



# Investment in State's Cooperative Programs

Program	FY 2024 Final	
Community Forests and Open Space	\$0	
Cooperative Lands - Forest Health Management	\$334,252	
Forest Legacy	\$0	
Forest Stewardship	\$128,100	
Landscape Scale Restoration	\$0	
State Fire Assistance	\$1,527,958	
rban and Community Forestry		
Volunteer Fire Assistance	\$798,195	
Total	\$3,607,559	

NOTE: This funding is for all entities within the state, not just the State Forester's office.

The cooperative programs are administered and implemented through a partnership between the State of Arizona, the USDA Forest Service and many other private, non-profit, and government entities. Program goals promote the health and productivity of Arizona forest lands and rural economies. Emphases includes hazardous fuel mitigation, community and critical infrastructure protection, forest products, wildlife, water resources, biomass utilization, rural economies, conservation practices and improving quality of life in the state's cities and towns. These programs increase cost effectiveness by working through partnerships, increase land value through cost-sharing sustained productivity of forests, are voluntary, and use non-regulatory approaches.

## **Program Goals**

• Work collaboratively to implement Arizona's Forest Action Plan - to improve forest and watershed restoration, forest and hazardous fuel management, and community sustainability through integrated program planning and implementation and supporting shared stewardship principles.

## **Key Issues**

- Encouraging fire adapted communities, promoting wildland ecosystems where appropriate fire regimes maintain health and resiliency of natural vegetation, and improving wildland fire management capacity across the state.
- Pursuing economic development potential of sustainable forest products and bioenergy, protecting
  areas of economic potential, and promoting the recognition of economic impacts of protected healthy
  natural systems. Developing uses and markets for small diameter trees while increasing utilization
  capacity for existing businesses increasing the amount of hazardous fuels that can be treated and
  removed from the urban interface.
- Improving ecosystem health by promoting resilient and diverse forest ecosystem structures, processes, and functions and making progress toward landscape scale outcomes, restoration of unhealthy ecosystems, and enhanced sustainability.
- Connecting people with trees and forests to allow maximum benefits, while minimizing negative human impacts. Addressing watershed health, forest health and fire safety issues in populated wildland/urban interface areas.
- Improving communications across a culturally diverse state with emphasis on improved collaboration with Native American Tribes. Sharing resources and information about varying perspectives and beliefs related to forests, trees, and other natural resources.
- Maintaining or improving water quality and quantity from forested watersheds and improving health and resiliency of forested aquatic systems.
- Improving air quality through specific management activities and increased public understanding of the importance and effects of fire on Arizona's air quality.

 Increasing resilience of Arizona ecosystems to climate change - preparing for and mitigating potential impacts- and reducing the potential rate of future climate change through maximized carbon sequestration in Arizona forests and trees.

## **Forest Facts and Accomplishments**

Selected Facts	Value	FY 2024 Accomplishments	Value
Population	7,151,502	Landowners Receiving Educational or	307
Acres of Forest Land	19,092,940	Technical Assistance	
Acres of Nonindustrial Private Forest Land	7,216,408	Acres Covered by New or Revised Forest Stewardship Plans	795
Number of NIPF Landowners	22,452	Acres in Important Forest Resource Areas	146
Acres of Federal Land Under State Fire Protection	0	Covered by New or Revised Stewardship Plans	110
Acres of Private Land Under State Fire	22,100,000	Volunteer Fire Departments Assisted	50
Protection		State Fire Communities Assisted	160
Number of Rural Fire Departments	226	Coop Forest Health Acres Protected	1,300
Cities and Towns	91	Forest Legacy Project Acquisitions	0
Forest Based Employment	984	Communities Provided Urban Forestry	53
Economic Impact of Forestry (by rank)	13	Program Assistance	55
State Forestry Budget (All Sources)	80,693,182	Population Living in Communities Provided Urban Forestry Program Assistance	5,350,397
		Urban Forestry Volunteer Assistance	2,047

## **Program Highlights**

### Community Forests and Open Space

DFFM continues to focus on outreach and partnership development for the Community Forest Program. While no CFP projects have been added, progress is being made on communication and potential project planning. Current efforts include:

DFFM is creating a communications plan to engage tribal communities, including developing a contact database and a Google Group/Listserv for streamlined outreach, including the CFP and FLP programs. CFP information is being shared with existing groups, such as the newsletter list and FLP contacts, who help distribute details to their networks.

