

APPENDIX A:

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APPENDIX B:

GLOSSARY

- Active Status** - A burning period in which fire perimeter growth is expected to increase by 10% or 10 acres, whichever is less.
- Burning Period** - That part of each 24-hour period when fires will spread most rapidly. Typically, this from 10 A.M. until sundown.
- Confine** - A wildfire suppression strategy where a wildfire is restricted to a predetermined area by the use of natural barriers until the fire burns itself out.
- Contain** - A wildfire suppression strategy where a wildfire is restricted to a defined area by the use of a combination of natural and constructed barriers until the fire burns itself out.
- Control** - A wildfire strategy where a wildfire is aggressively fought with personnel, equipment, and aircraft to halt the fire spread, construct a fireline around the perimeter of the fire, and extinguish all hot spots until the fire is declared out.
- Fire Situation Analysis** - A standardized report documenting the daily fire situation, designed for use in routine monitoring of prescribed natural fires.
- Ecosystem** - An ecological community with its physical environment, regarded as a unit.
- Escaped Fire** - A fire which has exceeded initial attack capabilities.
- Escaped Fire Situation Analysis** - A standardized report documenting the alternative strategies for management of an escaped fire. The analysis of effects is based on the best estimates of the park, resource and fire managers.
- Fuel** - Vegetative material that is capable of sustaining fire, such as grass, duff, needles, leaves, logs, shrubs, brush, snags, and trees.
- Fuel Loading** - The oven dry weight of all existing fuels in a given area. Loading is further analyzed by fuel size, usually expressed in tons/acre.
- Fuel Type** - An identifiable association of fuel elements of distinctive species, form, size, arrangement, or other characteristics that will cause a predictable rate of fire spread or difficulty of control under specified weather conditions.
- Fuel Type Classification** - The division of forest areas into fire hazard classes.
- Greater Yellowstone Area (GYA)** - An area that lies within the states of Montana, Idaho, and Wyoming and is made up of parts of six National Forests and two National Parks.
- Hazard** - A fuel complex defined by kind, arrangement, volume, condition, and location that forms a special threat of ignition or of suppression difficulty.
- Hazard Reduction** - Any treatment of a hazard that reduces the threat of ignition and spread of fire.

- Initial Attack** - The first suppression work on a fire.
- Management Ignited Prescribed Fire** - A fire intentionally ignited to accomplish management objectives in specific areas under prescribed conditions identified in approved prescribed fire plans.
- Prescribed Natural Fire** - A fire ignited by natural means (usually lightning) which is permitted to burn under specific environmental conditions, in preplanned locations, with adequate fire management personnel and equipment available to achieve defined objectives.
- Prescriptions** - Measurable fire danger and fire behavior conditions under which prescribed natural fires are permitted to burn for the purpose of maintaining ecological processes in native ecosystems.
- Presuppression** - Activities in advance of fire occurrence to ensure effective suppression action.
- Prevention** - Activities directed at reducing the number of fires that are ignited as the result of human activity. Activities include public education, law enforcement, personal contact, and reduction of fuel hazards.
- Suppression** - All actions undertaken to extinguish or limit fire growth beginning with its discovery. Suppression strategies include confine, contain, and control.
- Wildfire** - A fire occurring on wildland that is not burning within predetermined prescriptions.
- Wildland** - An area in which development is essentially nonexistent, except for roads, railroads, powerlines, and similar transportation facilities.

APPENDIX C

YEAR	Number of Fires			Acres Burned		
	Human Caused	Lightning Caused	Total Fires	Human Caused	Lightning Caused	Total Acres
1930	12	10	22	1	100	121.0
1931	69	12	81	7	20512	22,519.0
1932	18	12	30	28	2021	2,049.0
1933	18	22	40	257	2189	2,446.0
1934	21	18	39	470	197	667.0
1935	37	19	56	4	99	103.0
1936	28	29	57	13	13	26.0
1937	26	15	41	1	1	4.0
1938	6	6	12	5	.5	1.0
1939	19	16	35	45	1730	1,775.0
1940	23	41	64	467	19648	20,115.0
1941	4	8	12	.5	1.5	2.0
1942	6	42	48	.5	1021	1,021.5
1943	5	22	27	139	411	550.0
1944	3	2	5	57	6	63.0
1945	0	4	4	0	5	0.5
1946	15	14	29	8	830	838.0
1947	5	8	13	2	2	4.0
1948	14	13	27	76	8	84.0
1949	28	28	56	716	2272	2,988.0
1950	4	33	37	.1	.1	0.2
1951	5	3	8	1	0	1.0
1952	9	19	28	2	70	72.0
1953	23	58	81	475	1285	1,760.0
1954	7	11	18	7	47	54.0
1955	5	12	17	10	23	33.0
1956	7	12	19	74	126	200.0
1957	3	18	21	7	20	27.0
1958	6	23	29	10	64	80.0
1959	13	7	20	4	2	6.0
1960	16	39	55	198	435	633.0
1961	10	27	37	178	450	618.0

YEAR	Number of Fires			Acres Burned		
	Human Caused	Lightning Caused	Total Fires	Human Caused	Lightning Caused	Total Fires
1962	10	20	30	1	3	4.0
1963	19	27	46	24	14	38.0
1964	14	6	20	15	1	16.0
1965	4	8	12	51	3	54.0
1966	6	38	44	1	291	292.0
1967	3	15	20	2	1	3.0
1968	4	12	16	1	0	2.0
1969	9	9	18	5	1	6.0
1970	4	10	14	0	2	2.0
1971	3	21	24	3	18	21.0
1972	6	15	21	1	2	3.0
1973	8	24	32	119	32	151.0
1974	10	28	38	5	1303	1,308.0
1975	8	18	26	3	3	6.0
1976	11	19	30	0	1,603	1,603.0
1977	11	18	29	4	64	68.0
1978	12	12	24	1	13	16.0
1979	25	29	54	6	11,234	11,240.0
1980	4	21	25	0	4	4.0
1981	7	57	64	135	20,240	20,575.0
1982	7	13	20	0	1	1.0
1983	3	4	7	0	.1	0.1
1984	0	11	11	0	0	0.0
1985	10	43	53	0	32	32.0
1986	5	27	32	0	1	1.0
1987	6	29	35	4	960	964.0
1988	6	39	45	2	301,192	301,194.0
From Outside	3	2	5	444,75	48333	492,808.0
1989	7	17	24	1	10	11.0
1990	8	35	43	0	247	247.0
1991	5	24	29	0	265	265.0
TOTAL	705	1,254	1,959	448,328.5	439,338.7	887,667.1

MASTER CHRONOLOGY of NATURAL FIRES

<u>Year</u>	<u>Burning Date</u>	<u>UTM</u>	<u>Fire Name</u>	<u>Size (acres)</u>
1)	1972 Aug 11-13	547.8E 4897.0N	Two Ocean	0
2)	1972 Aug 11-13	548.5E 4893.3N	Chicken Ridge	0
3)	1973 July 12-13	560.2E 4953.6N	Wrang Creek	0
4)	1973 July 6-9	549.8E 4944.2N	Cottongrass	0
5)	1974 July 23-27	565.2E 4939.5N	Mist Creek	0
6)	1974 July 23-Aug 27	565.2E 4939.6N	Raven Creek	35
7)	1974 July 24-Aug 14	549.9E 4945.8N	Bluff Creek	55
8)	1974 July 28-Aug 10	572.3E 4949.2N	Willow Creek	160
9)	1974 July 28-Aug 10	556.0E 4040.4N	Stonetop	0.75
10)	1974 Sept 17-Nov 15	565.0E 4904.0N	Trail Creek	580
11)	1975 July 15-17	548.8E 4971.1N	Narrows	0
12)	1975 July 28-29	546.0E 4894.9N	Chicken Ridge	0
13)	1975 July 28-29	561.8E 4951.6N	Shallow Creek	0
14)	1975 July 28-29	561.8E 4948.9N	Wapiti Lake	0
15)	1975 July 28-29	560.1E 4946.0N	Tern Lake	0
16)	1975 July 28-29	560.3E 4945.0N	White Lake East	0
17)	1975 July 28-29	558.1E 4944.1N	White Lake West	0
18)	1975 Aug 13-14	504.0E 4967.0N	Grayling Creek	0
19)	1975 Sept 7-22	502.8E 4976.0N	Fawn	0.75
20)	1976 June 29-30	535.9E 4949.8N	Solfatara	0
21)	1976 June 29-30	575.3E 4941.4N	Pelican	0
22)	1976 June 29-July 11	519.7E 4960.6N	Arrow	31
23)	1976 July 1-2	498.5E 4952.4N	Cougar	0
24)	1976 July 11-Oct 10	550.8E 4907.3N	Divide	1500
25)	1976 July 12-15	543.3E 4899.0N	Heart	0
26)	1976 July 13-15	546.5E 4899.0N	Outlet	0
27)	1976 July 28	569.2E 4950.2N	Timothy	0
28)	1976 Aug 4-6	518.0E 4896.0N	Pitchstone	0
29)	1976 Aug 16-Sept 1	518.1E 4899.9N	Plateau	0
30)	1976 Aug 17-Sept 1	562.8E 4979.9N	Elk	0
31)	1976 Aug 30-Oct 10	562.0E 4950.0N	Jacks	20
32)	1976 Aug 30-Sept 3	567.2E 4953.6N	Clover	0
33)	1976 Aug 30-Sept 3	559.3E 4949.3N	Broad	0
34)	1976 Aug 30-Sept 3	562.2E 4949.1N	Deuce	0
35)	1976 Aug 30-Sept 3	543.5E 4893.5N	Paintbrush	0
36)	1976 Sept 2-9	571.1E 4943.4N	Lovely	0
37)	1977 July 8-26	548.5E 4904.0N	Surprise	0.01
38)	1977 July 13-19	513.5E 4965.0N	Dome	0.001
39)	1977 July 16-Sept 1	546.0E 4949.0N	Pelican	10
40)	1977 July 26-Aug 12	545.0E 4959.0N	Washburn	0.1
41)	1977 Aug 3-Sept 1	520.5E 4895.0N	Pitchstone	0.001
42)	1977 Aug 4-Sept 1	540.0E 4977.0N	Geode	0.01
43)	1977 Sept 15-23	550.0E 4981.0N	Buffalo	0.001
44)	1977 Sept 16-23	534.0E 4933.0N	Beach	0.001
45)	1978 July 16-20	556.0E 4970.0N	Jasper	0.01
46)	1978 July 16-18	543.0E 4963.0N	Carnelian	0.01
47)	1978 July 16-21	551.0E 4896.0N	Grouse	0.01
48)	1978 July 25-Aug 24	500.0E 4974.0N	Gallatin	5
49)	1978 Aug 9-17	536.0E 4982.0N	Oxbow	0.1
50)	1979 July 1-Oct 20	498.0E 4975.5N	Gallatin	2000

FIRE PREVENTION ACTION PLAN

GENERAL ACTIONS

The following General Action Items have been identified as elements in the park's overall Fire Prevention Program. The fire prevention analysis identified actions that will be taken to address the major causes of human-caused fires in Yellowstone in the past ten years. The main causes of human-caused fires in Yellowstone the past ten years are unattended campfires, discarded smoking material, and powerlines. These three causes will be addressed in fire prevention material distributed by the park.

1. A general fire prevention message will be developed and included in the park newspaper, added to the fishing regulation handout, broadcast on the park radio, included on the park television station, and posted on the bulletin board of each campground, fire wood concession woodshed, and visitor center.

Responsible person(s): Chief of Interpretation 6/92
Fire Management Officer

2. A general fire prevention message will be developed for users of the backcountry. This message will be included on the backcountry permit, posted at trailheads, included in the Trails End booklet, and included into the backcountry slide tape program.

Responsible person(s): Assistant Chief Ranger,
Resource Management
Fire Management Officer 6/92

3. A general fire prevention message will be developed targeting outfitters and special use groups.

Responsible person(s): Assistant Chief Ranger,
Resource Management
Fire Management Officer 6/92

4. Fire danger signs will be located at entrance stations and fire danger information will be posted in all visitor centers at the bottom of the daily weather forecast and at all trailhead registration locations during periods of HIGH fire danger.

Responsible person(s): District Rangers on-going
Fire Management Officer

5. Fire prevention training courses will be offered. All initial attack incident commanders will take the eight hour Fire Cause Determination Course. A four hour fire prevention course will

be offered to all NPS and concession employees and a fire prevention message will be incorporated into the seasonal orientation program.

Responsible person(s): Fire Management Officer 6/92

6. Fire prevention programs will be developed and presented to local schools, communities, and private landowners. These efforts will be coordinated with the U.S. Forest Service fire prevention program in the surrounding Yellowstone area.

Responsible person(s): Chief of Interpretation
Fire Management Officer o n -
going

7. A Memorandum of Understanding will be developed with Montana Power Company to address inspection and removal of hazard trees along the powerline corridor, pursue conversion of above-ground powerlines to underground, installation of fault-interruption equipment, and a plan for patrol of the powerline corridor following major wind events to detect trees across lines.

Responsible person(s): Chief of Maintenance o n -
going
Fire Management Officer

SPECIFIC FIRE PREVENTION ZONE RATINGS/ACTION ITEMS

FF ZONE #1 - GALLATIN ZONE

HAZARD

Low Majority of unit burned in 1988 and has limited potential for large fire growth. Fuels are mostly LP1 after 1988.

RISK

Low Limited access, limited use and low historical human-caused fire occurrence.

VALUE

Low No identified structural values. Some historical and cultural sites; Obsidian Cliff kiosk and Appollanaris Spring.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. A general backcountry fire prevention message will be developed and incorporated into the backcountry permit system.
2. A general outfitter fire prevention message will be developed targeting outfitters and special use groups.
3. Fire danger rating will be posted at all trailheads during HIGH fire danger.
4. Backcountry rangers will conduct normal patrols and impart fire prevention message in visitor contacts.
5. The fire prevention message will be disseminated at all entrance stations and will be coordinated with Grand Teton National Park and the USFS through interagency cooperation.
6. Private landowners adjoining the park will be contacted and the prevention message will be explained to them.

Responsible person(s):

Chief of Interpretation
Assistant Chief Ranger, Resource Management
District and Sub-district Rangers
Fire Management Officer

6/92

FP ZONE #2 - NORTHWEST ZONE

HAZARD

High This area has not burned recently and is composed of LPJ fuels with a heavy fuel loading and has a high potential for large fires and large fire growth.

RISK

Moderate Highway 191 corridor, moderate use along the Speciman Creek Trail, and limited backcountry access and use.

VALUES

Low Sportsman Lake cabin, some private land and developments near park boundary.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. Same action items as listed in FP Zone #1 included, specifically the backcountry actions.
2. Fire danger signing information will be updated daily with coordination with USFS for corresponding fire danger rating at all entrance stations.

Responsible person(s):

Same as for FP Zone #1

FF ZONE #3 - MAMMOTH ZONE

HAZARD

Moderate Fuels are not dense and were partially burned in 1988 as well as reduced by manual actions prior to the areas around that eventually burned.

RISK

High High visitor use, Headquarters area, permanent housing areas for 200 people, historical human-caused occurrence area, communication link for the park on Sunsen Peak, main transportation corridor, year-round campground, Mammoth Hotel, associated concessions, and powerline and telecommunication facilities.

