Quarterly Status Report

Fire Program Analysis (FPA) Project
For Reporting Period: July 1 through September 30, 2008

Project Overview

Fire Program Analysis is a common interagency fire planning and budget process with a cost-effective trade-off analysis incorporating land and resource management objectives.

Status, Key Tasks, and Milestones

Executive Oversight Group (EOG) Activities:
The EOG met three times by videoconference with FPA Project management. The EOG decided to move forward with a phased deployment of the FPA system. The results will be used to support the agencies' FY2011 budget requests. All Fire Planning Units (FPUs) will complete their analyses by May 2009. Notes of the EOG meetings can be found at: http://www.fpa.nifc.gov/Library/Memos/index.html

Next Milestone: Finalization of the interagency guidance for Fire Planning Units to use in preparing their analyses.

FPA Deployment Schedule: The 139 Fire Planning Units nationwide will be grouped into three waves with sequential start and due dates to ensure the FPA team can provide quality support to each wave and that all FPUS will have adequate time to complete their analyses. The dates for the sequenced waves are:

- October 1, 2008 – March 1, 2009 (includes the 7 prototype and 20 early-adopter FPUs)
- November 1, 2008 – April 1, 2009
- December 1, 2008 – May 1, 2009

Next Milestone: National goal programming analysis will be done when all FPUs have completed their analyses.

Early-adopter Fire Planning Units (FPUs): Twenty early-adopter FPUs volunteered to pressure-test the FPA system. The early-adopters participated in numerous interactive, online LiveMeeting™ presentations about the FPA system. These presentations and meeting notes can be accessed on the FPA web site at: http://www.fpa.nifc.gov/Implementation/Early_adopters/index.html and are being used to develop on-line training for all FPUs.

GAO Review of FPA: The Government Accountability Office (GAO) initiated an audit of the FPA Project in the last quarter of FY 2007 at the request of the Senate Committee on Energy and Natural Resources. Representatives from GAO met with FPA Project management and team members June 9 – 13, 2008 to review the model's technical design.

Next Milestone: GAO is expected to release the final report before the end of the calendar year.

System Development Progress

Business Process and User Interface: Version 2.01 of FPA was released on September 29, 2008. This release included the core functionality that FPUs will need for the sequenced deployment enabling them to complete their analyses by May 2009.

Initial Response Simulator (IRS): The diurnal rate of spread calibration was added to the core functionality of the IRS module in the September 29th 2008 release of Version 2.01. The IRS module uses science-based fire behavior models to simulate how fire behaves in natural environments. The simulation outputs will include:

- Modeled number of ignitions randomly drawn based on historic records
- Modeled number of fires that are contained under conditions used in the model
- Modeled number of acres burned under conditions used in the model
- Modeled number of fires and location for those modeled fires that exceed the simulation limits of the IRS module.

Next Milestone: Complete sensitivity analysis of modifications to the hourly diurnal rate of spread, time limits and delays and incorporate adjustments as needed.

Large Fire: The large fire simulation functional implementation as a stand-alone tool was finalized. The Large Fire simulation outputs will include:

- Modeled number of large fires
- Modeled number of acres burned
- Modeled size of individual fires
- Modeled fire intensity level for individual fires

Next Milestone: Large fire simulations will be integrated on the FPA server with the performances measurement subsystem by December 15, 2008, automating the linkage of the IRS and the Large Fire modules.

National Goal Programming: Finalization of the national goal programming design continues on the large simulated dataset representative of the size and complexity of the expected full national dataset. This simulated dataset contains fabricated performance measure values and costs that allow agency budget analysts to understand the types of tools and reports they will have access to. By using this simulated data set, they will identify which of the tools and reports will be most valuable to them to conduct the national analysis. Budget analysts will begin using actual FPU results with the national goal programming decision support tool as the first wave of FPUs complete their analysis in March.

Outputs will include:

- Results from a combination of investment alternatives from each FPU that demonstrate performance, based on modeling assumptions, within specified national budget scenarios.
- For each budget scenario, the estimated Preparedness, Fuels Treatment, and Prevention costs based on assumptions used in the IRS and Large Fire modules.
- Modeled suppression costs based on assumptions for future weather, fuels treatments accomplished in intervening years, probable location of fire starts, and initial response resources.

Next Milestone: In October 2008, national fire budget staff will further define decision support reports needed for the national analyses.

FPA Training Development: A contract was awarded to develop on-line web-hosted training modules.

Next Milestone: The first four of six training modules will be delivered by the end of October.

Monthly Key Communication Events:

- Collaboration with subject matter experts regarding development of the system.
- Monthly conference calls with FPA's Management Advisory Team (MAT)
- Routine status briefings provided to the National Fire and Aviation Fire Directors
- Monthly conference calls with LANDFIRE to enhance collaboration and share information
- Twice-monthly conference calls with FPA's Geographic Area leads to provide a forum for information exchange regarding the status of FPA
- Weekly LiveMeeting™ conferences with the early-adopter FPUs to prepare them to use FPA concluded the end of September
- FPA monthly newsletters and technical notes were distributed and regular electronic list server items sent to over 800 subscribers
- Weekly conference calls with the Interagency Science Team co-chairs, FPA team members, the Office of Wildland Fire Coordination, and U.S. Forest Service Washington office key contacts to FPA

