



ARIZONA STATE FORESTRY DIVISION

5 YEAR STRATEGIC PLAN FY 2016-2020

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EXECUTIVE SUMMARY

Under ARS 37-623, the Forestry Division is authorized to prevent and suppress any wildland fires on state and private lands located outside incorporated municipalities. Through cooperative fire agreements, AZSF also provides wildfire assistance to municipalities and federal agencies. On jurisdiction lands, AZSF responds to an average of approximately 400 wildfires per year that burn 25,000 acres (39 square mile area).

The Forestry Division's other primary role is the delivery of cooperative forestry programs. By statute, AZSF is the primary state agency to receive and manage federal grants relating to forestry. Leveraging these federal dollars allows the Division to retain fire specialists and field foresters to increase its firefighting capabilities and also provide cooperative forest assistance programs to state and local agencies, tribal entities, landowners, communities, forest industry, and non-profit groups. These cooperative programs include community wildfire hazardous fuel reduction, wildfire suppression response capacity building, forest insect and disease prevention, forest industry assistance, forest invasive plant management, forest landowner stewardship, urban and community forestry, tribal outreach and forest easements.

MISSION

The mission of the Arizona State Forestry Division is to manage and reduce wildfire risk to Arizona's people, communities, and wildland areas and provide forest resource stewardship through strategic implementation of forest health policies and cooperative forestry assistance programs.

VISION

Communities safe from wildland fire, healthy forests and rangelands, and strong economic development through sustainable natural resource management practices.

OUR 4 KEY STRATEGIC ISSUES:

- Enhance wildland firefighting response and management capacity and efficiency.
- Strengthen statewide wildfire prevention and mitigation programs.
- Foster and develop the economic, social, and ecological benefits of forests and trees.
- Increase organizational excellence and efficiency.

VALUES

- We value the safety of the public and our employees.
- We value the diversity and resourcefulness of our employees.
- We value employee excellence through training and mentoring.
- We value a can-do attitude and achievement.
- We value innovation.
- We value regular communication and transparency.
- We value building and maintaining strong partnerships with our cooperators and the public.
- We value focused perseverance in the control of wildfires and other emergencies.
- We value wise stewardship of Arizona's natural resources.
- We value humility and respectfulness.

STRATEGIC ISSUE #1: ENHANCE WILDLAND FIREFIGHTING RESPONSE AND MANAGEMENT CAPACITY AND EFFICIENCY

Issue Description:

Across all ownerships, the average of Arizona's annual fire acreage has tripled over the last twenty years. As fire size and severity grows, suppression costs also escalate. Mega fires that burn thousands of acres in one afternoon are becoming more commonplace. Large fires are the most costly in terms of structures destroyed, natural resource loss, and post fire losses. Recent studies show the true costs of Arizona wildfires range from 6 to 14 times the suppression cost.

Since frequent fire is a natural ecological process in many of Arizona ecosystems, we know that wildfires cannot be eliminated. AZSF responds to approximately 1500 reported wildfires annually on state and private lands, of which 400 are confirmed wildfires that burn approximately 25,000 acres. In addition AZSF often responds to federally managed fires in the State, either to provide state and local firefighting resources through a federal-state cooperative agreement or to assess threat potential to communities, local infrastructure, and state lands.

Goal 1: Enhance wildland firefighting response efficiencies.

Implementation Strategies:

Continue to utilize, improve, and revise as necessary the State's Comprehensive Wildland Mobilization Plan

Initiate study to review potential of consolidating the Arizona State Forestry Dispatch Center with a federal dispatch center.

Complete new Master Cooperative Wildland Fire Management and Stafford Act Response Agreement with federal land management agencies.

Goal 2: Increase firefighting suppression capacities.

Implementation Strategies:

Leverage AZSF preparedness funds with federal, state and local agencies to increase number or availability of firefighting resources, including aircraft.

Increase number of wildland fire trucks stationed at rural fire departments through Federal Excess Property Firefighting Program.

Develop agreement with the US Forest Service (USFS) to allow the Division's participation in the Federal Firefighter Property Program to acquire additional wildland firefighting equipment for State and local cooperators.