VALUES

High Historical structures, archives of historical material, concessions, permanent housing area, and campground.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General fire prevention and general backcountry fire prevention message will be posted in Mammoth and Indian Creek campgrounds and the Mammoth Visitor Center.
2. Study cost feasibility of burying the above ground powerlines and obtain all proper clearances.
3. Outreach program to Gardiner community with fire prevention message. Work in conjunction USFS efforts.
4. Target seasonal employees for both the NPS and concessioners with fire prevention training.

Responsible person(s):

Chief of Maintenance
Chief of Concessions
Chief of Interpretation
District and Sub-district Rangers
Fire Management Officer

on-going

FP ZONE #4 - BLACKTAIL ZONE

HAZARD

Moderate Heavy fuel accumulation near the park boundary, all fuels not burned in 1988 fires. Heavy corridor use area.

RISK

LOW Limited access near park boundary, a no campfire area, and a bear closure area.

VALUE

Moderate Structures of concern include Undine, Upper Blacktail cabin, Lower Blacktail cabin, Observation Peak cabin, Hellroaring cabin, Crevice creek cabin, Lava Picnic Area, Nez Perce and Bannock trails, and various archeological and cultural sites.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General fire prevention and general backcountry fire prevention messages, specifically mentioning the proper use of campfires, proper disposal of toilet paper, and backcountry use for this particular zone.
2. General outfitter message.
3. General employee education program and message.

Responsible person(s):

Same as for FP Zone #1 and #3.

PP ZONE #5 - TOWER ZONE

HAZARD

Low Fuels are generally sparse and associated fire behavior is low when compared to other zones that have greater amounts of LP3 and LP4 fuels.

RISK

High High day use area, 50 miles of developed trails, heavy concession use area with barbecue at Yancey's Hole, and the road junction area.

VALUES

High Tower Ranger Station and developed area, Roosevelt Lodge (National Historical Site) and concession area with cabins and store, Tower store and campground, concession dormitory, water treatment plant, and gas station.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General backcountry permit message posted at the Tower Ranger Station.
2. General prevention messages and specific message for the Tower area developed by the Tower Interpreter.
3. Regular Ranger patrols of campground and trail system.
4. Fire danger posted and updated daily at Tower Ranger Station.
5. Emphasis of fire prevention message for concession employees that are involved in the barbecue operation at Yancey's Hole.
6. Cache fire tools at Yancey's Hole and instruct employees on proper use of tools.

Responsible person(s):

Tower Sub-district Ranger - on-going
Tower Interpreter
Fire Management Officer

FP ZONE #4 - NORTHEAST ZONE

HAZARD

High Heavy, dense fuels located in proximity to Northeast developed area and the park boundary. There is potential for strong winds to carry fire across the park boundary and onto USFS and private land.

RISK

Moderate Two road corridors outside the park from Red Lodge and Cody, high day use area, two campgrounds (Pebble Creek and Slough Creek), and the Silver Tip Ranch north of the park boundary.

VALUES

Moderate Northeast Entrance Station (National Historic Landmark), Northeast Ranger Station, Lamar Ranger Station and Buffalo Ranch facilities, and Slough Creek transfer station.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General fire prevention and backcountry fire prevention messages, with emphasis on proper use of campfires.
2. Fire danger sign at Northeast Entrance station. Sub-district Ranger will coordinate with USFS on daily sign fire danger level.
3. Yellowstone Institute will be targeted for fire prevention education. This area to be covered by the Tower Interpreter.
4. Lamar Sub-district Ranger will be local liaison to work with Cooke City, Silver Gate, and USFS for fire prevention outreach.

Responsible person(s):

Lamar Sub-district Ranger
Tower Interpreter
Director, Yellowstone Institute
Fire Management Officer

on-going

FP ZONE # 7 - MIRROR PLATEAU ZONE

HAZARD

Low Area was mostly burned in 1988, fuels are mostly LP1 and associated fire behavior potential is low.

RISK

Low No risks are associated with this remote area.

VALUES

Low Main value is the Mt. Washburn visitor center and lookout with associated telecommunication equipment. Four backcountry cabins are located in this zone, Calfee Creek, Cold Creek, Upper Miller Creek, and Upper Lamar.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General fire prevention and backcountry fire prevention messages and actions as previously covered in other zones.
2. General fire prevention messages and fire danger posted in Mt. Washburn Visitor Center.

Responsible person(s):

Fire Management Officer
Tower Sub-district Ranger
Washburn Fire Lookout

6/92

FP ZONE #10 - CENTRAL PLATEAU ZONE

HAZARD

Moderate Fuels are moderately dense in most areas, the majority of fuels are LP1 or LP2 with no significant amount of LP3 fuels. Portions of the zone were burned in 1988.

RISK

Low Limited backcountry use with no major road or access corridors.

VALUES

Low Two backcountry cabins, Nez Perce and Mary Mountain, and powerline corridor. Arnica Creek for fishery values.

SPECIFIC FIRE PREVENTION ACTIONS REQUIRED

1. General fire prevention and backcountry fire prevention messages posted.
2. Coordinate with Montana Power Company to bury powerlines in this zone as outlined in general actions.

Responsible person(s):

Chief of Maintenance
Fire Management Officer

on-going

FP_ZONE #11 - MADISON PLATEAU_ZONE

HAZARD

High Fuels in this zone are mainly LP3, as only a portion of this zone burned in 1988. Heavy accumulation of dense fuels are found across much of this zone.

RISK

Moderate High backcountry use in Bechler and Shoshone Lake areas, fishing use on Lewis and Shoshone Lakes, road corridor in eastern part of this zone, and one campground.

VALUES

Low South Entrance developed area and Ranger Station, Bechler Ranger Station, Lewis Lake campground, and powerline corridor in eastern part of zone.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General fire prevention and backcountry fire prevention messages posted.
2. General outfitter message.
3. Fire prevention coordination with Targhee NF on timber sales along the park boundary and woodcutting permits issued along the park boundary.
4. Address the burning of the pit toilets at Shoshone Lake, coordinate with the FMO.
5. Boy Scout and other large groups that use Lewis and Shoshone Lakes will be targeted for fire prevention programs prior to use of these areas.

Responsible person(s):

District and Bechler Sub-district Rangers on-going
District Interpreter
Fire Management Officer

FP ZONE #12 - OLD FAITHFUL ZONE

HAZARD

Low Fuels were mostly burned during the 1988 fires while hazard fuels around developed areas were reduced prior to the fires. Majority of the fuels are LPl.

RISK

High Heaviest use area in the park due to attraction of the Old Faithful Geyser and thermal areas. Also on the Grand Loop road corridor, moderate backcountry use, heavy day use, and large amount of overnight visitors at concession facilities.

VALUES

High Old Faithful Inn (National Historic Landmark), Old Faithful Lodge and Snowlodge guest facilities, Old Faithful Visitor Center, Old Faithful Ranger Station, Old Faithful Clinic, Old Faithful Hamilton Stores, concession dormitories, and permanent housing and maintenance area.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General fire prevention and backcountry fire prevention messages posted.
2. Target largest visitor use area with interpretation programs that incorporate the general park fire prevention message into them.
3. Target seasonal concession and NPS employees with fire prevention awareness program.
4. Explore MOU with Montana Power Company to bury powerlines and deal with hazard trees that may impact the powerline.

Responsible person(s):

Chief of Maintenance
District Interpreter
Chief of Concessions
Fire Management Officer

on-going

FP ZONE #13 - WEST THUMB ZONE

HAZARD

Low Fuels in this area were mostly burned during the 1988 fires while the hazard fuels were reduced around developed areas prior to the fires. Most fuels are LPI.

RISK

High High visitor use area at Grant Village developed area and campground, main road corridor from South Entrance and along the Grand Loop road, high boating use area, high backcountry use area around Yellowstone and Heart Lakes.

VALUES

High Grant Village developed area, Hamilton stores, Grant Village Ranger Station and Visitor Center, maintenance area including water and sewage treatment facilities, permanent housing area, and concession dormitories.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General fire prevention and backcountry fire prevention messages posted, with an emphasis on proper use of campfires.
2. Target boat users with fire prevention message, emphasizing use of campfires along the lakeshore area.
4. Target concession and NPS seasonal employees for fire prevention awareness program.

Responsible person(s):

Grant Sub-district Ranger
Chief of Concessions
Fire Management Officer

on-going

RP ZONE #14 - YELLOWSTONE LAKE ZONE

HAZARD

Low Fuels in this zone are mostly LP1, this area was heavily burned by the 1988 fires.

RISK

Moderate Heavy use on Yellowstone Lake and along the associated lakeshore, moderate to heavy backcountry use, and moderate to heavy outfitter use.

VALUES

Low Backcountry cabins are main values, they include Thorofare Ranger Station, Fox Park, Trail Creek, and Cabin Creek patrol cabins.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General fire prevention and backcountry fire prevention messages posted.
2. Target boat users concerning proper use of campfires along the lakeshore and proper method on reporting new fire starts.
3. General outfitter fire prevention message disseminated to all outfitters.
4. Coordinate fire prevention message with Grand Teton NP and the Bridger-Teton and Shoshone NF's.

Responsible person(s):

District Ranger
Fire Management Officer

on-going

FP_ZONE #15 - EAST_ZONE

HAZARD

High Fuels are dense, mostly LPJ, LP, and DF. This area was not burned by the 1988 fires and little hazard fuel reduction has been accomplished. Potential for large fire growth is high in this zone.

RISK

Moderate Main road corridor and busy visitor entrance area, some boat use along the east shore, limited backcountry use, and heavy visitor use adjacent to the East Entrance area on national forest and private land.

VALUES

Low East Entrance Ranger station and permanent housing area, Park Point and Clear Creeks patrol cabins, and adjacent private holdings at Pahaska Teepee just outside the East Entrance.

SPECIFIC PREVENTION ACTIONS REQUIRED

1. General fire prevention and backcountry fire prevention messages posted.
2. General outfitter fire prevention message disseminated to all outfitters.
3. Fire danger sign at East Entrance station updated daily in coordination with the fire danger rating assigned by the Shoshone NF.
4. Outreach fire prevention program with Pahaska Teepee and landowners and residents in the Wapiti Valley in coordination with Shoshone NF.

Responsible person(s):

East Sub-district Ranger
District Interpreter
Fire Management Officer

on-going

HUMAN-CAUSED FIRES 1982-1991

<u>NO.</u>	<u>YEAR</u>	<u>NAME</u>	<u>DATE</u>	<u>UTM'S</u>	<u>CAUSE</u>	<u>ACRES</u>
1.	1982	GREBE	07/15/82	4956.7 x 534.7	Unknown	.1
2.	1982	CAMP	08/01/82	4920.7 x 537.5	Unknown	.1
3.	1982	GRANT	08/07/82	4914.0 x 534.1	Unknown	.1
4.	1982	WEST	08/14/82	4944.0 x 457.0	Campfire	.1
5.	1982	BISCUIT	08/15/82	4925.1 x 511.6	Campfire	.1
6.	1982	BAUM	08/16/82	4922.4 x 512.0	Campfire	.1
7.	1982	BREEZE	09/08/82	4920.7 x 542.4	Campfire	.1
8.	1983	FISHING	07/30/83	4934.2 x 550.4	Campfire	.1
9.	1983	PICNIC	05/02/83	4973.8 x 547.4	Campfire	.1
10.	1983	COTTONWOOD	09/15/83	4985.0 x 540.2	Campfire	.1
11.	1985	OTTER	06/20/85	4948.8 x 539.2	Campfire	.2
12.	1985	JUNCTION	06/20/85	4943.0 x 511.0	Campfire	.1
13.	1985	NORRIS	07/03/85	4954.0 x 524.3	Campfire	.1
14.	1985	PEBBLE	07/06/85	4983.4 x 570.7	Campfire	.1
15.	1985	VISITOR	08/18/85	4977.9 x 534.1	Campfire	.1
16.	1985	GRANT	08/19/85	4915.6 x 534.2	Campfire	.1
17.	1985	CASCADE	08/21/85	4939.7 x 546.5	Campfire	.1
18.	1985	K-LOOP	08/25/85	4915.6 x 534.2	Campfire	.1
19.	1985	MADISON	08/24/85	4943.2 x 506.5	Campfire	.1
20.	1985	FOX PARK	09/08/85	4887.4 x 556.0	Campfire	.1
21.	1986	QUEENS	07/01/86	4929.3 x 573.4	Powerline	.2
22.	1986	NATURAL BR	07/04/86	4928.4 x 539.2	Powerline	.1
23.	1986	LAVA	08/04/86	4976.2 x 529.5	Campfire	.1
24.	1986	GULL	08/15/86	4930.3 x 546.4	Campfire	.1
25.	1986	PROMONTORY	08/28/86	4911.0 x 557.8	Campfire	.1
26.	1987	KNOWLES	02/29/87	4984.3 x 532.4	Campfire	.1
27.	1987	A-LOOP	08/06/87	4934.5 x 549.8	Campfire	.1
28.	1987	LOPEZ	08/10/87	4970.2 x 520.8	Campfire	.1
29.	1987	TOWER CREEK	08/14/87	4970.8 x 547.7	Campfire	.1
30.	1987	FIREHOLE	10/07/87	4941.5 x 509.9	Campfire	.1
31.	1988	OBSERVATION	06/09/88	4923.3 x 514.1	Campfire	.1
32.	1988	GRIZZLY	07/12/88	4962.8 x 517.9	Campfire	.1
33.	1988	NARROWS	07/14/88	4912.7 x 521.5	Trash	2.0
34.	1988	NORTH FORK	07/22/88	4921.3 x 492.2	Smoker	406,359
35.	1988	COLONNADE	07/28/88	4898.0 x 504.2	Campfire	.1
36.	1988	NORRIS	08/16/88	4953.2 x 524.0	Campfire	.1
37.	1988	HUCK	08/20/88	4887.3 x 520.4	Powerline	20,443
38.	1988	HELLROARING	08/15/88	4986.0 x 554.8	Campfire	17,673
39.	1988	LeHARDY	10/02/88	4937.2 x 549.9	Campfire	.1
40.	1989	PIT	06/14/89	4920.3 x 532.8	Debris burning	.1
41.	1989	CLEAR CREEK	07/14/89	4924.6 x 557.5	Equipment	.1
42.	1989	GLEN	07/25/89	4980.6 x 517.7	Campfire	.1

<u>Q.</u>	<u>YEAR</u>	<u>NAME</u>	<u>DATE</u>	<u>UTM'S</u>	<u>CAUSE</u>	<u>ACRES</u>
43.	1989	SWAN LAKE	08/24/89	4974.0 x 520.0	Campfire	.1
44.	1989	CORRAL	07/31/89	4923.0 x 512.5	Powerline	.1
45.	1989	HOT MIX	09/02/89	4951.8 x 525.8	Powerline	.1
46.	1989	LEWIS LAKE	10/20/89	4902.2 x 528.8	Campfire	.1
47.	1990	TERRACE	07/22/90	4979.2 x 523.1	Campfire	.1
48.	1990	SPECIMAN	07/23/90	4986.1 x 496.2	Campfire	.1
49.	1990	SPRING CREEK	07/18/90	4919.5 x 520.0	Campfire	.1
50.	1990	POWERLINE	08/11/90	4922.5 x 513.0	Powerline	.1
51.	1990	GIBBON	09/02/90	4949.5 x 523.6	Unknown	.1
52.	1990	PELICAN	09/13/90	4933.7 x 550.7	Campfire	.1
53.	1991	ARTIST	07/09/91	4949.6 x 539.2	Vehicle	.1
54.	1991	BLACK BUTTE	08/02/91	4988.9 x 492.8	Campfire	.1
55.	1991	LAKE MAINT	10/16/91	4934.0 x 548.2	Powerline	.1
56.	1991	FISHING BR	10/16/91	4935.2 x 548.6	Powerline	.1
57.	1991	CANYON	10/17/91	4952.5 x 540.4	Powerline	.2

INTERAGENCY AGREEMENT

Between the

BUREAU OF LAND MANAGEMENT

BUREAU OF INDIAN AFFAIRS

NATIONAL PARK SERVICE

U.S. FISH AND WILDLIFE SERVICE

of the

UNITED STATES DEPARTMENT OF THE INTERIOR

and the

FOREST SERVICE

of the

UNITED STATES DEPARTMENT OF AGRICULTURE

I. Introduction

Fire loss in the forests and on the rangelands of the Nation continues to be a matter of great concern to the American public and to the land management Bureaus and Services of the Department of the Interior and the Forest Service of the Department of Agriculture, hereafter called "agencies." Considerable progress has been made in the development of fire plans and in methods of fire suppression by the agencies. More progress can be made by closer cooperation between the responsible agencies. The value of cooperation in fire management and fire suppression has been demonstrated by the agencies. Many of the land areas under jurisdiction of these agencies are so located geographically that fire on lands in one jurisdiction may become a threat to the resources on an adjoining jurisdiction. It is therefore desirable and in the public interest to provide specifically for coordinated action between these agencies.

