Wildland Fire Situation Analysis

WFSA Information

WFSA Number: 2

Fire Name: Canyon Complex (Including Butte Complex on PNF)

Incident Number: CA-PNF-000539

Date/Time Prepared: 7/3/2008 1400

Jurisdiction(s): USFS

Geographic Area: Northern California

Unit: Plumas and Lassen National Forests

Accounting or Management Code: 0511 P5D8LS

Fire Situation

Start Date/Time: 06/21/2008 1400

Current Fire Size: 30050 acres

Fuel Conditions

- The fuel conditions are extremely dry.
- Fuel loading is heavy.
- Low live fuel moisture.
- Fuel Model 10.
- Numerous snags.
- Heavy dead and down.
- Part of the complex is burning in previously burned areas such as the Storrie Fire where young brush components have frost killed tops and heavy snags.
- The area contains large amounts of shrub from previous fires.

Topography

- Steep canyonlands along the Middle and North Fork of the Feather River.
- These canyons are very inaccessible.

Jurisdiction and Land Ownership in the Fire Area

Plumas National Forest:

Beckwourth--Plumas National Forest, Plumas-Eureka State Park, private landownership includes both permanent and second homeowners, Sierra Pacific Industry and Soper Wheeler have large ownerships in the area.

Feather River--Plumas National Forest, SPI and Soper Wheeler, private landownership includes both permanent and second homeowners.

Mt.Hough--Plumas National Forest, private landownership includes both permanent and second homeowners.

Lassen National Forest:

Almanor Ranger District- SPI and Private land ownership includes permant and second homeowners

Fire Behavior - Current and Forecast

- Moderate to extreme fire behavior has been exhibited.
- Heavy fuels susceptible to spotting (from 1-1.5 miles).

Forecast Weather (3 and 10 day) and Current Seasonal Conditions

Weather: Clear.
Temps: Highs high 90's. Lows 51 to 61.
Rhs: 27%
Winds: Gusts up to 30 mph over the next 3-days.
Rain: none

Lassen-Eastern Plumas-Eastern Sierra Counties

Thursday (7/3): Sunny. Areas of smoke and haze. Highs 82 to 92. Light winds becoming southwest 10 to 15 mph with gusts up to 30 mph in the afternoon.
Thursday Night: Clear. Areas of smoke and haze. Lows 46 to 56. Southwest winds 15 to 20 mph with gusts up to 30 mph decreasing to around 10 mph after midnight.
Independence Day(7/4): Partly cloudy. Areas of smoke and haze. Highs 77 to 87. Southwest winds up to 10 mph increasing to 10 to 15 mph with gusts up to 30 mph in the afternoon.
Friday Night(7/4): Partly cloudy in the evening then becoming clear. Areas of smoke and haze. Lows 43 to 53. West winds 10 to 15 mph with gusts up to 30 mph in the evening becoming light.

Oroville

Thursday (7/3): Areas of smoke. Sunny, with a high near 91. South southeast wind between 6 and 16 mph.
Thursday Night: Areas of smoke. Mostly clear, with a low around 60. South wind between 13 and 16 mph becoming calm.
Independence Day (7/4): Sunny, with a high near 87. Calm wind becoming south between 6 and 9 mph.
Friday Night: Mostly clear, with a low around 59. South wind at 9 mph becoming east northeast.
Saturday(7/5): Sunny, with a high near 91.
Saturday Night: Clear, with a low around 64.
Sunday(7/6): Sunny, with a high near 92.
Sunday Night: Clear, with a low around 66.
Monday(7/7): Sunny, with a high near 95.
Monday Night: Clear, with a low around 70.
Tuesday(7/8): Sunny and hot, with a high near 97.
Tuesday Night: Clear, with a low around 68.
Wednesday(7/9): Sunny, with a high near 94.

National and Regional Fire Preparedness, and Suppression Resource Availability

- Type I Team has assumed management since 6/23.
- High competition for resources exist throughout Northern California.

Decision Summary

Selected Alternative
B. Direct/Indirect

Most Cost Effective Alternative: B. Direct/Indirect

Selected Alternative Description
- Hold all fires to a minimum acreage utilizing direct and indirect tactics, considering safety and cost effectiveness. Acreage not to exceed 63,000.
- Utilize MIST tactics where appropriate in the Wilderness Area.

Rationale for selecting this alternative
- This alternative would provide for safety under changing weather, timber type and fuel conditions as well as providing for the most flexibility with regards to firefighter suppression tactics.
- This alternative provides a balance between minimize acreage and suppressions costs in light of the limited number of suppression resources and fuel moisture.
- This complex is a combination of several fires varying in size over four Ranger Districts over two National Forests covering a half million acres.

WFSA revision or amendment thresholds and protocol
- If the fire complex becomes larger than 63,000 acres or exceeds total estimated suppression costs.

Critical fire management resources
- Type I Federal handcrews.

Special considerations
- Firefighting suppression involves very dangerous terrain, steep canyons with a high volume of snags and loose rocks.
- Communities at risk for the Cold Fire include Spring Garden and Greenhorn Ranch with only one ingress and egress route. Community at risk for the South/Frey Fires is Brush Creek and further south the town of Berry Creek. Communities at risk for the Camp, Pit and Rim Fire include the towns of Belden, Tobin, Storrie, Cresta and Poe. These are very small rural communities with little communications available to them in terms of internet and cell phone support.
- Evacuations have occurred in the town of Belden.

