

Wildland Fire Information and Technology
(WFIT)
Investment Management
Overview



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WILDLAND FIRE INFORMATION AND TECHNOLOGY

Contents

| | |
|--|-----------|
| Overview | 2 |
| WFIT Governance Structure | 2 |
| WFIT Roles and Relationships..... | 3 |
| OCIO (Office of the Chief Information Officer)..... | 4 |
| Executive Board (EB) | 4 |
| Program Board (PB)..... | 5 |
| Fire Management Board (FMB)..... | 5 |
| Planning Working Group (PWG)..... | 6 |
| Development Working Group (DWG) | 6 |
| Operations & Maintenance Working Group (O&MWG) | 6 |
| User Advisory (UAG)..... | 7 |
| Emerging Technology Group (ETG) | 7 |
| The WFIT Process | 7 |
| WFIT Life-cycle Process | 7 |
| Idea | 8 |
| Concept..... | 9 |
| Proposal Development | 9 |
| Project Planning..... | 9 |
| Project Development..... | 10 |
| Operations and Management | 11 |
| WFIT Summary | 11 |



WILDLAND FIRE INFORMATION AND TECHNOLOGY

This document is designed to introduce the concepts and management structures associated with the Wildland Fire Information & Technology (WFIT) program. The WFIT management and process structures are designed to accomplish two main goals:

- Effective leadership and management of the WFIT program in support of wildland fire business requirements and priorities.
- Improve the quality and efficiency of wildland fire information and technology services and capabilities.

Refer to the [WFIT website](#) for more detailed information about the program.

Overview

WFIT is a series of cohesive processes developed in response to the ever increasing need for an integrated interdepartmental-interagency method to manage the complex wildland fire investment Information Technology (IT) portfolio. The program meets these needs through the development of a repeatable business process integrating the:

- WFIT portfolio management process represented by a strong governance structure and a series of IT and project management processes.
- Project approval and funding process. Under this governance and management structure, the underlying funding sources for new projects, ongoing investments, and supporting staffs and infrastructures does not change. Each agency continues to provide appropriate funding.
- WFIT budget management process.

Success of the WFIT investment management process requires coordination and integration with the fire agencies, and the Department-level investment management and budget management processes. It maintains the integrity of the reporting relationships within the USDA Forest Service and Department of the Interior wildland fire management programs and personnel.

WFIT Governance Structure

The WFIT governance structure provides a single mechanism for identifying and managing WFIT investments. It supports and implements strategic business program direction on behalf of entities such as the Wildland Fire Leadership Council (WFLC) and the Federal Fire Policy Council (FFPC) to establish business goals and requirements. It also allows for the introduction of new ideas from any other source including (but not limited to) NWCG Committees, project and investment managers, Fire management leadership, or Field users. In this way, the WFIT program makes its stakeholders participants in the process. The idea can be a new way to solve a business problem, an enhancement/revision to an existing product, or a design in response to a new requirement. The Investment Review Boards (IRBs)/ISTAT Executive Committee (IEC) and related governance and management groups have final approval authority over strategic direction and individual investments.

The WFIT governance structure is based on a set of collateral duty “boards” comprised of existing U.S. Forest Service and Department of the Interior staff associated with wildland fire programs, each supported by permanent staff directly associated with the boards and working groups. See [Figure 1](#).



