land. If approved, an FMAG can reimburse 75 percent of eligible expenses on a specific incident or wildfire.

To be eligible for an FMAG, an incident has to constitute the threat of a major disaster.

To begin the FMAG application process, the governor or the governor's authorized representative submits to FEMA a request for an FMAG program declaration. The application must be submitted while the fire is burning uncontrolled and threatening such destruction as would constitute a major disaster.

When submitting a declaration request, the governor should provide factual data and professional estimates as available to support the request. The state's verbal request must be followed up with official, completed forms.

FMAG PROCESS

Local officials are responsible for providing accurate and sufficient data to the state documenting costs incurred in response to an FMAG Declaration and fire suppression efforts.

Information required:

- Size of fire(s) in acres or square miles
- Name, location and population of area (or areas) threatened
- Number of primary and secondary residences and businesses threatened
- Distance of fire to nearest neighborhoods
- Number of persons evacuated to date, if applicable
- Current and predicted (24-hour) weather conditions
- Degree to which state and local resources are committed to this fire and other fires in federal, state or local jurisdictions

To further support a declaration request, the state may append additional documentation including:

- Fire severity maps
- Geographic, topographical or land assessment maps
- Incident status summary report (ICS-209)

Source: Federal Emergency Management Agency FMAG Program Guide

ATTACK STRATEGIES: DIRECT ATTACK

Advantages:

- Minimal area is burned; no additional area is intentionally burned.
- Safest place to work; firefighters can usually escape into the burned area.
- The uncertainties of firing operations can be reduced/eliminated.

Disadvantages:

- Firefighters can be hampered by heat, smoke and flames.
- Control lines can be very long and irregular.
- Burning material can easily spread across mid-slope lines.
- May not be able to use natural or existing barriers.
- More mop-up and patrol is usually required.

Source: Incident Response Pocket Guide, a publication of the National Wildfire Coordinating Group

ATTACK STRATEGIES: INDIRECT ATTACK

Advantages:

- Control lines can be located using favorable topography.
- Natural or existing barriers can be used.
- Firefighters may not have to work in smoke and heat.
- Control lines can be constructed in lighter fuels.
- There may be less danger of slopovers.

Disadvantages:

- More area will be burned.
- Must be able to trade time and space for line to be constructed and fired.
- Firefighters may be in more danger because they are distant from the fire and have unburned fuels between them and the fire.
- There may be some dangers related to firing operations.
- Firing operations may leave unburned islands of fuel.
- May not be able to use control line already built.

SAFETY ZONES

A safety zone is an area where a firefighter can survive without a fire shelter. Considerations for effective safety zones:

- Take advantage of heat barriers such as lee side of ridges, large rocks or solid structures.
- When possible, burn out safety zones prior to arrival of fire front.
- Avoid locations upslope or downwind from the fire; chimneys, saddles or narrow canyons; and steep uphill escape routes.
- Not intended for structure protection.

Separation distance between the firefighter and the flames should be at least four times the maximum continuous flame height. Distance separation is the radius from the center of the safety zone to the nearest fuels.

Source: Incident Response Pocket Guide, a publication of the National Wildfire Coordinating Group

MEDICAL PLAN

Incident Command System principles dictate that an Incident Action Plan, to include a Medical Plan (ICS Form 206), be prepared for wildfires and other incidents.

PHI Air Medic, located at St. Joseph Regional Health Center, 2801 Franciscan, transports patients by helicopter.

The closest burn units are:

- Shriners Hospitals for Children Pediatric Burn Center in Galveston
- University of Texas Medical Branch Blocker Adult Burn Center in Galveston

Bryan Fire Department responds to medical calls. Fire stations are located at the following addresses:

- Fire Station No. 1, 300 West William J. Bryan Parkway
- Fire Station No. 2, 2813 Cavitt Ave.
- Fire Station No. 3, 3211 Briarcrest Drive
- Fire Station No. 4, 5429 North Texas Ave.
- Fire Station No. 5, 2051 W. Villa Maria Road

Treatment centers in the area include:

- St. Joseph Regional Health Center, 2801 Franciscan, Bryan
- College Station Medical Center, 1604 Rock Prairie Road, College Station
- Scott & White Healthcare, Highway 6 and Rock Prairie Road, College Station

STRUCTURE PROTECTION CHECKLIST

Rapid mitigation measures

- Remove small combustibles immediately next to structure.
- Close windows and doors, including garage (leave unlocked).
- Clean area around fuel tank and shut off tank.
- Charge garden hoses.
- Apply CAF, foam or gel retardants if available.