Potential Flagstaff Project - Discussions with the City of Flagstaff and the Trust for Public Land are ongoing. Progress is delayed due to road alignment negotiations with private property owners, which impact the open space corridor required for the CFP application.

### **Conservation Education**

Arizona's Specialized Forestry Programs participate in Conservation Education by educating the youth, public, and professionals about the value and benefits of urban trees and healthy forests. Through the work of a Forestry Outreach Coordinator in collaboration with program staff, educational information is shared through an e-newsletter, events, presentations, and other outreach activities. Conservation education information and materials are distributed to different audiences based on the type of event and preferred methods for each group. To engage the public in 2024, staff participated in various community events around the state where activities and materials were geared to educate and inspire individuals about tree care and forest stewardship. A Tree Care campaign was also conducted which consisted of billboards, meta-ads, and radio-ads advocating for community tree stewardship and the benefits of trees. For educators and youth, Specialized Forestry programs helped to facilitate and distribute related lesson plans, like Our Neighborhood Forests: Southwest Learning Guide, through K-12 classroom events, presentations for workforce development programs, professional conferences for educators, and college career fairs. Youth engagement in the DFFM Urban and Community Forestry's 2024 Arbor Day K-12 Poster Contest reached an all-time high of over 1800 submissions, with additional exhibits secured for increased awareness and celebration. For communities and natural resource professionals, staff shared

relevant educational information via presentations and exhibits at various professional conferences and workshops, newsletter and communication listservs, and our annual Arbor Day Celebration at the State Capitol. In addition, staff hosted a networking event for Arbor Day Foundation program participants (Tree City, Tree Campus, and Tree Line), our annual grantee showcase for Community Challenge Grants, and a workshop for professionals.

## **Cooperative Fire Protection**

State and Volunteer Fire Assistance programs are used to enhance the State of Arizona and local fire department firefighting efforts and capacity by providing necessary training and support in areas that are in the greatest need. This is provided through a variety of programs designed and based around the common goals of health and safety. Through these cooperative fire programs, hazardous fuel mitigation practices are pursued on non-federal lands in areas of greatest concern to prevent the loss of life and property, and lessen environmental and economic impacts. Prevention and educational programs such as FIREWISE USA are administered to teach property owners proper mitigation techniques and land users the role of wildfire in the ecosystem, how to prevent fires from occurring and how to act when a fire is in their area. State Fire and Volunteer Fire Assistance is also utilized to purchase needed equipment, such as personal protective equipment, for fire departments to better respond to active wildfires, and funds aid in modifying excess federal equipment to support fire response throughout the state. Community wildfire education is focused on the wildland-urban interface and forest health education issues as well as educational resource development. Arizona Department of Forestry and Fire Management provides assistance in Firewise and Community Wildfire Protection Planning to increase awareness of the hazards and responsibilities of people who live in and near forest ecosystems.

## **Economic Action**

Arizona Department of Forestry and Fire Management (DFFM) is actively engaging in collaboration and data sharing with multiple efforts, agencies and firms to find innovative solutions to Arizona's wildfire issues while incentivizing both traditional and emerging wood products industries and employment opportunities. Current efforts underway in Arizona include: Torrefied wood products, biochar, biocoal/black pellets, soil amendments, compost/mulch, bioenergy, combined heat and power (Nestle/Purina, Northern Arizona University), electricity generation, syngas, engineered wood products, finger jointing and cement. New biomass projects are currently under evaluation by both Nestle/Purina in Flagstaff and Drake Cement near Paulden; if successful these projects would utilize a combined 78,800 bone dry tons of woody biomass and provide an outlet for material from the center and western end of the 4FRI footprint. DFFM continues to seek maximizing efficient use of funding and resources by expanding and expediting the year-over-year volume of hazardous fuels reduction and timber sales to stimulate response and growth in the forest contractor sector. As a result, almost 140,000 tons of logs and biomass were delivered to upwards of 15 processing facilities. And, as a result of DFFM's recent statewide fuels reduction RFP, the State of Arizona has nearly doubled its contractor workforce from 27 to 47 companies.

