



Quarterly Status Report

Fire Program Analysis (FPA) Project

For Reporting Period: April 1 through June 30, 2008

Status, Key Tasks, and Milestones

Executive Oversight Group (EOG) Activities

The EOG met on April 25 (teleconference), and May 22, with FPA Project management to review progress and provide guidance on issues related to policy and scope. The EOG approved using 15-20 early-adopter Fire Planning Units (FPU) during July and August to validate additional FPA fire behavior modeled outputs, provide feedback on the user interface and the ease of using the system. The June 12 teleconference was cancelled due to scheduling conflicts. Notes of these meetings can be found at: <http://www.fpa.nifc.gov/Library/Memos/index.html>

Next Milestone: Release FPA to all users once the system is stable and has been successfully tested by the early-adopters, this will likely be mid- to late-September 2008. The FPA Executive Oversight Group (EOG) will meet during the next quarter on July 8, August 28 and in September 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 third time with FPA Project management and team members from June 9 - 13 to review the model's technical design.

Next Milestone: GAO will have an exit conference with agency and project executives in early September 2008.

System Development Progress

■ **Business Process and User Interface:** Version 2.0 of FPA was released on June 30, 2008. This release included the business process logic and user interface for all the system modules that will be pressure tested by the prototype and early-adopter FPU in July and August.

Next Milestone: Version 2.01 in mid- to late-September.

■ **Initial Response Simulator (IRS):** The IRS core functionality for creating fire event scenarios, generating fire behavior on the landscape, defining the FPU's fire resources and assigning resources to dispatch locations, linking dispatch locations to Fire Workload Areas (FWAs), and running IRS were included in the June 30th 2008 release of Version 2.0.

IRS module outputs include:

- Modeled number of ignitions
- Modeled number of fires that are contained under conditions used in the model
- Modeled number of acres burned under conditions used in the model

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.

- Modeled Energy Release Component (ERC) of conditions for fires that exceed the simulation limits of the IRS module.

Next Milestone: IRS enhancements to allow diurnal rate of spread calibration and modeling of point protection will be FPA Version 2.01 release to all users mid- to late-September.

Large Fire: The Large Fire simulation process is comprised of two stages. The first stage of the software statistically models fire behavior based on five simulations per FPU that characterize the impact of fuels, terrain, weather, and suppression on the FPU's landscape. These first stage simulations for all +130 Fire Planning Units are continuing with a targeted completion by the end of September 2008. The resulting statistical predictors of fire behavior will be used by the early-adopter FPUs to analyze their investment alternatives for performance and cost starting in July 2008.

Large Fire module outputs 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 completed and statistical models created for all FPUs by the end of September 2008.

National Goal Programming: A large simulated dataset representative of the size and complexity of the expected full national dataset was created for use in testing the current goal programming design. This simulated dataset contained performance measure values and cost figures in the ranges expected from all Fire Planning Units. Module enhancements were identified and implemented anticipating future complex reporting needed by national fire budget staff.

Outputs will include:

- Results from a combination of investment alternatives from each FPU that demonstrate modeled performance 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 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: National fire budget staff will use performance measures and costs from the prototype FPU analyses results to further define reporting capabilities needed for the national analyses to be run in February 2009.

Monthly Key Communication Events:

- 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 were distributed and regular electronic list server items sent to over 800 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.

Additional Key Communication Events

April

- Met with agency National Fire Program Budget staff in Boise, ID
- Northwest Geographic Area Data Preparation Workshop in Portland, OR
- Presented FPA overview at BLM Fire Leadership Team (FLT) meeting in Boise, ID
- Presented FPA overview at California Forest Service Fire Planners meeting in Sacramento, CA
- Presented FPA overview to Eastside Agency Administrators meeting in Lakeview, OR
- Briefed Forest Service Region 2 Regional Forester, Deputy Regional Forester, and Regional Fire and Aviation Director
- Presented FPA overview to Washington Agency Administrators in Wenatchee, WA
- Held introductory FPA workshop for National Interagency Fire Center employees in Boise, ID
- Presented FPA overview to US Fish and Wildlife Service National FLT meeting in Boise, ID
- Presented FPA status update to Forest Service Fire Planner Meeting in Coeur d' Alene, ID
- Great Basin Geographic Area Orientation workshop in Reno, NV
- Southern Area Geographic Area Orientation workshop in Atlanta, GA

May

- Southwest Geographic Area Orientation Workshop in Albuquerque, NM and Phoenix, AZ
- California Geographic Area Orientation Workshop in Sacramento, CA
- Northern Rockies Geographic Area Orientation Workshop in Bozeman, MT
- Presented FPA overview at BLM pre-season fire meeting in Lander, WY
- FPA's Interagency Science Team met with Large Fire Module development team in Boise, ID
- National Fire Program Budget staff and Planners meeting, Boise, ID
- US Fish and Wildlife Service Regional Fire Program Review, Denver, CO
- FPA's Executive Oversight Group meeting in Washington, DC

June

- Prototype Fire Planning Unit workshop, Phoenix, AZ
- GAO visit to review technical design of model
- Eastern Geographic Area Orientation Workshop in Minneapolis, MN
- FPA's Interagency Science Team met in Boise, ID
- Release FPA version 2.0 to prototype and early-adopter Fire Planning Units

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
- ⌚ **Mid- to late September 2008 – December 2008** - All FPU's 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 FPU's investment alternatives the for FY2011 budget request

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 0.93 and 1.00, respectively. These reflect that at this point in time the project is approximately 7% 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 within control of both cost and schedule.

FPA-2 Earned Value Report FY2007 - 2010

AS OF 6/30/2008

CPI = 0.93
SPI = 1.00

I.H.4 Actual Performance and Variance from OMB approved baseline (pending)							
Description	OMB Approved Baseline			Actual			
	Schedule		Planned Cost	Schedule		% Complete	Actual Cost (Sum of Invoices)
	Start Date	End Date		Start Date	End Date		
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		83%	\$ 778,433
FY08 SAIC CPIC and project support	10/1/2007	9/30/2008	\$ 84,000	10/1/2007		21%	\$ 15,642
FY08 IBM Development and Implementation	10/1/2007	9/30/2008	\$ 5,406,880	10/1/2007		79%	\$ 5,406,901
FY08 Teksystems Tech Writer	2/1/2008	9/30/2008	\$ 150,000	2/1/2008		48%	\$ 72,490
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		100%	\$ 615,946
s.t FY 2008			\$ 7,000,000				\$ 6,889,412
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			65%	\$ 22,530,809