Equipment and water use

- Mark entrance to indicate a staffed location if it is not obvious.
- Charge hose lines.
- Long hose lays are not recommended.
- Keep 100 gallons of water in reserve.
- Identify a backup water source.

STRUCTURE PROTECTION CHECKLIST

Equipment and water use (continued)

- Identify power lines for aerial resources.
- Never rely on water for firefighter safety.

Patrol following the fire front

- Most structures do not burn until after the fire front has passed.
- Move to closest safety zone and let fire front go through.
- Return as soon as conditions allow safe access to structures.
- Secondary ignition is usually due to residual spot fires or creeping ground fire.
- Take suppression actions within your capability.
- Call for assistance if needed.

Source: Incident Response Pocket Guide, a publication of the National Wildfire Coordinating Group

ACRONYMS

- AAR – After Action Review
- AHIMT – All-Hazard Incident Management Team
- BI – Burning Index
- BLM – Bureau of Land Management
- CAF – Compressed Air Foam
- CEOC - Community Emergency Operations Center
- CTR – Crew Time Report
- DHS – Department of Homeland Security
- DIVS – Division Supervisor
- EAS – Emergency Alert System
- EMT – Emergency Medical Technician
- EOC – Emergency Operations Center
- ERC – Energy Release Component
- FAA – Federal Aviation Administration
- FD – Fire Department
- FEMA – Federal Emergency Management Agency
- FMAG – Fire Management Assistance Grant
- FMO – Fire Management Officer
- GPS – Global Positioning System
- HAZMAT – Hazardous Material
- IA – Initial Attack
- IC – Incident Commander
- ICP – Incident Command Post
- ICS – Incident Command System
- IIMT – Interagency Incident Management Team
- JIC – Joint Information Center

ACRONYMS

- JIS – Joint Information System
- KBDI – Keetch-Byram Drought Index
- LAT – Large Air Tanker
- LCES – Lookout, Communication, Escape Routes, Safety Zones
- LE – Law Enforcement
- LEO – Law Enforcement Officer
- LODD – Line of Duty Death
- MAFFS – Modular Airborne Firefighting System
- MCP – Mobile Command Post
- MRE – Meal Ready to Eat
- NFPA – National Fire Protection Association
- NICC – National Interagency Coordination Center
- NIFC – National Interagency Fire Center
- NIMO – National Incident Management Organization
- NIMS – National Incident Management System
- PAO – Public Affairs Officer
- PD – Position Description
- PIO – Public Information Officer
- PL – Preparedness Level
- PPE – Personal Protective Equipment
- RAWS – Remote Automated Weather System
- RFC – Regional Fire Coordinator
- RFD – Rural Fire District
- RH – Relative Humidity
- RL – Risk Level
- ROS – Rate of Spread

ACRONYMS

- SACC** – Southern Area Coordination Center
- SAIT** – Safety Accident Investigation Team
- SCBA** – Self-Contained Breathing Apparatus
- SEAT** – Single-Engine Air Tanker
- SITREP** – Situation Report
- SOP** – Standard Operating Procedure
- TAC** – Tactical Channels
- TFLD** – Task Force Leader
- TFR** – Temporary Flight Restrictions
- TFS** – Texas A&M Forest Service
- UAC** – Unified Area Command
- UC** – Unified Command
- USDA** – United States Department of Agriculture
- USFS** – United States Forest Service
- UTF** – Unable to Fill
- VFD** – Volunteer Fire Department
- VFR** – Visual Flight Rules
- WCT** – Work Capacity Test
- WUI** – Wildland Urban Interface

GLOSSARY

The following terms are from the Incident Command System (ICS) National Training Curriculum documentation.

AGENCY REPRESENTATIVE: An individual assigned to an incident from an assisting or cooperating agency who has been delegated authority to make decisions on matters affecting that agency's participation at the incident. Agency Representatives report to the Incident Liaison Officer.

AREA COMMAND: An organization established to: 1) oversee the management of multiple incidents that are each being handled by an Incident Command System organization; or 2) to oversee the management of a very large incident that has multiple Incident Management Teams assigned to it. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources based on priorities, ensure that incidents are properly managed and ensure that objectives are met and strategies followed.