II. Purpose

To provide a basis for cooperation between the agencies of the Departments of the Interior and Agriculture on all aspects of wild-fire management and to facilitate the cooperative use of fire related resources during national or regional non-fire emergencies. This agreement rescinds and cancels all previous agreements, dated February 21, 1963, and amended October 3, 1977 (BLM-FS); June 9, 1980 (BIA-FS); and October 17, 1981 (NPS-FS).

III. Authority

1. Protection Act of 1922 (16 U.S.C. 594).
2. Memorandum of Understanding between United States Department of the Interior and the Department of Agriculture, dated January 28, 1943.
3. Reciprocal Fire Protection Act of May 27, 1953 (69 Stat. 66; 42 U.S.C. 1856a).
4. Economy Act of June 30, 1932 (47 Stat. 417; 31 U.S.C. 686), as amended. (For USDI Agencies only.)
5. Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702).
6. National Park Service Organic Act of August 1916 (16 U.S.C. 1).
7. Forest Service Cooperative Agreement Act of December 12, 1975 (16 U.S.C. 565a1-3).
8. Granger-Thye Act of April 24, 1950, as amended (16 U.S.C. 572c).
9. National Wildlife Refuge System Administrations Act of 1966 (16 U.S.C. 666dd-668ee; 80 Stat. 927) as amended.
10. Disaster Relief Act of 1974 (42 U.S.C. 1521).

IV. Activities

The agencies agree to cooperate in the full spectrum of fire management activities including the use of fire to achieve land management goals. Cooperative efforts shall be provided for at the national, regional, and local levels to facilitate efficient use of personnel, supplies, and equipment. Those activities will include but not be limited to:

1. Prevention of human-caused wildfires;
2. Training of personnel to common standards;
3. Presuppression activities;
4. Suppression of wildfires;
5. Rehabilitation of areas burned by wildfire;
6. Development and exchange of technology and data bases;

7. Development and distribution of cost information;
8. Use of resources on national or regional emergencies.

V. Objectives

1. Interagency fire management and wildfire suppression developed through coordination and cooperation.
2. Efficient use of fire management personnel of the agencies.
3. Provision for field offices of the signatory agencies to develop annual regional and local operating plans.
4. Provision for the use of fire personnel, equipment, and supplies to meet non-wildfire emergencies.

VI. Provisions

1. Agencies will develop cooperative arrangements to cover administrative and jurisdictional responsibilities which will provide for:
 - a. Use of closest-forces and total mobility concepts for support of large fires, including personnel, equipment, and supplies.
 - b. Development and use of fire equipment and supply caches compatible with total interagency requirements by local, area, regional, and national needs.
 - c. Training to mutually agreeable standards and curriculum.
 - d. Mutually acceptable performance qualifications and standards for wildfire fighting and wildfire management personnel.
2. Local representatives of the agencies are expected to jointly identify geographic areas where:
 - Exchanges of protection will provide the best cost benefit to the involved agencies; and
 - Cooperative efforts, both staffing and funding, is the best cost-conscious, efficient approach.
3. Agency representatives shall exchange fire management plans including fire resource information on available personnel, equipment, and supplies as necessary.
4. Agency representatives may agree to finance jointly, any or all fire management activities on intermingled or adjacent agency lands. One agency may agree to pay the other at a specified rate per acre or other amounts agreed upon in advance for any fire management activities on lands under its jurisdiction.

5. Agencies should mutually monitor fire suppression equipment and supplies stocking levels to assure proper distribution and quantities are on hand to meet the potential needs.
6. An agency is expected to take prompt initial action, with or without request, unless otherwise provided for, on fires of another within zones of mutual interest. Where one agency takes initial action in the suppression of a fire in a zone of mutual interest but in the protective unit of the other, that agency shall continue to fight the fire until relieved by an officer of the other agency.
7. When fires burn on or threaten lands of more than one agency, joint planning will be conducted by local officials to suppress the fire. Should disagreements occur, they will be elevated to the next higher management level.
8. Upon request, any authorized agency shall render assistance in significant non-fire emergencies to another, both within and outside zones of mutual interest, with its regular firefighting personnel and fire suppression facilities, when suitable assistance is available and when such action shall not leave areas in its own protection unit unduly exposed to fire danger, except in cases involving the threat to human life.
9. As provided for in the Reciprocal Fire Protection Act of May 24, 1955 (69 Stat. 66; 42 U.S.C. 185a), the agencies shall not bill each other for the services rendered in the suppression of wildfires. Each agency shall, upon request, forward specific cost information for billings to third parties, for management review and use. Cost for the other fire management activities, including appropriate administrative charges, shall be billed to the requesting agency unless otherwise provided for.
10. Billing for reimbursement of services rendered in response to non-fire emergencies shall be mutually agreed to on a case-by-case basis.
11. Upon request, any authorized agency shall render assistance in fire suppression to another, both within and outside zones of mutual interest, with its regular firefighting personnel and fire suppression facilities, when assistance is available and when such action shall not leave areas in its own protection unit unduly exposed to fire danger.

VII. General Provisions

1. Each agency shall make direct settlement from its own funds for all liabilities it incurs under this agreement.

2. Parties to this agreement are not obligated to make expenditures of funds under terms of this agreement unless such funds are appropriated for the purpose by the Congress of the United States, or are otherwise legitimately available. If some extraordinary emergency or unusual circumstance arises which could not be anticipated involving an expenditure in excess of available funds for the protection of life or property, all agencies shall seek deficiency appropriations to meet their respective shares of such emergency obligations.

3. This agreement shall take effect October 1, 1982. Any signatory agency may terminate this agreement by written notice to all other signatory agencies provided that such notice shall be given between the dates of October 31 of any year and March 1 of the following year. The remaining signatory agencies may continue the provision of this agreement.

4. Changes or modifications of this agreement may be initiated by any signatory agency. The changes or modifications shall not be incorporated until all parties agree, they are in the form of an amendment to the agreement, and are signed by all agencies.

5. Each party to this agreement does hereby expressly waive all claims against the other party for compensation for any loss, damage, personal injury or death occurring in consequence of the performance of this agreement.

<p><i>Arnold E. Lutz</i> Deputy Director, Bureau of Land Management</p>	<p><i>F. Dale Robertson</i> Chief, Forest Service</p>
<p><i>[Signature]</i> Deputy Assistant Secretary, Indian Affairs (Operations)</p>	<p><i>J. Eugene Hester</i> Acting Director, Fish and Wildlife Service</p>
<p><i>[Signature]</i> Director, National Park Service</p>	

Initial Shares by Region:

Region 1	40 %
Region 2	4 %
Region 4	46 %
NPS	10 %
Total	100 %

The 1990 cost of \$310,000 is used as the starting total shared cost for Base operations. This amount will be adjusted each year to reflect actual costs.

Facility site maintenance and replacement are not included as an operating cost and will be the responsibility of Regional Forester, Region 1.

IV. ORGANIZATION:

The WYIFC smokejumper organization has been agreed upon nationally and will not change for the next 5 years. These national shared forces include:

- 1 GS-9 Supervisory Smokejumper (Base Manager)
- 1 GS-8 Supervisory Smokejumper (Foreman) WAE 18/8 PP
- 2 GS-7 Supervisory Smokejumpers WAE 13/13 PP
- 11 GS-6 Smokejumpers WAE 7/19 PP *3-7/15, 2-1/2, 7 7-1/2*
- 1 GS-5 Assistant Dispatcher WAE 6/20 PP
- 1 ~~W~~ GS-8 Mixer Temp 6/20 PP
- 1 Smokejumper Aircraft

Any change in this organization must be agreed to by all cooperating units and reflected as an amendment to this agreement.

Cooperating units may assign additional personnel to the base. All expenses for these positions will be funded by the sending unit.

V. RESPONSIBILITIES:

A. Region 1 Aviation and Fire Management will:

Recruit and train all smokejumpers.

Provide booster crews upon request.

Coordinate funding for base and dispatch operations, smokejumper salaries and equipment, and smokejumper aircraft.

Prepare and submit bills for collection to NPS Rocky Mountain Region and request for Service Authorizations from Regions 2 and 4 based on cost sharing formula.

Conduct technical operations in accordance with current Forest Service policy and procedures.

B. Regions 1, 2, 4, and NPS Rocky Mountain Region will:

Pay their calculated share of fixed base and aircraft operating expenses upon receipt of billing by R-1 A&FM.

Participate in preparation and revision of annual operating plan.

Participate in selection of key personnel.

C. Region 3, through the Gallatin National Forest will:

Provide day-to-day general supervision and administration of the base, including disaster service for Base operations.

Calculate annually, by July 1 each year, the basic operating cost for the next fiscal year and submit to Region 1 Regional Office.

Take the lead in the revision of the annual base operating plan.

VI. OCCUPANCY PERIOD:

The normal occupancy period for the Base Manager and Foreman will be June 1 - September 15 each year. All other positions and aircraft will be agreed to in the yearly operating plan.

VII. NONFIRE RELATED ACTIVITIES:

Cooperating units may request from each other nonfire related services. Charges for services shall be on an actual cost basis and include both direct and indirect costs, including such elements of cost as equipment use rates, supplies and materials, salaries and fringe benefits, and leave accruals. Work shall be performed on a reimbursable basis. Requesting cooperating units will make payments to the performing agencies upon submission of a billing.

VIII. IT IS MUTUALLY AGREED:

A. Requests for nonfire related services shall be documented by purchase order or other prescribed agency forms and submitted to the performing agency to insure proper obligation/payment or collection of funds.

B. This agreement supersedes Agreement No. 20-39, dated 6/27/68 and all subsequent annual operating plans for the funding and operations of WYIFC.

C. The formula for cost sharing, under section III titled FUNDING, will be reviewed again in July, 1993, and each 3-year period thereafter. The percentages of use of personnel and aircraft will be determined for the previous 10-year period and furnished to each cooperating unit as soon

as possible for planning and budgeting purposes. These new percentages will be applied to the next 3-year period or as mutually agreed upon.

- D. This agreement is supplemental to the master interagency agreement B3-S1E-001 between the National Park Service and other Department of Interior agencies and the Forest Service dated 10/1/82. In the event of conflicting direction the master agreement shall prevail.
- E. Nothing herein contained shall be construed as obligating the Forest Service or the National Park Service to expend in any one fiscal year any sum in excess of appropriations made by Congress for that fiscal year, or to involve the Government in any contract or other obligation for the future payment of money in excess of such appropriations.
- F. This agreement may be revised as necessary, by mutual consent of all parties, by the issuance of a written amendment, signed and dated by all parties.
- G. This agreement shall become effective on the latest date indicated below and shall remain in effect until terminated by mutual agreement; or by any party hereto giving 1 year written notice to the other parties between October 1 and March 1; provided, however, that cancellation may not act to terminate any reimbursable effort underway at time of notice. The remaining signatory parties may continue the provisions of this agreement.

Lorraine Montague
Regional Director, Rocky Mountain Region

11-5-89
Date

Christopher Reddy
Regional Forester, Region 1

9/29/89
Date

Mary E. Cigill
Regional Forester, Region 2

11/2/89
Date

Robert P. Jolin
Regional Forester, Region 4

12/4/89
Date

WYOMING INTERAGENCY FIRE AGREEMENT

This Agreement is By and Between the
Bureau of Indian Affairs, Billings Area
Bureau of Land Management, Wyoming State Office
National Park Service, Rocky Mountain Region
of the Department of the Interior

and

U.S. Forest Service, Rocky Mountain Regional Office
U.S. Forest Service, Intermountain Regional Office
of the Department of Agriculture

and

Wyoming State Forestry Division

I. PURPOSE

Promote a more efficient fire management program through better utilization of fire resources and elimination of duplication.

II. AUTHORITY

- A. Interagency Agreement between the Bureau of Land Management, Bureau of Indian Affairs, National Park Service, and Fish and Wildlife Service of the U. S. Department of Interior, and Forest Service of the U. S. Department of Agriculture dated October 1, 1982.
- B. The reciprocal Fire Protection Act of May 27, 1955 (69 Stat. 60; 16 U.S.C. 185, 185a).
- C. Wyoming Statute 36-2-108 (State Forester Authorization).

III. PROGRAMS AND PROCEDURES

The participating agencies will initiate and maintain the following cooperative programs:

A. Cooperation

With the following exceptions, all participating units of the signatory agencies will order all Wyoming based resources and national resources through the Wyoming Interagency Coordination Center (WICC).

1. Recognizing the closest forces concept, all units may receive initial attack resources directly from offices or agencies located

on or adjacent to mutual jurisdictional fire management boundaries.

2. The Bridger-Teton National Forest will continue with dispatch and fire order procedures as set forth in the Forest's Incident Mobilization Guide.
 - a. The Bridger-Teton Forest Dispatcher will request national resources via the Region IV Coordination Center in Ogden, Utah.
 - b. Wyoming based resources will be requested via WICC except that Grand Teton National Park and Rock Springs BLM District resources may be requested directly for Initial Attack and support of project fires. Grand Teton National Park and Rock Springs BLM District may request resources directly from the Bridger-Teton National Forest.
 - c. Idaho based resources may be requested, in accordance with cooperative agreements and Region IV mobilization guide, directly from adjacent Forests for Initial Attack and support of project fires.
 - d. Forest personnel and equipment may be requested by WICC directly for use within the State of Wyoming.
 - e. Forest overhead may be used in Wyoming as part of an Incident Management Group.
 - f. The Forest Dispatcher will keep WICC and the Region IV Coordination Center advised of the disposition of Forest fire personnel and equipment as changes in availability occur.
3. The BLM Rock Springs District will continue with dispatch and fire order procedures as set forth in the District's Incident Mobilization Guide.
 - a. The District will be considered a logistical part of Region IV and will receive orders from the Regional Dispatcher for Regional/National support. The District will submit resource status and situation reports to Region IV.
 - b. District personnel and equipment may be requested by WICC directly for use within the State of Wyoming.
 - c. The District Dispatcher will keep WICC and the Region IV Coordination Center advised of the disposition of District fire personnel and equipment as changes in availability occur.

