



Cost Share Agreement Directions & Methodologies

Negotiating cost share agreements has been delegated to the respective Agency Administrators who are party to the Statewide Cooperative Fire Protection Agreement. Cost Share Agreements will be negotiated between agencies involved in specific on-the-ground fire suppression activities. **These agreements are mandatory when more than one agency is responsible for fire protection in the fire's location.** The agreement will not affix liability for fire cost payment by either Agency based upon responsibility for the fire origin. The designated representatives of each Agency with protection responsibility will complete and sign the agreement. See the related provisions in the Statewide Cooperative Fire Protection Agreement.

Changes to the original agreement will be added and numbered consecutively. Small revisions to this agreement may be completed on a single page, describing the change to the original agreement, and obtaining new signatures from those involved, or pen/ink changes may be made and then initialed by the original signing officials.

Cost Share Templates can be found at:

http://www.fs.fed.us/r1/fire/nrcg/Committees/business_committee.htm

The cost share method should be discussed immediately among all protection entities during the strategy development. If there are any disagreements among the protection entities on the strategy and tactics employed by the lead agency, this must be documented and resolved immediately.

Cost Share Agreement – Section by Section Directions

General Fire Information: Complete information on template.

Principal Contacts: List the appropriate personnel filling incident command and agency positions on the fire. This should include, but is not limited to, the agency administrator, agency representative coordinating the cost share agreement for the agency administrator, the incident business advisor, the incident commander, and other appropriate incident command team members as appropriate.

Special Management Operational Conditions: Document all decisions pertaining to special management considerations that are above the standard agreed upon (e.g., cultural site preservation, fireline rehab, etc.)

Protection Responsibility:

1. Does the fire area or any mitigation actions taken affect more than 1 area of protection responsibility?
Yes _____ No _____

IF YES, use the following matrix to identify all agencies that:

- have responsibility for wildland fire protection, structure protection and structure fire suppression.
- have areas of overlapping responsibility.



Entity & Protection Area Description	Wildland Fire Responsibility (Y or N)	Structure Protection Responsibility (Y or N)	Structure Suppression Responsibility (Y or N)
Federal Agency <i>Area Description:</i>			
State <i>Area Description:</i>			
County <i>Area Description:</i>			
Local Government <i>Area Description:</i>			

Definitions for Wildland Fire Protection, Structure Protection, and Structure Fire Suppression are contained in the Northern Rockies Coordinating Group Agency Administrators Memo of 5/28/08, entitled, "Community and Structure Protection Guidelines". <http://www.fs.fed.us/r1/fire/nrcg/index.html>

Structure Protection and Structure Suppression Details:

1. Were any structures threatened? Yes ___ No ___
1. Were structure protection actions conducted:
 - a. within the active fire area? Yes__ No__
 - b. outside the active fire area? Yes__ No__

IF YES to any of the above questions, use the following matrix to:

- document actions that were taken in regard to structure fire protection and structure fire suppression
- identify who has responsibility for those actions
- identify the locations of the actions taken.

Location and total number of structures at that location	Within active fire area? (Y or N)	Agency(s) Responsible for Structure Protection	Agency(s) Responsibility for Structure Suppression	Number of structures threatened at that location

3. Describe the actions and financial responsibilities within the active fire area taken by each agency

4. Describe the actions and financial responsibilities outside the active fire area taken by each agency.

**Other conditions relative to this agreement:**

1. Costs incurred by cooperators not engaged with the host agency or IMT in the fire suppression activities will not be included as a part of this cost share agreement.
2. Responsibility for tort claim costs will not be a part of this agreement. Responsibility for these costs will be determined outside this agreement.
3. Costs for accountable, sensitive, and durable property purchased by each agency will be charged directly to that agency and will not be shared.
4. Non-suppression rehabilitation costs are the responsibility of the jurisdictional agency and will not be shared.
5. Suppression strategies and their related costs, including use of aircraft and retardant, will be documented and approved by the signatories to this agreement.
6. Per the XX Cooperative Fire Agreement billing procedures, the parties to this agreement will determine the total costs of each agency. Each agency will bill for their costs.

Cost Share Methodology:**Background:**

Federal and state accounting systems cannot isolate costs by a cost share period. The following methodologies were developed to calculate a cost share agreement that will result in percentages that will be applied to the final actual costs of the fire. Thus, within the designated billing periods identified in the statewide agreement, final costs will be tallied by each agency for their respective charge code (P code for the FS, 2821HU for BLM, fire code with 92310 for BIA, fire code with E11 for NPS, SABHRS accounting code for MT, PCA number with program code for Idaho, project code for Peoplesoft accounting system for North Dakota).