Maintain full staffing of the State's 20 person inmate fire hand crews.

Develop Arizona rancher wildfire equipment, training, and prevention program.

Convene Federal, State, and local Wildfire Managers to review all of Arizona's Incident Management Teams for staffing and response sufficiency and evaluate need to change mix of Type 2 and Type 3 teams.

Increase partnership with the Arizona Wildfire Academy and other training venues to increase wildland fire training delivery to State and local firefighters, emphasizing annual refresher and basic level training to develop fire overhead capacity.

Goal 3: Increase fire business administration efficiencies.

Implementation Strategies:

Seek funding and develop web based invoicing systems and training modules for local government and contractor fire suppression billing to AZSF.

Revise Arizona State supplement to National Interagency Incident Business Management Handbook in collaboration with fire service stakeholders

Revise Cooperative Fire Rate Agreement and Emergency Equipment Agreements as needed with new provisional language and reimbursement rate standardization.

Seek grant funding to contract for a fire resource equipment and labor rate economic study.

Continue to provide additional trained and experienced agency representatives on large wildfire incidents.

Provide training to agency and cooperator personnel in fire cost share apportionment systems.

Performance Measures for Strategic Issue #1:

Comprehensive Statewide Deployment Plan with annual revisions completed.

Study initiated for consolidation of AZSF dispatch responsibilities into other interagency dispatch centers.

Master Cooperative Wildland Fire Management and Stafford Act Response Agreement completed.

Development and annual continuance of a statewide task force formed through the Arizona Interagency Coordinating Group to leverage and prioritize use of State preparedness funds and Federal severity funds.

Percent of fires controlled at 100 acres or less.

Percentage annual increase in NWCG qualified firefighting positions tracked by AZSF.

Number of fire departments assisted with equipment suitable for wildland firefighting.

Number of ranchers assisted with wildfire equipment

Percentage of local agency and private contractor fire invoices processed within 30 days.

STRATEGIC ISSUE #2: STRENGTHEN STATEWIDE WILDFIRE PREVENTION, COMMUNITY PREPAREDNESS, AND MITIGATION PROGRAMS

Issue Description:

Every resident of Arizona is affected by wildfire directly or indirectly. Data from the 2012 West Wide Wildfire Risk Assessment shows that over 1,000,000 Arizona citizens live in urban interface areas that are at risk to wildfire. The risk and cost of wildland fire across Arizona is increasing, particularly large and destructive fires that threaten life, communities, and natural resources. In 2014, the Slide Fire in Oak Creek Canyon threatened 3000 residents and post fire runoff will negatively affect Slide Rock State Park and the Arizona Game and Fish trout hatchery. The 2013 Yarnell Hill Fire resulted in the loss of 19 brave wildland firefighters from the Prescott Fire Department and over 100 residences destroyed in the Yarnell community. Just two weeks prior, the Doce Fire northwest of Prescott required the evacuation of over 300 residents. In 2011 alone, the suppression cost of large fires across the State exceeded 200 million dollars and burned over 1 million acres, with the Wallow Fire burnig over 500,000 acres.

Protecting the safety of firefighters, citizens, and communities, and values such as infrastructure, watersheds, airsheds, timber, rangeland, and wildlife habitat is of critical concern. Many of our forests, wildlands, and community interface areas need mechanical vegetation treatment followed up by regular burning to maintain health and reduce future fire intensities. We know that fire is a key process in many of our forest ecosystems, and using fire as a management tool where appropriate is an ongoing challenge, particularly with air quality concerns. In addition the utilization of managed grazing, including cattle and goats, may be an important tool in protecting our wildlands, as well as our rural economies.

Increasing our fire prevention, community preparedness, and mitigation programs in both quantity and efficiencies are needed to protect our citizens and their property. Benefits to be gained are communities that are defensible and adapted to wildfire, and a public that is educated and aware of their responsibilities in being outdoors or maintaining their properties in a Firewise condition. As much of the treatment is costly, the need to prioritize treatments through the use of current wildfire risk assessments and Community Wildfire Protection Plans is paramount. AZSF needs to continually educate citizens and community leadership to increase awareness of wildland fire issues and preparedness. To better manage and understand Arizona's wildfire issue, a true statewide data picture of wildland fires and their individual causes is needed on state and private lands.