4. The Grand Teton National Park will be considered a logistical part of Region II and will place and receive orders through wild fire zone Regional National support.

5. Wyoming Interagency Coordination Center

The Center will be staffed by a coordinator, dispatcher, and an assistant dispatcher. Funding shall be as agreed to in the Wyoming Interagency Coordination Center Mobilization Guide, Chapter II. The Center will be responsible for:

- a. Initial attack dispatching for the Shoshone and Big Horn National forests and Worland District SLM as established in the Center Mobilization Guide Supplement, Chapter II.
- b. Coordinating the movement of fire resources throughout the State.
- c. Daily situation reporting.
- d. Assisting with fire management, analysis, and planning.
- e. Disseminate interagency fire training and instructor information.
- f. Maintaining an interagency fire qualification program.
- g. Providing a central information source for prescribed burning, fire closures, etc.
- h. Developing and distributing a Wyoming Interagency Fire Mobilization Guide which will include as a minimum, resources available within Wyoming, dispatch/operating, mobilization procedures, and an annual Center operating plan.
- i. Maintaining and distributing the Wyoming Interagency Fire Agreement and operating plans.
- j. Developing and distributing the Annual Wyoming Interagency Coordination Center Report.

C. Air Tankers

These agencies agree that there is no need to have an air tanker on standby and available within the State of Wyoming. Air tankers located in adjoining states will adequately meet the protection needs of the agencies in Wyoming.

1. An Emergency Equipment Rental Agreement will be maintained with Hawkins & Powers Aviation for the use of a fixed base retardant plant in Cheyenne and for movement of a portable plant within Wyoming.
2. Requests for air tanker dispatch, standby, and relocation will be through the Wyoming Interagency Coordination Center.

D. Helicopters

In addition to other helicopters within and adjacent to the State these agencies agree to fund and operate two fire helicopters and helitack crews for interagency use in Wyoming.

The Ft. Washakie Fire Helicopter Operating Plan will be Appendix 1 and the Big Piney Fire Helicopter Operating Plan will be Appendix 2 of this agreement and updated as necessary. For additional information refer to these appendices.

E. Crews-Type I and II

These agencies agree to support, and use organized crews, within the State of Wyoming as listed in Chapter 60 of the Mobilization Guide.

1. The Administering Unit shall be responsible for organizing, training, and equipping crews. Other units shall, upon request, assist with training and furnish qualified overhead and liaison for fire assignments.
2. The Wyoming Interagency Hotshot crew may be made available for project work for other than the administering unit when the benefiting unit contributes funds to cover the cost of the crew while engaged on the project.
3. Presuppression costs for all crews except the Bighorn Basin Interagency Crews will be borne by the administering unit. Costs of the Bighorn Basin Interagency Crews will be borne by the home unit of the individual crew members.
4. Crews will meet the standard physical, training and organizational requirements established for Type I and II crews.
5. Any of the participating agencies may use these crews on fires or place them on standby at their home unit or at a staging area. The requesting agency must stand the cost of the actions requested. All requests for crew action shall be directed to the Wyoming Interagency Coordination Center.

F. Fire Caches

These agencies agree to stock at the field level only the tools and safety equipment required to equip their initial attack and first reinforcement forces.

1. Agency tool and supply requests beyond the field level capability will be directed to the Wyoming Interagency Coordination Center. The Center will fill the Agency request from the closest cache.
2. The following is a list of approved support caches, responsible Administrative unit and size of the caches which are located within the State of Wyoming.
 - a. WICC cache located at Cody, Wyoming is approximately a 200 person cache.
 - b. WRA cache located at Fort Washakie, Wyoming is approximately a 200 person cache.
 - c. STF cache located at Jackson, Wyoming is approximately a 100 person cache.
3. Unavailable items within Wyoming will be fire ordered through established dispatch centers to the appropriate Area Coordination Center.

G. Protection Exchanges and Offsets

These agencies agree that fire protection costs within Wyoming can be reduced by exchanging protection responsibilities and eliminating duplication in protection efforts.

Agencies at the field level will meet annually to identify possibilities for protection exchanges, offsets and other means of sharing fire protection that will improve efficiency in the fire protection program.

The approved protection exchanges or revisions will be forwarded to the Steering Committee prior to the fall meeting. Annually, the Steering Committee will formulate/update the Protection Exchange Operating Plan that will become Appendix 3 to this agreement.

H. Interagency Frequency Management

These agencies agree to support the National Interagency Incident Management System (NIIMS) concept of Integrated Incident Communications. An Interagency Frequency Management Plan is contained in Appendix A.

1. Training

The Steering Committee will serve as a state-wide Interagency Fire Training Council which will identify needs for both wildfire and prescribed fire training. In addition to the normal Steering Committee, a representative of the County Fire Wardens will be appointed to the Council. The Council will meet at least twice annually to determine the training needs, courses to be offered, agent sponsorship, instructor cadre, etc. The Council will meet and publish by July 1 a listing of agency sponsorship and approximate dates of courses to be offered for the following training year. The Council will select a representative to represent them on the Rocky Mountain Area Training Council.

2. Steering Committee

Each of the Agencies which are signatory to this agreement shall appoint one representative to be that Agency's Steering Committee member. The Steering Committee will review all operating plans required by this Agreement.

The purpose of this committee is to coordinate interagency fire protection and training efforts for field offices of the signatory agencies, within the State of Wyoming. The Committee will provide direction for operation of the Wyoming Interagency Coordination Center

The Steering Committee, as a minimum, will meet biannually to review operation of the WICC and identify workload elements for the ensuing year.

They will assemble or communicate between members in critical situations to establish fire protection resource priorities within WICC's area of responsibility.

K. Administrative

1. Implementation

The parties hereto have executed this agreement as of the 1st date written below.

2. Termination

- a. This agreement will terminate December 31, 1993, unless updated by the signatory Agencies.
- b. Any signatory Agency may terminate this agreement by written notice to all other signatory Agencies provided that such notice shall be given between the dates of October 31 of any year and March 1 of the following year.

3. Review

The following appendices may be reviewed and updated as necessary:

- a. Appendix 1 -- Ft. Washakie Fire Helicopter Operating Plan.
- b. Appendix 2 -- Big Piney Fire Helicopter Operating Plan.
- c. Appendix 3 -- Protection Exchange Operating Plan - 1991.
- d. Appendix 4 -- Frequency Management.

4. Each of the parties to this agreement do hereby expressly waive all claims against every other party for compensation for any loss, damage, personal injury or death occurring in the consequence of the performance of this agreement.

J. William Eichen
ASSOCIATE State Director, Wyoming
Bureau of Land Management

2/9/89
Date

John E. Carroll
Regional Forester, Region 2
United States Forest Service

2/14/89
Date

V. A. Rusk
Regional Forester, Region 4
United States Forest Service

2/8/89
Date

Bruce E. Lund
State Forester, Wyoming
State Forestry Division

1/26/89
Date

Jack W. Nester
Regional Director, Rocky Mountain Region
National Park Service
Jack W. Nester

APA 13 1989
Date

Maurice Cole
Area Director, Billings Area Office
Bureau of Indian Affairs

JAN 30 1989
Date

WIMS-tyoning Communications Plan

1. VHS Channel 2: 163.550
A primary calling and contact frequency to be used between units of Federal agencies at incident scene.
2. VHS Channel 3) 154.280 MHz
A primary tactical frequency to be used between units of non-Federal agencies at the incident scene.
3. (Mutual Aid, Law Enforcement): 154.375 MHz
A special frequency utilized by authorized agencies for contact with local law enforcement or emergency medical service units for summoning assistance for crowd-traffic control or medical emergencies.
4. Federal agency units can contact non-Federal units on 154.280 MHz.
5. Non-Federal agency units can contact Federal units on 163.550 MHz.
6. If necessary, all agencies can operate together on 154.280 depending on availability of frequency to units.
7. "AIR GUARD" frequency for helicopters should be 163.600 MHz if available or 167.350. This frequency has not been standardized yet.
8. Requesting agency Incident Commander can specify what common frequency responding units are to transmit on either 163.550 or 154.280 MHz.
9. Law Enforcement Mutual Aid frequency 154.375 MHz should be used only if other frequencies are not available and only on a limited basis by authorized units.
10. EIM-WY units at incident scene working together can use 163.400 as scene of action frequency to avoid other channel congestion.
11. Other frequencies may be required by individual agencies on case by case basis and should be covered by agreement between cooperating agencies. Agreement should be initiated by the agency requesting use of other agencies frequency.
12. Depending on size of incident, other radio systems may be deployed to supplement initial attack assignments.

- 41102 -

Wyoming Interagency Radio Frequency Management
and Operations Guide

Presented to

Wyoming Interagency Steering Committee
Jackson, Wyoming
3 May 1988

Prepared by

Ed Erlanson ~~107-33-504~~
Bureau of Land Management
Wyoming State Office
Branch of Information Services
Telecommunications Staff

OVERVIEW

As great many different fire suppression organizations exist throughout America, it is often difficult for most of these organizations to function cooperatively in an efficient manner because they use different terminology, employ personnel with widely varying qualifications, set different standards for equipment, and have no common radio frequencies or communications plan.

There is a system that overcomes these problems by combining the best of existing methods into one that is flexible and efficient. The name of this system is the National Interagency Incident Management System (NIIMS).

Within NIIMS there are a number of management concepts that provide a basis for effective incident operations:

Common Terminology - All participating agencies use clear radio text (no codes) and predefined standard terms.

Functional Management - Organizational management by five major functions: Command, Planning, Operations, Logistics and Finance.

Management by Objective - Topdown management so that all involved know and understand the objectives of the operation.

Unified Command - All agencies or individuals who have jurisdictional responsibilities and, in some cases, those with functional responsibility at the incident, contribute to determining over all objectives and selection of a strategy to achieve those objectives.

Consolidated Action Plan - Only one action plan is required so that everyone involved in the incident understands what is to be done.

Span of Control - In general, best supervisory control is three to seven subordinates with five the most common number.

Integrated Incident Communications - The ability of participating agencies to plan in advance the use of integrated radio frequencies to tie together all tactical and support units on an incident.

Additional Management Concepts - Designated Incident Facilities, Management of Technical Resources, Common Standards for Qualifications, Certification, and Training.

NIIMS COMMUNICATIONS

Within the area of Integrated Incident Communications, planning, both short range and long range, must be a part of the agency and interagency overall planning. This is necessary to provide adequate communications on any multi-agency incident as well as day to day operations. Frequency sharing agreements must be drafted, approved and signed by the agencies. Equipment upgrades, when needed, should be a part of long range planning.

All agencies should be aware that several radio manufacturers now offer wide-band (150-170 MHz), multi-channel, programmable equipment both in mobiles and portables for reasonable prices. Agencies are encouraged to convert to these units as quickly as budgets will allow. Within the BLM this type equipment is now mandated by the Washington Office.

Another important part of planning for a multi-jurisdictional incident in NIIMS is the use of a Common Communications Plan among the participating agencies. This plan is needed to tie together the tactical and support units of the various agencies and to maintain communications discipline especially in the use of radios.

All communications between organizational elements should be in plain English (clear text). No codes should be used, and all communications should be confined to only essential messages.

BLM-Wyoming Communications Plan

The Bureau of Land Management-Wyoming NIIMS-ICS Radio Frequency Plan was established in 1999. These frequencies and their use are listed below and are common to all BLM-WY fire vehicles:

<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>OPTIMARY USE</u>
1	167.950 MHz	Air Safety, air/ground emergency
2	169.550 MHz	Fed to Fed and Fed to non-Fed call up
3	154.280 MHz	Wyoming State Fire Common
4	154.875 MHz	Wyoming State Law Enforcement Common
5	163.400 MHz	BLM-Wyoming Scene of Action

The frequency 167.950 MHz is for use as an air safety and initial contact frequency. This frequency will only be used for communications involving aircraft. Use is limited to emergency communications between aircraft and between aircraft and ground crews.

To: SAC, JED, LHM, DAW, JTB
From: Director
Subject: NIIMS Frequency Use Agreements

Mr. Tolson	_____
Mr. DeLoach	_____
Mr. Mohr	_____
Mr. Bishop	_____
Mr. Casper	_____
Mr. Callahan	_____
Mr. Conrad	_____
Mr. Felt	_____
Mr. Gale	_____
Mr. Rosen	_____
Mr. Sullivan	_____
Mr. Tavel	_____
Mr. Trotter	_____
Tele. Room	_____
Miss Holmes	_____
Miss Gandy	_____

LEAD COPY

Attached is the NIIMS Frequency Use Agreement for cooperative operations on Bureau frequencies in direct support of NIIMS. Effective immediately, this agreement will be used, where applicable, for all new NIIMS Frequency Use Agreements, and for all old NIIMS agreements as they are renewed. This is a basic agreement and should be expected to include additional information where deemed necessary by the parties involved.

The use of Interior/Bureau frequencies in conjunction with local or regional NIIMS planning documents by either Federal Government or non-Government participants is authorized without prior Departmental/Bureau coordination and a Radio Frequency Authorization (RFA) is not required, providing the following conditions are met:

1. A signatory to the local NIIMS agreement invokes the organizational concept in a specific geographic area.
2. An Incident Commander assumes control and organizational responsibility over all radio frequency related activities.
3. All NIIMS operations involving use of Interior radio frequencies comply with all technical and operational limits established in the basic RFA.
4. A properly executed NIIMS Frequency Use Agreement based upon the attached agreement is in effect and a copy has been received by this office.

The Department has authorized the use of non-Interior frequencies for NIIMS operations by the Bureau without prior Departmental coordination and without an RFA, providing the following conditions are met:

1. The use is in accordance with a locally prepared NIIMS planning document.
2. An Incident Commander assumes control and organizational responsibility over all radio frequency related activities.
3. All NIIMS operations involving use of non-Interior radio frequencies comply with participating agency regulations, FCC Rules, and/or NTIN Manual requirements for emergency communications as applicable.

National Interagency Incident Management System (NIIMS)
Frequency Use Agreement

between the

Bureau of Land Management and _____

TO ALLOW SHARED USE OF RADIO FREQUENCIES ASSIGNED EXCLUSIVELY FOR Bureau of Land Management Use, IN DIRECT SUPPORT OF NIIMS OPERATIONS.