WILDLAND FIRE INFORMATION AND TECHNOLOGY

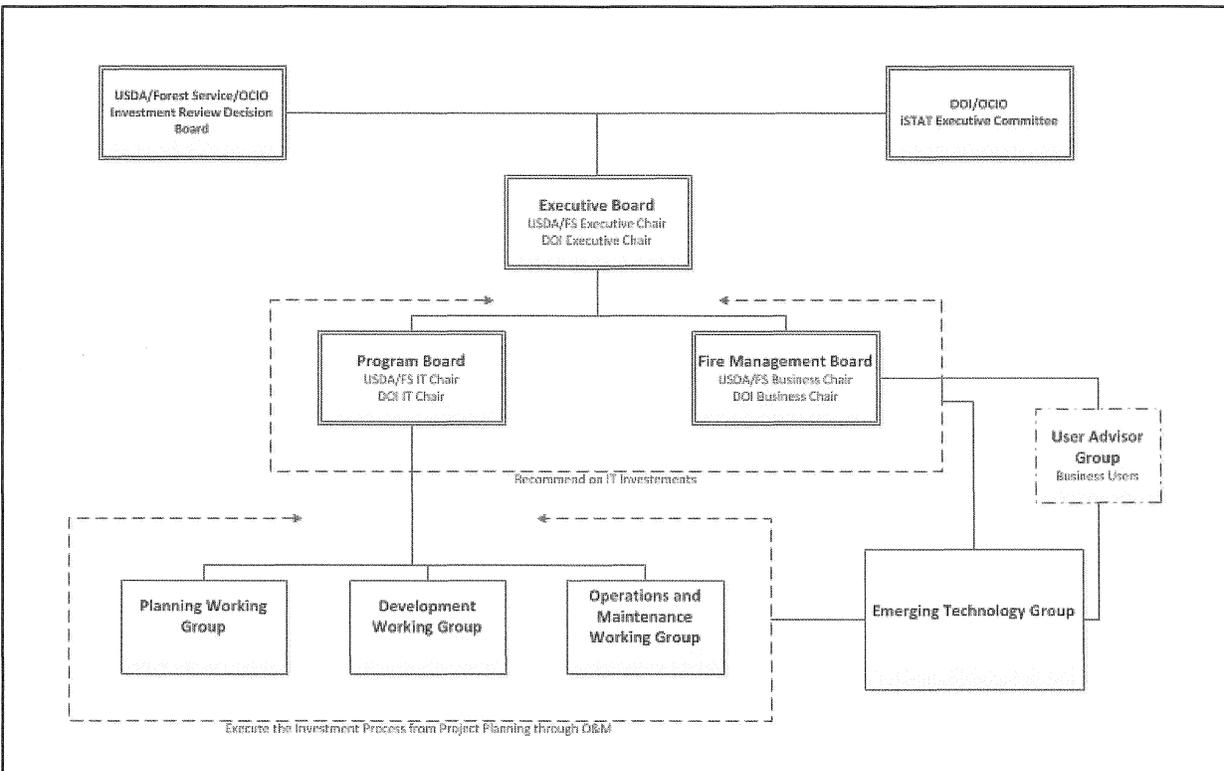


Figure 1 - WFIT Governance and Management Structure

The boards are responsible for coordinating, directing, and overseeing work conducted by existing wildland fire program staff, to ensure that the WFIT portfolio is planned, developed, and implemented in an efficient manner to meet business requirements. The boards also determine necessary funding requirements and allocate costs in a fair manner. The PB, FMB, and the EB work closely with DOI and USDA fire program management organizations to identify funding requirements and build these into agency budget requests and annual work plans.

Each board and working group has specific roles, functions, responsibilities, authority, and accountability. However, the collaboration between the boards/groups allows for the development and implementation of standardized business processes and procedures including workflows, decision making processes, and standard operating procedures. Refer to the [WFIT website](#) to review charter documents for boards and working groups.

WFIT Roles and Relationships

The Executive Board (EB), Program Board (PB), and Fire Management Board (FMB) work together to manage wildland fire business requirements and their technologic implementation. This includes:

- Championing WFIT requirements,
- Priorities and investments with agency governance bodies.
- Monitoring the performance, status, and health of the investment portfolio
- Adjudicating and reconciling differences and competing fire business priorities.

However, the focus of each group is slightly different.