BRANCH: The organizational level having functional or geographic responsibility for major parts of incident operations. The Branch level is organizationally between Section and Division/Group in the Operations Section, and between Section and Units in the Logistics Section. Branches are identified by the use of Roman numerals or by functional name (e.g., medical, security, etc.).

GLOSSARY

CACHE: A pre-determined complement of tools, equipment and/or supplies stored in a designated location, available for incident use.

CHECK-IN: The process whereby resources first report to an incident. Check-in locations include: Incident Command Post (Resources Unit), Incident Base, Camps, Staging Areas, Helibases, Helispots and Division Supervisors (for direct line assignments).

CHAIN OF COMMAND: A series of management positions in order of authority.

COMMAND: The act of directing and/or controlling resources by virtue of explicit legal, agency or delegated authority. May also refer to the Incident Commander.

COMMAND STAFF: The Command Staff consists of the Information Officer, Safety Officer and Liaison Officer. They report directly to the Incident Commander. They may have an assistant or assistants, as needed.

COMPLEX: Two or more individual incidents located in the same general area which are assigned to a single Incident Commander or to Unified Command.

GLOSSARY

COORDINATION CENTER: Term used to describe any facility that is used for the coordination of agency or jurisdictional resources in support of one or more incidents.

DELEGATION OF AUTHORITY: A statement provided to the Incident Commander by the Agency Executive delegating authority and assigning responsibility. The Delegation of Authority can include objectives, priorities, expectations, constraints and other considerations or guidelines as needed. Many agencies require written Delegation of Authority be given to Incident Commanders prior to their assuming command on larger incidents.

DEMOBILIZATION UNIT: Functional unit within the Planning Section responsible for assuring orderly, safe and efficient demobilization of incident resources.

DIRECTOR: The ICS title for individuals responsible for supervision of a Branch.

DISPATCH: The implementation of a command decision to move a resource or resources from one place to another.

DIVISION: Divisions are used to divide an incident into geographical areas of operation. A Division is located within the ICS organization between the Branch and the Task Force/Strike Team. Divisions are identified by alphabetic characters

GLOSSARY

for horizontal applications and, often, by floor numbers when used in buildings.

DOCUMENTATION UNIT: Functional unit within the Planning Section responsible for collecting, recording and safeguarding all documents relevant to the incident.

EMERGENCY MANAGEMENT COORDINATOR/DIRECTOR: The individual within each political subdivision that has coordination responsibility for jurisdictional emergency management.

EMERGENCY MEDICAL TECHNICIAN (EMT): A health-care specialist with particular skills and knowledge in pre-hospital emergency medicine.

EVENT: A planned, non-emergency activity. ICS can be used as the management system for a wide range of events, e.g., parades, concerts or sporting events.

GENERAL STAFF: The group of incident management personnel reporting to the Incident Commander. They may each have a deputy, as needed. The General Staff consists of:

- Operations Section Chief
- Planning Section Chief
- Logistics Section Chief
- Finance/Administration Section Chief

GLOSSARY

GROUP: Groups are established to divide the incident into functional areas of operation. Groups are composed of resources assembled to perform a special function not necessarily within a single geographic division. Groups are located between Branches (when activated) and Resources in the Operations Section.

HELIBASE: The main location for parking, fueling, maintenance and loading of helicopters operating in support of an incident. It is usually located at or near the incident base.

HELISPOT: Any designated location where a helicopter can safely take off and land. Some helispots may be used for loading of supplies, equipment or personnel.

INCIDENT: An occurrence either human caused or by natural phenomena that requires action by emergency service personnel to prevent or minimize loss of life or damage to property and/or natural resources.

INCIDENT ACTION PLAN: Contains objectives reflecting the overall incident strategy and specific tactical actions and supporting information for the next operational period. The Plan may be oral or written. When written, the Plan may have a number of forms as attachments (e.g., traffic plan, safety plan, communications plan, map, etc.).

GLOSSARY

INCIDENT COMMANDER: The individual responsible for the management of all incident operations at the incident site.

INCIDENT COMMAND POST (ICP): The location at which the primary command functions are executed. The ICP may be collocated with the incident base or other incident facilities.

INCIDENT COMMAND SYSTEM (ICS): A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.