Analysis prepared by: */s/ Alice B. Carlton*
/s/ Kathleen Morse

James M. Cuneo
Agency Administrator Approval

7/4/08
Date/Time
1623 hours

Daily Review

$34,000,000 63,000 Estimated target suppression cost and size

National Prepared -ness Level	Regional Prepared-ness Level	Suppres-sion cost to date	Size to date	Selected alternative remains valid (Y or N)	By	Date	Time

Final Review

The elements of the selected alternative were met on:

Date:_____ Time:_____

By:_____
Agency Administrator

Values at Risk

Item	Value at Risk ($)
Structures Private Prop.	220,000,000
Cost to replace individual homes, assuming 171 homes valued @ $31,494,267 from RAVAR for Cold Fire. ($184,177) replacement value. 26 @ $5,154,994 in Sierra County. An additional 4 cabins in the Lotts Lake area and 2 cabins in the Henry's Flat area, assuming 6 cabins @ $184,177. An estimate of the number of homes in the towns of Feather Falls, Brush Creek and Belden would be around 1,000.	
Federal Timber Value	350,000,000
Assuming acre value of $1300 @ 240000	
Wildlife	10,000,000
Assumes that each PAC costs $250,000 and 40 are lost.	
Wild & Scenic River	1,500,000
Assumes 4,553 acres of Wild and Scenic River	
Prehistoric & Historic	600,000
Including Ski Resort Cables up at Johnsville.	
Recreation Sites & Value	750,000
Recreation sites are valued for both replacement costs @ $100,000 for larger more developed campsites with running water and flush toilets. While pit toilets are valued at $15,000, and another $1,500 for each site to be refurbished. Cold Fire: McRae Meadows CG (4 sites), Ross CG (6 sites) and A-Tree (1 site) (each with one toilet). South and Frey Fire: Milsap CG (1 pit toilet, 20 sites, archeological significance), Feather Falls CG (vault toilet, 5 sites, parking area with water system), Little North Fork CG and Rogers Cow Camp CG - both are small (5-7 spaces) with vault toilets. Pit Fire, Camp & Rim Fire: Gansner CG (14 sites), North Fork (20 sites) and Queen Lily (12 sites) on the Plumas are all developed campsite with flush toilets). James Lee CG, Philbrook CG on the Lassen. Additional funds may be necessary to bring campsites up to code as well as to replace existing infrastructure, such as septic tanks, etc.	
Private Timber Values	10,000,000
Railroad	55,000,000
2.0 miles of railroad @ $2.5million/mile. This information was obtained from Union Pacific, Robert Dickinson, office: 530-281-6580, cell: 916-801-9943. He hesitated to quantify the costs without studying the information, however, he couldn't get to it until July 2, 2008. There is at least 20 miles of railline in the Hwy 70 corridor.	
Powerlines	7,200,000
4.17 miles of transmission lines at a cost of $75,000/mile for distribution lines, $300,000 for transmission lines. Terry Daley provided the information from the Plumas-Sierra Rural Electric Coop. For the Cold Fire both types of line are in the area.	
Total value at risk (rounded)	660,000,000

Resource Management Objectives

Canyon Complex

Protect life and property.
Protect known T&E locations.
Protect the Wild and Scenic River as well as Wilderness Area values.
Minimize impact to sensitive species.
Minimize impact to hydro power and municipal water supplies.
Protect cultural and historic resources.
Minimize impact to HFQLG vegetation management projects.

Objectives

Objective	Priority (high=10)	Weight
Economic		
Low suppression costs	6	0.06
• Minimize impacts recreation and Wilderness Area values, private landowners, timber values, while keeping suppression costs low.		
• Balance cost with lack of resources for fire suppression.		
Environmental		
Cultural Resources	5	0.05
• Minimize impact to historic (circa 1800's) wood structures and features (foundations, etc.).		
Wild & Scenic River	3	0.03
• The Pit/Camp/Rim, Cold & South/Frey have designated Wild & Scenic River.		
• Protect water quality of the Wild & Scenic River.		
• The "*Plumas National Forest - Land and Resource Management Plan*" provides management prescriptions for the Wild and Scenic River that apply to the NFS lands: Rx-2, Wild and Scenic River Prescription: General Direction states "Minimize disturbance to the land surface from retardant. Standards and Guidelines states "Obtain approval from the Forest Supervisor for emergency use of other than short-term or fugitive-dye retardants".		
• The Decision Notice and Finding of No Significant Impact for the "Aerial Application of Fire Retardant" states that "Alternative 2, Proposed Action, continues the nationwide aerial application of fire retardant to fight fires on NFS lands while adopting the current interim *Guidelines for Aerial Delivery of Retardant or Foam near Waterways* as permanent". The Guidelines define a waterway as any body of water including lakes, rivers, streams, and ponds whether or not they contain aquatic life. The Guidelines state "Avoid aerial application of retardant or foam within 300 feet of waterways" with exceptions. One exception "When potential damage to natural resources outweighs possible loss of aquatic life, the unit administrator may approve a deviation from these guidelines" and "When alternative line construction tactics are not available due to terrain constraints, it is acceptable to anchor the foam or retardant application to the waterway. When anchoring a retardant or foam line to a waterway, use the most accurate method of delivery in order to minimize placement of retardant or foam in the waterway (e.g., a helicopter rather than a heavy airtanker)."		
Timber Values	6	0.06
• Protect timber values where feasible and minimize high severity fire effects from burn out operations where possible.		
T&E	10	0.11
• Minimize the longterm impacts to T&E species locations on both Forests. The Plumas has known locations of Layne's ragwort and California Red-legged frog. In the High Lakes OHVarea, the Lassen has Mountain yellow-legged frogs in Oliver Lake, Murphy Lake, Mud Lake and Chips Lake. Helicopter dipping operations should be avoided in these waters. If it is necessary due to personnel safety or operational limitations, ensure that all bucket drops occur iin the middle of the water body to reduce the risk of damage to this resource. Prior to dipping implementation notify the resource advisor on the Lassen. Using portable pumps in any of the above listed water bodies is also prohibited.		
• Use "*Aerial Retardant Guidelines*"		

