Quarterly Status Report
Fire Program Analysis (FPA) Project
For Reporting Period: January 1, through March 31, 2008

Status, Key Tasks, and Milestones

Second Internal Release

The second internal release of FPA was delivered as scheduled in mid-February. This is the second of four internal releases that sequentially build system functionality targeting the June 2008 operational release. The functionality added to the system includes the core functionality of the Initial Response Simulator, the majority of the pre-planning for the Large Fire capability, and more than half of the user interface and business process framework.

<u>Next Milestone</u>: Release 3 in mid-April.

> ### 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.

Executive Oversight Group (EOG) Activities

The EOG met on February 28 and March 20 with FPA Project management to review progress and provide guidance on issues related to policy and scope. LANDFIRE data was confirmed as the enterprise fuel model source. The University of Wisconsin's SILVIS data with a 2-kilometer (1.2) buffer was approved as the source for defining Wildland Urban Interface within the FPA model. Notes of these meetings can be found at:
http://www.fpa.nifc.gov/Information/Papers/index.html

Interagency Team Members

Nina Rose Hatfield	Department of the Interior
Kent Connaughton	US Forest Service
John Phipps	US Forest Service
Rick Prausa	US Forest Service
Dave Cleaves	US Forest Service, Research
Carlos Rodriguez-Franco	US Forest Service, Research
Henri Bisson	Bureau of Land Management
Dan Wenk	National Park Service
Ken Stansell	US Fish & Wildlife Service
Vicki Forrest	Bureau of Indian Affairs

<u>Next Milestone</u>: The FPA Executive Oversight Group (EOG) will meet during the next quarter on April 25, May 22 and June 12th to review progress and FPA Operations & Maintenance plans.

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 for the second time with FPA Project

management and team members between March 10 – 15 to learn of project progress and to review project documents for both the 2005 and the upcoming June 30, 2008 release of FPA. The second phase of the GAO audit that focuses on the technical aspects of the FPA Project is scheduled to begin in April 2008.

System Development Progress

▤ **Business Process and User Interface**
Release 2 was delivered on February 18, 2008. The first two iterations of internal Release 3 were also delivered and tested during this quarter. Delivered functionality includes tools for the Fire Planning Units to input data into the system and build investment alternatives. More than half of the user interface and business process framework has been delivered. The contractor has implemented a user interface development toolkit that has increased production by at least two-fold to mitigate the known risk the tight schedule presents.
<u>Next Milestone</u>: Iterations 3, 4 & 5 of Release 3 by April 15, 2008.

▤ **Initial Response Simulator (IRS)** The IRS core functionality is complete with some corrections being made to resolve issues discovered following delivery and testing. The IRS includes fire resources and "line producing" effectiveness for engines, crews, dozers and aviation support. Outputs of the IRS module include:
   o Modeled number of ignitions
   o Modeled number of fires that are contained under conditions used in the model
   o Modeled number of acres burned under conditions used in the model
   o Modeled Energy Release Component (ERC)of conditions for fires that exceed the simulation limits of the model

<u>Next Milestone</u>: Implementation of the Fire Event Scenario module needed to model fire ignitions as input to the Prevention Module and IRS.

▤ **Large Fire** The Large Fire simulation process is comprised of two stages. The first stage of the software that statistically models fire behavior based on the FPU's simulations has been completed. The system components developed for this first stage are being used by FPA Project staff to run the required five fire behavior simulations for all FPUs to minimize their workload. Development began on the second stage of the Large Fire Module that uses the simulations from the first stage to create statistical predictors of fire behavior. The results will be used by the FPUs to analyze their investment alternatives for performance and cost starting in July 2008. Outputs will include:
   o Modeled number of large fires
   o Modeled number of acres burned
   o Modeled size of individual fires
   o Modeled fire intensity level for individual fires

<u>Next Milestone</u>: Large fire simulations will be completed and statistical models created for all FPUs as fuel model data is updated by LANDFIRE Project's Rapid Refresh initiative scheduled for completion at the end of June 2008.

▤ **National Goal Programming** Team members met twice this quarter with the U.S. Forest Service and the Department of the Interior's Fire Program Budget Officers, to finalize national analysis requirements and developing interagency guidance for FPUs to use when developing investment alternatives for FPA.

Outputs will include:

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

Next Milestone: Seven prototype FPUs will test the draft interagency guidance for FPA by designing investment alternatives that will be used through IRS, Large Fire Module and Goal Programming to test the FPA system end-to-end.

Key Communication Events:

Monthly

- Ongoing collaboration with subject matter experts regarding development of the prototype.
- Monthly video conference meetings with the Executive Oversight Group (EOG)
- Monthly conference calls with FPA's Management Advisory Team (MAT).
- Monthly 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.
- FPA monthly newsletters and technical notes have been distributed and regular electronic list server items have been sent to over 600 subscribers.
- Twice-monthly 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

January

- FPA overview presented to representatives from National Association of State Foresters in Orlando, FL.
- Briefed national interagency Fire Planners
- Met with agency Fire Program Budget Officers in Boise, ID
- FPA overview presented to the U.S. Fish and Wildlife Service's Fire Management Officers in Minneapolis, MN.
- Presented FPA overview to the Rocky Mountain Geographic Area Coordination Center in Denver, CO.