Goal 1: Assist the public and communities in planning for and reducing fire risks.

Implementation Strategies:

Develop Statewide Fire Risk Portal to identify priority fuels treatment projects on all lands.

In collaboration with the State Land Commissioner, develop a vegetation removal program for the purpose of fire suppression and forest management.

Assist communities in seeking funding and developing or revising Community Wildfire Protection Plans.

Provide technical assistance to communities and subdivisions in implementing Firewise USA programs.

Seek and leverage federal grants with State general fund hazardous fuel appropriations to perform fuel mitigation projects in high risk areas.

Continue to promote State Inmate Fire Crew program as a tool to increase hazard fuel treatment in and around communities at risk.

Increase wildland urban interface hazardous fuel project efficiencies through development of minimum treatment standards for primary Arizona vegetation types.

Increase public and government official's awareness of wildland fire risks and available mitigation tools.

Continue to improve interagency coordination, standards, and public outreach for fire restrictions.

Goal 2: Increase statistical data and cause determination on wildland fires.

Implementation Strategies:

Develop and implement web based wildland fire report data system in conjunction with the national IRWIN project for all state and local agencies.

Develop fire cause determination accuracies by increasing investigation training opportunities for cooperating agencies and seeking funding for full time investigator.

Increase fire suppression reimbursements through increased investigations.

Utilize fire cause data to prioritize fire prevention efforts.

Goal 3: Design and implement effective smoke management protocols.

Implementation Strategies:

Partner with the Arizona Interagency Coordinating Group and Arizona Department of Environmental Quality to develop online smoke database to streamline the permit request, approval, and management processes while integrating on-line mapping with smoke monitoring and modeling functions.

Participate and provide leadership to the Arizona Prescribed Fire Council

Performance Measures for Strategic Issue #2:

Acres of state and private owned land treated to protect communities from wildland danger and improve natural resource health.

Acres treated by State inmate fire crews.

Number of Communities receiving Firewise USA Recognition.

Number of State qualified Firewise Assessors or Advisors.

Minimum interface treatment standards by fuel type developed.

Number of communities and local agencies educated in wildland risk assessment mitigation tools.

Completion and implementation of web based fire report system.

Number of available State and local wildland investigators.

Number of wildfires investigated.

Smoke database completed.

Fire risk portal completed.

STRATEGIC ISSUE #3: FOSTER AND DEVELOP THE ECONOMIC, SOCIAL, AND ECOLOGICAL BENEFITS OF FORESTS AND TREES

Issue Description:

Due to a variety of factors, including past fire suppression policies, lack of markets for wood products, and recent limited harvesting activities an unnatural buildup of vegetation has occurred through many forest and other vegetation types within the State of Arizona. Harvesting in the ponderosa and mixed conifer forests declined significantly in early 1990's as wood availability from federal lands decreased and the large mills shut down. All these factors have resulted in a very unhealthy and unnatural accumulation of trees that present a significant threat from wildfires, insects, and disease. The overstocked condition of the forests means that when fires do ignite, they are resistant to control, grow in intensity and size much quicker than was historically the case, and they are much more catastrophic in effect. In addition, the unnatural buildup of our forests results in less surface flow of water, less water in springs and streams, and degraded water quality condition particularly after a fire when the ash and sediment flow. The overcrowded conditions also weaken the overall health of the forest making them considerably more vulnerable to attack by disease and insects.

In May 2012, the US Forest Service awarded the Four Forest Restoration Initiative contract for 30,000 acres per year, for ten years, of harvest and utilization. The project is designed to foster hazardous fuel reduction, forest restoration, and utilization across the landscape in northern Arizona. This startup of 4FRI has had its challenges as another company took over the contract through a novation agreement. When the project eventually gets underway in earnest, there will be an opportunity for private and state lands to dovetail with these efforts to get more material removed and utilized that will reduce the number of trees per acre; increase resistance to fires, disease, and insect attack; and allow economic development opportunities for our rural forested communities.