This agreement is executed in compliance with the Radio Communications Manual (1377 DM 2.11). It provides for cooperative operations on Bureau of Land Management (BLM) frequencies by Federal, State and local governmental agencies during multi-jurisdictional operations where BLM is an active participant when used in direct support of the National Interagency Incident Management System/Incident Command System (NIIMS/ICS). This frequency sharing must be in accordance with the following stipulations:

1. The _____ may utilize _____ mobile and/or hand-held radios capable of operation on the following frequencies:

TRANSMIT FREQUENCY

RECEIVE FREQUENCY

158.550 MHz

158.550 MHz

2. The use of the listed frequencies is restricted to the intercommunications in support of NIIMS operations managed by the BLM, and limited to the WYOMING area. Usage must conform with all technical and operational limitations imposed by the licensing authority upon the BLM.
3. The BLM frequency/list will only be activated under the NIIMS/ICS structure when the Incident Commander has assumed organizational responsibility and in accordance with procedures established in locally prepared NIIMS planning documents.
4. A de facto claim to priority, or otherwise restricting use of any BLM shared frequency is not permitted. Net control will be maintained by the BLM which will remain responsible for proper usage.
5. This agreement for radio frequency sharing may be unilaterally withdrawn upon notification by either party without prejudice to the basic NIIMS planning document.
6. Changes to this basic agreement must be approved prior to implementation.

Reviewed and Certified by:

SUN State Telecommunications Manager

(Date)

Authorized by:

(Signature)

(Date)

(Signature)

(Date)

(Title)

(Title)



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

MAR 4 1987

COPY FOR YOUR
INFORMATION

2/9/87
①
3/2/87

Mr. William S. Werner, Representative
Interdepartment Radio Advisory Committee
U. S. Department of Agriculture
USDA Forest Service, CST
P. O. Box 2417
Washington, D.C. 20013

Dear Mr. Werner:

The enclosed Interagency Agreement between the Department of the Interior (DOI) and the U.S. Department of Agriculture (USDA) is designed to allow field operations to commence by implementing the National Interagency Incident Management (NIIMS) Steering Committee recommendation for a common calling frequency for NIIMS. You will notice that once a "blanket" GSDI radio frequency assignment (RFA) has been approved by the Frequency Assignment Subcommittee and entered into the Government Master File of Radio Frequency Assignments, DOI is no longer directly involved. Field operations may begin immediately without the necessity of individual RFAs, or further action on our part.

We are in the process of clearing the frequency 168.550 MHz nationwide for exclusive NIIMS use. No operations, other than those associated with NIIMS, will be allowed by any of the participating entities. One major shortcoming has been our inability to find a similar frequency exclusively for aircraft operating in a NIIMS environment. Hopefully, another agency will step forward with a channel for this very important function.

I expect to be signing agreements with other agencies over the next several months. As one of the principal supporters of the NIIMS concept, and therefore impacted, you may wish to recommend changes to the agreement since it will undoubtedly become the standardized boiler-plate agreement for all other users. Please feel free to call me if you have any suggestions.

Sincerely,

Michael P. Terry, Representative
Interdepartment Radio Advisory Committee

INTERAGENCY AGREEMENT
BETWEEN
DEPARTMENT OF THE INTERIOR
AND
THE DEPARTMENT OF AGRICULTURE
RELATING TO THE USE OF RADIO FREQUENCY 168.650 MHz
IN SUPPORT OF
THE NATIONAL INTERAGENCY INCIDENT MANAGEMENT SYSTEM (NIMS)

PURPOSE

This agreement allows the U.S. Department of Agriculture (USDA) independent use of the dedicated radio frequency 168.550 MHz in support of the National Interagency Incident Management System (NIIMS). The Agreement establishes mutually agreed upon technical limitations, operational constraints and revalidation requirements established by the Department of the Interior (DOI) for the use of the radio frequency by USDA and other government agencies. Its purpose is to provide a common calling frequency available to any Federal, State or local governmental entity during multi-jurisdictional emergency operations.

BACKGROUND

The National Interagency Incident Management System (NIIMS) was primarily designed to improve the ability of fire protection forces through resource sharing. However, it can readily adapt to respond to a variety of emergencies caused by a flood, earthquake, hurricane, major aircraft accident or hazardous material spill. Using the NIIMS concept of operations, large scale disasters potentially impacting two or more jurisdictions can be efficiently managed by increasing the ability of local, State and Federal agencies to coordinate their efforts during emergency operations.

CONDITIONS AND LIMITATIONS

1. USDA agrees to obtain a radio frequency assignment indicating the area of coverage desired, through the Frequency Assignment Subcommittee of the Interdepartment Radio Advisory Committee within 90 days from the date of this agreement.
2. Use of the frequency 168.550 MHz to support NIIMS operations exclusively will be allowed on an "as required" basis without further notification or coordination. A note will be added to the USDA assignment specifying that use is limited to NIIMS operations and boss fire exercises.
3. The USDA radio frequency assignment must indicate an expiration date of 5 years, subsequently renewable upon mutual agreement between the agency Frequency Assignment Subcommittee representatives.
4. The use of any method to restrict access to the NIIMS common calling frequency, or otherwise preclude ready availability to the NIIMS user community, is specifically prohibited.

5. The NIIMS calling frequency will not be used for tactical operations when alternatives are available.

6. Use of the NIIMS common calling frequency is subject to the following conditions:

- a) The NIIMS calling frequency will only be activated when an Incident Commander assumes organizational responsibility for its use in accordance with this agreement.
- b) Mobile operations only are authorized under this agreement.
- c) RF power output to the antenna should be limited to the minimum necessary to maintain communications, but shall not exceed 100 watts.
- d) Only emission class F3E (analog voice) is authorized.
- e) Antenna gain shall be limited to 3db maximum.
- f) A de facto claim to priority, or otherwise restricting use of this frequency is not permitted.

7. This agreement can be unilaterally cancelled on thirty days notice by either party.

DOI, IRAC Representative

USDA, IRAC Representative

*This agreement has been
signed. RJE*

MEMORANDUM OF UNDERSTANDING

between

ABERDEEN AREA BUREAU OF INDIAN AFFAIRS,
MERCERSBURG AREA BUREAU OF INDIAN AFFAIRS,
BILLINGS AREA BUREAU OF INDIAN AFFAIRS,
REGION TWO USDA-FOREST SERVICE,
COLORADO BUREAU OF LAND MANAGEMENT,
WYOMING BUREAU OF LAND MANAGEMENT,
ROCKY MOUNTAIN REGION NATIONAL PARK SERVICE AND
STATE FORESTRY OF WYOMING, COLORADO AND SOUTH DAKOTA

The agreement for this Memorandum of Understanding between Agencies is maintained in Section 601 of the Economy Act of June 30, 1937 (31 U.S.C. 686); the Mutual Fire Protection Act of May 27, 1915 (39 Stat. 66; 42 U.S.C. 1854); the Memorandum of Understanding between the U.S. Department of Interior and the U.S. Department of Agriculture dated January 23, 1943; and the Cooperative Agreement between the U.S. Department of the Interior, Bureau of Indian Affairs, and the U.S. Department of Agriculture, Forest Service, dated June 9, 1980.

I. PURPOSE

This Memorandum of Understanding establishes general guidelines and procedures for use and dispatch of Indian firefighters from Wyoming, South Dakota and Colorado for forest fire control work. As an appendix to this Memorandum of Understanding, an Annual Operating Plan for the current year will be developed by each involved agency prior to April 1 of each year. This operating plan will, within the framework of the Agreement, contain operating procedures as agreed upon at an annual Program Review.

II. CREW AVAILABILITY

The following Reservations may supply Indian Firefighters:

Wind River (Shoshone, Arapaho)
Pine Ridge (Sioux)
Rosebud (Sioux)
Southern Ute (Ute)
Ute Mountain (Ute)
Cheyenne River (Sioux)

In addition, off-reservation Indian crews may be provided from several South Dakota communities if a need for the crew(s) is established by a particular user agency (National Forest, BLM District, State Forestry, etc.).

III. CREW STRUCTURE

Crews generally will be structured in accordance with the National Standard Crew Size which will be specified in the Annual Operating Plan. Exceptions to the standard crew size may be camp and kitchen crews and other specialized crews.

IV. FIRE QUALIFICATIONS, TRAINING, CERTIFICATION AND RECORDS

A. Qualifications:

All members of Indian fire crews will meet the following National Qualifications Standards:

1. Have passed their 18th birthday.
2. Have passed the physical fitness test at the 45 level or higher or run the 1-1/2 mile course in 11:40 minutes or less.
3. Have a satisfactory physical examination on file at the respective agency. Specific requirements will be a part of the annual operating plan.
4. Have completed the National Standard Training courses for their position or the equivalent.
5. Meet currency and/or other requirements as specified in the Annual Operating Plan.

B. Training:

Training will be provided annually to meet the requirements of all user agencies. BIA will take the lead in coordinating Reservation training sessions. The user agency establishing the need for particular off-reservation crews will take the lead in coordinating training for these crews. All parties to this Memorandum of Understanding will cooperate in the training by providing instructors, training aids, equipment and financial assistance depending on the availability of funds. All firefighters must receive minimum training prior to any dispatch. The Annual Operating Plan will identify training requirements and standards.

C. Certifications:

1. BIA and/or the primary user agency will certify that firefighters are qualified according to the National Qualification Standards. They may issue an incident qualification card to each individual attesting to this. More often than not, they will issue a manifest at the time of dispatch, and by this will assure that all firefighters are properly qualified in the position they occupy.

D. Records:

1. Each BIA Agency or the primary user agency will maintain an adequate record system which will identify information necessary to determine the qualifications and physical fitness level of each firefighter. Recommended systems and procedures will be specified in the Annual Operating Plan.

V. OUTFITTING CREWS

BIA normally will provide personal gear and safety equipment necessary to outfit the number of crews available at each Reservation. BIA Agencies will issue the above equipment to each firefighter and will establish the necessary screening procedures to assure that all firefighters possess these items prior to sign up. Each BIA Agency will provide for cleaning, proper storage, and accountability to these items. The outfitting of off-reservation crews will be the responsibility of the user agency.

VI. CROSSING AND DISPATCHING CREWS

Orders for crews will be placed according to the procedures specified in the Annual Operating Plan. Dispatchers in Region 2 have been assigned dispatch responsibilities as follows:

1. Wyoming Interagency Coordination Center - Wind River
2. Black Hills Dispatch - Pine Ridge, Rosebud, Cheyenne River
3. West Slope Fire Center - One Mountain, Southern Ute

In addition, off-reservation crews may be dispatched by the Black Hills as needed.

VII. EMPLOYING AND PAYING

Indian fire crews will be paid under the U.S. Department of Agriculture Pay Plan for Emergency Firefighters currently in effect. Fully qualified organized crews will be paid according to the following classifications:

1. Crew Member - Firefighter AD-2
2. Squad Boss - Firefighter AD-3
3. Crew Boss - Firefighter AD-4

Timekeeping and payroll procedures and the current pay plan will be included in the Annual Operating Plan.

VIII. COSTS OF MOBILIZING AND DEMOBILIZING

Costs incurred by cooperating agencies for servicing crews will be absorbed by the Agency incurring the cost in accordance with current regulation and policy.

IX. COORDINATION OF THE INDIAN FIREFIGHTER PROGRAM

Coordination of the Indian Firefighter Program in the Region 2 area will be handled by the Rocky Mountain Fire Directors, which includes a representative from each party to this Memorandum of Understanding. The role of the Directors may include coordination of training, such as approval of training plans for Reservations, arranging training assistance to reservations, preparing guidelines and procedures to assure that Indian fire crews meet qualification requirements of all user agencies, recommending policy for management of the Indian Firefighter Program, and other tasks as the needs of the program dictate.

The establishment and management of off-reservation crews in the Indian Firefighter Program will be the responsibility of the agency which establishes the need for the crew(s). The Directors' responsibility toward these off-reservation crews, once they are established, will be the same as to the reservation crews.

X. EFFECTIVE PERIOD

This Memorandum shall be effective when signed by all parties. It will continue in force and effect until terminated by written notice by any party, provided that the notice of termination of the agreement must be given between the dates of December 1 of any year and April 30 of the following year. On a periodic basis, all

parties shall possess the Memorandum and determine if the memorandum is still applicable. Modification of the Memorandum shall result in renewal of the document and routing for the necessary signatures.

APPROVED:

_____	_____
Date	Area Director Billings Area, Bureau of Indian Affairs
_____	_____
Date	Area Director Aberdeen Area, Bureau of Indian Affairs
_____	_____
Date	Area Director Albuquerque Area, Bureau of Indian Affairs
_____	_____
Date	Wyoming State Director Bureau of Land Management
_____	_____
Date	Colorado State Director Bureau of Land Management
_____	_____
Date	Regional Director, Rocky Mountain Region, National Park Service
_____	_____
Date	Regional Forester U.S.D.A. Forest Service, Region 2
_____	_____
Date	State Forester Wyoming Forestry Division
_____	_____
Date	State Forester Colorado Forestry Division
_____	_____
Date	State Forester South Dakota Forestry Division

THE GREATER YELLOWSTONE AREA
INTERAGENCY FIRE MANAGEMENT PLANNING
AND
COORDINATION GUIDE



Prepared Under the Direction of
The Greater Yellowstone Coordinating Committee

THE GREATER YELLOWSTONE COORDINATING COMMITTEE

Presents

THE GREATER YELLOWSTONE AREA
INTERAGENCY FIRE MANAGEMENT PLANNING
AND
COORDINATION GUIDE

INCORPORATING

Beaverhead
Bridger-Teton
Custer

Gallatin
Shoshone
Targhee

National Forests

and the

Grand Teton

Yellowstone

National Parks



Published June 1990

INTRODUCTION

The Greater Yellowstone Area (GYA) is made up of parts of six National Forests and two National Parks. Contiguous portions of these Parks and Forests encompass roughly 11.7 million acres of Federal reservations, plus state lands, National Wildlife Refuges, unreserved public domain (Bureau of Land Management) and privately owned lands. This vast area lies within three states - Montana, Idaho and Wyoming and includes all or parts of 12 counties.

The Greater Yellowstone Area is world-renowned for its scenery, wildlife, wilderness, rivers, hunting, fishing, outdoor recreation opportunities, geologic, and thermal features. Other resources, although not as well known, are critically important to the people living in and adjacent to this area. Activities such as timber harvesting, firewood gathering, livestock grazing, mining, oil and gas development, outfitting and tourism associated with recreation are important segments of local economies.

Since their inception, National Forests and National Parks have been managed differently, as specified in their original Congressional mandates. National Parks were founded upon the principles of preservation, public enjoyment, and non-interference with natural processes. National Forests were established on conservation principles: the wise multiple-use of natural resources. The National Park Service, an agency of the United States Department of the Interior, is responsible for administration of the National Park System. The Forest Service, an agency of the United States Department of Agriculture, is responsible for administration of National Forests. In the early 1960's, Forest and Park Managers in the GYA recognized the need for coordination on a number of issues and programs which crossed jurisdictional boundaries. The Greater Yellowstone Coordinating Committee (GYCC) was born of this need and consists of the following:

Regional Foresters of the Intermountain, Northern and Rocky Mountain Regions of the U.S. Forest Service.

Regional Director of the Rocky Mountain Region of the National Park Service.

Forest Supervisors of the Beaverhead, Custer, Gallatin, Shoshone, Targhee, and Bridger-Teton National Forests.