Objective	Priority (high=10)	Weight
Water Use	7	0.07

- Please see T&E above regarding water bucket drops and the mountain yellow-legged frog.
- Municipal wateruse water quality should be protected where possible.

Wildlife	5	0.05

- PACs and SOHAs for California spotted owls are found throughout the area, if equipment stays on developed roads and OHV trails there should be no concerns.

Soils	4	0.04

- Soils in the High Lakes area are granitic in nature and prone to erosion. Firelines constructed with dozers will require proper drainage prior to demobilization.

Roadless Area	9	0.10

- There is designated Roadless Area in the vicinity of the Pit Fire and the South and Frey fires.
- Management actions must meet the 2001 Roadless Rule. A road may not be constructed or reconstructed i inventoried roadless areas except as provided in paragraph (b) of 36 CFR 294.12. These exceptions include road construction/reconstruction needed for public health and safety (flood, fire, catastrophic events); roads needed pursuant to outstanding right/statute/treaty; prevention of resource damage, etc.
- Timber may not be cut, sold, or removed in inventoried roadless areas except as provided in paragraph (b) of section 294.13. The cutting, sale, or removal of timber for the cuttiing, sale or removal of timber to improve threatened, endangered, proposed, or sensitive species habitat, to maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncahrateristic wildfire effects...., for roadless areas that have been substantially roaded timber may be cut, sold, or removed only in the substantially altered portion of the inventoried roadless area. Refer to 294.13 (b) for a complete listing of exceptions.

Social

Public Safety	10	0.11

- Provide for public safety.

Recreation	6	0.06

- Protect scenic values and recreation sites.

Cold Fire: McRae Meadows CG, Ross CG and A-Tree. **South and Frey Fire**: Milsap CG, Feather Falls CG, Little North Fork CG and Rogers Cow Camp CG.
Pit Fire, Camp & Rim Fire: Gansner CG, North Fork and Queen Lily on the Plumas and James Lee CG, Philbrook CG on the Lassen.

Wilderness Area	6	0.06

- the Pit/Rim & Camp Complex of fires are touch the Bucks Lake Wilderness Area.
- Protect Wilderness Area values.
- Request a resource advisor (wilderness resource advisor) be present during suppression activities in the Wilderness Area.

Other

Objective	Priority (high=10)	Weight
Private Property	10	0.11

- Provide for prevention of wildland fire from spreading into structures and other commercial endeavors. Current areas of concern are:

Cold Fire--Sloat, Spring Garden & Greenhorn approx. 171 homes.
South and Frey Fires--unknown number of homes.
Camp, Rim & Pitt--7 structures & 2 campsites at Lott's Lake. 2 Cabins on Henry's Flat. 3 miles West of Lott's Lake is a community of 50+ summer homes.

Range/Cattle	7	0.07

4 allotments with approx. 250 cattle per allottment. Their names are: Bucks Creek, Bear Creek and Fall River on the Plumas NF and Henry's Flat on the Lassen NF.

Safety Issues

Safety Issues

Safety is the Number One Priority

- Provide for safety in context of lack of available resources needed to suppress numerous fires throughtout Northern California, cost constraints and minimizing acreage burned.
- Topography and tactics necessitate the use of Type I hand crews.
- Lack of appropriate resources coupled with difficult terrain has contributed to firefighter fatigue and associated safety concerns.

Hazards

- Difficult inaccessible terrain
- Very steep canyonland environment
- Falling rocks and snags
- Mining shafts
- Railroad
- Powerlines

Alternatives

Alternative A. Direct

- Utilize a direct attack strategy.
- Use existing roads and natural openings to take direct suppression action on fire.
- Use MIST tactics in the Wilderness Areas.

Target Outcome

Currently the fires on the Plumas National Forest and surrounding private land total 23,050, including the Camp (2,785), Pit (1,519), Rim (2,785), Lynch (1,105), West (5,206) which are being managed by CalFire. The Plumas National Forest and it's fire management team are responsible for roughly 13,050 acres. Direct Attack means that the fires stay exactly the size they are now.

Probability:	15%
Final Fire Size:	30500 acres
Time to Contain:	20 days
Time to Control:	30 days

Extreme Outcome

Probability:	85%
Final Fire Size:	267225 acres
Time to Contain:	60 days
Time to Control:	100 days

Alternative B. Direct/Indirect

- Hold all fires to a minimum acreage not to exceed 63,000 acres.
- Use MIST tactics in the Wilderness Areas.

