



State and Private Forestry Fact Sheet Arizona 2024



Investment in State's Cooperative Programs

Program	FY 2023 Estimate
Community Forestry and Open Space	\$0
Cooperative Lands - Forest Health Management	\$367,981
Forest Legacy	\$1,740,000
Forest Stewardship	\$121,563
Landscape Scale Restoration	\$300,000
State Fire Assistance	\$1,604,815
Urban and Community Forestry	\$745,000
Volunteer Fire Assistance	\$800,100
Total	\$5,679,459

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 2023 Accomplishments	Value
Population	7,151,502	Landowners Receiving Educational or Technical Assistance	279
Acres of Forest Land	19,092,940	Acres Covered by New or Revised Forest Stewardship Plans	712
Acres of Nonindustrial Private Forest Land	7,216,408	Acres in Important Forest Resource Areas Covered by New or Revised Stewardship Plans	707
Number of NIPF Landowners	22,452	Volunteer Fire Departments Assisted	87
Acres of Federal Land Under State Fire Protection	0	State Fire Communities Assisted	6
Acres of Private Land Under State Fire Protection	22,100,000	Coop Forest Health Acres Protected	1,300
Number of Rural Fire Departments	226	Forest Legacy Project Acquisitions	0
Cities and Towns	91	Communities Provided Urban Forestry Program Assistance	58
Forest Based Employment	984	Population Living in Communities Provided Urban Forestry Program Assistance	5,337,656
Economic Impact of Forestry (by rank)	13	Urban Forestry Volunteer Assistance	4,723
State Forestry Budget (All Sources)	91,625,670		

Program Highlights

BIL-IIJA Forest Action Plan (Forest Health)

All 2023 ADS data was processed for use in development of an Aerial Detection Survey (ADS) Mortality Distribution Map. To assess Mediterranean Pine Engraver's impacts on rural forests, information on what primers are needed and what types of samples are suitable for sequencing was determined through discussion with Cal Poly Humboldt labs. Three new invasive insect alerts were produced in Q4 2023. Additionally, 1,000 copies of the updated Northern Arizona Invasive Plant Guide were printed. Invasive Plant program staff has met with ADOT employees several times throughout Q4 2023 to coordinate invasive plant trainings for ADOT employees, in addition to drafting a workbook that will accompany the trainings. The first training is planned for Q2 of 2024.

BIL-IIJA Forest Action Plan (State Fire Assistance)

DFFM Prevention completed 26 Smokey Bear School events, 24 Community Outreach events that included fairs, open houses and town hall events, 62 Firewise events including Firewise Assessor courses in Payson, Prescott, Apache Junction, Camp Verde, Bisbee, Portal, Prescott, Heber and Sedona. A Firewise Trailer Wrap designed was finalized and we reached a 98.7% Firewise Renewal rate - highest in the country.

BIL-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 deliverables were completed in December, and the next step will be for the DFFM team to update the website so the campaign can be launched to the public in Q1 2024. The AZ Arboriculture Pre-Employment Program launched its course in October, and 8 (out of 10) participants, receiving weekly stipends, completed the full classroom portion of the training. All 8 were placed in internships which began in mid-December and will continue through February. Program evaluations were developed for participants, instructors, and internship supervisors.

Through a sub-award with the AZ Nursery Association, a Tree Track was completed at the annual SHADE conference. The voice-over PowerPoint videos for the Tree Steward Manual are 95% complete.

One additional module on invasive species will be the final video in the series. The Tree Steward Manual is in version 2 status and has been shared with partners working on the HOA Tree Steward Pilot to field test the content. Strategic Planning moved forward with an actor mapping session to determine stakeholders. The data were summarized by UCF staff and the Strategic Plan/Needs Assessment Facilitator. The planning team began coding the existing survey documents, pulling out themes, and drafting some initial questions for the survey, which will be sent to the stakeholders in Q1 2024. The HOA Tree Steward Training project began recruiting participants (15) who will attend the training beginning in Q1 2024 (January 11-April 6). The project facilitators have begun personalizing the materials needed for the course based on the Tree Steward Instructor Manual content and have identified the training locations in the Homeowner's Association Property, the Blue Horizons Community, in Buckeye, AZ.