- Presented FPA overview to the Intermountain and Northwest Region, and the National Park Service Fire Management Officer (FMO) workshop in Portland, OR

February

- Briefed the interagency Fire Executive Council
- Presented FPA overview at the U.S. Fish and Wildlife Service's Southeast Regional FMO workshop in Duck NC.
- Meeting BLM State FMO and Fire Planner for OR/WA regarding the Oregon Dept. of Forestry Protection Agreement & FPA – Boise, ID
- Presented FPA System Introductory brief via LiveMeeting for the Forest Service members of the EOG
- Presented FPA overview to the Forest Service California Fire Managers – Reno, NV
- Presented FPA System Introductory brief for the DOI members on the EOG – Washington, DC

March

- Briefed U.S. Fish and Wildlife Service Fire Staff for the Southwest Region – Albuquerque, NM
- Presented FPA overview at the National BIA Forestry and Fire Managers – Albuquerque, NM.
- Briefed the Associate State Directors for BLM via regular BLM monthly conference call
- FPA-hosted FMIS/WFMI/FAMWEB interagency fire history proposal meeting w/Fire Directors – Boise, ID
- Presented FPA overview to the Forest Service and Bureau of Land Management Fire Leadership, Pacific Northwest – Portland, OR
- Presented FPA overview to the U.S. Forest Service Regional Fuels Managers- Portland, OR
- As part of their ongoing audit, the Government Accountability Office met with the FPA team in Boise.

Project Time Line

- 🕐 **April 2008 -** FPA iterative development Release 3

- 🕐 **April 2008 -** FPA workshops for the Northwest, Northern Rockies and Great Basin Geographic Areas

- 🕐 **May 2008 -** FPA workshops for the California, Southwest and Northern Rockies Geographic Areas

- 🕐 **May 2008** - FPA iterative development Release 4

- 🕐 **June 2008 –** FPA workshop for the Eastern Geographic Area

- 🕐 **June 2008 -** FPA system Release

- 🕐 **July 2008 – December 2008 -** All FPUs run FPA analysis

- 🕐 **January - February 2009 -** FPU-selected alternatives for FY 2011 reviewed by regional offices for interagency programmatic consistency

- 🕐 **March - May 2009 -** National level analysis of FPUs' investment alternatives the for FY2011

COSTS

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 active tasks in the FPA project baseline in fiscal year 2008. 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 0.98 and 1.00, respectively. These reflect that at this point in time the project is approximately 2% over budget and on schedule.

The USDA-OCIO and OMB monitor both the CPI and SPI. A project is placed on the USDA-OCIO watch list if the CPI or SPI indicate a deviation of more than 10%. Based on these metrics, the FPA project is well within control of both cost and schedule.

FPA Earned Value Report

AS OF	**3/31/2008**					**CPI =**		**0.98**
						SPI =		**1.00**

Actual Performance and Variance from OMB approved baseline

| | OMB Approved Baseline | | | | | | Actual | |
| | Schedule | | | Schedule | | | | |
Description	**Start Date**	**End Date**	**Planned Cost**	**Start Date**	**End Date**	**% Complete**	**Actual Cost (Sum of Invoices)**	
FY 2005	1/1/2005	9/30/2005	$ 4,895,452	1/1/2005	9/30/2005	100%	$ 4,895,452	
FY 2006	10/1/2005	9/30/2006	$ 5,385,794	10/1/2005	9/30/2006	100%	$ 5,385,794	
FY 2007	10/1/2006	9/30/2007	$ 5,074,521	10/1/2006	9/30/2007	100%	$ 5,360,151	
FY 2008								
FY08 Govt Program Management	10/1/2007	9/30/2008	$ 939,120	10/1/2007		57%	$ 534,433	
FY08 SAIC CPIC and project support	10/1/2007	9/30/2008	$ 84,000	10/1/2007		14%	$ 12,019	
FY08 IBM Development and Implementation	10/1/2007	9/30/2008	$ 5,406,880	10/1/2007		54%	$ 3,091,069	
FY08 Teksystems Tech Writer	2/1/2008	9/30/2008	$ 150,000	2/1/2008		25%	$ 37,630	
FY08 O&M (IBM Task 18)	10/1/2007	9/30/2008	$ -	10/1/2007		0%		
FY08 HW/SW Maintenance	10/1/2007	9/30/2008	$ 420,000	10/1/2007		41%	$ 171,123	
s.t FY 2008			$ 7,000,000				$ 3,846,273	
FY 2009	10/1/2008	9/30/2009	$ 5,899,085					
FY 2010	10/1/2009	9/30/2010	$ 4,074,940					
Total	**1/1/2005**	**9/30/2010**	**$ 32,329,793**			**59%**	**$ 19,487,671**	