### Forest Health Protection

Arizona's Forest Health Program is a cooperative forestry program partially funded by the USDA Forest Service through state and private forestry to assist state and private forest and woodland landowners. These funds help pay for our Invasive Plant Coordinator and Forest Health Specialist positions. Arizona's Forest Health Program provides technical assistance for forest insect and disease issues and invasive plant prevention, detection, control, and monitoring. The program develops and provides forest health educational tools, workshops, and training opportunities and contributes to creating new forest health technologies. Forest health-related publications, workshops, and training sessions are developed and offered annually to interested state and private groups and individuals. The forest health program manager and FH specialist oversee the Western Bark Beetle Initiative Grant Program, which focuses on improving tree health and reducing adverse bark beetle impacts. AZ DFFM FH Program uses these funds to support our Bark Beetle Reduction Cost Share Program, which helps offset the cost of removing actively infested bark beetle trees during the fall and winter. Additionally, the Forest Health Program supports the USDA FHP team with their ground survey work and the annual Aerial Detection Survey (ADS) of millions of acres, providing land managers and the public with information about landscape-level insect and disease conditions. An annual Forest Health Conditions Report is created by our Forest Health Program each year, highlighting the ADS results for each Agency District.

## Forest Legacy

The Forest Legacy Program (FLP) in Arizona, funded and administered by the USDA Forest Service in

partnership with the Arizona Department of Forestry and Fire Management (DFFM), aims to protect privately owned forest lands through conservation easements or land purchases. The program safeguards environmentally significant private forest areas at risk of development or fragmentation.

DFFM currently manages three active Forest Legacy projects:

Date Creek Bosque - A recently funded FLP protecting riparian forest in Yavapai County Bull Basin Forest - A Ponderosa Pine forest inholding within Kaibab National Forest in Coconino County Cochise Stronghold Woodlands - A Madrean oak woodland forest in Cochise County

These ongoing projects represent a combined investment of over \$4.7 million and protect approximately 1,360 acres of critical forested land. Building on the success of the Sonoita Creek Wildlife Corridors (SCWC) Phases 1 and 2 Legacy Project, which permanently protected 386 acres with a \$1.7 million investment, DFFM continues to add additional key protected forested acres, expanding the project's footprint. SCWC Phase 3 ranked third nationally for FLP funding and is anticipated to receive funding through a grant agreement by spring 2025. For SCWC Phase 3, DFFM and project partners applied for \$2.2 million in Land and Water Conservation FLP funding to protect 756 additional acres. Concurrently, a 25% matching fund application was submitted through the Department of Defense Readiness and Environmental Protection Integration (REPI) Challenge, with funding decisions expected in June 2025.

DFFM has also:

Completed all Stage 2 Pre-Appraisal due diligence for Bull Basin Forest and Cochise Stronghold Woodlands

Developed a comprehensive draft of the Deed of Conservation Easement for Date Creek Proposed 5 Arizona FLP projects for federal funding consideration

Reached out to 66 landowners and partners, delivering FLP presentations to multiple stakeholders

