



SOUTH DAKOTA PRESCRIBED BURN MANAGEMENT PLAN

SD-ECS-9
Rev Jan 2020

SECTION I. GENERAL BURN UNIT INFORMATION

Owner / Operator:
Address:
E-mail:
Legal Description:
Acres in Burn Unit:
Land Use of Burn Unit: Range, Pasture, CRP, Crop, Other (describe):

Burn Unit:
Phone No:
Cell No:
County:

When burn unit includes multiple landowners, record the primary owner above and list other owners on an attachment.

SECTION II. OBJECTIVE OF BURN (Select all that apply)

- Reduce Eastern Red Cedar
Stimulate Desirable Herbaceous Species
Improve Wildlife Habitat
Improve Grazing Distribution
Control of invasive grasses, forbs, and/or shrubs
Remove Litter
Reduce Wildfire Hazard
Other-list

SECTION III. DESCRIPTION OF BURN UNIT

SECTION III, PART A. Woody Plant Species Present (List species, size and estimated canopy cover. If none, write in none):

SECTION III, PART B. Predominant herbaceous vegetation types present and likely growth-stage at proposed burn date (List type - cool season, warm season, forbs - height):

SECTION III, PART C. Fuel Load (Planned):

Determine a minimum fuel load to meet identified objective. Grazing deferment may be necessary.
Fine Fuel pounds per acre planned
* Normally at least one third of the fine fuel complex must be dead or cured in order to have an adequate ratio of live to dead material to carry a fire.

SECTION IV. FIRE PLAN - PREPARATION

SECTION IV, PART A. Resource Maps: Attach copies of the following maps and information. Check off to indicate inclusion as determined by planner.

- Topographic Map (required if slopes exceed 5%)
Burn Unit Map (Include North arrow, landowner and/or burn unit name, areas needing protection-see Section IV E-G, holding-line locations and type, firebreaks, firing sequence, water sources, location of equipment, safety zones, and surrounding land use and access)
A map of the surrounding area, up to 3 miles out depending on anticipated smoke behavior based on prescription.(example: plat map)

SECTION IV, PART B. Existing Surrounding Land use: Describe land use adjacent to burn unit (all sides of unit) and indicate direction from burn unit.

	North	South	East	West
Grassland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cropland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developed Area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION IV, PART C. Burn Unit History: Describe General Management over the past 5 years (i.e., grazed, rested, CRP, etc.) Include years since last grazing, haying, mowing or burning.

SECTION IV, PART D. Description of Planned Firebreaks or Fuel Breaks: Describe the type, length, and width of firebreak and actions to be taken to create firebreak. (*Show on Burn Map*). Types of fire breaks include but are not limited to: mowed, grazed, disked, bare soil, road, wet line, and water.

Location of Firebreak or Fuel break	Type of Fire Break or Fuel Break	Min Width
Additional Comments about Planned Firebreaks and/or Fuel breaks		

SECTION IV, PART E. Areas needing Pre-Burn Protection within the burn unit: Show areas on Burn Map (Check items identified in the planning process and indicate date protection completed).

Area or Structure	Describe Protection Needed	Date Completed
<input type="checkbox"/> Houses, Barns, and Other Buildings		
<input type="checkbox"/> Feeders, Pens, Corrals		
<input type="checkbox"/> Watering Systems		
<input type="checkbox"/> Utility Poles, Power Lines, Other Hazards		
<input type="checkbox"/> Fences		
<input type="checkbox"/> Equipment		
<input type="checkbox"/> Hay/Feed		
<input type="checkbox"/> Hunting Facilities		
<input type="checkbox"/> Wind Turbines		
<input type="checkbox"/> Oil or Gas Structures		
<input type="checkbox"/> Desirable Wooded Areas		
<input type="checkbox"/> Special Wildlife Habitats		
<input type="checkbox"/> Lakes, Streams, Wetlands		
<input type="checkbox"/> Critically Eroding Areas		
<input type="checkbox"/> Other - Describe (ex. rock piles)		
<input type="checkbox"/> Threatened and Endangered Species, Cultural Resources are adequately evaluated and addressed		

SECTION IV, PART F. Describe access points to unit and escape routes: Include location of gates, stream crossings, open access, etc. Show locations on Burn Map . Give careful consideration of smoke direction and impacts of smoke on nearby structures, dwellings, and escape routes.

SECTION IV, PART G. Residences and Businesses near the Burn Unit and those that may be impacted by smoke: Contact all before planned burn date.