WILDLAND FIRE INFORMATION AND TECHNOLOGY

OCIO (Office of the Chief Information Officer)

The respective DOI and USFS OCIO representatives develop, deliver, and defend the business information technologies that empower every aspect of the fire program mission. They do this by:

- Supporting all strategic priorities and initiatives by ensuring and creating all technology investments are mission-focused and business-driven.
- Ensuring technology resources are effectively and efficiently managed from planning to operations with informed oversight and accountability.
- Creating a proactive and robust security environment through actionable insight by integrating security policy and operations to continuously monitor and protect information assets.

The respective OCIOs:

- Recommends:
 - Standardized processes and procedures to help align the WFIT governance process with established policies and procedures.
 - Strategies for common approaches to acquisitions, security, data, infrastructure, application development, and financial management.
- Establishes:
 - IT strategies, policies, and priorities for the respective Department levels.
- Approves and provides management oversight for:
 - Capital investments
 - Budget

Executive Board (EB)

The EB:

- Recommends:
 - IT strategies, policies and priorities jointly to the Department of Agriculture and Department of the Interior investment review boards.
 - Investment proposals for joint approval by the Department of Agriculture and Department of the Interior investment review boards.
 - Architectures to the Department of Agriculture and Department of the Interior investment review boards necessary to implement WFIT capabilities.
- Establishes:
 - And oversees governance structures, policies, and procedures for WFIT.
 - Establishes and approves resource allocations to support IT investments and programs.
- Approves:

WILDLAND FIRE INFORMATION AND TECHNOLOGY

- Investment proposals within parameters established by the joint decisions of the Department of Agriculture and Department of the Interior investment review boards.
- Architectures within parameters established by the Department of Agriculture and Department of the Interior investment review boards.

Program Board (PB)

The PB:

- Manages the:
 - IT strategies, policies and priorities established by the EB.
 - Governance structures, policies, and procedures for WFIT.
- Recommends:
 - Resource allocations to support IT investments and programs.
 - Investment proposals to the EB.
 - Architectures necessary to implement the WFIT strategy to the EB.

Fire Management Board (FMB)

The FMB:

- Advises the EB on:
 - Information and technology strategies, policies, priorities, and funding.
 - Governance structures, policies, and procedures for wildland fire information and technology.
 - Management of the WFIT program in support of the wildland fire business community requirements and priorities.
 - Specific investment proposals, including business requirements, priority, funding, and technology.
- Provides liaison, coordination, and cooperation between the wildland fire information and technology governance and management structures and other wildland fire governance and management structures. These include, but are not limited to the National Wildfire Coordinating Council (NWCG).
- Manages the Change Control Boards (CCB) for business requirements related to applications.

The four WFIT working groups, chartered by the PB and FMB, with concurrence of the EB, are responsible for the day-to-day management and implementation of the WFIT program.

WILDLAND FIRE INFORMATION AND TECHNOLOGY

Planning Working Group (PWG)

The PWG:

- Manages the WFIT portfolio (status and health).
- Assesses and solicits business requirements and priorities.
- Evaluates investment proposals.
- Prepares investment proposal decision materials and manages the investment approval process.
- Recommends investment proposals to the WFIT PB.
- Develops and maintains data standards and the data management program.
- Develops and updates the five-year investment plan.
- Develops and maintains Target (To Be) architectures.
- Maintains and updates IT strategic planning.

Development Working Group (DWG)

The Development Working Group (DWG):

- Manages all investment development activity.
- Ensures that all investment development activity meets project management requirements.
- Ensures that development activity is consistent with and meets user and management requirements and expectations.

Operations & Maintenance Working Group (O&MWG)

The Operations & Maintenance Working Group (O&MWG):

- Oversees systems and platforms for delivery of services,
- Manages infrastructure,
- Continuously manages IT security,
- Ensures investment compliance with all applicable policies and requirements,
- Identifies infrastructure requirements necessary to support service delivery,
- Continuously coordinates with agency information technology policy and service delivery functions, and
- Coordinates common information technology policies and procedures among agencies to enable efficient and effective interagency wildland fire program activities.

