INTERAGENCY LARGE FIRE COST REVIEW GUIDEBOOK

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Table of Contents

Introduction 3

Chapter 1 – Interagency Large Fire Cost Review – Process 4

Chapter 2 – Interagency Large Fire Cost Review – Protocols 6

Chapter 3 – Interagency Large Fire Cost Review – Reporting 8

Appendix A – General Standards for Conducting a Review 9

Appendix B – Review Objective and Questions 12

Appendix C – Review Data Collection Documents 15

Appendix D – Cooperator Participation 17

Appendix E – Task Definitions 18

Appendix F – Sample Large Fire Cost Review Report Template 19

INTRODUCTION

The high costs of wildland fire suppression, particularly large and complex incidents, are of considerable concern to Congress, the Office of Management and Budget, the Government Accountability Office, the public, and the agencies themselves. Successful initial attack of fires and proactive hazardous fuels treatment activities contribute to minimizing large fire occurrence, and helps reduce overall wildland fire suppression and rehabilitation costs.

Of equal importance are appropriately rigorous and consistent administrative oversight and controls across all facets of incident management at all complexity levels, and for all components of the fire management program as a whole. To this end, in December 2007, the Federal Fire Executive Council (FEC) tasked the National Wildfire Coordinating Group (NWCG) with the development of interagency large fire cost review guidance for all Federal wildland fire management agencies (DOI and FS). This guidance is intended to be used for after-the-fact reviews at the local/state/regional level to identify lessons learned.

This guidebook sets forth Cost Review Team objectives and establishes the minimum standard accepted protocol for meeting them.

The primary objective of an interagency large fire cost review is to evaluate and document decision processes and actions taken on incidents, and their direct or indirect effect on costs. Findings are weighed and assessed relative to stated criteria, to include specified requirements, measures, or defined business practices. The resulting review and objective analysis provides recommendations to management for incident- specific and programmatic process improvements based on comprehensive analysis of incident documentation. This allows for improvement of program performance and operations, evaluation of costs, and facilitates the application of focused and appropriate corrective actions. Accountability to the public is enhanced.

The general standards for interagency large fire cost reviews are adapted from the "Generally Accepted Government Auditing Standards", with modifications appropriate to meet the needs of the interagency fire community.

The Interagency Standards for Fire and Aviation Operations Guide (Red Book) provides basic direction for conducting Large Fire Cost reviews to determine strategic, tactical, and financial actions affecting overall fire costs. Additionally, annual Wildland Fire Management appropriation language directs both the Department of the Interior and the U.S. Forest Service to utilize independent panel review for all individual fire incidents where expenses meet or exceed $10 million in total cost.

Chapter 1

Interagency Large Fire Cost Review – Process

A review will be required for incidents (single fire or complex) that meet or exceed federal combined expenditures of $10 million for DOI incidents, and $5 million for Forest Service incidents.

A review team may be assigned when an incident (single fire or fire complex) meets or is expected to meet one or more of the following criteria:

- The predicted time to achieve the fire management objective exceeds 21 days.
- There are significant political, social, natural resource, or policy concerns.
- There are significant and complicated cost-share or multi-jurisdictional issues.
- The affected agency requests a review.

Deviations from this process may only be approved by the delegating official. Under extraordinary circumstances, Forest Service Regions may negotiate with the Washington Office, Fire & Aviation Management in the selection of fires to be reviewed within a given year in cases where the number of required reviews poses a severe hardship.

Review Purpose

The purpose of reviews is to provide oversight and identification of strengths and opportunities for improvements in large fire management operations. The review examines guidance and direction, social factors, risk management, strategic and tactical decisions that influence incident management effectiveness and cost. (See Appendix B)

The **Purpose** of the review is to:

a. Examine strategic decisions made by agency administrators and incident management teams (IMTs) with respect to land and fire management plans, Federal Wildland Fire Management Policy, and the appropriate wildland fire decision support document. Identify and report the rationale for strategies and tactics selected.

b. Examine the delegation of authority to the incident commander(s) to determine whether specific cost containment direction and clear protection goals were

articulated. Determine if the IMTs are adhering to agency cost containment objectives.

c. Examine and document the role of the agency administrator in providing financial oversight and strategic decisions for the incident.

d. Identify cost reduction actions that have or have not been effectively implemented and documented for the incident. The review team will evaluate incident costs with respect to strategic and tactical decisions, social and political issues, effective use of fire suppression resources, and application of incident business management principles.