Direction from Unit	Name	Physical Address	Phone Number

SECTION IV, PART H. Highways or other right-of-way: List all with the potential to be impacted by prescribed burn and smoke.

Example: US highway 6 - 2 miles south of unit

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

SECTION IV, PART I. SAFETY PERSONNEL AND OTHER AGENCIES: List name and phone number at time of plan development; record date notified as notification occurs. DIAL 911 IN CASE OF EMERGENCY, FOLLOW ALL LOCAL PERMITS AND/OR PERMISSION THAT MAY NEED TO BE OBTAINED.

Name	Phone Number	Date Notified
FIRE DEPARTMENTS		
Primary Department:		
Chief (Name):		

SHERIFF'S DEPARTMENT		
Name of Department:		
Sheriff's Name:		

UTILITY COMPANIES: If not present fill in N/A		
A.		
B.		
C.		

OIL AND GAS COMPANIES (INCLUDING GAS PIPELINES): If not present fill in N/A		
A.		
B.		
C.		

OTHER INCLUDING WIND ENERGY COMPANIES: If not present fill in N/A		
A.		
B.		
C.		

SECTION V - FIRE PLAN - IMPLEMENTATION OF PRESCRIBED BURN

SECTION V, PART A. ENVIRONMENTAL CONDITIONS NEEDED TO ACCOMPLISH OBJECTIVES

1. Planned Date Range for Burn: _____ through _____
(Time of year and/or stage of plant growth that will best meet prescribed burn objectives)
2. List pertinent fuel conditions such as likely green-up at proposed date, type of fuels (cool or warm season grass), live fuel moisture, 10 hour fuel , etc., that could impact success of burn.

3. Planned weather conditions for burn site Planned
 - a. Air Temperature _____
 - b. Relative Humidity % _____
 - c. Wind Speed _____
 - d. Acceptable Wind Direction _____

[May reference NOAA at: https://www.weather.gov/fsd/fire](https://www.weather.gov/fsd/fire)

SECTION V, PART B. FIRING SEQUENCE AND/OR IGNITION METHOD

Describe Firing Sequence and/or Ignition Method (backing fire, flank fire, head fire, strip fire, etc.) below. *Indicate on burn map*. If additional room is needed, attach description to the back of this form.

SECTION V, PART C. EQUIPMENT NEEDS

TYPE OF EQUIPMENT	NUMBER AND/OR GALLONS NEEDED	CHECK WHEN ACQUIRED	ADDITIONAL NOTES
Engines/Pumpers/Tenders (Number and size in gallons)		<input type="checkbox"/>	
Type VI Fire Fighting Equip (Number and size in gallons)		<input type="checkbox"/>	
ATVs/UTVs		<input type="checkbox"/>	
ATVs/UTVs w/Sprayers (Number and size in gallons)		<input type="checkbox"/>	
Drip Torches		<input type="checkbox"/>	
Torch Fuel (gallons)		<input type="checkbox"/>	
Backpack Sprayers		<input type="checkbox"/>	
Fire-Weather Kit, i.e. Kestrel		<input type="checkbox"/>	
2-Way Radios		<input type="checkbox"/>	
Highway Flags		<input type="checkbox"/>	
Flappers		<input type="checkbox"/>	
Rakes		<input type="checkbox"/>	
Chainsaws		<input type="checkbox"/>	
Shovels		<input type="checkbox"/>	
Drinking Water		<input type="checkbox"/>	
Matches/Lighter		<input type="checkbox"/>	
Burn Unit Maps (recommend all personnel have a map)		<input type="checkbox"/>	
Leaf Blower		<input type="checkbox"/>	
Wetting Agent		<input type="checkbox"/>	
Other (List):			
		<input type="checkbox"/>	
		<input type="checkbox"/>	

SECTION V, PART D. PERSONNEL REQUIRED. DEVELOP INDIVIDUAL CREW ASSIGNMENTS BEFORE BURN.

1. NUMBER OF PEOPLE NEEDED TO CONDUCT BURN: _____

2. NAME OF BURN BOSS: _____

3. PERSONNEL TO CONSIDER FOR BURN:

POSITION	NUMBER	POSITION	NUMBER
a. Engine/Pumper Drivers	_____	e. Lead ATV/UTV Patrol	_____
b. Hose Operators	_____	f. 2 nd ATV/UTV Patrol	_____
c. Igniters	_____	g. Weather/Lookout	_____
d. Hand Tool Operators	_____	h. Spotters	_____
		i. Other (Specify Job)	_____

Develop a list of personnel, phone numbers, and e-mail contact information for the required positions before planned burn, see Example Burn Crew Roster. Have list available for pre-burn briefing and ensure that assigned personnel are familiar with their assigned job duties. Attach a copy of the personnel roster to the burn plan after completion of the prescribed burn.