The User Advisory (UAG) and Emerging Technology Group (ETG) provide advice and interface between the information and technology program and users and developers.

WILDLAND FIRE INFORMATION AND TECHNOLOGY

User Advisory (UAG)

The UAG:

- Maintains contact and serves as liaison with user communities and program areas throughout wildland fire.
- Assists with development of strategies, architectures, and investment proposals.
- Assists with evaluation and assessment of efficacy of the wildland fire information and technology program and individual projects and investments.
- May be formally chartered (NWCG sub-committee, mobile technologies, and so forth), or an ad-hoc group of business users or stakeholders that identify requirements not being met.

Emerging Technology Group (ETG)

The ETG:

- Chartered under the FMB for the purpose of exploring solutions to business requirements.
- Maintains contact and serves as liaison with internal and external science and technology communities and program areas with the business community.
- Assists with development of strategies, architectures, and investment proposals.
- Assists with evaluation and assessment of efficacy of the wildland fire information and technology program and individual projects and investments.

The WFIT Process

An effective leadership structure is supported by processes designed to:

- Reduce the overall project cost.
- Decrease the risk of project failure to meet cost, schedule, or scope.
- Optimize the project management process through standardization; conduct reviews early and frequently to enable prompt corrections to identified problems or improvement opportunities.

WFIT Life-cycle Process

The WFIT program is based on a generic life-cycle management work flow process. [Figure 2](#) shows how this process starts with the introduction of a new and/or upgrade to an existing legacy system and follows a specific WFIT review and approval workflow process.



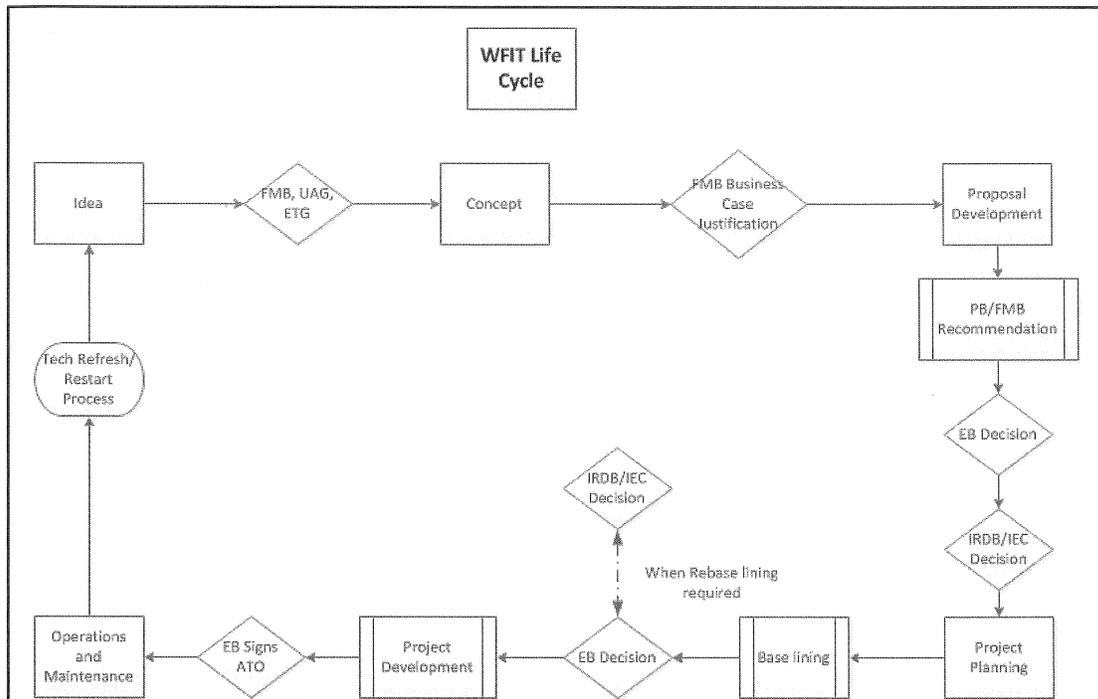


Figure 2 - WFIT Life Cycle Management Work Flow Process

Detailed specifics regarding this workflow process can be found in the WFIT Investment Management SOP located at the [WFIT website](#).