Review Team Composition

The review team will be comprised of members with experience as agency administrator; in incident operations; incident business management; and financial management. Additional technical specialists may be utilized at the discretion of the team leader. The team leader, or at minimum one team member should have completed large fire cost review training. A minimum of one team member must be from the host agency. All team members will adhere to the standards in Appendix A, "General Standards for Conducting a Review."

Referral of Findings Outside the Scope of Large Fire Cost Reviews

Investigation of potential criminal or administrative misconduct falls outside the scope of large fire cost review team jurisdiction. Teams should refer these issues to the agency administrator, and document such referrals in the final report.

Reporting

The review team will provide a draft report to the delegating official or designee. The delegating official may initiate a formal comment period prior to completion of a final report. The responsible agency director will submit a plan for corrective action to the respective delegating official in response to actions recommended in the report. Team findings and lessons learned will be distributed to agency administrators, WO staffs, IMT staff and all jurisdictional agencies for review and appropriate distribution. The final report will be conveyed back to the field unit via individual agency protocol.

Chapter 2

Interagency Large Fire Cost Review – Protocols

Agency administrators are to monitor incident complexity with consideration for large fire cost review criteria (see Chapter 1). When cost review is required, the agency administrator will advise the delegating official, through appropriate agency channels to prepare a delegation of authority to the review team leader. Copies of the delegation will be provided to the agency/bureau director and the agency administrator managing the fire. Participation of other agencies may be appropriate in the case of multi-jurisdictional incidents, and non-Federal cooperators should be afforded this opportunity and provided with delegations of authority where appropriate. (See Appendix D)

Upon receiving the delegation of authority, the review team leader will generate a resource order for review team members and request a separate FireCode specific to the cost review.

Review team members are responsible to coordinate transportation arrangements from their home unit to the work location.

The incident agency administrator designates a local team liaison to help coordinate logistical support and arrangements for work space, lodging, and local transportation. The liaison meets with the team upon their arrival to discuss and finalize arrangements.

The liaison arranges for the in-briefing with the agency administrator and staff and may also coordinate scheduling of other briefings and interviews with local agency personnel. The liaison also helps arrange for access to documentation resources.

The in-briefing with the agency administrator should include the following:

- A review of the review team's delegation of authority.
- A discussion of interagency large fire cost review elements
- Review of local issues and concerns.
- Identification of cooperating agencies, entities and individuals, and any respective interests that merit consideration in the review process.
- Timelines for the review process and scheduling of the exit conference
- A review of the agency administrator's obligation to disclose outcomes of the team findings with the IMT, staff, and partners.

The review team will examine the agency administrator's delegation of authority to the incident commander and other relevant decision documents. The team will conduct interviews with agency and incident personnel and review documentation such as:

- Unit land, resource and fire management planning direction.
- Unit incident business operating guidelines.
- Incident decision analysis and management direction documentation.
- Fire protection and cooperative agreements with state, Tribal, or local entities.
- Unit fire event and fuels management history.

For a comprehensive list of documents that may be pertinent to a review, see Appendix C.

Preliminary findings will be discussed in the exit conference with agency administrator(s). Corrective actions requiring immediate attention will be highlighted. Any safety-related concerns found are to be reported to the agency administrator immediately.

Chapter 3

Interagency Large Fire Cost Review – Reporting

Upon completion of document review and interviews, the team will prepare a draft report for submission to the delegating official. The delegating official will solicit comments from the incident agency. The review team will consider and incorporate comments as appropriate and provide the finalized report to the delegating official.

Incident Report Structure

Each report will include the following sections:

(1) Introduction
(2) Process
(3) Review Objectives
(4) Executive Summary
(5) Cost breakdown by I-Suite categories
(6) Trends and Analysis
(7) Findings and Recommendations (to include both best practices as well as areas for improvement)
(8) Appendices

(See Appendix F for a sample large fire cost review report template)

Annual Report Structure [1]

Findings and recommendations found consistently across all incidents will be consolidated in an interagency report of lessons learned.

[1] The FS has additional annual reporting requirements as outlined in FSM 5194

Appendix A

General Standards for Conducting a Review

The general standards for interagency large fire cost reviews are adapted from the "Generally Accepted Government Auditing Standards" with appropriate modifications to meet the needs of the interagency fire community. They are generic in nature and provide the basic framework for conducting program reviews of all types.