Community Forestry and Open Space

First Community Forest Project in the Southwest -- Rogers Lake Community Forest
By Jiamin Liang, Southwestern Region Cooperative Forestry Program Resource Assistant

Located southwest of the city of Flagstaff is the newly established Rogers Lake Community Forest! It sits at the edge of a unique wetland that is surrounded by ponderosa pine and Gambel oak forest. Previously this 80-acre lot of private land was used for cattle grazing, but it will now serve as an entryway to the immediately adjacent Rogers Lake County Natural Area. This marks the first community forest project to come to completion in the Southwest area and was made successful through to Coconino County's application to the Forest Service's Community Forest Program, a grant program under Cooperative Forestry that provides financial assistance to qualifying entities to establish community forests.

Through great efforts from the Coconino County Parks and Recreation, Trust for Public Lands, Arizona Department of Forestry and Fire Department, US Naval Observatory Flagstaff Station, Department of Defense's Readiness and Environmental Protection Integration (REPI) Program, with help and feedback from many other community organizations, the Rogers Lake Community Forest was able to come to life.

Easier Access to the Rogers Lake Natural Area

As the first community forest in the region, the surrounding communities will be able to see many benefits. The community forest will allow for easier access to the Rogers Lake Natural Area with an expansion of a trail system that includes hiking and mountain biking and creating a wildlife viewing platform. It will also provide protection to habitats of over 15 rare plants and the critical Woody Ridge Wildlife Corridor that houses mountain lion, pronghorn antelope, Merriam's turkeys, and more. In addition, new research and environmental teaching opportunities will be available for the faculty and students of NAU. Fu

Conservation Education

Arizona's Urban and Community Forestry Program participates in Conservation Education by educating youth and the public about the value and benefits of urban trees and forests. With the Urban and Community Forestry Program Manager, a Forestry Outreach Coordinator manages the Tree City USA programs, coordinates the annual Arizona State Arbor Day Celebration, and participates in numerous outreach events throughout AZ. In addition, the Urban and Community Forestry Program produces urban forest-related lesson plans, like Our Neighborhood Forests: Southwest Learning Guide, and hosts an annual grantee showcase for Community Challenge Grant recipients. In 2023, we integrated new topics into our educational outreach, including urban forestry career pathways and workforce development. We participated as an exhibitor in the AZ Rural Science Technology Engineering and Math (STEM) Summit to reach Arizona STEM educators. We scoped outreach materials to assist potential new Tree City, Tree Campus, and Tree Line Programs with the application process, including resources designed to help with tree ordinance development. These materials will further engage many audiences around the state in our Specialized Forestry Programs.

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.

DFFM seeks to maximize 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. Forest contractors and their ability to hire are critical to continued success of any traditional or emerging wood industries. DFFM seeks to maintain a robust forest contractors procurement list and is currently soliciting a RFP for forest contractors in CY2024.

Forest Health Protection

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 Western Bark Beetle Initiative Grant Program focuses on improving tree health and reducing adverse bark beetle impacts. It helps fund our Bark Beetle Reduction Cost Share Program, awarding funding to help offset the cost of removing actively infested bark beetle trees during the fall and winter. In 2023, we expanded our Mediterranean Pine Engraver (MPE; an invasive 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. Forest Health Monitoring funds support 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. An Invasive Plant Program coordinates with Cooperative Weed Management Areas, partnerships, and coalitions, focusing on treating invasive plants capable of transforming plant communities in forests, woodlands, and rangeland. The Arizona Department of Forestry and Fire Management (DFFM) also received state funding for invasive plant treatment, which will be instrumental in leveraging other funding.

Forest Legacy

The Forest Legacy Program (FLP) in Arizona is a conservation program administered and funded through the USDA Forest Service, in partnership with the Arizona Department of Forestry and Fire Management, to encourage the protection of privately owned forest lands through conservation easements or land purchases. It identifies and permanently protects environmentally important private forest areas that would otherwise be developed or fragmented.

The Arizona Department of Forestry and Fire Management (DFFM) continues to grow the Forest Legacy Program throughout Arizona, managing three current Forest Legacy conservation projects, including the San Pedro Riparian Forest Protection in Cochise County, the Bull Basin Forest in Coconino County, and the Cochise Stronghold Woodlands in Cochise County. These three ongoing projects total \$3,720,000, protecting 1,300 acres of nationally significant private forests. The Sonoita Creek Wildlife Corridors (SCWC) Phases 1 and 2 Legacy Project (\$1,715,000) in Santa Cruz County permanently protected 386 acres and was completed in Spring 2022 (FFY23).