Idea

A new idea can be introduced to the WFIT program from any source including (but not limited to) NWCG Committees, project and investment managers, Fire management leadership, or Field users. In this way, the WFIT program makes its stakeholders participants in the process. The idea can be a new way to solve a business problem, an enhancement/revision to an existing product, or a design in response to a new requirement. Examples include, but are not limited to:

- A user provides a request/suggestion to a help desk.
- New OMB mandate for a security enhancement.
- A vendor updates its current version of existing software.
- A study of help desk support logs reveals an opportunity to enhance a user interface.
- A researcher considers developing a better model.
- Lessons learned from an incident.

In order for an idea to be considered by the WFIT program, the Idea Originator (User) must provide a written document outlining the idea description, the intended audience, and the business benefit to the ETG. During this phase, the User, the UAG, the ETG, and the FMB work together to evaluate how the idea fits business needs and current policy. After reviewing all information and conclusions, the FMB determines whether or not to further investigate the idea.

Concept

When the FMB accepts an idea it becomes a concept and moves into the Concept phase of the life cycle. The FMB has the responsibility to keep the PB and the PWG informed about concept development.

During the initial Concept phase, the User, ETG, and FMB research and develop early design and planning documentation. Activities include collaboration with the scientific, technical, and field-level community in order to ensure the idea is sound and meets requirements in the fire and business communities. This collaboration produces a variety of specifications, graphics, planning, and testing documents used in the prototyping.

The second phase of the Concept involves prototyping where the UAG and ETG create a detailed plan to develop and test the concept prototype. These groups and the User build a prototype of the concept that goes through rigorous scientific testing and business evaluation. After testing is complete, the ETG and UAG determine if the concept meets all technical and business criteria. When all criteria are met, the ETG and UAG demonstrate the concept and provide review results and evaluations to the FMB and PB for their go/no go decision.

When the FMB and PB approve the concept prototype, they develop a business case justification to present to the EB. The business justification includes business objective, consistency with strategy, funding, and project management requirements that is used in proposal development.

Proposal Development

The Proposal Development process initiates the formal WFIT Investment process. During the Proposal Development process, the PWG builds the proposal package with support from the FMB, PB, ETG, User, DWG, and O&MWG. The PWG provides a single point of entry for formal proposals and does **NOT** approve or disapprove any investment. As a single point-of-entry this group helps prevent duplicate proposals, proposals outside the WFIT environment, and potential conflicts within the WFIT environment.

The PWG can assign other groups to help build the proposal package and coordinates proposal review based on established criteria (business need, consistency with IT strategy, implications for non-fire programs, etc.) The final proposal package includes a two page document (standard template), concept evaluations/recommendations from the PB (technical) and the FMB (business) and any other relevant documentation. After the Proposal package is compiled, reviewed, and approved by the PB and FMB it is submitted to the EB for their approval or rejection.

With EB approval of the Proposal package, it is then forwarded to the IRDB/IEC (respectively) representative as a recommendation for inclusion capital investment portfolio. Once approved by the respective IRDB/IEC, the concept then becomes a project. The PWG must submit cost estimates for the life of the project. The EB validates the previously approved proposal package. When the timeline or cost estimates vary greatly, the EB may approve or disapprove the new proposal. When disapproved, the EB notifies respective IRDB/IEC to remove the project from the capital investment portfolio. When approved, the EB recommends the proposal to the IRDB/IEC for re-base lining. Budgets and funds are managed by appropriate authority.