Principles

The principles maintained and demonstrated by management and staffs are essential elements of a positive environment for the review teams. Conducting review activities in accordance with principles is a matter of personal and organizational responsibility.

The principles that guide the work of those who conduct reviews include:

- the public interest
- integrity
- objectivity
- proper use of government information, resources, and position; and
- professional behavior

Conducting reviews in the government environment is an important responsibility, and reviewers must accept the responsibility to openly and impartially serve and protect the public's interest.

The credibility of the government sector review process is based on the team's objectivity in discharging their professional obligations. Objectivity includes an active demeanor and appearance of independence when providing review services, retaining impartiality in attitude and actions, and embodying intellectual honesty. It also includes freedom from and vigilance for real or perceived conflicts of interest. Such conflicts may, in fact or appearance, impair a team member's effectiveness and credibility. Avoidance of conflict of interest is essential.

Independence

Team members must maintain independence to ensure their opinions, findings, conclusions, judgments, and recommendations will be impartial. Teams should avoid situations that would suggest that the team members are unable to maintain independence or of exercising objective and impartial judgment relative to the review and reporting process. Teams must conduct their investigations in observance with the legal and ethical measure that asks "Would these findings, opinions, conclusions judgments and

recommendations be viewed as impartial by an objective third party with the same knowledge of the relevant information?"

Key elements of reviews include:

- assessing the extent to which legislative, regulatory, or organizational goals and objectives are being achieved;
- assessing the relative ability of alternative approaches to yield better program performance or eliminate factors that inhibit program effectiveness;
- analyzing the relative cost-effectiveness of a program or activity;
- evaluating whether the reviewed entity is following sound procurement practices and
- assessing the reliability, validity, or relevance of financial information related to the performance of a program.

Review Methodology

The team will determine the methodology and establish objectives to be used to conduct the review. The methodology describes the nature and extent of the review process for gathering and analyzing information.

The team must also establish the scope of the review which is directly tied to the review objectives. The scope defines the subject matter to be assessed and sources of information to be analyzed.

Obtaining Sufficient and Appropriate Information

The team must obtain sufficient and appropriate information to provide a reasonable basis for findings and conclusions. The team should determine if facts have been obtained to support the review findings. Findings must be based on facts and be supported with documentation.

Developing a Finding

A finding must include four elements:

- Criteria: represents the laws, regulations, contracts, grant agreements, standards, measures, expectations of what should exist, defined business practices and benchmarks against which performance is compared or evaluated.

- Condition: is the current situation.

- Cause: identifies the reason for the condition or the factors responsible for the difference between the situation that exists (condition) and the required or desired state (criteria).

- Effect or potential effect: is a clear logical link to establish the impact of the difference between the situation that exists (condition) and the required or desired state (criteria).

Documentation

Teams must prepare documentation related to the planning, conducting, and reporting for each review. This documentation should be in sufficient detail to support the report.

Appendix B

Review Objective and Questions

The purpose of the questions is to provide a framework for conducting interviews that will lead to pertinent details about management of the incident. The review team should consider these questions as categorical and foundational, and expand questioning as warranted based on the circumstances of each incident importance of a given subject, and the knowledge held by individuals being interviewed.

Objective:

The primary objective of the interagency large fire cost review is to evaluate decisions and actions taken on incidents and their direct or indirect effect on cost.

Review Questions:

Guidance and Direction

1. What were the agency administrator's objectives for the incident, and how were those objectives conveyed as direction to the IMT in the following:

    - Wildland fire decision support analysis
    - Delegation of authority
    - IMT In-briefing
    - On-going monitoring of the effectiveness of strategy and compliance with cost direction

2. Do the agency administrators and incident commanders believe they have the necessary information to make timely and prudent decisions? If not, why not?

3. Determine if the delegations of authority contain sufficient direction to provide clear objectives and cost containment guidance to the IMTs.

4. Was the decision analysis cost threshold stated in the delegation of authority?

5. Determine if the land management plan and fire management plan are linked and provide sufficient discussion/direction to inform fire management strategies including:

    - fire history
    - resource management and fire management goals
    - information on wildland urban intermix/interface zones
    - guidance on the appropriate management response to wildland fires
    - information on hazardous fuels treatments

- cost containment guidance.

6. Were IMTs provided information about areas where hazardous fuels treatments have occurred, and, if so, how was the information used to develop strategies and tactics?

7. Identify if, where, and in what way, hazardous fuels treatments were effective in reducing damage and/or improving suppression success.