### Forest Stewardship

The Forest Stewardship Program (FSP) assists, educates, and inspires non-industrial private forest landowners to actively manage their forests to maintain and enhance the vital benefits these forests provide to society. With many new staff members at DFFM this year, an emphasis was placed on training. Program staff dedicated 65 hours toward FSP training including a 2-hour virtual event that was recorded and continues to be used to orient new employees. In one effort to improve engagement with nonindustrial private forest landowners, FSP staff worked with other programs to co-develop and cofacilitate an internal workshop. The workshop was designed to gather information about staff's Tribal engagement priorities and barriers to success. A report summarizes the information gathered and recommends next steps. In support of landscape-scale planning, DFFM convened and participated in partner groups. Also, staff curated and compiled several geospatial datasets into a user-friendly interactive map viewer/maker (Landscape Planning Atlas) that informs planning across jurisdictions. Datasets that aid in strategic landowner outreach and education are included. FSP staff developed or revised two comprehensive Forest Stewardship Plans totaling 843 acres, including 155 acres in a federal investment area. Staff also developed and approved 6 new or revised practice plans totaling 5,184 acres including 2,896 acres in federal investment areas. FSP staff provided technical assistance to 61 nonindustrialized private forest landowners, and provided education to 246 landowners.

### Good Neighbor Authority

Work continued on four National Forests and one BLM District in 2024. Sixteen (16) projects either started or continued on the Coconino and Tonto National Forests and the BLM Gila District to complete 5,958 acres of treatments with the following breakdowns by treatment objective: Hazardous fuels reduction: 1,978 acres; Watershed restoration: 2,064 acres; and Wildlife habitat improvement: 1,916 acres. Work to plan timber sales on all 4FRI forests continued, with 15,086 acres marked. The impact of the timber removal projects includes 2,829 loads and 78,923 tons of timber removed and 336 loads and 9,374 tons of biomass removed off of federal lands. In total, \$4.1M was paid to the private sector.

### IIJA Cocopah Saltcedar Invasive Project

An agreement with the Cocopah Tribe was executed in November 2023. Herbicide was sprayed on 5 acres of giant reed. The Tribe is continuing to work on compliance and permitting throughout 2024. Treatment was planned to start in Oct. 2024, but we have not received their Q4 report.

### IIJA Forest Action Plan (Forest Health)

All 2024 Aerial Detection Survey (ADS) data was processed for use in the development of the annual Forest Health Conditions report and will be used in an ADS Mortality Distribution Map; this map will help assess impacts on tree health in rural forests. MPE samples were sent to the University of Florida and confirmed to be the Mediterranean pine engraver, with no genetic variation to suggest a sub-species or variant. In 2024, 7 Forest Health documents were updated and translated into Spanish and Diné. The Invasive Plant (IP) Program has continued conversations on the development of AZ's Spatial Invasive Infestation and Priority Analysis (SIIPA) tool; the IP Program completed two invasive plant trainings for ADOT employees in 2024, with more than 40 ADOT staff members in attendance, between both trainings. Over the last few years AZ DFFM FH team has continued to expand our Mediterranean Pine Engraver (MPE; an invasive bark beetle) trapping efforts to include all of Arizona and trap for other new, introduced bark, ambrosia, or wood boring beetles. We have received Bipartisan Infrastructure Law funding to implement new assessment and monitoring efforts regarding MPE and our native and ornamental conifers' susceptibility to this non-native invasive insect. To date, AZ DFFM has not identified MPE in native tree species and has not identified any new invasive bark, ambrosia, or wood-boring beetles. However, MPE has continued to spread around the state of Arizona, reiterating the need for continued trapping efforts by AZ DFFM FH Program and increased outreach and education regarding the spread of this invasive insect. The invasive plant program also received Bipartisan Infrastructure Law funding to update the "non-native invasive plants of Arizona" field guide and print copies of this updated version. To date, this field guide has been updated and completed, and copies have been made and dispersed to DFFM and UofA Cooperative Extension.

## IIJA Forest Action Plan (State Fire Assistance)

DFFM Prevention completed 180 events reaching 3,785 people. These events included 18 Firewise Assessor courses and 34 Smokey Bear 80th Birthday Library events. In the Firewise Assessor classes Prevention staff trained 146 new Home Ignition Zone Assessors. Prevention staff also welcomed 30 new Firewise Communities into the fold in 2024 which is #1 in the Southwest region. Arizona, for the second year in a row, maintained a 98.7% renewal rate for Firewise communities which is #1 in the country.