A healthy forest industry in Arizona is critical to the restoration of our forests and rural economies. While many of the large dimensional lumber mills that were prevalent in the early 1990's are no longer in existence, Arizona does have many small to medium mills and other wood utilization industries that do have capabilities to take wood from restoration treatments. As landscape scale projects such as 4FRI get underway, the Division needs to continue to support existing industry growth and encourage new industry establishment where appropriate.

Federal forestry grants programs offered to the Forestry Division primarily from the USFS provide primary funding streams to implement forest management treatments and technical assistance to state and private lands and communities. The foreseeable trend for these funds is to diminish as the federal government addresses the US deficit. To maintain the current delivery level the Division will need to offset federal funding losses through more efficient program delivery methods, higher quality grant submittals, and alternative funding sources.

Goal 1: Progress toward landscape scale outcomes and restoration of unhealthy forest ecosystems.

Implementation Strategies:

Utilize the 2010 State Forest Action Plan to delineate priority forest landscapes and critical forest issues.

Convene stakeholders to seek input for needed revisions of the Forest Action Plan to be updated in 2015.

Maintain leadership role and utilize expertise of Forest Health Council to advance forest policies that will foster community wildfire protection, landscape forest management, and forest based economic recovery.

Enlist state agency support to the USFS in the implementation of the 4FRI contract and similar.

Maintain active AZSF participation in forest and fire related collaborative organizations, such as the Four Forest Restoration Initiative Stakeholders, Prescott Area Wildland Urban Interface Commission, Greater Flagstaff Forest Partnership, and the Natural Resources Working Group, to promote and coordinate multi-jurisdictional landscape efforts.

Goal 2: Provide stewardship, forest health, and other cooperative forest management assistance to state and private lands.

Implementation Strategies:

Increase awareness of AZSF assistance in providing forest stewardship, forest health, and forest legacy programs for private inholdings through expanded outreach efforts.

Increase number of stewardship plans and landowner technical assistance that provide direction on making forested lands more resilient and provide economic opportunities.

Provide current public information related to cooperative forestry issues, including emerging forest health threats and treatment options.

Provide forest management services to State Trust Lands, including forest management planning, silvicultural treatments, forest health treatments, and fire hazard fuel treatments.

Leverage and seek federal grant and other funds to implement cooperative forest programs and projects on state, private, and tribal lands.

Promote the Invasive Plant and Western Bark Beetle Grant Program to forested land owners, communities, and organizations.

Goal 3: Provide expertise in utilization and marketing to local communities, small businesses, tribes, and others to increase the utilization of hazardous fuel and forest restoration residue (logs, chips and biomass) from our forests.

Implementation Strategies:

Continue maintaining a forest marketing and utilization specialist to offer technical expertise in harvest systems, mill configurations, market strategies, product transportation, Arizona Healthy Forest Incentive Utilization, federal government coordination, and equipment development.

Partner with the State of New Mexico and the USFS to seek and leverage funding to maintain Arizona's marketing and utilization specialist.

Provide technical expertise in renewable energy projects that propose to make energy from wood waste, forest residues, and small logs.

Provide marketing and utilization technical assistance to tribal forestry entities.

Maintain current forest industry directories and thinning contractor directories.

Goal 4: Increase the management of our urban forests and promote their contributions to clean air, water quality, and energy conservation through shading, diversity of wildlife habitat, maintenance of property values, and an improved quality of life for Arizona citizens.

Implementation Strategies:

Increase outreach to increase awareness of AZSF urban and community programs and available resources.

Develop baseline knowledge of Arizona's urban forests to identify where data and resource gaps exist, develop long-range goals for urban forests, compile statewide canopy cover information, and to provide regular and updated urban forest management information for multiple needs.

Develop urban forestry specific training sessions to address inventory needs and build "toolkits" for Arizona communities and encourage urban tree sustainability.

Promote the Urban and Community Forestry Challenge Grant Program to communities and organizations.

Performance Measures for Strategic Issue #3:

Amend 2010 Forest Resource Assessment and Strategy to be completed in 2015.

Active participation in Forest Health Council and collaborative stakeholder groups.

Number of Forest Management Plans (Stewardship or related) completed or revised.

Number of forest landowners assisted.