8. Identify the influence in the cost of suppression when community protection was a primary objective.

Social Factors

1. What are the socio-political factors influencing actions and, therefore, costs for this fire?

2. Can/were the socio-political factors satisfied? If so, how? If not, why?

3. Quantify the costs associated with mitigating these concerns.

Risk Management

1. What were the values to be protected as stated in wildland fire decision support documents?

2. What considerations did the IMT and agency administrator use to mitigate the threats to the values to be protected?

3. How was fire management responsibility shared between the public, local, state and federal agencies?

4. Was a cost share agreement warranted for this fire? If so, was one prepared that appropriately recognized protection and cost responsibilities and did partners/cooperators share fiscal responsibility for the fire?

Strategic and Tactical Decisions

1. How did agency administrator direction influence overall fire costs?

2. Did the agency administrator identify all agencies with jurisdictional and/or protection responsibilities, and the need for unified command?

3. What specific actions did the IMT and agency administrator take to control costs in the three highest cost areas of personnel, contracts and aircraft?

4. Specifically, what effect did IMT actions have on overall fire costs? Which actions were within their control and which were dictated by others (agency administrator, political influence, prioritization and resource allocation decisions made at the national or geographic area level, etc.)?

5. Was any other wildland fire decision support systems used to develop strategies and guide tactics? If so, how effectively were they used?

6. If a prior fire occurred in the same location, were the strategies and tactics different for this event? How and why?

Appendix C

Review Data Collection Documents

May be supplemented as needed.

AGENCY RELATED ITEMS:

Land and resource management plan or equivalent
Fire management plan
Business operating guidelines
Current year severity authorizations and actions
Local cooperative agreements and annual operating plan
Maps of fire area, protection areas, and local communities
Aviation Plan
List of cooperators and contact phone numbers
Hazardous fuels treatments history for last 5 years
Past fire location maps and burn intensity
Fire-use programs in effect
State/Local/Other Reviews
Preseason fire and fuels condition forecasts for the geographic area and local unit

INCIDENT RELATED ITEMS

Delegations of authority
Wildland fire decision support documentation
Cost share agreements (State, Local, Tribal, Private etc)
Daily Incident Action Plans (from day 1 to date)
209 Daily Incident Status Reports from fire start to containment
IMT Summaries
Fire Maps by Division (daily)
Fire Maps (Progression)
Fire Maps (initial attack, extended attack, large fire to final)
Evacuation/Structure Protection Plans
Copy of I-Suite reports
Copies of resource orders (Aircraft/Equipment/Overhead/Crews/Supplies)
Copies of buying team logs
Copies of cache report/orders
Daily press briefings
Safety reviews
Aviation documentation
IMT After Action Reviews
IBA Report
IA dispatch logs for development of fire chronology
IMT transition plans and strategic plans
Weather forecast and fire weather warnings issued during the incident

Strategic Long Term Plans
Key Decision Logs

ITEMS WITH LFCR TEAM:
Agency Directives and Policy Guidance
National Mob Guide/Geographic Area Mob Guide/Red Book/Blue Book
Interagency Incident Business Management Handbook
Notebooks/File Folders/3 Ring Binders
Plastic or Paper Box to Carry Data
Misc. Office Supplies
Laptop(s) with jump drive(s) (portable memory storage devices)

Appendix D

Cooperator Participation

In multi-agency incidents and incidents where partners or cooperators had a significant presence, agency administrators should encourage their participation in the review. It is recognized that cooperators may have their own procedures for cost reviews, but their participation could add significantly to the review process.

Cooperators may wish to participate in the review in one of several ways, including but not limited to:

1. As a full participant with the appropriate agency, executive providing a delegation of authority. This would be most appropriate for incidents with joint jurisdictional and/or protection responsibilities, cooperator expenditure of funds and the cooperating agency is interested in findings regarding expenditures for his/her agency. The cooperating agency may wish to include a review team member or rely on the federal team members.

2. As a supporting participant where the cooperating agency provides an ad hoc member to the review process. This may be appropriate where the cooperating agency is interested in participating in the review.

3. As a supporting participant where the cooperating agency provides information by its employees participating through interviews and documentation.

Appendix E

Task Definitions

Guidance and Direction — Examine the information available to assist the agency administrator and/or IMT to make timely and sound decisions. Determine if the delegations of authority contain sufficient direction to provide clear protection strategies and cost containment guidance to the IMTs. Determine if the land management plan and fire management plan are linked and provide sufficient direction in the wildland fire decision support process to inform fire management strategies and cost containment guidance.