Methodologies**Cost Share By Acre:**

Criteria: Direct resources utilized across all direct protection areas are considered equal for the entire fire. This methodology is based on percentage of acres burned within each direct protection area.

Example:

Total acres burned: 56,588
Acres burned within state direct protection area: 36,888 or 65% of total acres burned
Acres burned within forest service direct protection area: 19,700 or 35% of total acres burned
These percentages (65% and 35%) are applied to the total actual costs of the fire.



Cost Share by Effort:

Effort Method #1.

Criteria: Use I-Suite Costs within the Cost Share Period to reflect the cost of effort and apply the percentage of acres burned within each protection area for the cost share period. Efforts prior to, during, and after the cost share period are equal. Note: This method is based on using I-Suite costs. If I-Suite was not available prior to and following the cost share period, this method cannot be used.

Example:

Date	7/28	7/29	7/30	7/31	Total
Tribal Acres Burned	25	62	3,889	5,390	9,366
State Acres Burned	418	2,061	2,589	5,495	10,563
Daily I-Suite Costs	\$30,000	\$75,000	\$100,000	\$120,000	\$325,000

Total acres burned on fire = 50,000

Acres burned during the cost share period: 19,929 = 40% of total (19,929/50,000)

Daily acres burned within tribal direct protection area: 9,366 or 47%

Daily acres burned within state direct protection area: 10,563 or 53%

Total I-Suite Costs for fire = \$500,000

I-Suite costs prior to the cost share period (Tribal protection): \$50,000 = 10%
(50,000/500,000)

I-Suite costs during cost share period: \$325,000 = 65% (325,000/500,000)

Tribal share = .65*.47 = 31%

State share = .65*.53 = 34%

I-Suite costs after the cost share period (State protection): \$125,000 = 25%
(125,000/500,000)

To calculate final percentage:

Tribe: 10% + 31% = 41%

State: 34% + 25% = 59%

These percentages (41% and 59%) are applied to the total actual costs of the fire to calculate the cost share for this incident.

Effort Method #2

Criteria: This methodology factors in resources that are updated on an Incident Action Plan (IAP) in each division by Operations and whose costs can be estimated. An agency's share of daily direct protection costs in the cost share period will be identified using I-Suite costs. That agency sum is then divided by the total



direct protection costs within the cost share period to get a ratio that is then applied to the total I-Suite costs within the cost share period. That dollar amount would then be divided by total Fire I-Suite costs, to arrive at a final percentage to apply to all actual fire costs.

Example: Assume there are two Divisions, X, and Y, in which the state has no direct protection acres. The State does have partial protection responsibility in Division Z. Assume the total direct protection costs for each day and division are as shown below, and that total I-Suite cost estimates for the 3 day cost share period are \$701,910, while total I-Suite cost estimates for the fire are \$950,000. See table below.

		State Percentage of Direct Protection Acres in each Division each day			Daily Costs of Direct Protection Resources Used in each Division			Total Daily Direct Protection Cost Estimates	Total Daily Incident Cost Estimates During Cost Share Period	State Share of Direct Protection Costs	Apply State Share of Direct Prot Costs to Total Direct Prot Costs During Cost Share Period
Date	Div X	Div Y	Div Z	Div X	Div Y	Div Z	Total Div X, Y, & Z	(Includes facilities, support, etc)	(Daily State % x Daily Direct Prot Costs)	(To get State % of Direct Prot Costs)	
8/6	0	0	33%	\$50,000	\$100,000	\$24,666	\$174,666	\$227,381	.33 x \$24,666 = \$8,140		
8/7	0	0	33%	\$50,000	\$100,000	\$27,734	\$177,734	\$233,607	.33 x \$27,734 = \$9,152		
8/8	0	0	33%	\$50,000	\$100,000	\$28,837	\$178,837	\$240,922	.33 x \$28,837 = \$9,516		
Totals				\$150,000	\$300,000	\$81,237	\$531,237	\$701,910	\$26,808	\$26,808 / \$531,237 = 5.05%	

Then, take the 5.05%, apply it to the total I-Suite costs within the C/S period ($.0505 \times \$701,910$) = \$35,446.

To allow for acres burned outside the cost share period, this \$35,446 would be divided by the total I-Suite costs for the fire of \$950,000 = 3.73%, which would be the final state % to apply to all actual costs. (If there were no acres burned outside the cost share period, you would stop at the 5.05% and use that as the state % to apply to all actual costs.)