Target Outcome

Currently the fires on the Plumas National Forest and surrounding private land total 23,050, including the Camp (2,785), Pit (1,519), Rim (2,785), Lynch (1,105), West (5,206) which are being managed by CalFire. The Plumas National Forest and it's fire management team are responsible for roughly 13,050 acres. Direct/Indirect would utilize existing land features, roads and other safe anchor points to manage the fire. It would consider firefighter safety first.

Probability:	60%
Final Fire Size:	63000 acres
Time to Contain:	30 days
Time to Control:	50 days

Extreme Outcome

Probability:	40%
Final Fire Size:	267225 acres
Time to Contain:	60 days
Time to Control:	100 days

Alternative C. Worst Case Scenario

- Protect resource values: campgrounds, hydro facilities and railroad facilities.
- Follow-up with perimeter control, keep to minimum acres.
- Not to exceed 97,000 acres.
- Use MIST tactics in the Wilderness Areas.

Target Outcome

Currently the fires on the Plumas National Forest and surrounding private land total 23,050, including the Camp (2,785), Pit (1,519), Rim (2,785), Lynch (1,105), West (5,206) which are being managed by CalFire. The Plumas National Forest and it's fire management team are responsible for roughly 13,050 acres. The Worse Case

Extreme Outcome

Scenario is one where many structures and recreation sites burndown. It would allow for the use of existing land features, roads and other safe anchor points to manage the fire. It would consider firefighter safety first.

Probability:	20%
Final Fire Size:	97000 acres
Time to Contain:	50 days
Time to Control:	70 days

Probability:	80%
Final Fire Size:	267225 acres
Time to Contain:	60 days
Time to Control:	100 days

Estimated Suppression Costs

Alternative A. Direct

Target Outcome

Estimated suppression cost: $16,300,000

Basis for cost estimate:
Historic average cost per acre

Extreme Outcome

Estimated suppression cost:
$120,000,000

Basis for cost estimate:
Historic average cost per acre

Alternative B. Direct/Indirect

Target Outcome

Estimated suppression cost: $33,700,000

Basis for cost estimate:
Historic average cost per acre

Extreme Outcome

Estimated suppression cost:
$120,000,000

Basis for cost estimate:
Historic average cost per acre

Alternative C. Worst Case Scenario

Target Outcome

Estimated suppression cost: $51,900,000

Basis for cost estimate:
Historic average cost per acre

Extreme Outcome

Estimated suppression cost:
$120,000,000

Basis for cost estimate:
Historic average cost per acre

AAC Tables

From	To	Cost
0	0.25	$8250
0.26	10.00	$5400
11.00	100.00	$2300
101.00	300.00	$1170
301.00	1,000.00	$1170
1,001.00	100,000.00	$535
100,001.00	100,000,000.00	$450

Values Protected

Note: Outcome values are rounded to 3 significant digits counting from the left.
Totals are rounded to 2 significant digits.

Alternative A. Direct

Item	Values At Risk	Protected in Target Outcome (15%)	Protected in Extreme Outcome (85%)	Expected Values Protected
Structures Private Prop.	220,000,000	220,000,000	0	
Federal Timber Value	350,000,000	310,000,000	0	
Wildlife	10,000,000	8,900,000	0	
Wild & Scenic River	1,500,000	1,340,000	0	
Prehistoric & Historic	600,000	600,000	0	
Recreation Sites & Value	750,000	750,000	0	
Private Timber Values	10,000,000	9,990,000	0	
Railroad	55,000,000	55,000,000	0	
Powerlines	7,200,000	7,200,000	0	
Total (rounded)	$660,000,000	$610,000,000	-$48	$91,000,000

Alternative B. Direct/Indirect

Item	Values At Risk	Protected in Target Outcome (60%)	Protected in Extreme Outcome (40%)	Expected Values Protected
Structures Private Prop.	220,000,000	219,000,000	0	
Federal Timber Value	350,000,000	266,000,000	0	
Wildlife	10,000,000	5,000,000	0	
Wild & Scenic River	1,500,000	1,140,000	0	
Prehistoric & Historic	600,000	456,000	0	
Recreation Sites & Value	750,000	570,000	0	
Private Timber Values	10,000,000	7,600,000	0	
Railroad	55,000,000	41,800,000	0	
Powerlines	7,200,000	5,470,000	0	
Total (rounded)	$660,000,000	$550,000,000	-$48	$330,000,000

Alternative C. Worst Case Scenario

Item	Values At Risk	Protected in Target Outcome (20%)	Protected in Extreme Outcome (80%)	Expected Values Protected
Structures Private Prop.	220,000,000	161,000,000	0	
Federal Timber Value	350,000,000	255,000,000	0	
Wildlife	10,000,000	7,300,000	0	
Wild & Scenic River	1,500,000	1,100,000	0	
Prehistoric & Historic	600,000	440,000	0	
Recreation Sites & Value	750,000	550,000	0	
Private Timber Values	10,000,000	7,300,000	0	
Railroad	55,000,000	40,000,000	0	
Powerlines	7,200,000	5,200,000	0	
Total (rounded)	$660,000,000	$480,000,000	-$48	$96,000,000

Resource Value Losses

Note: Outcome values, including totals, are rounded to 3 significant digits counting from the left.
Expected Impact is rounded to 2 significant digits.