Social Factors — Determine if there are social and political factors or constraints driving costs and expenditures on this fire and quantify any costs associated with mitigating social and political influences on operational decisions in wildland fire suppression that have been identified in the wildland fire decision support process. Examine if the agency administrator has defined standards on the appropriate amount of effort to expend when wildland fires on federal lands affect or threaten private lands, property, or structures. Determine if federal and nonfederal entities have clearly defined their financial responsibilities for wildland fire suppression, particularly wildland-urban interface.

Risk Management — Ensure that the agency administrator and IMT have viewed and interpreted risk management from a broad perspective, including safety concerns, and alternative strategies and tactics that balance environmental impacts and socio-economic concerns. Examine the decisions made to mitigate risk which impact the cost of fire suppression and support and the thought process for identifying and balancing the threat level with acceptable costs.

Tactical Decisions — Examine the decisions generated from the local land management and fire management plans to the tactical decisions made in the wildland fire decision support process. Examine the specific actions taken by the IMT and agency administrator to control costs in the three highest cost areas of personnel, contracts and aircraft and whether the actions were within their control or dictated by others (politicians, etc.) Determine if tactical decisions included cost management as a high priority and were compatible with the delegation of authority.

Appendix F

Sample Large Fire Cost Review Report Template

2008 LARGE FIRE COST REVIEW

UNIT NAME

AGENCY NAME AND REGION

DATES OF REVIEW

2008 LARGE FIRE COST REVIEW
FIRE UNIT NAME
AGENCY NAME AND REGION NUMBER

TABLE OF CONTENTS

I. Executive Summary 4

II. Trends and Analysis 6

III. Findings and Recommendations 6

References 20

Appendix 1: Wildland Fire Decision Support Analysis 21

Appendix 2: Chronology 24

Appendix 3: Identified Cost Avoidance Potential 35

Appendix 4: Cost Reduction Accomplishments 36

Appendix 5: ICS-209 Data Chart 37

Appendix 6: Fire Progression Map 38

Regional Large Fire Cost Review Team Members

Name, Team Leader
Title, Agency, City, State

Name, LFCR Title
Title, Agency, City, State

INTRODUCTION

More attention is being focused on the high costs of suppressing large and complex wildland fires. Such costs are under much greater scrutiny by Congress, the Office of Management and Budget, the Government Accountability Office, and the public. Over the long term, hazardous fuels treatment and aggressive initial attack contribute to reducing large fire occurrence. This leads to an overall reduction in wildland fire suppression and rehabilitation costs. In the short term, it is important that management scrutiny is applied to all facets of wildland fire management at every level of fire complexity.

The Interagency Standards for Fire and Aviation Operations Guide contains guidance and direction for conducting Large Fire Cost Reviews to determine what strategic, tactical, and financial actions were taken that affected the overall cost of the incident/fire. The requirement is based on the dollar threshold reached by an incident, $5 million and National level reviews.

PROCESS

The Regional Large Fire Cost Review Team was convened by the XX in June 2008. The Team reviewed the Test Fire in West Buttermilk, Montana. The following summarizes the key points of the final report based on a series of document searches, research and analysis, and interviews.

REVIEW TEAM OBJECTIVES

The objective of this Large Fire Cost Review Team was to focus on strategic decisions and tactical actions, compliance with policy and law, and risk analysis and management. This includes efforts made by the Agency administrators and IMTs (IMT) to ensure compliance with contracting, procurement, and resource allocation procedures including fiscal vigilance for potential waste and abuse. All of these decisions and actions set the stage for spending levels and ultimate costs for a large fire.

I. EXECUTIVE SUMMARY:

- Highlights – include commendations

Insert graph with cost breakdown.

Figure 1. Summation of overall costs (as of 6/14/08) and breakdown by category for the Test Fire in West Buttermilk, Montana.

II. Trends and analysis:

Brief weather synopsis.

III. Findings and Recommendations:

Findings and recommendations for the Test Fire are organized by the headings: guidance and direction, risk management and tactical decisions, followed by appendices.