Superintendents of Grand Teton and Yellowstone National Parks.

In the summer of 1988 the Greater Yellowstone Area experienced an unprecedented fire season. While it has long been recognized that fire is a major element in shaping soil, physiographic, vegetation, and wildlife patterns throughout the area and research has documented large scale fires occurring every 300-400 years in the GYA, never before, in the post-European settlement history of the area, had such large and fast moving fires been experienced. The 1988 fire season led to a nationwide debate about fire management policy on federal lands and specifically about National Park Service and Forest Service policy which allowed some fires to burn as "prescribed natural fires".

In response to this public debate, in September of 1988 the Secretaries of Agriculture and Interior appointed a Fire Management Policy Review Team. The Team examined existing federal fire policies, individual unit fire management plans, and held public meetings across the United States. In May 1989, the Team made their final report. The report stated that "the objectives of prescribed natural fire programs in national parks and wildernesses are sound, but that policies need to be refined, strengthened and reaffirmed."

The Team made 15 recommendations for improving federal fire management programs, which are listed in Appendix A. The Fire Management Policy Review Team recommendations were approved by both the Secretary of Agriculture and Interior, and have been adopted as policy by both the National Park Service and Forest Service, and incorporated into agency directives.

Some of the Fire Management Policy Review Team's recommendations can be implemented by individual efforts at the local, regional, or national office levels. In some cases, better planning and coordination between adjacent land management units will be required. However, there are issues and operational procedures within the Greater Yellowstone Area that must be addressed on an area-wide basis.

STATEMENT OF PURPOSE

The purpose of this document is to address those fire management issues and operational procedures, which in the view of the GYCC, must be addressed and implemented on an area-wide basis to meet the new policies which resulted from the recommendations of the Fire Management Policy Review Team, in a consistent manner.

OBJECTIVES

The specific objectives of this document are to:

1. Strengthen fire management planning within the Greater Yellowstone Area.
2. Develop specific operating principles and procedures to provide effective interagency coordination and management of prescribed fires and wildfires occurring in the GYA.
3. Clearly define the role of the GYCC in fire management within the GYA.

This is not a comprehensive planning document. It will not achieve levels of fire management planning required for individual units, nor is it designed to serve as a "master" fire management plan for the Greater Yellowstone Area. The responsibility to conduct professional level fire management planning remains with individual units, commensurate with their departmental and agency policies and guidelines.

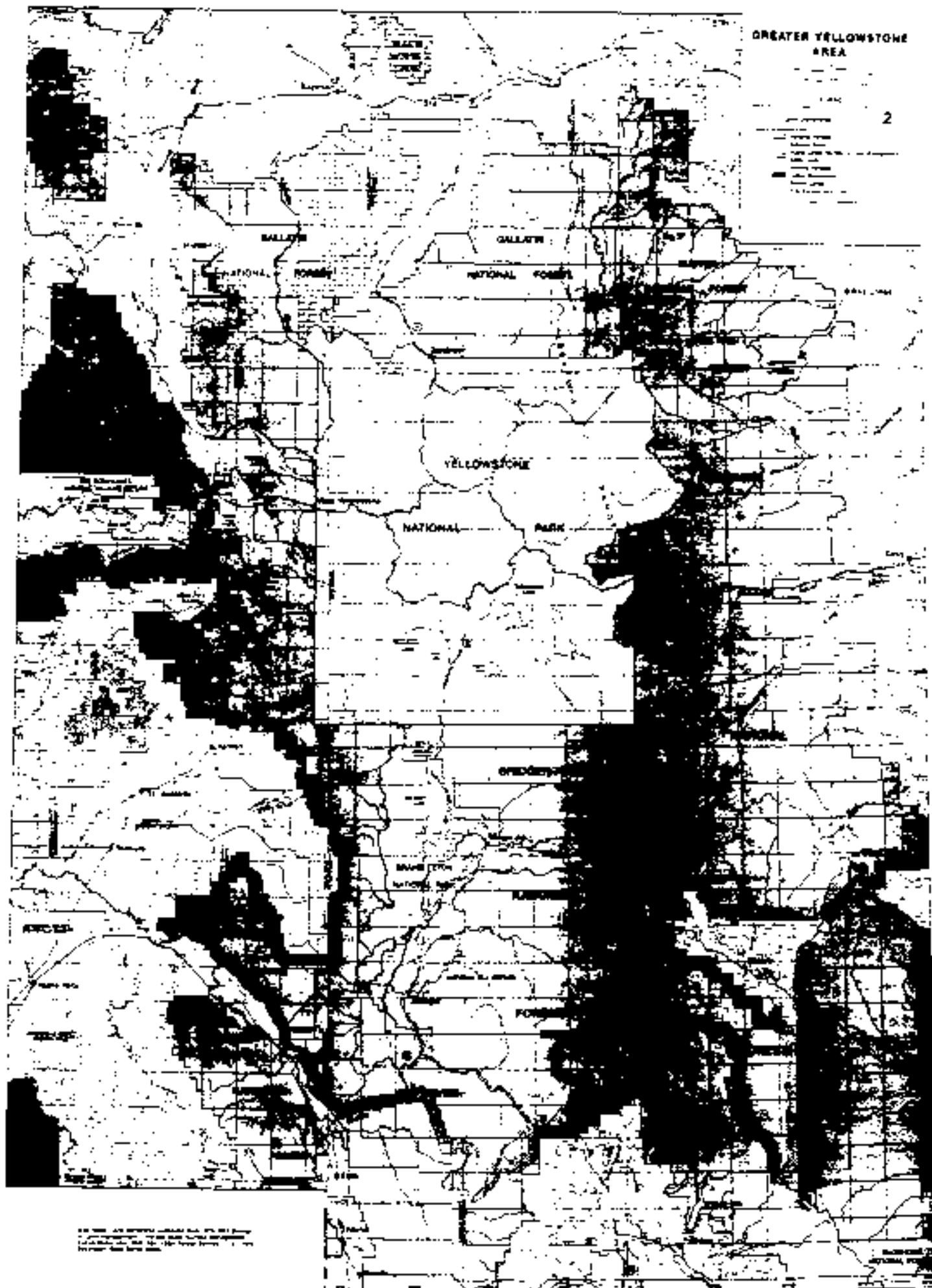
AREA ADDRESSED BY THIS DOCUMENT

A multitude of issues which cross the jurisdictional boundaries of individual Parks or Forests face the Greater Yellowstone Coordinating Committee, including fire management, grizzly bear management, geothermal development, fisheries, wildlife management, and more. Unfortunately, not all issues fit a fixed definition of exactly what land base constitutes the GYA or what many refer to as the Greater Yellowstone Ecosystem. During and following the 1988 fire season, a great deal of discussion has taken place concerning what area should be viewed as being within the GYA for purposes of fire management. Certain organizational, logistical, and topographic realities require that this be more clearly defined, particularly for that portion of the Bridger-Teton National Forest south of Jackson, Wyoming. Consequently, for purposes of fire management, this document will be viewed as addressing:

All of the Greater Yellowstone Area as defined in the GYCC Aggregation Document, with the exception of the area south of the Snake River/Green River Divide on the Bridger-Teton National Forest. (See Map)

GREATER YELLOWSTONE AREA

2



U.S. GEOLOGICAL SURVEY
BULLETIN 1464
1987

PLANNING AND COORDINATION

GENERAL

Individual units within the GYA are currently reviewing their fire management plans to ensure they meet agency standards. These agency standards include a list of common criteria agreed upon by the Forest Service and National Park Service which must be contained in individual plans for them to be mutually acceptable to neighboring units. These criteria appear in Appendix B. Individual fire management plans will follow the GYA operating principles contained in this document. In addition, the GYCC has agreed to continue or establish several specific operational procedures which will ensure a high level of interagency fire management planning and coordination in the GYA. These include:

1. Holding an annual pre-fire season meeting of all GYA Fire Management Officers (FMO's).
2. Establishing an interagency peer review process for revised fire management plans.
3. Continuing the use of the GYA Fire Situation Report established in 1989.
4. Continuing the use of the GYA Mobilization Guide and Preparedness Plan.
5. Establishing a process for activating a GYCC Fire Management Advisory Group (FMAG) which will serve as professional level consultants to members of the GYCC during on-going large, potentially large, and/or complex fire incidents.
6. Defining a consistent process for the management of prescribed fires and wildfires in the GYA.

A key component of individual fire management plans, and a cornerstone of coordinated fire management in the GYA, is conducting comprehensive joint planning along the boundaries of neighboring land management units and completion of mutually acceptable fire management plans. While each unit will have to work closely with their neighboring unit in the development of their individual plan, in most cases, the actual mechanism for demonstrating that one unit's fire management plan is mutually acceptable to their neighbor will be through the use of formal written agreements. Concurrent with the review of individual plans, these documents will be available for review. As the review process dictates changes in individual fire management plans, these agreements will be updated accordingly.

ANNUAL MEETING OF GYA FIRE MANAGEMENT OFFICERS

Fire Management Officers from each GYA unit will meet each year prior to the fire season to review the status of fire management planning efforts and operational procedures. Discussion will include review of preseason conditions, fire season potential, situation and status reporting, mobilization and preparedness plans, prescribed natural fire prescriptions, planned management ignited fires, and review of cooperative agreements. Key assignments to be made at this meeting include Peer Review Group membership and GYCC Fire Management Advisory Group (FMAG) membership. Individual GYA units will coordinate and host this meeting on a rotating basis. Participation by Forest Supervisors, Park Superintendents, and Regional Fire Staff members is encouraged.

ESTABLISHMENT OF A GYA INTERAGENCY PEER REVIEW PROCESS FOR FIRE MANAGEMENT PLANS

To compliment the normal agency review and approval procedure, a GYA peer review process will be instituted for the purpose of reviewing individual fire management plans. The process will occur as follows:

1. A three-person Peer Review Team will be appointed annually at the Spring GYA FMO meeting. Team membership will include at least one fire specialist and one wilderness/resource specialist.
2. When individual fire management plans are ready for review, they will be sent to the members of the GYA Peer Review Team for a detailed evaluation; to be followed by a meeting of the Review Team and the Forest or Park FMO. This process must occur in a timely fashion and prior to or concurrently with normal agency review.

Implementation of individual fire management plans may occur only after completion of the normal agency approval process and approval of all applicable agreements.

GYA FIRE SITUATION REPORT

Current information on the fire situation in each GYA unit is critical for responsible fire management planning and implementation. Sharing of fire situation information between units in the GYA will be coordinated by the Forest Service Northern Region Coordination Center (NRCC). Each GYA unit will submit a fire situation report on a daily basis by 0900 hours to the NRCC. This report will be consolidated into the GYA Situation Report and sent to each unit via the Data General Computer System by 1000 hours each day. The GYA Situation Report will provide each unit with a description of fire activity, resources assigned, and potential for continued fire activity to facilitate coordinated planning and public information efforts.

The Situation Report will not replace the need for direct contact between adjoining units and all other affected or potentially affected cooperators. Specific information on each fire including location, size, status, resources committed, and estimated maximum allowable perimeter will be shared. This will facilitate dialogue between FMO's, including a review of prescription parameters, potential fire behavior, and appropriate management strategies.

GYA FIRE MANAGEMENT ADVISORY GROUP (FMAG)

In order to enhance coordinated management of large, potentially large and/or complex fire incidents within the GYA, a GYCC Fire Management Advisory Group (FMAG) will be formed. Participants in this group shall consist of a minimum of three GYA FMO's from two agencies. Unit manager participation from the most affected unit(s) will be solicited. All other potentially affected federal, state, and local officials will be consulted. This group, including a chairperson, will be recommended for Unit Manager approval at the annual spring FMO meeting. The FMAG will be activated by any one of the following conditions:

1. Discretion of any GYA Unit Manager.
2. Two or more units having active PNF's or active wildfires, and GYA in Preparedness Level III or higher.
3. One unit with more than three active PNF's or active wildfires and GYA in Preparedness Level III or higher.
4. GYA in Preparedness Level IV or higher, regardless of number of fires.

The Chairperson will monitor the GYA Situation Report on a daily basis during the fire season and will activate the group when any one of the criteria is met. Once activated, the FMAG will assess the overall fire situation in the GYA on a daily basis and make recommendations to the affected Unit Manager(s) and the GYCC. The FMAG will not function as a Multi-Agency Coordination (MAC) Group. Their recommendations will be based on local, regional, and national fire situation; resource availability; current and projected fire behavior; potential threat to life and property; air quality impacts; and social, economic, and political impacts of GYA fire management activities.

Their function is to :

1. Serve as professional level consultants to the members of the GYCC and provide advice on appropriate management strategies for PNF's and wildfires as requested.
2. Recommend when all new fire starts in the GYA should be declared wildfires.
3. Recommend when no new management ignited prescribed fires will be permitted.
4. Recommend when the totality of the fire circumstances warrants the establishment of a MAC Group as dictated by the GYA Preparedness Plan.

1. Active means as defined on a burning permit in which fire perimeter growth is expected to increase by 10% or 10 acres, whichever is less.

PREScribed FIRE

GENERAL

Fire has been a significant natural force in the evolution of the flora and fauna of the GYA ecosystem and continuation of these natural processes is desirable in much of the area. Prescribed fire is used by the National Park Service and the Forest Service for a variety of management purposes. These fires are utilized when and where they can be without unreasonably impacting other land uses or creating unacceptable environmental, social, or economic impacts. They are conducted only under approved prescribed burn plans. The respective agencies have provided safeguards in the planning and execution processes that minimize the risk from the use of prescribed fire. Both agencies utilize two types of prescribed fire: management ignited prescribed fire and prescribed natural fire.



MANAGEMENT IGNITED PREScribed FIRE

Prescribed fires intentionally started by agency managers to accomplish land management objectives are classed as Management Ignited Fires. This type of prescribed fire may be utilized for many purposes in the GYA, ranging from hazard fuel reduction to assisting in the reintroduction of fire in its natural role in the environment. Each management ignited prescribed fire is conducted in accordance with a site-specific approved prescribed burn plan implemented by trained, qualified, and experienced personnel.

PREScribed NATURAL FIRE (PNF)

Prescribed natural fires are those ignited by natural means, which are permitted to burn, under specific parameters, to achieve defined objectives. The use of prescribed natural fire to achieve land management objectives must always be carefully weighed against the values it has the potential to impact, as well as the concerns of the public. In order to qualify as a prescribed natural fire, the ignition must start and remain within the established parameters, collectively referred to as the prescription. Both Forest Service and National Park Service policy require that the prescriptions for PNFs include specific environmental, fire behavior, geographic, legal, and administrative parameters. In the GYA, lightning is the only natural ignition type contemplated, but volcanic activity could be another conceivable source.

GUIDELINES FOR PNF MANAGEMENT

Adoption of a standard methodology will enable the Forest Service and National Park Service to apply a consistent approach to PNF management. The following format will be clearly identified in all unit fire management plans and will be used as a means to standardize management of these fires.

DECISION PHASE

The decision process begins when a candidate ignition is detected.

The appropriate staff person(s) will evaluate the ignition against the applicable initial evaluation criteria as identified in the unit's fire management plan. These criteria must facilitate making a timely determination of whether a new fire is within prescription, is anticipated to remain within prescription, or must be declared a wildfire.

