Mississippi Wildfire and Incident Tracking System

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AGENDA

• Introduction
• Mississippi Forestry Commission’s Requirements
• Technology Solution
• Demo
• Next Steps
MISSION: provide active leadership in forest protection, forest management, forest inventory and effective forest information distribution, necessary for Mississippi's sustainable forest-based economy.
ORGANIZATIONAL STRUCTURE

- Board of Commissioners (Appointed by Governor)
- State Forester
  - Departments
    - Business Support
    - Forest Information
    - Forest Management
    - Forest Protection
    - Forest Health
  - Seven District Foresters
    - Assistant District Foresters
    - Service Foresters
      - Forestry Technicians
      - Forest Rangers
Between 1992 and 2008 Mississippi experienced an increase in forested acreage of 1.4 million acres with approximately 1 million acres of that increase being in Hardwood forests.
FOREST INFORMATION

- Supports all Mississippi Forestry Commission program areas by providing information, program promotional activities, and program publicity.
- Utilizes mass media outlets (e.g., radio, television, and newspaper) to release forestry and agency information to the public at large.
- Departments:
  - Informational Material Development
  - Public/Media Relations
  - Outreach / Minority Outreach
  - Firewise
FOREST PROTECTION

• Mandated to protect the state’s forestland from wildfire.
• Department includes:
  - Fire Services
    - Wildfire Suppression
    - Burn Bans
    - Burn Permits
  - Aviation
  - Communications
  - Forest Protection Grant Programs
  - Fire Law Enforcement
  - Firewise / Fire Education
FOREST HEALTH

• Provides forest pest detection, evaluation and control recommendations for all private and state-owned timberlands as well as urban areas.
• Conducts at least one statewide aerial survey each year and additional surveys when needed. Insect and disease spots are ground checked to determine the exact cause and extent of damage.

Southern Pine Beetle  Cogongrass  Redbay Ambrosia Beetle
The basic purpose of the Wildfire Incident and Permit Tracking (WIPT) application is to record data for individual burns and fires into their respective databases and to display permitted fires, wildfires and MFC resources in real-time as data is entered via:

- Permit Manager
- Incident Manager
MFC USER REQUIREMENTS

- Record and map all permits as issued
- Convey live info to others
- Record wildfires and dispatch information
- Utilize customer number system
- Utilize drop-down menus
- Map weather parameters
- Location for acreage burns
- Customer history
- State inventory of fire managed land
- Records can be edited and deleted at the dispatch center level
- Real-time data entry (and display)
- Link database to fire report system
- User interface with smoke sensitive areas
BENEFITS

• Inter-Agency Sharing of Information
• MFC Workflow Enhancement
• Improved Data
• Improved Customer Database
GEOGRAPHIC APPROACH

Many Data Sources

Integrate and Analyze

Turn into Actionable Intelligence

Creating The Common Picture

Coordinated Action

Geographic Information System
ESRI TECHNOLOGY SOLUTION

- ArcGIS Server 10.0, SP4
- ArcSDE 10.0. SP4
- ArcGIS Flex Viewer (2.5)
- Windows Server 2008 R2
- SQL Server 2008
NEXT STEPS

- Development
- Testing
- Deployment