Project Planning

The Project Planning phase initiates business processes and documentation designed to support a project. The PB assigns an Integrated Project Team (IPT) to begin creating a charter document

WILDLAND FIRE INFORMATION AND TECHNOLOGY

detailing project scope, schedule, and cost. In addition the PWG works with other groups to generate early versions of these project planning documents:

- Business Case
- Requirements Analysis. This addresses: who, what, when, where, why, and how.
- Project Plan/Schedule
- System Security Plan
- Project Charter
- Investment Charter
- Interconnection Agreement(s)
- Funding Plan
- Acquisition Plan
- Risk Plan
- Communications plan
- Specified project documentation (e.g. CPIC documentation, analysis documentation, design documentation, system documentation, implementation plan (including training), etc.
- Milestone reports
- Product roll out, testing, and evaluation for approval and acceptance.
- O&M Plans

Once these documents are completed, they are submitted to the EB for approval or rejection. When a project is approved by the EB, the Managing Partner and IRDB/IEC review the planning documents and accepts or rejects the proposal. When all organizations agree to accept the proposal, another budget baseline is performed by the Managing Partner. If all organizations agree to the new baseline figures, necessary funding is allocated and project development begins.

Project Development

The DWG leads the development cycle and oversees project management activities such as plan implementation, acquisition, and budget, scope, and milestone management. As needed, the Project Business Manager involves other working groups to assist and advise a project to ensure high product quality. Throughout this phase, the Project Business Manager provides regular updates to the FMB, PB, EB, and appropriate IEC or IRDB representative.

As the development process draws to a close, the DWG proposes that the PB, EB, and other working groups accept project deliverables as complete. The primary threshold for project completeness is meeting the accomplishments described in the Project Scope and User Acceptance testing approval. During this period, a project begins transitioning activities into the Operations and Maintenance phase. The final step before moving to O&M requires the Systems Owner (i.e., Managing Partner, co-chair of the EB) to sign the Authority to Operate (ATO).



WILDLAND FIRE INFORMATION AND TECHNOLOGY

Operations and Management

The Operations and Management (O&M) process is comprised of managing the technical and physical aspects of an application, hosting, and technical support functions. It is not a management of the requirements, that role is a function of the Change Control Board managed under the FMB.

During this phase, the O&MWG is the lead for steady state investment management and any technical refresh/restart activities. The FMB also identifies and validates new business requirements through the CCB. Each group coordinates with other working groups to manage the development, steady state, and life cycle of every investment. There is regular oversight and monitoring by the PB and EB who then inform Managing Partner Budget Representatives and Partner Agency Representatives.

The O&MWG considers all change proposal requests using the proposal review and analysis process described in earlier sections of this document.

While the O&MWG does not require a charter, there are several supporting documents required for each project. These include:

- Transition plan to O&M
- A Service Level Agreement (SLA)
- The PB Charter
- Annual Operating Plan (AOP)
- System Certification and Accreditation
- System Interconnection Agreement
- Exhibit 300
- Federal Register Notice
- Other system documents designed for the specific project.

The FMB and the PB are responsible for identifying when an existing system no longer meets the business needs of the fire community and is nearing the end of its life cycle. The managing partner's IT staff may be in the best position to know about the obsolescence of the underlying technology that supports the system and learn about new technology that could be adopted. The budget representatives track system costs over time and may be the first to notice when costs start to escalate. Collaboration with the managing partner and PB is vital in recognizing when it is time to consider starting a new investment proposal package to replace an aging system before it is obsolete.

WFIT Summary

The WFIT governance structure provides a path for interagency leadership, direction, implementation, and oversight of the portfolio of information and technology investments (services and capabilities) that support the wildland fire business processes and requirements. The governance structure does not replace existing wildland fire business governance structures. Instead, it provides a mechanism for ensuring that business requirements identified by those structures are supported by efficient and cost effective information and technology capabilities (including applications, data, and infrastructure).