If the fire is a wildfire, that determination must be made immediately and an appropriate suppression response initiated.

If the fire qualifies as a PNF, the following activities will take place:

- A recommendation to manage the ignition as a PNF will be made to the appropriate Unit Manager, as specified in the plan.
- The initial decision will be made by the Unit Manager within time frames established in the plan. In all cases, this should be less than two hours. This decision must be made carefully because it determines management's intentions until a formal Prescribed Natural Fire Burn Plan can be completed. Between the initial decision and Burn Plan completion, the Unit Manager will revalidate the fire on a daily basis as remaining within prescription parameters.
- Fire behavior projections using both an "expected" and "most severe" weather scenario will be developed for the Unit Manager. These, along with the evaluation of other key points from the decision making process, will be documented as part of the project plan.
- Concurrently with the initial Unit Manager decision process, a team will be activated to begin preparation of a formal PNF Burn Plan. The Burn Plan will be prepared commensurate with agency standards but in no case later than 48 hours after the initial discovery. The development of the Plan should be an interdisciplinary effort completed by those responsible for management of the area where the fire is burning, and other subject matter experts as needed. Approval of the Plan is made by the local Unit Manager. When a fire is expected to burn on two or more agency jurisdictions, all affected agency Unit Managers will approve the burn plan.

The plan documents the key points considered in the initial decision process and identifies areas that will need probable follow-up at some future time during the incident. It also specifies the type and intensity of monitoring that will be needed on the fire.

A maximum allowable perimeter for the fire will be determined. This is the outer limit of acceptability, based on land management objectives. Those holding actions anticipated to keep the fire within this area will be specified. Planned actions must be tactically sound with



sufficient emphasis on land management objectives, safety, resource availability, and cost effectiveness. Organization, equipment, and funding necessary to implement the holding actions will be estimated.

A contingency section will be included and will specify the probable actions necessary in the event the fire is later declared a wildfire. The contingency section will provide some groundwork for the identification of the appropriate suppression response or completion of an Escaped Fire Situation Analysis (EFSA) (a description of EFSA's is provided in the WILDFIRE section later in this document). The contingency section of the plan will also establish an estimate of suppression resources needed to implement the probable strategy.

- When the burn plan is completed it will be reviewed by the Unit Manager. If the plan indicates an acceptable level of risk and consequences from the fire, the Unit Manager may approve the plan and the fire will continue to be actively managed as a PNF. If the consequences and/or risk are unacceptable, the Unit Manager will terminate the PNF status and initiate an appropriate suppression response.

One of the key decision points is whether or not project funds are available to finance management of the fire as a PNF. If funding is unavailable, the ignition is considered out of prescription, and will be declared a wildfire. The funding source depends on the land management objectives to be accomplished through the program. The appropriate Unit Manager may designate other available funds from their units if they choose to do so.

MANAGEMENT PHASE

The management phase of the fire covers those actions taken after the decision has been made to declare it a prescribed fire.

Once an ignition is declared a prescribed natural fire, it must be carefully monitored and receive necessary attention to be managed to a successful conclusion. Each fire should have an assigned Prescribed Fire Manager responsible to the appropriate Unit Manager. If the fire spreads to more than one agency's land, each agency will have a representative on a PNF management group. This group will remain responsible for managing the incident throughout its duration, including making the recommendation to declare it a wildfire should it become necessary. Any single wildland fire incident can only have one designation regardless of agencies involved.

An agency prescribed fire manager may handle more than one fire concurrently. His/her responsibilities include refinement of the Prescribed Burn Plan, particularly the Holding and Contingency sections, and the implementation of monitoring and holding actions.

A tactical team leader (Holding Specialist/Boss), working for the prescribed fire manager will be responsible for executing the holding actions. The makeup and qualifications of the remainder of the tactical team will be appropriate for the complexity of the anticipated holding actions, and in all cases will meet agency standards. Both the prescribed fire manager and the tactical team leader must remain available during the duration of an active PNF. A key part of implementing any holding action is the identification of decision points. These are "triggering" points at which holding actions must be implemented in order to be effective.

On each subsequent day of the PNF, the Unit Manager will certify that the fire can be maintained within the provisions of the approved fire plan, and that adequate suppression resources are available to respond to the fire should it go out of prescription. Regardless of level of activity, all PNF's will be systematically monitored, recertified daily, and actively managed until they are declared out.

REVIEW PHASE

Postfire review of fire perimeter projections and fire effects are needed to properly evaluate the program. This will be accomplished by the prescribed fire manager, or an interagency peer review group at a unit manager's request, on all incidents that exceed 100 acres in size. The information which should be collected on these fire includes:

1. Documentation of all management decisions pertinent to the fire incident.
2. A copy of the prescribed natural burn plan.
3. A final incident summary that analyzes the estimates (cost, size, fire behavior, etc.) in the burn plan and compares these with actual results obtained.

WILDFIRE

Once a fire has been declared a wildfire, an appropriate suppression response will be initiated according to National Forest or National Park management plan direction. Each wildfire ignition will be responded to in a timely manner with appropriate forces utilizing ecologically sound and economically efficient tactics. If a wildfire escapes initial attack, an Escaped Fire Situation Analysis (EFSA) will be completed and reviewed daily. The EFSA will provide the current and predicted fire activity, offer management alternatives for suppression actions and their probability of success, evaluate the ecological, social, economic, and political ramifications of those suppression alternatives, and provide specific direction to the Incident Commander, from the appropriate Unit Manager. All suppression actions will be based on the direction set in the initial EFSA or subsequent revisions, if conditions change. The EFSA will be signed by the appropriate Unit Manager or Acting.

If a prescribed fire is declared a wildfire an EFSA will be developed. Once a prescribed fire has been declared a wildfire, it will never revert to prescribed fire status and the appropriate suppression response will be continued until the wildfire has been suppressed. Any single wildland fire incident can only have one designation regardless of agencies involved.

If the fire is predicted to spread to another administrative unit(s), all affected Unit Managers will be involved in the development of the EFSA.

One agency will not take suppression action on lands administered by another agency unless authorized to do so under existing written agreements, or verbally, prior to initiating the suppression action.

SUPPRESSION STRATEGIES

A full range of suppression strategies are available to meet management plan direction. These strategies range from direct control and minimization of burned acres to indirect control methods that utilize natural barriers and confine the fire within a predetermined area. If a delay occurs in making a wildfire determination on an ignition, the result could be increased suppression cost and resource loss. Wildfire declarations will be made as quickly as possible and appropriate suppression actions taken.



SUPPRESSION TACTICS

Appropriate suppression tactics shall be identified in individual fire management plans and approved by Unit Managers in EFSA's. These tactics shall protect life and property, minimize cost and impacts (loss) commensurate with values at risk. An appropriate suppression response will be initiated and continued on all wildfires until declared out. Suppression forces will use effective methods and equipment necessary to accomplish suppression needs while minimizing resource impacts.

ROLE OF THE GREATER YELLOWSTONE COORDINATING COMMITTEE IN FUTURE LARGE FIRE INCIDENTS

It is the role of the Greater Yellowstone Coordinating Committee to facilitate the coordinated management of the GYA. The GYCC does not have line authority over individual unit managers or units within the Greater Yellowstone Area. However, since the GYCC is composed of three Forest Service Regional Foresters and the National Park Service Regional Director, as well as the Forest Supervisors and Park Superintendents of all units within the GYA, decisions and agreements made by the GYCC have wide-spread support, and are implemented through normal present lines of authority.

In the event of large, potentially large, or complex fire incidents, the GYCC will continue to serve in its role as a facilitator of communication, coordination, and effective cooperation between the individual units of the GYA. Agreements reached by GYCC members will be implemented through normal lines of authority. While the entire GYCC membership will not function as a Multi-Agency Coordination (MAC) Group, individual members or their designees, may activate or participate in a MAC Group. Whenever an Area Command is established, it will operate under a written Delegation of Authority clearly outlining both their geographic and functional role. This delegation will be signed by all Unit Managers under whose authority the Area Command is operating. Area Command will redelegate this authority to individual Incident Commanders consistent with individual EFSA's. Any Delegations of Authority between Unit Managers and Incident Commanders in effect at the time an Area Command is established, will be replaced by a new Delegation of Authority between the Incident Commander and Area Command. The GYCC may offer input and direction to the MAC Group and/or Area Command as necessary.

PUBLIC INVOLVEMENT/NEPA COMPLIANCE

One of the major recommendations of the 1988 Fire Policy Review Team was that the National Environmental Policy Act (NEPA) process be followed in the development or revision of unit fire management plans. This recommendation now has been adopted as agency policy by both the Forest Service and National Park Service. Individual units are proceeding through the review and revision process at different rates. This is a result of differential planning complexity, varying amounts of work necessary to bring individual units into compliance, and individual unit priorities. As each individual unit within the GYA proceeds through the review and revision process, each will determine and conduct an appropriate level of NEPA compliance consistent with the plan complexity and individual agency policy.

COORDINATED FIRE RESEARCH

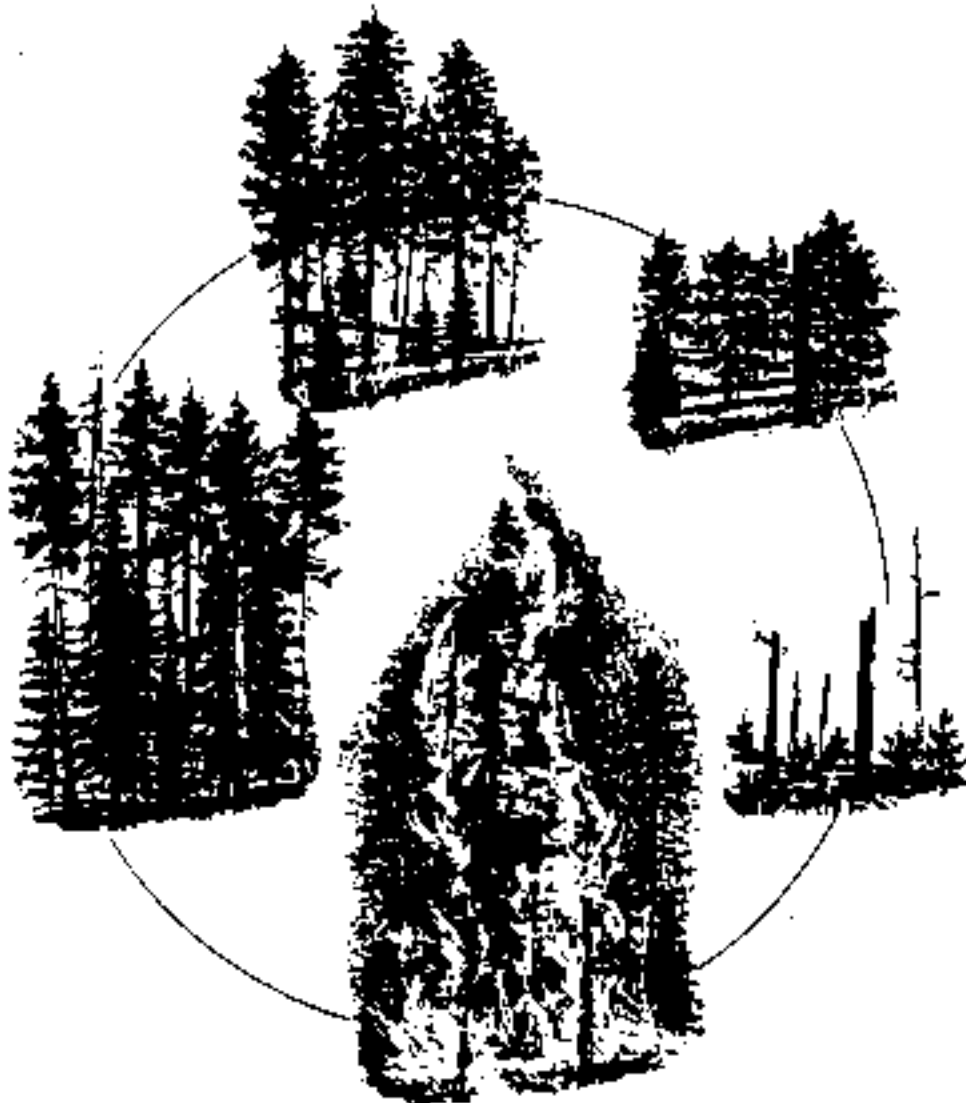
Despite significant scientific information documenting the role of fire within the GYA, there is a continuing need for long term monitoring of fire effects and research on a variety of fire related issues. The GYCC has appointed agency research coordinators responsible for identifying research needs, preparing requests for proposals and coordinating fire related research projects with the GYA. This process will enhance coordinated research efforts between agencies, avoid duplication of effort and provide valuable scientific information for future management.

CLOSING STATEMENT

The Greater Yellowstone Area contains the largest nearly intact natural systems remaining in the temperate regions of the world. Fire, acting as a dynamic natural force, has historically been a dominant factor in shaping flora and fauna for which the area is now famous. Properly managed, fire remains an important component of resource management programs designed to fulfill federal land management agency's Congressional mandates within the GYA. It is also recognized that under extreme conditions, such as those experienced in 1988, rapidly spreading wildfire may be beyond modern man's technological capabilities to control.

This document has outlined specific operational procedures for the GYCC to monitor the overall fire situation in the GYA during the fire season. It has established criteria which will be utilized within the GYA for determining when it is necessary to activate the GYCC Fire Management Advisory Group and MAC Groups. Criteria have been established which will be used by the GYCC to determine when the totality of fire circumstances warrants suspension of additional prescribed natural fires. These procedures will allow the GYCC to fulfill its role as a facilitator for coordinated management of the Greater Yellowstone Area, while maintaining the management integrity of each Department and the legal responsibility of each Unit Manager.

The Greater Yellowstone Coordinating Committee believes the guidelines and operational procedures outlined in this document will contribute greatly to a more unified, coordinated approach to managing fire in the Greater Yellowstone Area.