Alternative A. Direct

Item	Target Outcome (15%)		Extreme Outcome (85%)	Expected Impact
Mature Timber	160,000,000		1,410,000,000	
Immature Poles	2,090,000		18,300,000	
Seed and Saplings	908,000		7,960,000	
Forage	6,400		56,100	
Water Storage	167,000		1,460,000	
Fisheries - Wm/Cd Wtr	0		0	
Wildlife - Big Game	3,960		34,700	
Wildlife - Other	0		0	
Recreation - Disp/Dev	2,550,000		22,400,000	
Total (rounded)	$170,000,000		$1,500,000,000	$1,300,000,000

Alternative B. Direct/Indirect

Item	Target Outcome (60%)		Extreme Outcome (40%)	Expected Impact
Mature Timber	331,000,000		1,410,000,000	
Immature Poles	4,310,000		18,300,000	
Seed and Saplings	1,880,000		7,960,000	
Forage	13,200		56,100	
Water Storage	345,000		1,460,000	
Fisheries - Wm/Cd Wtr	0		0	
Wildlife - Big Game	8,190		34,700	
Wildlife - Other	0		0	
Recreation - Disp/Dev	5,270,000		22,400,000	
Total (rounded)	$340,000,000		$1,500,000,000	$800,000,000

Alternative C. Worst Case Scenario

Item	Target Outcome (20%)		Extreme Outcome (80%)	Expected Impact
Mature Timber	510,000,000		1,410,000,000	
Immature Poles	6,640,000		18,300,000	
Seed and Saplings	2,890,000		7,960,000	
Forage	20,400		56,100	
Water Storage	531,000		1,460,000	
Fisheries - Wm/Cd Wtr	0		0	
Wildlife - Big Game	12,600		34,700	
Wildlife - Other	0		0	
Recreation - Disp/Dev	8,120,000		22,400,000	
Total (rounded)	$530,000,000		$1,500,000,000	$1,300,000,000

Computation of NVC Losses by FMU and FIL

Alternative A. Direct

			Target Outcome			Extreme Outcome		
FMU	FIL	$/acre	%	Acres	Impact	%	Acres	Impact
	1	-1280	0	0	0	0	0	0
	2	-2120	0	0	0	0	0	0
	3	-3900	0	0	0	0	0	0
	4	-5450	100	30500	-166225000	100	267225	-1456376250
	5	-5960	0	0	0	0	0	0
	6	-6020	0	0	0	0	0	0
			100	30500	-$170,000,000	100	267225	-$1,500,000,000
Total								

Alternative B. Direct/Indirect

			Target Outcome			Extreme Outcome		
FMU	FIL	$/acre	%	Acres	Impact	%	Acres	Impact
	1	-1280	0	0	0	0	0	0
	2	-2120	0	0	0	0	0	0
	3	-3900	0	0	0	0	0	0
	4	-5450	100	63000	-343350000	100	267225	-1456376250
	5	-5960	0	0	0	0	0	0
	6	-6020	0	0	0	0	0	0
			100	63000	-$340,000,000	100	267225	-$1,500,000,000
Total								

Alternative C. Worst Case Scenario

			Target Outcome			Extreme Outcome		
FMU	FIL	$/acre	%	Acres	Impact	%	Acres	Impact
	1	-1280	0	0	0	0	0	0
	2	-2120	0	0	0	0	0	0
	3	-3900	0	0	0	0	0	0
	4	-5450	100	97000	-528650000	100	267225	-1456376250
	5	-5960	0	0	0	0	0	0
	6	-6020	0	0	0	0	0	0
			100	97000	-$530,000,000	100	267225	-$1,500,000,000
Total								

NVC Tables

Only negative values are included for this fire.

	FIL 1	FIL 2	FIL 3	FIL 4	FIL 5	FIL 6
Mature Timber	-1219.55	-2027	-3768.07	-5260.32	-5692.43	-5692.43
Immature Poles	-37.64	-58.18	-68.44	-68.44	-68.44	-68.44
Seed and Saplings	-21.59	-28.29	-29.78	-29.78	-29.78	-29.78
Forage	0	0	0	-0.21	-0.42	-0.86
Water Use	0	0	0	0	0	0
Water Storage	-1.81	-3.66	-5.47	-5.47	-9.12	-9.12
Fisheries - Wm/Cd Wtr	0	0	0	0	-15.47	-19.49
Fisheries - Anad Sport	0	0	0	0	0	0
Fisheries - Commercial	0	0	0	0	0	0
Wildlife - Big Game	0	0	0	-0.13	-0.16	-0.19
Wildlife - Other	0	0	-0.02	0	-0.05	-0.07
Recreation - Disp/Dev	0	0	-27.12	-83.7	-142.14	-198.72
Recreation - Wilderness	0	0	0	0	0	0
Improvements	0	0	0	0	0	0
Totals	-$1,281	-$2,117	-$3,899	-$5,448	-$5,958	-$6,019

Safety Assessment

Alternative A. Direct

Target Outcome	Fallback Outcome	Extreme Outcome
	Issue: Safety is the Number One Priority	
Rating: 8 / 10		Rating: 1 / 10
	Issue: Hazards	
Rating: 8 / 10		Rating: 1 / 10