DFFM is currently focusing on several future projects, such as Chiricahua Mountain, Date Creek, Amhurst Run Flying M, Nutrioso Creek, and additional phases of the Sonoita Creek Wildlife Corridors (SCWC), along with a few others. These Legacy Projects are in the planning stages, promising continued conservation efforts. In September 2023, DFFM and its primary project partners applied for \$2,200,000 in Land and Water Conservation FLP funding to protect an additional 756 acres under the SCWC Phase 3 FLP. The Arizona Forest Stewardship Coordinating Committee ranked SCWC Phase 3 as the number one project in Arizona. In September, the DFFM Forest Legacy Program Manager applied for 25% matching funding through the Department of Defense Readiness and Environmental Protection Integration (REPI) Challenge Grant, and funding decisions will be made in June 2024.

Forest Stewardship

Arizona's Forest Stewardship program prioritizes ecological restoration in important regions identified in the State's Spatial Analysis Project and Forest Resources Assessment. These are comprised primarily of ponderosa pine forests and pinyon-juniper woodlands. In these areas, we currently are addressing objectives articulated in the 2020 Arizona Forest Action Plan including strategic planning in the highest-priority landscapes and constituency outreach that will inform tactical plan writing and the development of the 2030 Arizona Forest Action Plan. Both require hiring staff and contractors who help us engage at-risk and underserved communities, understand and be responsive to our constituents' concerns and priorities, and create an information-sharing environment in which knowledge about traditional practices and the latest advances in forestry, wildfire mitigation and carbon management is shared.

Good Neighbor Authority

In FY20223, DFFM entered into seven (7) Good Neighbor Authority agreements with the USFS: Beaver Creek Watershed and Wildlife Habitat Enhancement Project (1,916 acres/Coconino NF), Payson and Pleasant Valley RDs Timber Projects (718 acres/Tonto NF), 4FRI Greater Payson, Dude, and Haigler Restoration (14,259 acres/Tonto NF), Cragin Watershed Protection Project II (5,780 acres/Coconino NF), Pumphouse Crossboundary Community Protection Project (3,500 acres/Coconino NF), DFFM Heritage Inventory Services (21,274 acres/Kaibab NF), Timber Sale Preparation Activities (\$1.647M/Prescott, Tonto, Coconino, Kaibab, Apache- Sitgreaves NFs). New agreements are under development with the Coronado and Prescott NFs in FY2024.

Inflation Reduction Act - Urban and Community Forestry

An additional Urban Forestry Specialist was hired in October 2023 to increase capacity for IRA grant administration. \$5.3 million were successfully sub-awarded through a competitive grant program to fund 10 additional projects that will improve urban forestry condition 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 diversification of the U&CF Advisory Council.

Landowner Assistance

The Mullen Mountain forest health improvement project is located approximately four miles northeast of Pinetop, Arizona. In 2022, the landowner contacted DFFM with concerns about hazardous fuels accumulation and an infestation of Western bark beetles on the 54-acre property. DFFM staff confirmed the infestation and determined that the stand of Ponderosa that occupied most of the property was overstocked and encroaching on valuable cultural and ecological assets. These assets included two historic sites, two riparian areas and an open meadow valuable for wildlife.

DFFM staff worked with the landowner to develop a silvicultural prescription that would thin the stand and dispose of the slash according to Western Bark Beetle Initiative guidelines. The prescription encouraged stand diversity in age, spacing and composition; protected the historic sites while preserving their aesthetics; improved the riparian and meadow areas for wildlife utilization and complemented adjacent treatments recently completed by the USFS to mitigate wildfire risk in Pinetop's WUI. The project was executed in Summer 2023, utilizing \$30,742 of WBBi pass-through funding and a \$3,074 contribution from the landowner. The slash was piled and will be burned by State crews as conditions allow in Autumn 2025. DFFM's Mullen Mountain project exemplifies landowner assistance, constituency service and multi-jurisdictional collaboration.