Additional Key Communication Events

July

- FPA team held a series of LiveMeetings™ and conference calls with the early-adopter FPUs to demonstrate the FPA system user interface, introduce the FPA modules and answer questions
- Met with agency National Fire Program Budget staff in Boise, ID
- A subset FPA's Interagency Science Team met in Boise, ID

August

- A subset of FPA's Interagency Science Team met with Large Fire Module (LFM) development team in Boise, ID
- National Fire Program Budget staff and Planners meeting, Boise, ID

September

- GAO exit conference to discuss their Statement of Facts
- A subset FPA's Interagency Science Team met with the LFM and IRs teams in Boise, ID
- Met with National Interagency Prevention Team leads to review FPA Prevention Module
- Met with training personnel from the National Interagency Fire Center (NIFC) to advise FPA on options to capture LiveMeeting™ training sessions for later used

Project Time Line

- **October 2008 – December 2008 -** All FPUs initiate their FPA analysis for use in preparing the FY2011 budget submission

- **February – April 2009 -** FPU-selected alternatives reviewed by regional offices for interagency programmatic consistency

- **May - June 2009 –** National goal programming and trade-off analysis of FPUs' investment alternatives is conducted.

Project Earned Value Report

The project earned value report compares the actual cost and schedule to the planned cost and schedule. The table below shows the tasks in the FPA project baseline in fiscal year 2008 and the planned tasks for FY 2009. Actual costs represent invoiced amounts or actual expenditures for each milestone. Obligations incurred for future contract work are not considered actual costs.

The cost performance index (CPI) and schedule performance index (SPI) are 0.90 and 1.06, respectively. These reflect that at this point in time the project is approximately 10% over budget and on 6% ahead of schedule.

The USDA-OCIO and OMB monitor both the CPI and SPI. A project is placed on the USDA-OCIO watch list if the cost or schedule deviates by more than 10%. Based on these metrics, the FPA project is 10% over budget and 6% ahead of schedule. The cost variance is due the increased effort of the development contractor as the FPA system prepares for full deployment. The FPA project manager is working with the development contractor to develop a staffing strategy to reduce future effort while staying within overall budget. In addition, planned module release in October 2008 will facilitate completion of a key FPA milestone. Additionally, FY09 management reserve will offset some of the cost overruns. By the end of October EVM metrics are expected to be within the tolerance set by USDA-OCIO and OMB.

FPA-2 Earned Value Report FY2007 - 2010

CPI = 0.90
AS OF 9/30/2008 **SPI =** 1.06

I.H.4 Actual Performance and Variance from OMB approved baseline (pending)

	OMB Approved Baseline				Actual			
	Schedule		Durati		Schedule			
Description	Start Date	End Date	Days	Planned Cost (Budget At Completion) BAC	Start Date	End Date	% Complete	Actual Cost (AC=ACWP) (Sum of Invoices)
FY 2005	1/1/2005	9/30/2005	195	$4,895,452	1/1/2005	9/30/2005	100%	$ 4,895,452
FY 2006	10/1/2005	9/30/2006	260	$5,385,794	10/1/2005	9/30/2006	100%	$ 5,385,794
FY 2007	10/1/2006	9/30/2007	260	$5,074,521	10/1/2006	9/30/2007	100%	$ 5,360,151.32
FY 2008								
FY08 Govt Program Management	10/1/2007	9/30/2008	262	$939,120	10/1/2007	9/30/2008	100%	$ 1,022,433
FY08 SAIC CPIC and project support	10/1/2007	9/30/2008	262	$84,000	10/1/2007	9/30/2008	100%	$ 38,846
FY08 IBM Development and Implementat	10/1/2007	9/30/2008	262	$5,406,880	10/1/2007	9/30/2008	100%	$ 7,375,622
FY08 Teksystems Tech Writer	2/1/2008	9/30/2008	173	$150,000	2/1/2008	9/30/2008	100%	$ 108,798
FY08 O&M (IBM Task 18)	10/1/2007	9/30/2008	262	$0	10/1/2007	9/30/2008	100%	
FY08 HW/SW Maintenance	10/1/2007	9/30/2008	262	$420,000	10/1/2007	9/30/2008	100%	$ 615,946
s.t FY 2008				$7,000,000				$ 9,161,644
FY 2009								
FY09 Govt Program Management	10/1/2008	9/30/2009	261	$1,769,940	10/1/2008	9/30/2009	0%	
FY09 SAIC CPIC and project support	10/1/2008	9/30/2009	261	$60,000	10/1/2008	9/30/2009	0%	
FY09 IBM Development and Implementat	10/1/2008	9/30/2009	261	$0	10/1/2008	9/30/2009	0%	
FY09 Teksystems Tech Writer	10/1/2008	9/30/2009	261	$75,000	10/1/2008	9/30/2009	0%	
FY09 O&M (IBM Task 18)	10/1/2008	9/30/2009	261	$3,424,145	10/1/2008	9/30/2009	0%	
FY09 HW/SW Maintenance	10/1/2008	9/30/2009	261	$570,000	10/1/2008	9/30/2009	0%	
s.t FY 2009				$5,899,085				
FY 2010	10/1/2009	9/30/2010	261	$4,074,940				
Total	**1/1/2005**	**9/30/2010**	**2,098**	**$ 32,329,793**			**69%**	**$ 24,803,042**