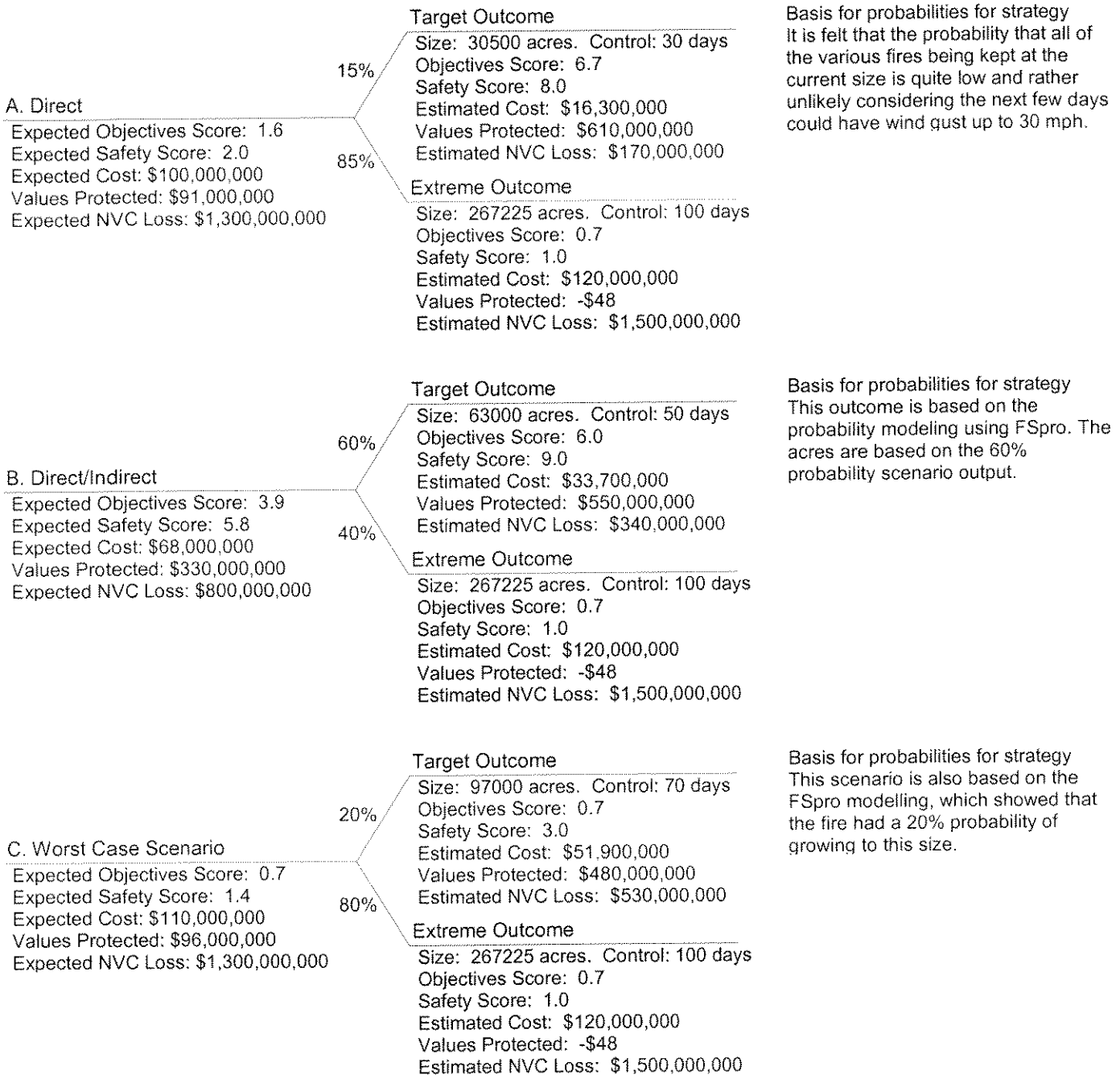
Alternative B. Direct/Indirect

Target Outcome	Fallback Outcome	Extreme Outcome
	Issue: Safety is the Number One Priority	
Rating: 9 / 10		Rating: 1 / 10
	Issue: Hazards	
Rating: 9 / 10		Rating: 1 / 10

Alternative C. Worst Case Scenario

Target Outcome	Fallback Outcome	Extreme Outcome
	Issue: Safety is the Number One Priority	
Rating: 1 / 10		Rating: 1 / 10
	Issue: Hazards	
Rating: 5 / 10		Rating: 1 / 10