APPENDIX A

RECOMMENDATIONS FROM THE FINAL REPORT OF THE FIRE MANAGEMENT POLICY REVIEW TEAM

MAY 5, 1989

RECOMMENDATIONS

The Team recommends that the Secretaries of Agriculture and the Interior implement the following policy and direction:

1. Existing USDI and USDA fire management policies governing wilderness and parks must be strengthened and reaffirmed to limit their application to legitimate prescribed fire programs. Clarification is needed to prevent inappropriate use of fundamentally sound policies.
2. The agencies reaffirm their policies that fires are either prescribed fires or wildfires. The agencies reject as impractical and unprofessional the practice that fires can be allowed to burn free of prescriptions or appropriate suppression action.
3. USDA and USDI agencies will periodically review fire management plans for parks and wilderness for compliance with current policy, direction, and the additional requirements recommended by this report. No prescribed natural fires are to be allowed until fire management plans meet these standards.
4. Current fire management plans must be strengthened by:
 - a. Developing joint agency fire management plans, agreements, or addendums to existing plans for those areas where fires could cross administrative boundaries. Periodic joint review of these plans should occur. These will include agreement on processes and criteria to be used to make decisions on prescribed vs. wildfire and suppression strategies and tactics.
 - b. Including a comprehensive set of criteria which will be used in deciding whether or not to allow natural ignitions to burn as prescribed fires. In addition to those criteria currently required and commonly used, the following factors will be considered:
 - (1) Energy release component.
 - (2) 1000-hour fuel or duff moisture content.
 - (3) Appropriate consideration of the national and regional fire situation, including the numbers of fires and amount of available resources to suppress them.
 - (4) Limits on numbers of fires burning in the planning unit at one time.
 - (5) Limits on projected length of active perimeter and acreage burned.
 - (6) Indicators of cumulative drought effects on fire behavior.
 - (7) Potential impacts upon visitors, users, and local communities, both on and off site.
 - c. Clearly describing the decision process and factors to be addressed before a fire is declared a prescribed natural fire.

d. Including criteria to be used in declaring a prescribed fire a wildfire. There must be interagency agreement on these factors in areas where fire may move across administrative boundaries and shared suppression resource may be required.

e. Clearly identifying areas that need protection from fire, such as developments within or adjacent to wilderness and park boundaries. Fire management plans should also include actions that are to be taken, such as hazard fuel reduction or installing fuel breaks, to protect such developments or areas.

f. Clearly stating the management objectives being addressed by the prescribed natural fire program, including identification of specific values gained as a result of allowing natural fires to burn un-suppressed within prescribed conditions and areas.

g. Clearly describing the process to be used to ensure adequate public involvement and coordination with local governments in both plan development and implementation.

5. Agencies will cooperatively develop regional and national contingency plans and procedures and provide the appropriate program monitoring and direction, including curtailment of prescribed fire activities when necessary because of competition for national and regional fire suppression resources.

6. The responsible line officer or designee shall certify in writing daily that a fire is within prescription and adequate resources are available to ensure that each prescribed natural fire will remain within prescription through the ensuing 24-hour period, given reasonably foreseeable weather conditions and fire behavior. If the fire cannot be kept within prescription with available forces and funds, it shall be declared a wildfire and appropriate suppression action initiated.

7. Agencies must re-evaluate the opportunities to use management ignited prescribed fire to achieve management objectives and to complement prescribed natural fire programs. Additionally, hazard fuels must be reduced to protect selected areas, particularly developments within and adjacent to boundaries from prescribed natural fire and high wildfire risk. Fuels will be treated along park and wilderness boundaries or internally where there are high values at risk.

8. Fire program management will be improved by establishing properly staffed regional and unit level organizations.

a. Agencies will ensure the availability of qualified staff and knowledgeable line officer for developing, implementing, and managing prescribed fire programs.

b. National Park Service regional offices will establish a full-time regional fire coordinator to develop and oversee park programs in accordance with FIREPRO III, where appropriate.

c. Agencies will implement the concept of highly trained, well-equipped and mobile tactical teams to provide on-the-ground monitoring and management of prescribed natural fires in national parks and wilderness.

d. Agencies will ensure the strengthened policy is understood and implemented by all appropriate personnel.

e. Agency managers will assure that personnel develop a thorough understanding of the management objectives for the lands they are managing.

f. The National Park Service is to complete an analysis of normal fire year operations, in order to define essential minimum wildland fire program needs and to take action to meet those needs.

9. Additional interagency emphasis will be given to addressing opportunities for improving the management programs.

a. The National Wildfire Coordinating Group (NWCG) charter should be expanded specifically to include prescribed fire program coordination.

b. The NWCG should take the lead in developing common terminology for prescribed burning programs and describing wildfire suppression alternatives.

c. Agencies will develop joint criteria for selecting appropriate suppression tactics in wilderness and parks.

d. Agencies will improve public and agency understanding and acceptance of using appropriate suppression tactics that meet fire management objectives and minimize the adverse impact on wilderness values and park resources.

10. Agencies will ensure NEPA compliance for fire management plans. Agencies will increase opportunities for public involvement and coordination with state and local government when revising or developing fire management plans.

11. Interpretation and public information before and during fires will be improved.

a. Agencies will ensure that timely, accurate and consistent information is provided for the public on the purpose, presence, and status of prescribed natural fires, as well as impacts on the community due to closed roads, trails, smoke, back country restrictions, and other effects.

b. Interpretive and fire status messages are for different purposes, and agencies should strive to keep them separate and distinct. There should also be a distinction between the information needs for prescribed fires and wildfires.

c. Agencies should ensure that the public is informed of the risks involved in fire management programs.

d. Agencies will use common terminology for prescribed natural fire programs.

12. USDI and USDA will review the methods of funding prescribed fire and fire protection programs with the objective of improving interagency program effectiveness. Planning and presuppression activities should be financed by program funds rather than through emergency fund transfers and supplements.

13. There is a need for additional research related to fire management programs.

a. USDI and USDA will develop coordinated research programs utilizing the unique capabilities of both organizations.

b. The feasibility of prescribed burning forests using stand replacement fire will be investigated and tested by implementing an appropriate interagency field research program.

c. Research will be undertaken to develop and implement an expert system that integrates a wide array of fuel, topographic, weather, climatological, fire behavior, post-fire effects, and other information and readily displays such information in an interactive mode for the user at a computer terminal. This expert system would help to assure that important variables are not overlooked as decisions are made regarding long duration fires.

e. Efforts will also be undertaken to develop comprehensive data bases for park and wilderness resources and provide for state of the art analyses and display as well as an efficient, continuous monitoring system to insure timely update of information.

f. Development of additional emission factors for wildland fuels and better methods for projecting air quality impacts of prescribed and wildfires are needed, since smoke and air pollution are major considerations in deciding when to terminate prescribed natural fires and in scheduling management ignited prescribed fires.

14. If any Federal bureau engages in prescribed natural fire programs in Alaska, that bureau is responsible for adherence to the standards established as a result of these recommendations. The well-established terminology describing levels of wildfire suppression in Alaska should not be changed for the sake of conformity with the broader categories used elsewhere.

15. The agencies will cooperate fully in determining whether allegations of misuse of policy are true and take measure to ensure that any such practices not occur in the future.

APPENDIX B

CRITERIA FOR PRESCRIBED NATURAL FIRE PORTIONS OF FIRE MANAGEMENT PLANS AGREED UPON BY FOREST SERVICE AND NATIONAL PARK SERVICE

February 1989

1. General description, objectives, background and acceptable results of program.
2. Statement of exactly which functional position is responsible for decision making regarding prescribed natural fire.
3. Required organization, numbers of personnel and the qualifications needed to implement a prescribed natural fire program.
4. Funding requirements and procedures.
5. Inter/intra agency coordination needs, steps and procedures, including the required daily verification of needed resources.
6. Boundary agreements with adjoining land management agency with prescribed natural fire program: mutually acceptable criteria for prescribed natural fire implementation.
7. Decision process and timetable for decision making, including the identification of specific criteria which will be evaluated in making an initial prescribed natural fire determination.
8. The requirement for a Prescribed Natural Fire Project Plan for each PNF which will address acceptable holding actions, monitoring requirements, daily revalidation procedures, contingency procedures, the funding process and a summary report.
9. Information and interpretation actions.
10. Monitoring and evaluation needs/process/schedule.
11. Daily revalidation requirements.
12. Potential impacts of plan implementation on site and off site including environmental, social and economic impacts.
13. NEPA compliance documentation.

GYA PREPAREDNESS PLAN

GYA PREPAREDNESS LEVELS

Purpose:

To identify the level of Wildland Fire, Prescribed Natural Fire, and Prescribed Burning activity, severity, and resource commitment within the Greater Yellowstone Area.

To identify actions to be taken by the Greater Yellowstone Area Fire Management Advisory Group (FMAG) under the guidelines of the Greater Yellowstone Coordinating Committee (GYCC) to assure an appropriate level of preparedness/readiness for the existing and potential situation.

To modify or curtail Unit fire management activities when essential to assure preparedness or response capabilities for situations within the GYA.

GYA Preparedness Levels:

The Fire Management Advisory Group will monitor the GYA fire situation and preparedness levels and will determine preparedness through level three (3) and will recommend to the Unit Managers, GYCC Co-Chairpersons, three Forest Service Fire and Aviation Directors, and the National Park Service Regional Fire Management Officer a preparedness level four (4) and five (5).

GYA preparedness levels are determined through a daily analysis of the GYA situation report by the FMAG. This is to assure that sufficient resources will be available for the GYA, various regions, or national situations.

PREPAREDNESS LEVEL I

Description:

No large fire activity within the GYA. Units have low to moderate fire potential for high intensity fires. Initial attack is successful and fires are manageable. No competition exists for national resources.

ACTION	RESPONSIBILITY
Individual GYA Units will determine appropriate actions.	Unit Administrators through Unit Preparedness Plans
Individual GYA Units will submit daily fire status report.	Unit Dispatcher with FMO approval
Consolidated GYA situation report submitted daily to NICC and back to individual GYA Units.	Northern Region Coordination Center
GYA Units staffed at Initial Attack level.	Unit Administrator
Certification that prescribed natural fire(s) within prescription and adequate resources are available to ensure fire(s) will remain in prescription through ensuing 24-hour period, given reasonably foreseeable weather conditions and fire behavior.	Unit Administrator

PREPAREDNESS LEVEL II

Description:

One or more Units experiencing moderate to high fire potential. Multiple fires occurring, initial attack successful on most but a few fires escaping to size class B or C. Escaped fires are manageable, potential for further growth is moderate. Resources are adequate in the GYA and no competition exists for national resources.

ACTION	RESPONSIBILITY
Level 1 actions carry through.	Appropriate Fire Staff
Individual Unit Administrator's briefed by Unit FMO on daily basis.	Unit FMO
Individual Units evaluate fire severity on a daily basis to ensure management ignited and PNF's are in compliance with Unit prescribed burn plans.	Unit FMO / Fire Staff

PREPAREDNESS LEVEL III

Description:

Two or more Units experiencing high to very high fire potential with no weather break expected within the next 48 hours. Two or more Units are experiencing size class C or D fires. One Unit requiring commitment of a Type I or Type II Incident Management Team. Units are experiencing resource shortages and are requiring assistance from regional support centers. National Interagency Coordination Center (NICC) and/or Rocky Mountain Area Coordination Center (RMACC), Intermountain Region Coordination Center (IRCC), Northern Region Coordination Center (NRCC) are supporting fire activity in their or other Region(s).

ACTION	RESPONSIBILITY
Level I/II actions carry through.	Appropriate Fire Staff
Daily briefing for Regional Fire Staff and GYCC Managers incorporating situation update and evaluation by the FMAG via the GYCC Team Leader.	Regional Fire and Aviation Directors / Regional Fire Management Officer / Appropriate Fire Staff
FMAG is activated.	FMAG Chairperson
Evaluate need to activate GYA MAC Group	FMAG / Regional Staff / GYCC Team Leader
Coordinate repositioning of resources and ensure availability of qualified personnel for fire dispatches.	GYA Unit FMO's / FMAG
Staff GYA fire dispatch offices seven days a week.	GYA Unit FMO's / FMAG
Individual Units provide timely update on emerging or existing fire situation to FMAG, respective Regional Office, and NICC through normal GYA situation reporting.	Unit FMO / Fire Staff

Evaluate / document that Unit prescribed fire program objectives can be accomplished given current commitment or resources and severity potential predictions. Evaluate all new PNFs against current/predicted situation.

Affected Unit Administrator /
Unit Fire Staff

PREPAREDNESS LEVEL IV

Description:

Two or more Units experiencing very high to extreme fire potential with no weather break expected within the next 48 hours. Multiple ignitions cause a number of fires to escape initial attack, resulting in size class D+ fires. Two or more Units experiencing project fires requiring commitment of Type I or Type II Incident Management Teams. Resource shortages are being experienced in the GYA and by Regional support centers, with two or more Regions being supported by NICC and/or RMACC, IRCC, NRCC. Other national fire activity increasing the competition for resources placing a drain on the normal regional support centers in the GYA.

ACTION	RESPONSIBILITY
Level I/II/III actions carry through.	Appropriate Fire Staff
Evaluate need to activate GYA MAC Group.	FMAG / Regional Fire Staff
Evaluate status of all prescribed fires to ensure that burn plans and contingencies can be accomplished given the current fire activity and resource commitment.	Unit Administrator / Unit Fire Staff / FMAG / Regional Coordination Center / Regional Fire Staff
Allow new prescribed fire starts (both natural and planned) to proceed only after consultation and approval from Regional Fire Staffs and with potentially affected neighbors.	Unit Administrator / Unit Fire Staff / FMAG / Regional Fire Staff
Increase coordination between GYA and potentially affected agencies involving Regions concerning prioritizing resources and fire restrictions with other GYA Units and potentially affected neighbors.	FMAG / Regional Fire Staffs / Regional Coordination Centers

Evaluate potential of going to Level V and inform all GYA Units and Regional Staff of all affected agencies.

FMAG / Regional Fire Staff

PREPAREDNESS LEVEL V

Description:

Three or more units experiencing extreme fire severity with no weather break expected within the next 48 hours. Three or more Units experiencing major fires requiring the commitment of Type I Incident Management Teams. NICC and/or RMACC, IRCC, NRCC actively supporting two or more Regions with fire activity. Significant competition for resources exists with the potential to exhaust all Agency resources.

ACTION	RESPONSIBILITY
Level I/II/III/IV actions carry through.	Appropriate Fire Staff
Allow no new prescribed fires (management ignited or natural).	Unit Administrators / FMAG / Regional Fire Staff / Regional Administrators
Evaluate feasibility of initiating appropriate suppression action on existing prescribed fires, halting any further ignition and securing control lines by the end of the burning period to enable the release of resources for other wildfire activities.	Unit Administrators / FMAG / Regional Fire Staff / Regional Administrators
Intensify coordination efforts with all fire protection agencies and news media.	FMAG / GYA MAC Group
Establish GYA MAC Group to assess resource availability, establish priorities, and coordinate with applicable Regional MAC Group(s).	GYCC

APPENDIX A

GLOSSARY OF TERMS

Greater Yellowstone Area (GYA) - land area made up of six National Forests and two National Parks. Area encompasses approximately 11.7 million acres of Federal reservations, state lands, National Wildlife Refuges, unreserved public domain (Bureau of Land Management) and privately owned lands that lie within three states - Montana, Idaho, and Wyoming.

Greater Yellowstone Coordinating Committee (GYCC) - consists of three Regional Foresters of the Intermountain, Northern, and Rocky Mountain Regions of the U.S. Forest Service; the Regional Director of the Rocky Mountain Region of the National Park Service; the Forest Supervisors of the Beaverhead, Custer, Gallatin, Shoshone, Targhee, and Bridger-Teton National Forests; and the Superintendents of the Grand Teton and Yellowstone National Parks.

Greater Yellowstone Area (GYA) Fire Management Officers (FMO's) - consists of FMO's from the Custer, Gallatin, Shoshone, Targhee, and Bridger-Teton National Forests and Grand Teton and Yellowstone National Parks.

Fire Management Advisory Group (FMAG) - consists of at least three FMO's, from both agencies including a chairperson. This group is an advisory group that monitors the GYA fire danger and fire activity following the guidelines set down in the GYA Preparedness Plan and makes recommendations to Unit Managers and the GYCC.