SECTION V, PART E. MOP-UP PLAN

MOP UP STANDARDS: Patrol entire perimeter of burned area, put out all flames and smoke within 50 feet of burn line, all heavy fuels within 100 feet of burn line and all snags within 150 feet of burn line. Pay special attention to smoldering leaf/litter, dung pats, woody debris and other coarse fuels.

Mop-up Plan Item	Person Responsible
Maintain close observation of burned area and weather conditions for 24-72 hours or until the fire is completely extinguished. Take immediate positive action to ensure safety, should a dangerous change in weather be forecasted.	

SECTION V, PART F. Post-Burn Conservation Practices and Monitoring:

1. Describe desired conditions after the burn including % control of target species, and post-burn vegetation type, diversity, and condition.

2. List additional conservation practices to be implemented after the burn to assist in meeting the resource objectives including, but not limited to, prescribed grazing, herbaceous weed control, upland wildlife habitat management, or range planting.

3. Describe Monitoring Methods to be used to evaluate burn effectiveness (Type and Frequency). Options include, but are not limited to Photo points, GrassSnap, Apparent Trend, Woody Canopy, or Stem Counts.

SECTION VI - CERTIFICATIONS AND APPROVALS OF PRESCRIBED BURN PLAN

COOPERATER CERTIFICATION AND SIGNATURE: Required

As the owner/operator, I, as the decision-maker have been involved in the planning process for this prescribed burn management plan. I have been informed that I could be liable for damages and the cost of fire suppression should the fire escape from the designated area as a result of this prescribed burn. No substitutions are allowed without the approval of the individual who developed the prescribed burn plan.

Signature of Owner or Operator (Circle One)

Date

PLAN PREPARED BY: Required

Plan Prepared by (Print Name): _____

Address: _____

Phone Number: _____

Company or Organization: _____

Signature: _____ Date: _____

*** If NRCS employee is preparing the plan, that person must have JAA approval for the Job Class of burn.**

PLAN CERTIFICATION - CERTIFIED TSP (TECHREG) DEVELOPED BURN PLAN: Only when prescribed burn plan is completed by TSP

I certify that I have reviewed the documents for technical adequacy and that the elements of the document are technically compatible, reasonable, and can be implemented. I have provided technical assistance to the client and provided deliverables to the client and NRCS for each element required by CAP 112 criteria. I certify that NRCS requirements are met and consistent with all applicable federal, state, and local laws and regulations. I have been informed that I could be liable for damages and the cost of fire suppression should the fire escape from the designed area as a result of this prescribed burn. This Prescribed Burn Plan 338 or CAP 112 Plan (*circle one*) addresses all items required in the Conservation Practice Standard and Design Procedures in the 338 Standard/CAP 112 Plan (*circle one*).

TSP Certification (Print Name): _____

Signature: _____ Date: _____

The 338 Prescribed Burn Plan or the CAP 112 Plan meets the requirements for NRCS Prescribed Burning outlined in the 338 Standard/CAP 112.

NRCS Certification (Print Name): _____

Signature: _____ Date: _____

BURN PLAN CERTIFICATION

*PLAN APPROVED BY NRCS (Print Name): _____

Signature: _____ Date: _____

*** Person approving design must have JAA approval for the Job Class of burn being checked.**

Plan reviewed by
other approving
agency

Print Name: _____ Date: _____

Signature: _____ Agency/Entity: _____

SECTION VII, PART A - PRESCRIBED BURN IMPLEMENTATION - POST-BURN EVALUATION

COMPLETE IMMEDIATELY AFTER BURN HAS BEEN COMPLETED

- 1. Burn Unit Name: _____
- 2. Acres Burned: _____
- 3. Date of Burn: _____
- 4. Beginning Time of Burn: _____
- 5. Time Mop-up Completed: _____
- 6. Observed Weather Changes During Burn: _____
- 7. Fire Behavior:
 - a. Spotting None Few Many
 - b. Difficult to Control Yes No
 - c. Convection Column Yes No
 - d. Fire Whirls Yes No
- 8. Objective of Burn was Met: Yes No

Evaluation Completed by burn boss or landowner/operator: _____

Signature

Date

PRACTICE CERTIFICATION - (TO BE COMPLETED AFTER BURN HAS BEEN CONDUCTED)

This applied practice meets South Dakota Standards and Specifications.