Decision Tree



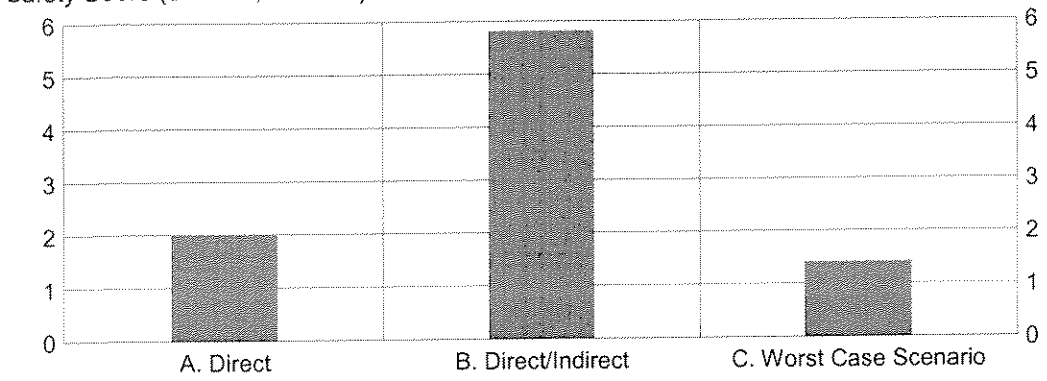
Comparison of Alternatives

	Alternatives A. Direct	B. Direct/Indirect	C. Worst Case Scenario
Estimated Target Suppression Cost	$16,000,000	$34,000,000	$52,000,000
Expected Suppression Cost	$100,000,000	$68,000,000	$110,000,000
Expected Values Protected	$91,000,000	$330,000,000	$96,000,000
Expected Resource Loss	$1,300,000,000	$800,000,000	$1,300,000,000
Total Expected Financial Impact	**-$1,309,000,000**	**-$538,000,000**	**-$1,314,000,000**
Expected Objectives Score	**1.6**	**3.9**	**0.7**

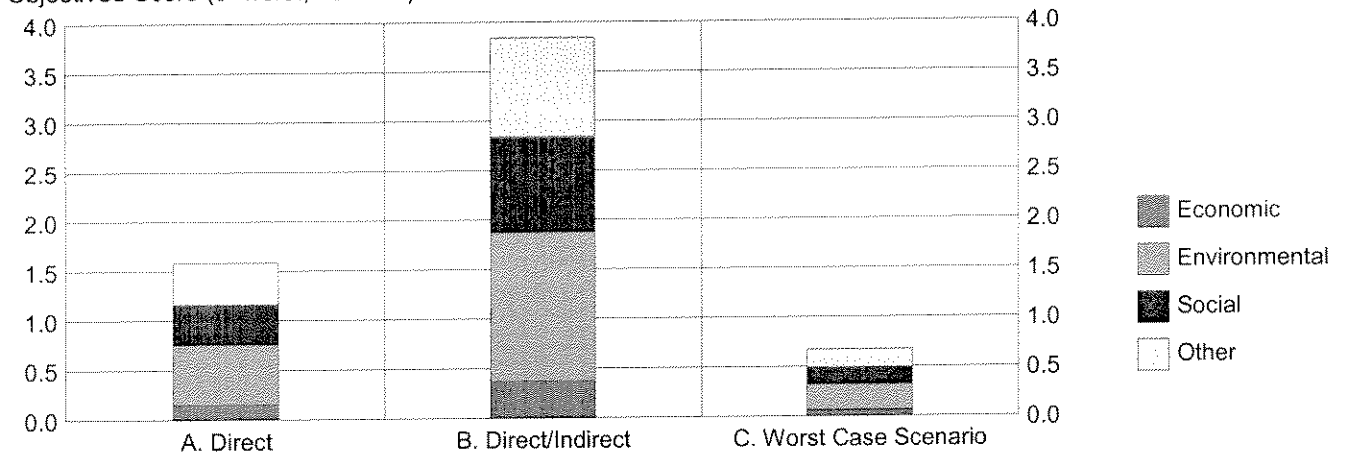
		Outcomes			Alt. A	Outcomes			Alt. B	Outcomes			Alt. C
		Tg	F	Ex		Tg	F	Ex		Tg	F	Ex	
	Probability (%)	15	0	85		60	0	40		20	0	80	
Objective	**Wgt**												
Economic													
Low suppression costs	0.06	10		1	2.3	9		1	5.8	1		1	1.0
Environmental													
Cultural Resources	0.05	10		1	2.3	9		1	5.8	1		1	1.0
Wild & Scenic River	0.03	10		1	2.3	9		1	5.8	1		1	1.0
Timber Values	0.06	10		1	2.3	9		1	5.8	1		1	1.0
T&E	0.11	10		1	2.3	9		1	5.8	1		1	1.0
Water Use	0.07	0		0	0.0	0		0	0.0	0		0	0.0
Wildlife	0.05	0		0	0.0	0		0	0.0	0		0	0.0
Soils	0.04	0		0	0.0	0		0	0.0	0		0	0.0
Roadless Area	0.10	0		0	0.0	0		0	0.0	0		0	0.0
Social													
Public Safety	0.11	10		1	2.3	9		1	5.8	1		1	1.0
Recreation	0.06	10		1	2.3	9		1	5.8	1		1	1.0
Wilderness Area	0.06	0		0	0.0	0		0	0.0	0		0	0.0
Other													
Private Property	0.11	10		1	2.3	9		1	5.8	1		1	1.0
Range/Cattle	0.07	10		1	2.3	9		1	5.8	1		1	1.0
Expected Safety Score		**2.0**				**5.8**				**1.4**			
Safety is the Number One Priority	0.50	8		1	2.0	9		1	5.8	1		1	1.0
Hazards	0.50	8		1	2.0	9		1	5.8	5		1	1.8