A. Guidance and Direction:

Finding 1:

Recommendation 1:

B. Risk Management:

Finding 1:

Recommendation 1:

C. Social Factors:

Finding 1:

Recommendation 1:

D. Tactical Decisions:

Finding 1:

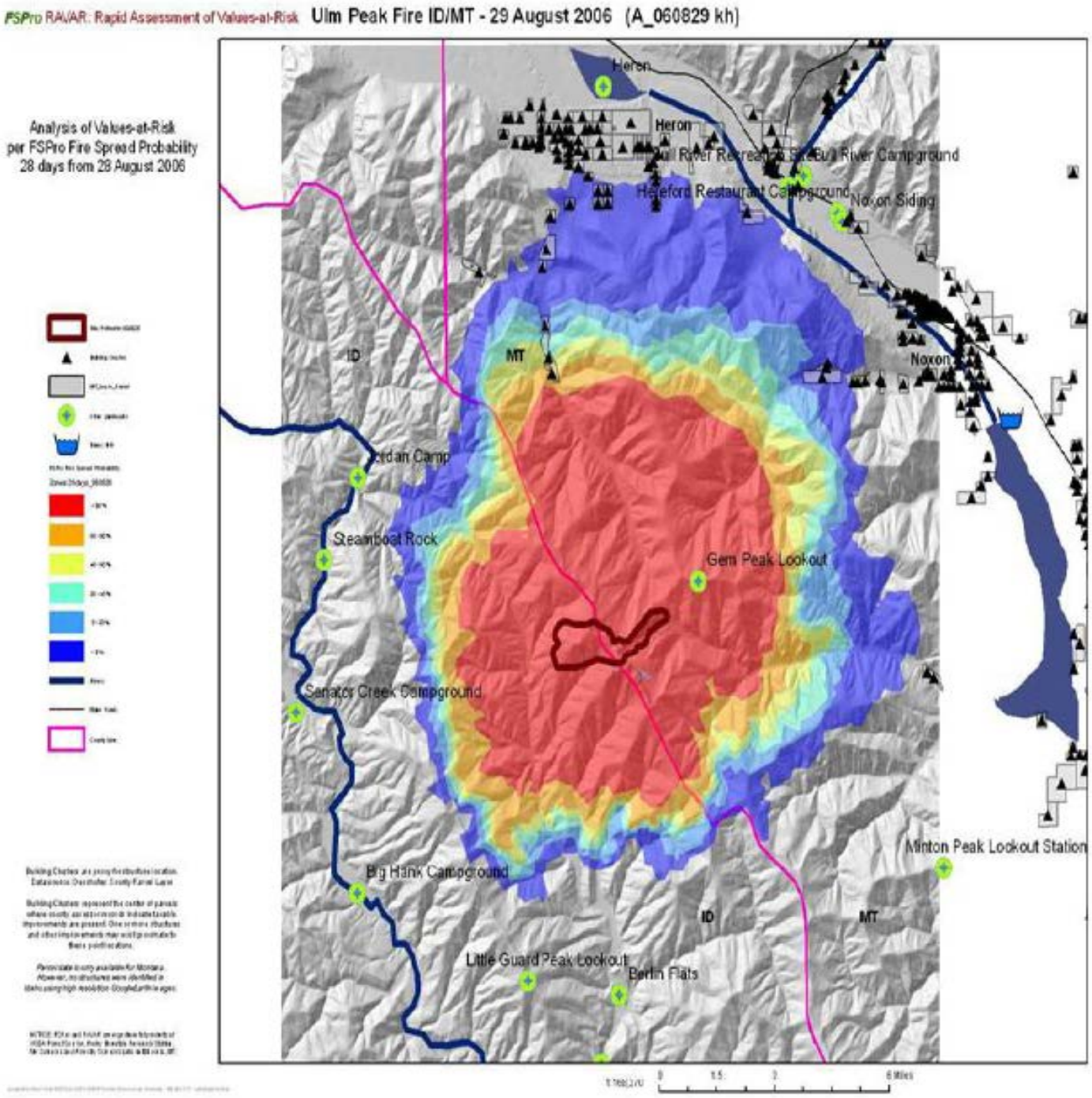
Recommendation 1:

References:

2001 Federal Wildland Fire Policy.
Others.....

APPENDIX 1: Wildland Fire Decision Support Analysis

Attach WFDSS runs, WFSA decision tables, and Key Decision Logs if available:



KEY DECISION LOG
Test Fire

Key Decision Log is a process to document decision making. The process allows for more tracking decision making while exploring alternatives and collaborations for cost management. This process will document the thought process when making decisions.