### IIJA Forest Action Plan (Stewardship)

Forest Stewardship Program (FSP) staff have been meeting with underserved Tribal communities. One community where there has been successful engagement is the Fort McDowell Yavapai Nation (FMYN). Multiple FSP staff members are in communication with Tribal staff about possible fuels treatments. With help from partners USDA Forest Service and First Nations Development Institute, the Nation is connecting with a funding opportunity to improve their capacity to write grants that support their forest management goals. DFFM is providing technical assistance to the Nation, when requested.

## IIJA Forest Action Plan (UCF)

As part of a statewide tree education campaign, billboard mock-ups, companion social media, and website materials were designed to drive community members to DFFM's tree care website. The campaign was launched to the public at the beginning of March. Paid media initiatives in English and Spanish (billboards, audio spots, Meta ads, and native ads) resulted in nearly 46.3 million impressions and over 73,000 clicks to the DFFM campaign landing page (dffm.az.gov/tree-care) that UCF staff updated to accompany the campaign. The workforce development program (AAPP-Yuma) came to a close. Eight AAPP-Yuma participants completed their internships and were paid completion stipends. Program evaluations were completed. All students indicated they enjoyed the program, made professional and peer-to-peer connections they will keep, gained increased confidence, and are ready to take the next step in their career. The remaining money from the Workforce Development Program will support ongoing workforce development efforts, including a municipal urban forestry toolkit. Details should be finalized by Q1 2025. The Tree Steward Manual Draft is now complete with accompanying slide decks and voice-over videos for use in training. The Tree Steward Manual was piloted via the HOA Project grant with the Arizona Sustainability Alliance (AZSA). We hosted a feedback session with AZSA to hear how well the curriculum worked in practice and made revisions and notes for future consideration. The Tree Stewards program has been written into the AZSA's new IRA grant project plan. We have extended the grant to the Arizona Community Tree Council (ACTC) to finalize pending details regarding the Pest & Threats Guide. The ACTC 2-Day Certified Arborist Training in Spanish was completed with 22 tree-workers attending. A 5-Year UCF Strategic Plan draft was prepared, reviewed, and approved by the UCF Advisory Committee and DFFM Leadership. The plan will be finalized in Q4 2024 and shared in Q1 2025.

## IIJA Invasive Capacity Building

Mediterranean Pine Engraver push-pull methods assessment began in May 2023. Push-pull was paused in 2024 due to capacity issues when our Forest Health Specialist left. Trap collections occurred throughout 2024, trainings for local tree care companies on collection techniques occurred in August and September. Through a sub-award, the University of Arizona has completed and updated the Invasive Plant Guide of Arizona website, printed copies, and distributed it to DFFM and UofA Cooperative Extension.

### IIJA Observatory Mesa Invasive Plant Project

The City of Flagstaff Council approved the EnviroSystems Management, Inc. contract in February 2024. This contractor began treatment work on up to 312 acres in the fall and winter of 2024. A property survey in Q4 showed that the initial treatment was successful, and retreatment will occur in the spring of 2025.

## Inflation Reduction Act - Urban and Community Forestry

\$4.8 million of the \$5.3 million were successfully sub-awarded through a competitive grant program to fund 10 additional projects to improve urban forestry conditions in disadvantaged communities. Projects cover tree inventories, tree and shade master plans, tree ordinance creation, tree plantings, tree care industry workforce development, and training and education for low-income residents and students in multiple languages. In addition, the U&CF team has convened a group of internal and external stakeholders to address the diversification of the U&CF Advisory Council. Plans for an additional RFP for the remaining pass-through funds are scheduled for early 2025. The Specialized Forestry Program Administrator and Forestry Outreach Coordinator joined the DFFM Tribal Engagement Working Group, which will develop an agency-wide plan for engaging with our Tribes. The working group developed a logic model for moving forward, which included a plan for working with a tribal liaison and training for agency staff and the UCF Advisory Committee. The group also planned an internal tribal needs assessment for Q4 2024 and included 30 staff members, including executive leadership, statewide program managers, and district staff. The Forestry Outreach Coordinator worked with agency-wide staff to host a table at the Resource Fair of the Arizona Tribal Fire and Climate Resiliency Summit.