Signature TSP: _____
(required when TSP provides implementation assistance)

Date: _____

This practice has been applied as designed.

Signature Landowner/Operator: _____
(required when producer implements prescribed burn)

Date: _____

*This practice meets the objectives of Prescribed Burn (338)**

* Documentation required: Completed (pages 1-7) and signed, copy of the go no-go pre-burn checklist and burn permit (if needed).

Signature NRCS: _____

Date: _____

*** Person certifying practice must have JAA for the job class of the burn being certified.**

PRESCRIBED BURN CHECKLIST

(To be reviewed and filled out before burning on the DAY OF BURN)

Pre-burn Checklist (Completed prior to day of burn):	YES	NO
1. Weather forecast favorable (predicted within burn prescription)	<input type="checkbox"/>	<input type="checkbox"/>
2. Necessary firebreaks have been constructed	<input type="checkbox"/>	<input type="checkbox"/>
3. Potential hazards have been accounted for	<input type="checkbox"/>	<input type="checkbox"/>
4. Special precaution areas noted	<input type="checkbox"/>	<input type="checkbox"/>
5. Backup/secondary firebreak locations noted	<input type="checkbox"/>	<input type="checkbox"/>
6. Safety equipment is adequate	<input type="checkbox"/>	<input type="checkbox"/>
7. Tools and equipment are available	<input type="checkbox"/>	<input type="checkbox"/>
8. Adequate personnel are available	<input type="checkbox"/>	<input type="checkbox"/>
9. Special considerations have been reviewed	<input type="checkbox"/>	<input type="checkbox"/>
10. Burn Permit obtained from local fire chief and on site (if required)	<input type="checkbox"/>	<input type="checkbox"/>

GO-NO GO CHECK LIST: (Complete on Day of Burn) If answer to any is NO, do not burn until corrected

Actual weather conditions at burn site:	Planned	Actual	Time Recorded
a. Air Temperature	_____	_____	_____
b. Relative Humidity %	_____	_____	_____
c. Wind Speed	_____	_____	_____
	YES	NO	
d. Acceptable Wind Direction	<input type="checkbox"/>	<input type="checkbox"/>	
e. Actual Wind Direction	_____		
f. Forecasted conditions are favorable	<input type="checkbox"/>	<input type="checkbox"/>	
g. Mixing height	_____		
h. Transport winds	_____		
i. Ventilation rate (transport x mixing height)	_____		
Notification of units of government made:			
a. Local Fire Department	<input type="checkbox"/>	<input type="checkbox"/>	
b. Sheriff/County Dispatch	<input type="checkbox"/>	<input type="checkbox"/>	
Neighbors notified	<input type="checkbox"/>	<input type="checkbox"/>	
Other: (test fire observation)			

IF ANY OF THE ABOVE ARE ANSWERED "NO," DO NOT BURN

Checklist completed by: _____

Date: _____

CONTINGENCY PLAN

In the event a prescribed burn escapes the prescription area the following steps should be taken for the suppression of the fire:

- 1) Cease ignition immediately
- 2) Leave sufficient personnel with the prescribed burn to prevent further escape
- 3) Remainder of personnel move to suppress the escape
- 4) One person will be designated to bring the backup water supply
- 5) Burn Boss will call the fire department

OPTIONAL BURN CREW ROSTER

(Complete the day of Burn)

Burn Unit Name: _____

Number of people needed to conduct burn: _____

Burn Boss Name: _____

TEAM ID

Engine/Pumper Drivers:

Hose Operators:

Igniters:

Lead ATV/UTV Patrol:

Additional ATV/UTV Patrol:

Hand Tool Operators:

Lookout/Weather:

Other (Specify Job):

TEAM ID

Engine/Pumper Drivers:

Hose Operators:

Igniters:

Lead ATV/UTV Patrol:

Additional ATV/UTV Patrol:

Hand Tool Operators:

Lookout/Weather:

