



June 25, 2009

Joint Fire Science Program Investment Strategy

In recognition of the Joint Fire Science Program's (JFSP) ten-year anniversary in 2008, the JFSP Governing Board conducted an independent program review. The final review report contains 28 recommendations and was delivered in January 2009. In response to these recommendations the Board developed an overarching five-year investment strategy to guide future program actions. The strategy articulates how the program intends to balance investments in short-term and long-term science, applied and fundamental science, science delivery and adoption, and program performance and outcome monitoring.

Investment Topics	Investment Goal
Science	65%
Lines of work	35%
Emerging management needs	15%
Fundamental science	10%
Remeasurement	5%
Synthesis, Training, & Outreach	25%
Program Management & Evaluation	10%

In comparison with recent investments by JFSP, the new strategy reflects an increased emphasis on science delivery, program evaluation, and long-term science, all in response to specific recommendations in the program review.

Lines of work

Lines of work are developed to address complex management problems that require coordinated, multi-year investments to develop useful solutions. A mix of fundamental and applied studies may be employed as appropriate. The investment strategy for a line of work is developed through problem framing with managers and subsequent science planning processes.

JFSP is currently engaged in three lines of work:

- *Software system integration* – JFSP is funding development of an Interagency Fuels Treatment Decision Support System (IFT-DSS). This data and software integration framework is scheduled for completion and potential transition to an operational system in FY 2012.
- *Smoke and emissions* – JFSP recently invested in smoke model validation work and science addressing regional haze and low-level smoke dispersion. Science planning is underway to identify investments needed to integrate results from this work into operational smoke management tools.
- *Fuel treatments* – JFSP has invested heavily in research evaluating fuel treatment effectiveness and effects, and is currently investing in fuel treatment guides for managers, lifecycle fuel treatment regimes, insect and wind effects on fuel profiles, and climate change effects on fuel treatment effectiveness.

Emerging management needs

JFSP will continue to solicit and fund proposals that are responsive to the emerging needs of fire and fuel managers. Results from individual projects are expected to be immediately useful when the project is complete in two to four years. The program is currently investing in these topics:

- Arid land revegetation
- Compatibility of fire and fuel treatments with T&E species
- Fire prevention effectiveness
- Economics of biomass removals
- Managing fire in deep, organic soils
- Climate change effects on fire regimes and ecosystems
- Influences on human behavior in the WUI

Fundamental science

JFSP invests in fundamental science when science breakthroughs are needed to develop better management applications; e.g., fire physics studies are needed to develop a “next-generation” fire behavior model. JFSP also invests in fundamental science to stimulate new thinking; e.g., studies that investigate the potential for climate change to induce new “tipping points” in landscapes that may experience more frequent or severe fire.

Remeasurement

JFSP funds remeasurement of previously established field experiments and remeasurement of plots and surveys in areas burned by a recent fire. The intent is to extend the usefulness of previous investments and capture unique opportunities provided by unplanned events.

Science delivery

JFSP will continue producing the JFSP publication series (Digests, Briefs, Manager’s Views, and Syntheses), actively managing the JFSP website, and organizing roundtables, roadshows, and other forms of client interactions.

In addition, one of the primary recommendations from the program review is that JFSP increase funding for science delivery. Accordingly, JFSP is now developing a national network of regional fire science delivery consortia to significantly increase the pace of science delivery and adoption.

Interagency collaboration

The JFSP Governing Board invests in science and science delivery projects from an interagency perspective, and believes great value is added to all participating agencies from this approach. The Board intends to continue this interagency approach in all aspects of JFSP investments for the foreseeable future.

An Interagency Research, Development & Applications Partnership