This computation represents using an agency's share of direct protection costs and is figured based on effort by division by day, to arrive at a final ratio to apply to all actual costs.



Effort Method #3

Criteria: Negotiation between the cost share agencies would result in the identification of the miles of two categories of control line (road and equipment) within each protection area. The agencies will negotiate the definition of high/moderate/low and the weights of the effort for each category. An example could be: high = weight of 1, moderate = weight of .67, and low = weight of .33. A map will need to be produced by the IMT that will be used to measure the miles of effort and then validated by the agencies involved.

Cost centers, such as aviation, can be separately calculated and then factored into the final percentage for cost sharing of the actual costs of the fire.

Example:

Cost Share Options										
Classification	Effort	Weight	Actual Total Miles	Weighted Total Miles	Actual Miles CS&KT	Actual Miles DNRC	Actual Miles USFS	Weighted Miles CS&KT	Weighted Miles DNRC	Weighted Miles USFS
Road	High	1	16.76	16.76	0.00	10.82	5.94	0.00	10.82	5.94
	Moderate	0.67	18.91	12.67	7.93	9.21	1.77	5.32	6.17	1.19
	Low	0.33	8.48	2.80	0.00	8.36	0.12	0.00	2.76	0.04
Equipment	High	1	29.47	29.47	0.00	12.16	17.31	0.00	12.16	17.31
	Moderate	0.67	75.23	50.41	35.81	34.51	4.92	23.99	23.12	3.29
	Low	0.33	7.55	2.49	4.11	3.44	0.00	1.36	1.14	0.00
Total			156.41	114.59	47.85	78.50	30.05	30.66	56.16	27.77
Percent of Total					30.59	50.19	19.21	26.76	49.01	24.23



Control Line Effort Percents and Aviation Effort Percents Merged to Calculate Weighted Final Percents

A. Total Fire Cost in I-Suite - Direct Resources	\$12,430,936	100%			
B. Total Direct Air Costs Attributed to Agency Jurisdictions	\$1,475,050	11.90%			
C. Total Suppression Rehab Costs (DNRC & USFS ONLY)	\$154,852	1.20%			
D. Total to be Allocated using Line Effort (A - B - C)	\$10,801,034	86.90%			
			DNRC	CSKT/BIA	LNF/FS
E. Agency Share of Control Line Effort			49%	27%	24%
F. Agency Cost of Control Line Effort (D x E)			\$5,292,507	\$2,916,279	\$2,592,248
					\$10,801,034
G. Agency Share of Direct Air Operations			63%	14%	23%
H. Agency Cost of Direct Air Operations (B x G)			\$929,282	\$206,507	\$339,262
					\$1,475,050
I. Agency Share of Suppression Rehab (2/3 DNRC, 1/3 FS)			\$103,751		\$51,101
					\$154,852
J. Agency Total Cost (F + H + I)			\$6,325,539	\$3,122,786	\$2,982,611
					\$12,430,936
K. Agency Weighted % (Including Direct Air Operations) (J/A)			51%	25%	24%

Notes:

A. Based on I-Suite report dated 9/19 covering period 7/31 to 9/10 + Suppression Rehab Costs

B. Cost Share Team (Roberta) met with air operations personnel and used fire records to assign direct a/c operations costs to agency jurisdictions

(An additional \$495,410 in indirect air operations is included in Line D.)

E. Line Effort percentages are based on GIS map of control lines reviewed and weighted by operations representatives from each agency.

I. USFS (1/3) & DNRC (2/3) Rehab Split

K. These percentages would be applied to every dollar paid out.

The cost share determination period is 7/307 to 9/09/07



Cost Share By Flat Amount:

Criteria: This methodology can be used when the effort expended was limited in terms of resources and duration when the fire crosses into another party’s direct protection area.

Example: Agency A’s fire burns briefly onto Agency B’s protection area. Costs are captured for that identified period. Agency A will then bill Agency B \$14,601.

Date	Resources Assigned Per Operational Period	Estimated Cost
8/15 - Day	O-24 TFLD Jeff Scuzzy	\$360
	E-80 R There Constructions T6 Engine	\$1690
	E-82 Wildland Fire Chasers T6 Engine	\$1758
	Helicopter 62B, two bucket drops	\$1500
8/15 - Night	C-1 Hyper Hotshots	\$7175
8/16 – Day	O-7 TFLD Eric Poundstone	\$360
	E-82 Wildland Fire Chasers T6 Engine	\$1758
Total Costs		\$14,601

You-Order, You-Pay:

Criteria: Under the You-Order, You-Pay (YOYP) methodology, each agency is fiscally responsible for the resources they order, regardless of where they are used on the incident. **A Decision Document will be completed instead of a cost share agreement.**

Final Agency Apportionment:

Agency accounting systems are unable to separate final costs by the actual cost share period. Thus, a final percentage for each agency is determined through the appropriate methodology. This final percentage will be applied to the total actual cost of the fire (except for the you-order you-pay and flat amount methodologies).

