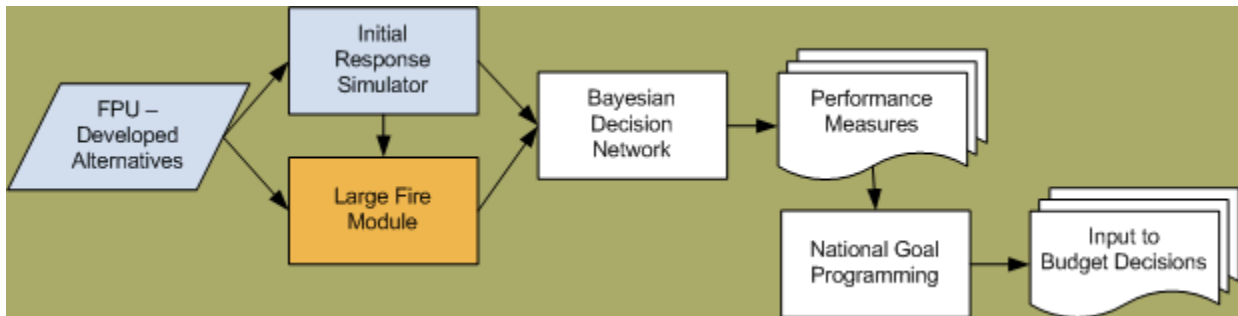




December 2007

Understanding the System: - This is the third in a series of newsletters that walk readers through the components of the FPA system flow.

FPA System Flow Diagram



Current Topics:

- Touring the FPA System
- FPA Whitepapers
- NARR Weather Whitepaper
- New team members
- What's Next?

For more information visit <http://fpa.nifc.gov> or call Venetia Gempler 208-947-3786

Fire Program Analysis

Fire Program Analysis (FPA) system is a common interagency decision support tool for wildland fire planning and budgeting. This tool will enable wildland fire managers in the five federal land management agencies to plan jointly.

The Wildland Fire Leadership Council (WFLC) is a cooperative interagency organization dedicated to achieving consistent

■ **Touring the FPA System** - Last month the newsletter described the process of analyzing the Fire Planning Unit's (FPU's) investment alternatives' effectiveness, using the Initial Response Simulator (IRS). The next step in the FPA process is to run the FPU's investment alternatives through the Large Fire Module. As with the initial response simulator, the large fire module functions as a simulator. The large fire simulation is done in two stages.

The first stage is completed by the FPA Project staff for each FPU prior to the out year fire budget planning season. This step measures the unique relationships between fuels, topography, weather, fuels treatments, and the impact of suppression activities within each FPU. These relationships are captured by running five separate FPA FSPro (Fire Spread Probability) simulations.

The five FPA FSPro simulation runs measure the impacts of:

1. Current condition - Fire simulation with suppression.
2. Suppression - Fire simulation without suppression.
3. Weather - Fire simulation where fuels are constant.
4. Fuels and topography--Fire simulation where weather is constant.
5. Fuel treatments -- Fire simulation where an FPU's typical fuel treatment prescription has been applied to the fuels layer.

For the FPA team to complete the FPA FSPro simulation runs the FPUs must have "clean" FPU boundaries, fire occurrence, Wildland Urban Interface (WUI) data (all of which are enterprise data sources) and fuels treatment prescriptions. Each of the five FPA FSPro runs takes approximately 12 to 18 hours to complete. Consequently, the FPA team plans to begin the FPA FSPro runs as soon as the data are available.

The simulation outputs from these runs are statistically analyzed to develop

implementation of the goals, actions, and policies in the National Fire Plan and the Federal Wildland Fire Management Policy. The Council provides leadership and oversight to ensure policy coordination, accountability, and effective implementation of the National Fire Plan and the Federal Wildland Fire Management Policy.

predictors for the FSPro simulation results for burn probability, burn intensity, and final fire cost. The statistical predictor is a timesaving substitute to running full FPA FSPro simulations for each of the FPU's investment alternatives.

The second stage of the FPA large fire simulation is done by the FPUs during the budget planning season. Because the statistical predictor is quick and efficient, the FPUs can use the predictor equations to analyze numerous investment alternatives and their performance and associated costs. In short, FPU planners are quickly able to evaluate each of their investment alternatives without lengthy computer time.

■ FPA Technical White papers.

As the FPA system is developed and validated through testing, technical white papers will be issued that explain different aspects of the FPA system. White papers may be written on a variety of subjects such as, how and why an FPU should create a Fire Workload Area, or to explain what data are used in each analysis step. Technical white papers form the framework for the FPA system desk guide.

The white papers will be sent directly to "Technical Listserv " subscribers, and posted on the FPA web site at:
<http://www.fpa.nifc.gov/Library/Papers/index.html>

■ [North American Regional Reanalysis \(NARR\) Weather Data White Paper](#)

The white paper explains how FPUs can use the NARR grid weather in areas where the Remote Automatic Weather Station data is insufficient or unavailable.

■ New FPA team members:

- Kathy Hinds - Technical Writer. Kathy will be helping the team with developing documentation, training and system whitepapers.
- Jared Jablonski - Detailed to FPA as a Training Specialist. Jared is developing on-line outreach and training materials.
- Alexis Collins - Public Affairs Specialist, continues to assist developing FPA outreach products and briefing materials.

■ What's Next?

- February 2008 - FPA Internal Release 2.0, featuring advanced IRS functionality, core Large Fire functionality, and expanded User Interface capabilities
- January 2008 - New Executive Oversight Group announced
- January 2008 - FPA, LANDFIRE, Wildland Fire Decision Support System, National Interagency Fuels Group meet
- February 2008 - Management Advisory Team meets in Boise

The FPA System: - will be designed to encourage state, local, and tribal agency participation. - incorporates geospatial data which provide the means to map levels of wildland fire risk on lands across the country. - generates outcomes from fire planning units that provide information to the national budget planning process. - will provide a way for land managers to compare trade-offs between wildland fire program components.

- is a tool to ensure wildland fire management actions help meet performance measures outlined in the 10-Year Comprehensive Strategy.