INCIDENT MANAGEMENT TEAM: The Incident Commander and appropriate Command and General Staff personnel assigned to an incident.

INFORMATION OFFICER: A member of the Command Staff responsible for interfacing with the public and media or with other agencies requiring information directly from the incident. There is only one Information Officer per incident. The Information Officer may have assistants.

LIAISON OFFICER: A member of the Command Staff responsible for coordinating with representatives from cooperating and assisting agencies.

GLOSSARY

LOGISTICS SECTION: The Section responsible for providing facilities, services and materials for the incident.

MOBILIZATION: The process and procedures used by all organizations federal, state and local for activating, assembling and transporting all resources that have been requested to respond to or support an incident.

MULTI-AGENCY COORDINATION (MAC): A generalized term which describes the functions and activities of representatives of involved agencies and/or jurisdictions who come together to make decisions regarding the prioritizing of incidents and the sharing and use of critical resources. The MAC organization is not a part of the on-scene ICS and is not involved in developing incident strategy or tactics.

MUTUAL AID AGREEMENT: Written agreement between agencies and/or jurisdictions in which they agree to assist one another upon request, by furnishing personnel and equipment.

NATIONAL INTERAGENCY INCIDENT MANAGEMENT SYSTEM (NIIMS): An NWCG-developed program consisting of five major subsystems which collectively provide a total systems approach to all-risk incident management.

GLOSSARY

NATIONAL WILDFIRE COORDINATING GROUP (NWCG):

A group formed under the direction of the Secretaries of the Interior and Agriculture to improve the coordination and effectiveness of wildland fire activities, and provide a forum to discuss, recommend appropriate action or resolve issues and problems of substantive nature.

OPERATIONAL PERIOD: The period of time scheduled for execution of a given set of operation actions as specified in the Incident Action Plan. Operational Periods can be of various lengths, although usually not over 24 hours.

OPERATIONS SECTION: The Section responsible for all tactical operations at the incident. Includes Branches, Divisions and/or Groups, Task Forces, Strike Teams, Single Resources and Staging Areas.

OVERHEAD PERSONNEL: Personnel who are assigned to supervisory positions which include Incident Commander, Command Staff, General Staff, Directors, Supervisors and Unit Leaders.

RESOURCES: Personnel and equipment available, or potentially available, for assignment to incidents. Resources are described by kind and type, e.g., ground, water, air, etc.

GLOSSARY

SECTION: That organization level with responsibility for a major functional area of the incident, e.g., Operations, Planning, Logistics, Finance/Administration. The Section is organizationally between Branch and Incident Commander.

SINGLE RESOURCE: An individual, a piece of equipment and its personnel complement, or a crew or team of individuals with an identified work supervisor that can be used on an incident.

SPAN OF CONTROL: The supervisory ratio of from three-to-seven individuals, with five-to-one being established as optimum.

STAGING AREA: Staging Areas are locations set up at an incident where resources can be placed while awaiting a tactical assignment. Staging Areas are managed by the Operations Section.

STRIKE TEAM: Specified combinations of the same kind and type of resources, with common communications and a leader.

TACTICAL DIRECTION: Direction given by the Operations Section Chief which includes the tactics appropriate for the selected strategy, the selection and assignment of resources, tactics implementation and performance monitoring for each operational period.

GLOSSARY

TASK FORCE: A combination of single resources assembled for a particular tactical need, with common communications and a leader.

TEMPORARY FLIGHT RESTRICTIONS (TFR): Temporary airspace restrictions for non-emergency aircraft in the incident area. TFRs are established by the FAA to ensure aircraft safety, and are normally limited to a five-nautical-mile radius and 2,000 feet in altitude.

TWENTY-FOOT WINDS: Sustained winds averaged over a 10-minute period and measured 20 feet above the average height of nearby vegetation.

TYPE: Refers to resource capability. A Type 1 resource provides a greater overall capability due to power, size, capacity, etc., than would be found in a Type 2 resource. Resource typing provides managers with additional information in selecting the best resource for the task.

UNIFIED COMMAND: In ICS, Unified Command is a unified team effort which allows all agencies with responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies.

ICS FORMS

Incident Command System forms may be tailored to meet an agency's needs. More importantly, even though the format is flexible, the form number and purpose of the specific type of form must remain intact to maintain consistency and facilitate immediate identification and interoperability, and for ease of use.