Signatures of Authorized Personnel and Attachments:

List all appropriate officials that will sign this agreement. List any attachments to the agreement in this section (such as I-Suite reports, aircraft use reports, etc.). **A map must be included that shows the fire area with the methodology applied to that map.** Indicate if this is an original agreement or a supplemental agreement for the same fire.



SAMPLE
COST SHARE AGREEMENT
 Between the
USDA FOREST SERVICE – SMOKEY BEAR NATIONAL FOREST
 And the
BUREAU OF INDIAN AFFAIRS – ROCKY MOUNTAIN REGION
 And the
STATE OF NIRVANA

This cost share agreement is between the agencies identified above, as negotiated for the following incident in accordance with the Statewide Cooperative Fire Protection Agreement #09-NU-110156000-87 executed between the parties on 2/29/09. The purpose of this agreement is to provide for a coordinated cooperative fire suppression operation on this fire and to describe the cost division.

General Fire Information:

Incident Name: Smoking Stump Fire

Incident Start Date and Time: 7/12/2009 @ approximately 1515

Origin:

Township	7N	Range	55E	Section	29
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Estimated Size: 150 acres at the time of this agreement:

Incident Cause: Lightning

Incident Numbers by Protection Agency:

Agency	Incident #	Accounting Code
USFS	NU-SBF-00055	P7DXRU09
Nirvana		99977
BIA		DUM0

Agreement Period: This agreement becomes effective on the date indicated below and will remain in effect until amended or terminated.

State date/time: 7/13/2009 at 0001

End date/time: 7/18/2009 at 2400

Principal Contacts:

The following personnel are the principal contacts:

Title:	Name:	Agency:
Agency Administrator	Gifford Pinchot	USFS
Agency Representative	Aldo Leopold	USFS
Agency Administrator	Ben Cartwright	State of Nirvana
Agency Representative	John Mellencamp	State of Nirvana
Agency Administrator	Tom Cabin	BIA
Incident Business Advisor(s)	Pamela Hocker & Jane Orion	USFS & State of Nirvana
Incident Commander(s)	Chuck Stoonich	USFS
Other IMT members as appropriate	Mike Meyers, OSC	BLM



Special Management Operational Conditions:

Document all decisions pertaining to special management considerations above the standard agreed upon, (i.e., cultural site preservation, fireline rehab, etc.).

USFS will pay the difference from the standard seed for fireline rehab and the Mix C.

Protection Responsibility:

1. Does the fire area or any mitigation actions taken affect more than 1 area of protection responsibility?

Yes _____ X _____ No _____

IF YES, use the following matrix to identify all agencies that:

- have responsibility for wildland fire protection, structure protection and structure fire suppression.
- have areas of overlapping responsibility.

Entity & Protection Area Description	Wildland Fire Responsibility (Y or N)	Structure Protection Responsibility (Y or N)	Structure Suppression Responsibility (Y or N)
Federal Agency <i>Smokey Bear NF</i> Area Description: Little Bear RD, with private affidavit lands within the Red Rock Area	YES	YES	NO
Federal Agency <i>BIA within the Cree Reservation</i>	YES	YES	NO
State <i>State of Nirvana</i> Area Description: All state and private lands outside the Red Rock area.	YES	YES	NO
County <i>Kimball County</i> Area Description: All state and private lands within the county, except for the affidavit lands within the Red Rock area.	YES	YES	NO
Local Government <i>McAllister VFD</i> Area Description: Private structures in Red Rock Area. FS leased cabins in the Red Rock Area.	NO	NO	YES



Definitions for Wildland Fire Protection, Structure Protection, and Structure Fire Suppression are contained in the Northern Rockies Coordinating Group Agency Administrators Memo of 5/28/08, entitled, “Community and Structure Protection Guidelines”. <http://www.fs.fed.us/r1/fire/nrcg/index.html>

Structure Protection and Structure Suppression Actions:

1. Were any structures threatened? Yes x No
2. Were structure protection actions conducted:
 - a. within the active fire area? Yes x No
 - b. outside the active fire area? Yes x No

IF YES to any of the above questions, use the following matrix to:

- document actions that were taken in regard to structure fire protection and structure fire suppression
- identify who has responsibility for those actions
- identify the locations of the actions taken.