### Landowner Assistance

The Gust property is located in Apache County south of the rural community of Vernon. In 2022, DFFM developed a Forest Stewardship Plan for this property that included treatment prescriptions for managing a mix of pine, oak, juniper, and grassland. Treatment goals for this project are to reduce hazardous fuels, improve forest health, and enhance wildlife habitat. In March 2024, staff from three DFFM districts, in cooperation with NRCS Team 4, completed approximately 70 acres of cut tree marking on the property. The Gusts attended, provided feedback on the mark, and learned about basic forestry concepts while sharing stories and information about their property. The treatment was implemented in the fall, and is funded by the NRCS Environmental Quality Incentives Program (EQIP). This project demonstrates the successful collaboration between NRCS and DFFM, and coordination among multiple DFFM districts.

### Lower Gila River Initiative

LGI program activities in 2024 were jointly overseen by the Forest Health Program and Central District (A4S) Forestry staff. The three projects to highlight in FY 2024 are Arlington, Boat Ramp, and Estrella Riparian Phase I. Arlington and Boat Ramp are projects in partnership with the AZGFD, an important partner in this effort along the Lower Gila River. Arlington is a project that resulted in 129 acres of complete tamarisk vegetation clearing and removal, including all biomass. Completion of this project is part of a larger effort by AZGFD to restore native vegetation to the Arlington Wildlife Area. Boat Ramp is a tamarisk hand thinning treatment project occurring along the south bank of the Gila River on the AZGFD Robbins Butte Wildlife Area. A DFFM Forestry Crew has nearly completed treatment on the Boat Ramp Project. In partnership with the Maricopa County Parks and Recreation Department, a contractor masticated 80 acres of tamarisk and planted over 1,300 native trees. The majority of the trees were provided at no cost by the Native Tree Nursery of the Maricopa County Flood Control District. The trees were watered by the contractor during the first year to ensure establishment. DFFM expended a total of \$922,758 and treated 297.5 acres during FY 2024. That total dollar amount includes the purchase of native plant seed and native trees to restore vegetation to project sites. The total number of acres treated includes other projects beyond those listed above. Going forward, LGI program activities will fully transition to the Central District (A4S) Forestry staff, with the Forest Health Program providing technical

support as needed.

#### Urban and Community Forestry

Arizona's Urban and Community Forestry Program (UCF) provides information and technical assistance to Arizona cities and towns. The program has Certified Arborists and Urban Foresters on staff to answer tree-related questions and help communities maintain, restore, and improve urban forest ecosystems. The UCF Program includes oversight and management of the Community Challenge Grant Program; promotion and management of the Arizona Tree City USA, Tree Line USA, and Tree Campus USA programs; the Arizona Magnificent Tree Program; and planning and implementing the Arizona Arbor Day celebrations. The UCF Program supports tree inventory and canopy development programs, tree-planting projects, local and state policy development, and local outreach and education programs. The UCF Advisory Committee consists of urban forestry and arboriculture professionals across the state and assists with strategic UCF planning, tree care education, and Community Challenge Grant selection. The UCF Program Manager provides technical and administrative support to the ACTC Advisory Council to achieve common urban forestry goals. In 2024, the UCF Program awarded Community Challenge Grants to universities and Non-Governmental Organizations, which launched urban forestry projects, including workshops and plantings of edible forests, historic tree preservation, and grade 4-12 stewardship engagement programs.

## **Contact Information**



Arizona Department of Forestry and Fire Management

Thomas A Torres *State Forester/Director* 1110 West Washington St., Suite 100 Phoenix, AZ 85007 602-771-1400 <u>ttorres@dffm.az.gov</u> US Forest Service Southwestern Region Alicia San Gil Director - Forest Management, Forest Health, Cooperative Forestry USDA Forest Service 333 Broadway Blvd. SE Albuquerque, NM 87102 505-842-3242 alicia.sangil@usda.gov