Number of communities recognized as Tree City USA by National Arbor Day Foundation.

Number of communities with completed needs assessments to inventory their urban forestry assets.

Number of forest industry technical assists.

Number of urban forestry training sessions.

Development of accessible tool that compiles statewide urban forest inventory information, including summary reports of the combined economic and environmental value of Arizona's urban forests.

Completion of cooperative forest information reference library.

Number of cooperative forestry technical bulletins, threat advisories, or brochures produced.

STRATEGIC ISSUE #4: INCREASE ORGANIZATIONAL EXCELLENCE AND EFFICIENCY

Issue Description:

AZSF employs approximately 56 full time and 80 call-when-needed seasonal staff. The workforce is comprised predominantly of natural resource professionals and technicians. Expertise within these classifications include firefighting, incident command, fire behavior, dispatch operations, aircraft operations, Firewise, forest stewardship, forest utilization, forest health, and urban community forestry. Additional AZSF staff expertise in other personnel classifications include IT, radio communications, fiscal administration, procurement, human resources, and fire equipment renovation and repair.

Approximately 30% of the full time staff has been with the agency under three years. These staff members are still learning their complex jobs, and continual mentoring and training are paramount to the agency's success. Several more key positions are eligible to retire in the next five years, and successional planning will play a key role in maintaining work continuity.

The federal government land management agencies are the primary competitors that recruit AZSF employees. Similar positions within the federal service typically pay 20 to 35% higher wages. As the federal land management agencies are also experiencing high numbers of retirements, many openings are available, particularly in wildfire related positions. Our focus will be the evaluation and use of the best available tools to retain top performers and recruit highly experienced candidates. The new personnel reform system provides the agency new tools to reward top performing employees and promote goal achievement. Other examples include using new technologies that can provide increased efficiencies and also be used as a retention/recruitment tool for tech savvy employees and job seekers. Collaboration and cooperative efforts with stakeholders is another example of practices that can leverage work outcomes while increasing job satisfaction and career development opportunities.

Goal 1: Improved employee recruitment quality and retention.

Implementation Strategies:

Continue to utilize new personnel reform tools in conjunction with existing programs to reward top performance, address low performance, incentivize agency goals, and attract quality job candidates.

Goal 2: Increase organizational and service efficiencies.

Implementation Strategies:

Complete training development plans for all employees to include successional planning attributes such as cross training, special assignments, and team leadership roles.

Develop in-house mentoring and training programs.

Goal 3: Evaluate and implement new technologies to increase operational efficiencies.

Implementation Strategies:

Maintain in-house technology committee to identify and evaluate new technologies to further the agency's mission and increase efficiencies.

Increase public, cooperator, and internal communication through improved website design and through use of social media.

Goal 4: Instill a cooperative and collaborative organizational culture.

Implementation Strategies:

Promote the necessity for collaboration and leveraging to all AZSF employees through leaders intent, training, and mentoring.

Develop an organizational paradigm that all AZSF programs and plans shall consider cooperation and leveraging opportunities with stakeholders.

Performance Measures for Strategic Item #4:

Agency turnover rate.

Program customer satisfaction ratings.

Creation of technology committee.

Number of mentors identified and employees that have been assigned mentors.

Standard operating guidelines implemented regarding stakeholder leveraging and cooperation.

All dollar figures in thousands

Resource Assumptions					
	FY 2015 Appropriation	FY 2016 Budget Request	FY2017 Estimate	FY2018 Estimate	FY2019 Estimate
Full - Time equivalent (FTE) Positions	56	57	57	57	57
General Fund	\$6,103.8	\$7,100.1	\$6,574.2	\$6,574.2	\$6,574.2
Other Appropriated Funds	\$3,000.0	\$3,000.0	\$3,000.0	\$3,000.0	\$3,000.0
Non- Appropriated Funds	\$226.5	\$225.0	\$225.0	\$225.0	\$225.0
Federal Funds	\$2,324.8	\$2,209.0	\$2,209.0	\$2,209.0	\$2,209.0
Total Agency Funds	\$11,655.1	\$12,534.1	\$12,008.2	\$12,008.2	\$12,008.2