The following provides brief descriptions of selected ICS forms. This list is not all-inclusive. All ICS forms can be downloaded at <http://www.nwccg.gov/pms/forms/icsforms.htm>

ICS 201 - Incident Briefing

Most often used by the initial Incident Commander, this four-section document (often produced as four pages) allows for the capture of vital incident information prior to the implementation of the formal planning process. ICS 201 allows for a concise and complete transition of command briefing to an incoming new IC. This form is designed to be transferred easily to the members of the Command and General Staff as they arrive and begin work. It is not included as a part of the formal written Incident Action Plan.

ICS FORMS

ICS 202 - Incident Objectives

ICS 202 serves as the first page of a written IAP. It includes incident information, a listing of the IC's objectives for the operational period, pertinent weather information and a general safety message. Signature blocks are provided.

ICS 203 - Organization Assignment List

ICS 203 is typically the second page of the IAP. It provides a full accounting of incident management and supervisory staff for that operational period.

ICS 204 - Assignment List

ICS 204 is included in multiples, based on the organizational structure of the Operations Section for the operational period. Each Division/Group will have its own page, listing the Supervisor for the Division/Group (including Branch Director if assigned) and the specific assigned resources with leader name and number of personnel assigned to each resource. This document then describes in detail the specific actions the Division or Group will be taking in support of the overall incident objectives.

ICS FORMS

Any special instructions will be included as well as the elements of the Incident Radio Communications Plan (ICS 205) that apply to that Division or Group.

ICS 205 - Incident Radio Communications Plan

ICS 205 is used to provide information on all radio frequency assignments down to the Division/Group level.

ICS 206 - Medical Plan

ICS 206 presents the incident's Medical Plan to care for responder medical emergencies.

ICS 209 - Incident Status Summary

ICS 209 collects basic incident decision support information and is the primary mechanism for reporting this situational information to incident coordination and support organizations and the Agency Administration/Executives.

ICS 211 - Incident Check-In List

ICS 211 documents the check-in process. Check-in recorders report check-in information to the Resources Unit.

ICS FORMS

ICS 215 - Operational Planning Worksheet

ICS 215 is used in the incident Planning Meeting to develop tactical assignments and resources needed to achieve incident objectives and strategies.

ICS 215A - Safety and Risk Analysis

ICS 215A communicates to the Operations and Planning Section Chiefs the safety and health issues identified by the Safety Officer. It also identifies mitigation measures to address the identified safety issues.

CONTACT LIST

District Coordinator, Texas Department of Public Safety,
Division of Emergency Management
979-412-0003

Texas A&M Forest Service Contact Info

Regional Fire Coordinator
200 Technology Way, Suite 1162
College Station, TX 77845-3424
979-458-6507

Assistant Chief Regional Fire Coordinator
700 South Reynolds Street
La Grange, Texas 78945
979-968-5555

LaGrange Dispatch
979-968-5555

texaswildfirerisk.com
ticc.tamu.edu
texasforests-service.tamu.edu
texasfirewise.com

STANDARD FIREFIGHTING ORDERS

WATCH OUT SITUATIONS

Standard Firefighting Orders

1. Keep informed on fire weather conditions and forecasts.
2. Know what your fire is doing at all times.
3. Base all actions on current and expected behavior of the fire.
4. Identify escape routes and safety zones, and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.
7. Maintain prompt communications with your forces, your supervisor and adjoining forces.
8. Give clear instructions and be sure they are understood.
9. Maintain control of your forces at all times.
10. Fight fire aggressively, having provided for safety first.

Watch Out Situations

1. Fire not scouted and sized up.
2. In country not seen in daylight.
3. Safety zones and escape routes not identified.
4. Unfamiliar with weather and local factors influencing fire behavior.
5. Uninformed on strategy, tactics and hazards.
6. Instructions and assignments not clear.
7. No communication link with crew members or supervisor.
8. Constructing line without safe anchor point.
9. Building fireline downhill with fire below.
10. Attempting frontal assault on fire.
11. Unburned fuel between you and fire.
12. Cannot see main fire; not in contact with someone who can.
13. On a hillside where rolling material can ignite fuel below.
14. Weather becoming hotter and drier.
15. Wind increases and/or changes direction.
16. Getting frequent spot fires across line.
17. Terrain and fuels make escape to safety zones difficult.
18. Taking a nap near fireline.



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