Who/ Date/ Time	KEY DECISION	ASSOCIATED RISKS	ALTERNATIVES CONSIDERED	RATIONALE FOR DECISION	COST IMPLICATION		AA/IC CONCURENCE
					SHORT TERM	LONG TERM	

APPENDIX 2: Fire Chronology

Written chronology of the fire from ignition to control. Table format is preferred.

APPENDIX 3: Identified Cost Avoidance Potential:

Based on a summary of fire costs and a review of assignments and activities, the following table depicts areas in which alternate planning, operations and tactics could have been implemented resulting in potential cost reductions on the fire:

Cost Category:	Potential Cost Avoidance Amount:	Comments:

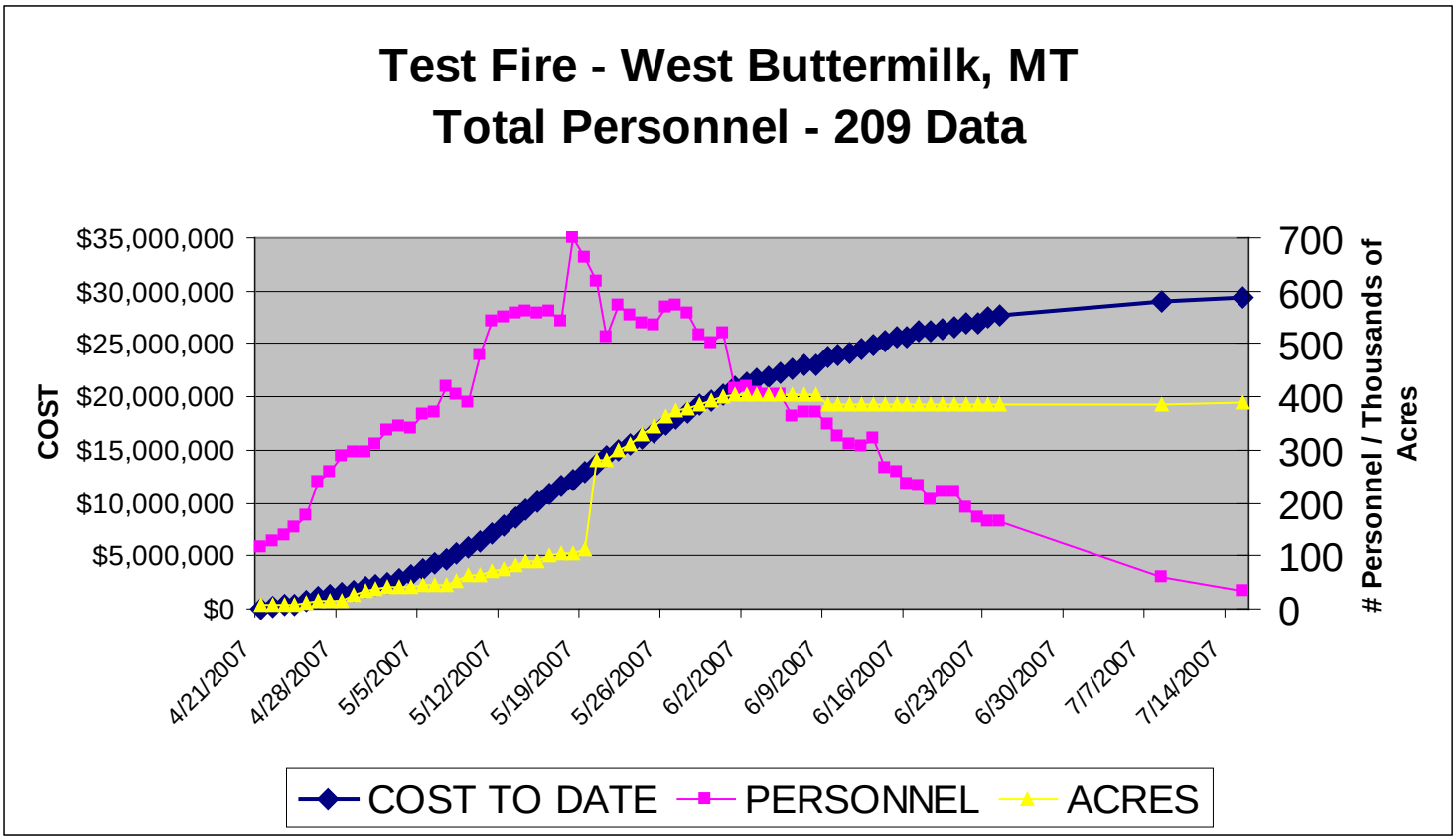
APPENDIX 4: Recognized Cost Reduction Accomplishments