Location and total number of structures at that location	Within active fire area? (Y or N)	Agency(s) Responsible for Structure Protection	Agency(s) Responsibility for Structure Suppression	Number of structures threatened at that location
Red Rock Area – 5 private affidavit structures	Yes	USFS	McAllister VFD	3
4 FS leased cabins outside the Red Rock Area	Yes	USFS	McAllister VFD	2
6 Private structures outside the Red Rock Area	Yes	Kimball County	McAllister VFD	3
3 Private structures in the Lone Pine Area	No	Kimball County	McAllister VFD	3

3. Actions and Financial Responsibility **Within** the active fire area:
 - Private affidavit structures at Red Rock: sprinkling. USFS sole financial responsible party for Red Rock affidavit structures. Financial responsibility for any structure suppression action will be borne by the McAllister VFD because the structures are within their jurisdictional responsibility.
 - FS Leased Cabins: brush clearing around homes. USFS sole financial responsibility party for the leased cabins outside the Red Rock area.
 - Private structures outside the Red Rock area: Home assessments and brush clearing around homes. State of Nirvana, through the County Assistance program, has financial responsibility for Kimball County.
4. Actions and Financial Responsibility **Outside** the active fire area:
 - McAllister VFD assisted McAllister County with fuel mitigation around private structures in the Lone Pine area due to projected path of the fire. Private landowners paid for the fuel mitigation.



Other conditions relative to this agreement:

1. Costs incurred by cooperators not engaged with the host agency or IMT in the fire suppression activities will not be included as a part of this cost share agreement.
2. Responsibility for tort claim costs will not be a part of this agreement. Responsibility for these costs will be determined outside this agreement.
3. Costs for accountable, sensitive, and durable property purchased by each agency will be charged directly to that agency and will not be shared.
4. Non-suppression rehabilitation costs are the responsibility of the jurisdictional agency and will not be shared.
5. Suppression strategies and their related costs, including use of aircraft and retardant, will be documented and approved by the signatories to this agreement.
6. Per the XX Cooperative Fire Agreement billing procedures, the parties to this agreement will determine the total costs of each agency. Each agency will bill for their costs.

Cost Share Methodology:

Northern Rockies Cost Share Method - Effort Method #3

Cost Share Options										
Classification	Effort	Weight	Actual Total Miles	Weighted Total Miles	Actual Miles BIA	Actual Miles Nirvana	Actual Miles USFS	Weighted Miles BIA	Weighted Miles Nirvana	Weighted Miles USFS
Road	High	1	16.76	16.76	0.00	10.82	5.94	0.00	10.82	5.94
	Moderate	0.67	18.91	12.67	7.93	9.21	1.77	5.32	6.17	1.19
	Low	0.33	8.48	2.80	0.00	8.36	0.12	0.00	2.76	0.04
Equipment	High	1	29.47	29.47	0.00	12.16	17.31	0.00	12.16	17.31
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Total			156.41	114.59	47.85	78.50	30.05	30.66	56.16	27.77
Percent of Total					30.59	50.19	19.21	26.76	49.01	24.23



2009

C. Total Suppression Rehab Costs (Nirvana & USFS ONLY)	\$154,852	1.20%			
D. Total to be Allocated using Line Effort (A - B - C)	\$10,801,034	86.90%			
		Nirvana	BIA	USFS	
E. Agency Share of Control Line Effort		49%	27%	24%	
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I. Agency Share of Suppression Rehab (2/3 Nirvana, 1/3 FS)		\$103,751		\$51,101	\$154,852
J. Agency Total Cost (F + H + I)		\$6,325,539	\$3,122,786	\$2,982,611	\$12,430,936
K. Agency Weighted % (Including Direct Air Operations) (J/A)		51%	25%	24%	

Notes:

A. Based on I-Suite report dated 9/19 covering period 7/31 to 9/10 + Suppression Rehab Costs

B. Cost Share Team met with air operations personnel and used fire records to assign direct a/c operations costs to agency jurisdictions

(An additional \$495,410 in indirect air operations in included in Line D.)

E. Line Effort percentages are based on GIS map of control lines reviewed and weighted by operations representatives from each agency.

I. USFS (1/3) & Nirvana (2/3) Rehab Split

K. These percentages would be applied to every dollar paid out.

The cost share determination period is 7/13/09 to 7/19/09

State of Nirvana, through the County Assistance program, has financial responsibility for Kimball County.