Comparison of Alternatives

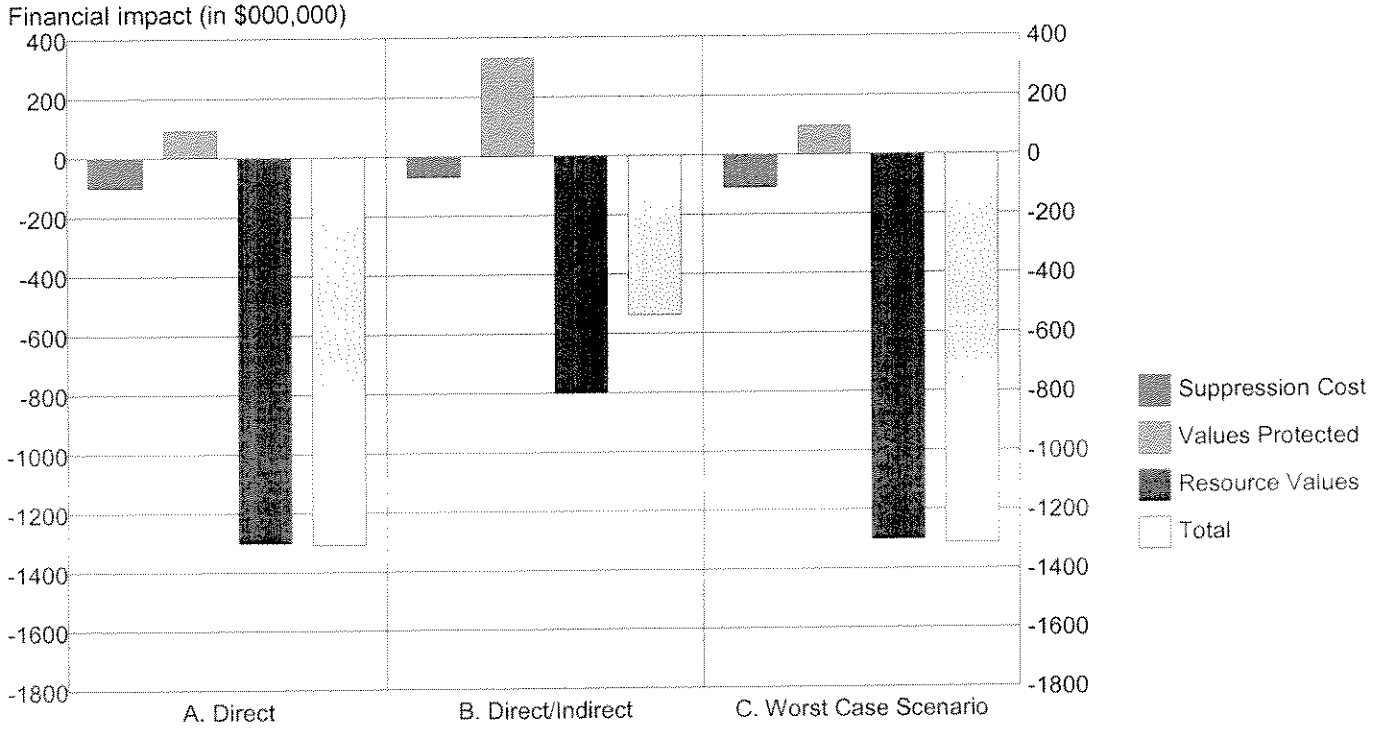
Safety Score (0=worst, 10=best)



Objectives Score (0=worst, 10=best)



Financial impact (in $000,000)



Incident Complexity Analysis

Incident Complexity Rating: Type
Rationale:

NO	YES	FACTOR
		A. Fire Behavior
	X	Burning index predicted to be above the 90% level.
	X	Potential exists for "blowup" conditions (fuel moisture, winds, etc.).
	X	Crowning, profuse or long-range spotting.
	X	Weather forecast indicating no significant relief or worsening conditions.
		B. Resources Committed
	X	200 or more personnel assigned.
	X	Three or more divisions.
	X	Wide variety of special support personnel.
	X	Substantial air operation which is not properly staffed.
	X	Majority of initial attack resources committed.
		C. Resources Threatened
	X	Urban interface.
	X	Developments and facilities.
	X	Restricted, threatened or endangered species habitat.
	X	Cultural sites.
	X	Unique natural resources, special designated zones or wilderness.
-		Other special resources.
		D. Safety
	X	Unusually hazardous fire line conditions.
	X	Serious accidents or fatalities.
	X	Threat to safety of visitors from fire and related operations.
	X	Restrictions and/or closures in effect or being considered.
	X	No night operations in place for safety reasons.
		E. Ownership
	X	Fire burning or threatening more than one jurisdiction.
	X	Potential for claims (damages).
	X	Different or conflicting management objectives.
-		Disputes over suppression responsibility.
	X	Potential for unified command.
		F. External Influences
	X	Controversial wildland fire management policy.
	X	Pre-existing controversies/relationships.
-		Sensitive media relationships.
	X	Smoke management problems.
	X	Sensitive political interests.
	X	Other external influences.
		G. Change in Strategy
-		Change to a more aggressive suppression strategy.
	X	Large amounts of unburned fuel within planned perimeter.
	X	WFSA invalid or requires updating.
		H. Existing Overhead

X Worked two operational periods without achieving initial objectives.

- Existing management organization ineffective.
- Overhead overextended themselves mentally and/or physically.
- Incident action plans, briefings, etc. missing or poorly prepared.