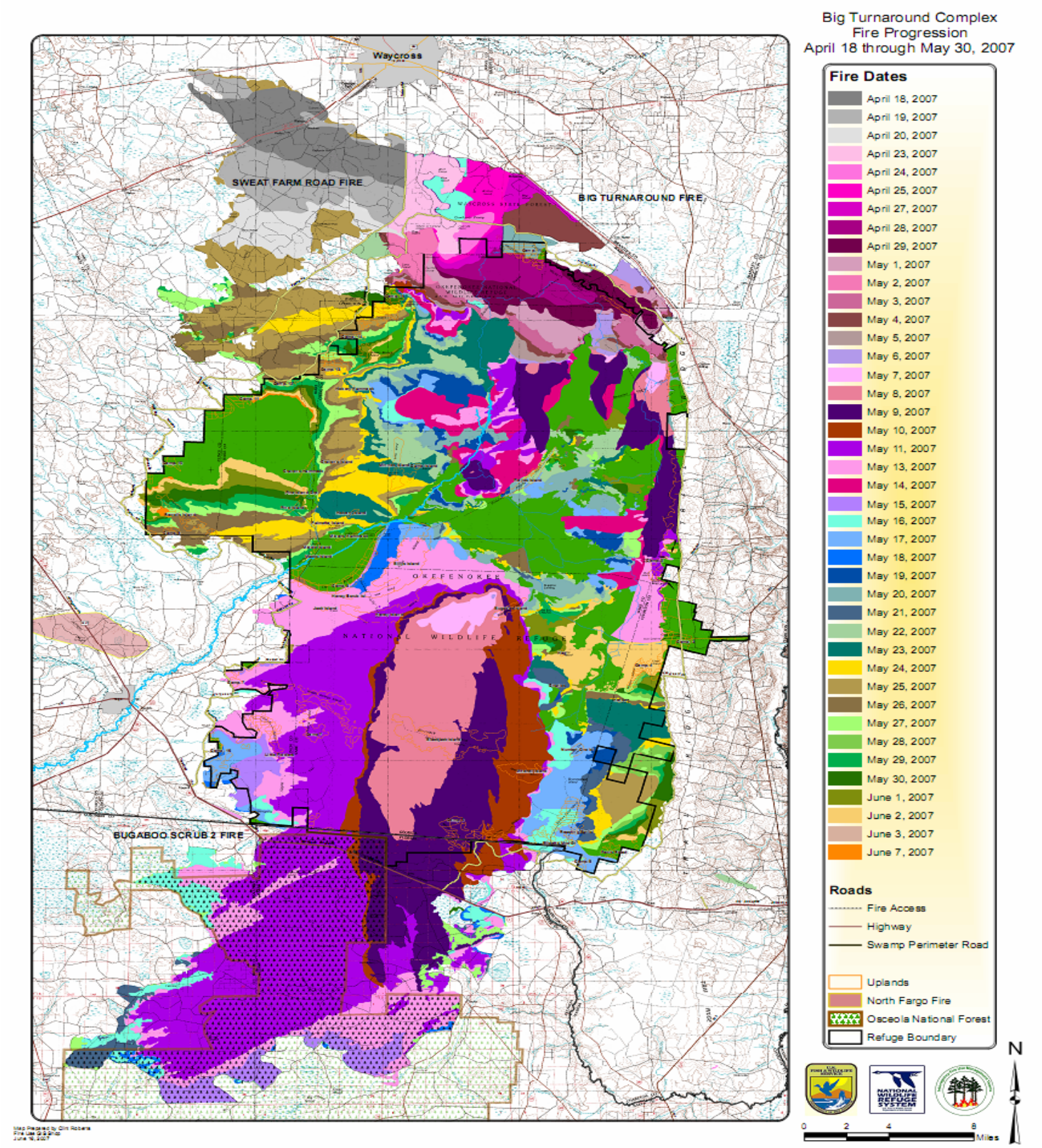
Based on a summary of fire costs and a review of assignments and activities, the following table depicts actions that were implemented by agency administrators and incident management teams that resulted in real cost savings on the Fire:

Cost Category:	Cost Reduction Amount:	Comments:

APPENDIX 5: ICS-209 Data Chart:

Attach chart showing critical resource use by date throughout the duration of the fire.



APPENDIX 6: Fire Progression Map

Attach fire progression map showing acreage progression by day throughout the course of the fire.