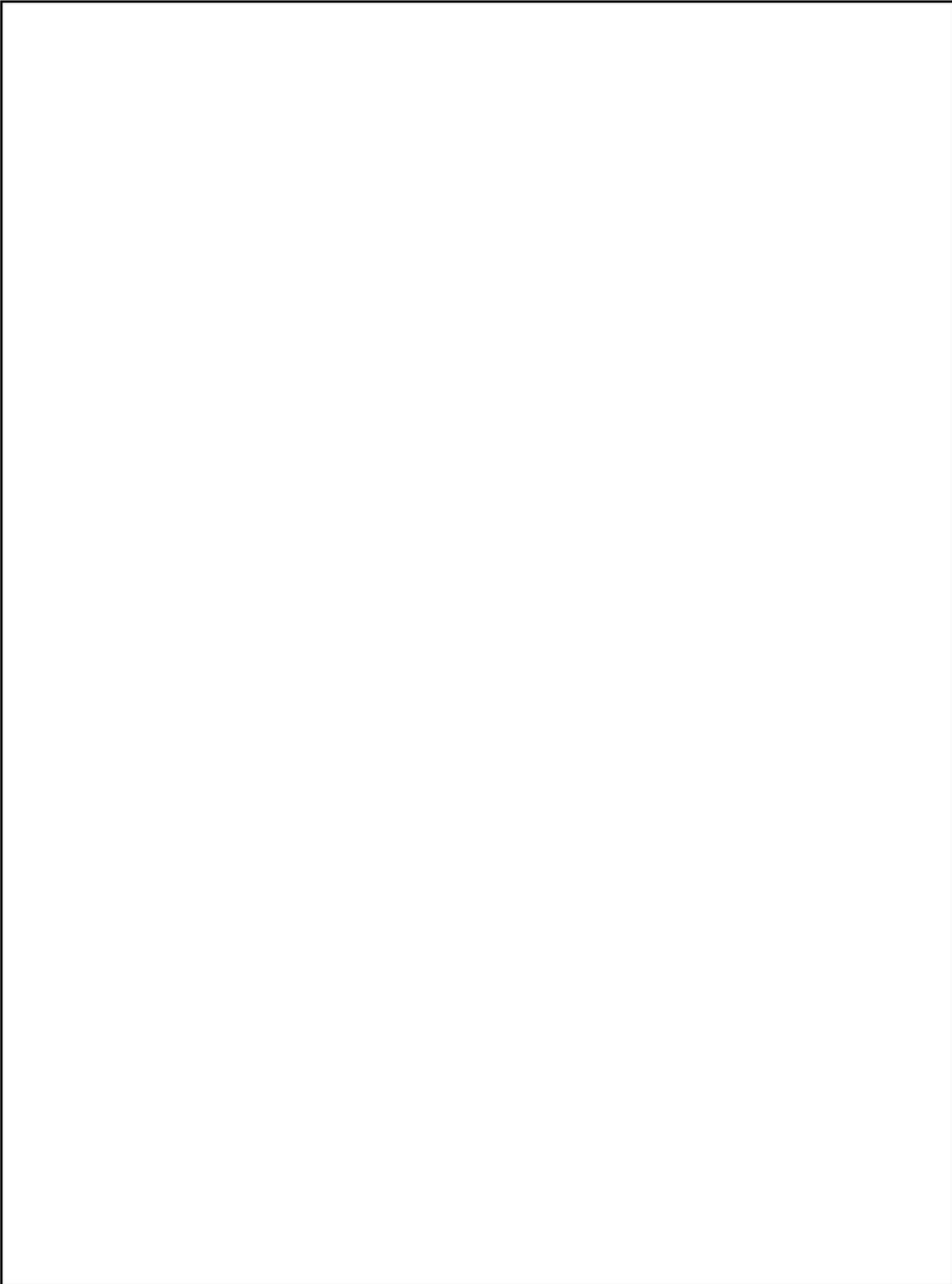
Other (Specify Job):

BURN UNIT MAP

- | | | |
|--|--|---|
| <input type="checkbox"/> Landowner and/or Burn Unit Name | <input type="checkbox"/> North Arrow | <input type="checkbox"/> Holding-line Locations |
| <input type="checkbox"/> Areas Needing Protection | <input type="checkbox"/> Safety Zones | <input type="checkbox"/> Location of Equipment |
| <input type="checkbox"/> Firing Sequence | <input type="checkbox"/> Water Sources | <input type="checkbox"/> Adjacent Land Uses |
| <input type="checkbox"/> Unit Access and All Escape Routes | <input type="checkbox"/> Firebreaks | <input type="checkbox"/> Hazards Within Unit |



TOPOGRAPHIC MAP



SURROUNDING AREA MAP