Lower Gila River Initiative

The Invasive Plant Program received state funds through the Gila River Nonnative Vegetation Species Eradication Fund (GRNVSEF). In 2023, the Invasive Plant Program began planning and implementing several large-scale, complex riparian restoration projects along the Lower Gila River to remove invasive salt cedar (Tamarisk) in priority areas. Vegetation management treatments include the mechanical clearing of dense salt cedar stands and the use of hand crews in vulnerable areas where salt cedar is mixed with native vegetation. Treatments also include the planting of native trees and shrubs and the reseeding and stabilization of disturbed soil. This project will benefit the region's natural resources by reducing the extent of salt cedar to conserve water resources for wildlife and other beneficial uses. Enhanced habitat in the Lower Gila River will provide desirable conditions to meet the needs of wildlife and various recreational activities for the public. This work utilized internal DFFM Forestry Crews and state vendors that provide fuel reduction and forestry services. Treated areas will enhance habitat for native wildlife species, protect communities, infrastructure, and natural resources from flooding, and reduce the risk of wildfire.

R3 Special Project: AZ and USFS Shared Stewardship Initiative

Prioritized the USFS Shared Stewardship Initiative and Wildfire Crisis Strategy goals of working with partners across jurisdictions to develop and implement projects and support planning and investments in fire-adapted communities.

- i. Conducted monthly shared stewardship meetings with AZ Forestry to identify cross-boundary goals.
- ii. Established and participated in cross-boundary leadership groups with State, county, tribal, and local partners in northern Arizona.
- iii. Shifted priorities for Western Bark funding to priority landscapes for Forest Health prevention treatments. \$350,000 equaling approximately 560 acres of prevention treatments in FY23. RO Forest Health conducted multiple trainings (Insect and Disease, Hazard Tree, site visits) that included 7 Tribal Land Management entities, both States, Universities, Private industry, DOD (LANL), DOI (BIA, FWS, NPS), and Forest Service which included more than 150 professionals.
- iv. Significant increase in cone collection to bolster seed bank resources.
- v. Updated Community Wildfire Protection Plans across the region.
- vi. R3 was allocated \$1,900,000 (25% of total funding available nationally) in FY23 for BIL invasive species funding and awarded an additional \$460,000 (from FY22 and FY23 BIL invasive funds) for invasive plant treatment and program execution on non-NFS lands.
- vii. Partnered to create an Emerald Ash Borer Task Force to address the need for Statewide Response New Mexico FY 2024 Information last updated plans for this invasive forest pest. The task force includes state agencies in Arizona and New Mexico, University researchers, Forest Service, and APHIS.

R3 Special Project: IRA Forest Legacy Bull Basin (Coconino County)

•Successfully awarded \$1,900,000 from the new small-landowner initiative within Forest Legacy focusing on conserving strategic small track projects that support the President's 30 by 30 Initiative and EO 14009. This new project was awarded in the first year IRA funds were made available to the Forest Service and the Forest Legacy program.

R3 Special Project: Rogers Lake Community Forest (Coconino County)

The first Community Forest within the Region was designated in July 2023 – Rogers Lake Community Forest (Coconino County, AZ). Interest in this Justice 40 targeted program is growing with new partner interest inquiries from state, Tribal governments, and non-profit partners. (Link to R3 Spotlight-<https://fsweb.r3.fs.fed.us/spotlight/230822/>)

R3 Special Project: Tribal LSR White Mountain Apache Mt. Baldy Hazardous Fuels Reduction

The White Mountain Hazardous fuels reduction project is located on the eastern portion of the Fort Apache Indian Reservation (FAIR) in east-central Arizona, home of the White Mountain Apache Tribe. The project will be within the spruce/fir and/or mixed conifer forest types at an elevation between 8,500 and 10,500 feet.

The Mt. Baldy area/ecosystem is very unique and incredibly important to the Tribe due to its cultural significance, water resources for local use and statewide, threatened and endangered species, as well as economic value through commercial timber stands and recreational value through fishing, hunting, snowplay and hiking. With all of these values at risk, cultural significance being the most important, this project correlates directly with LSR program objectives of reducing the risk of uncharacteristic wildfire to

improve the health and resilience of this critically important forest ecosystem, while helping to maintain water quality and watershed function and protecting this habitat for all that live here.

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; 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 Arizona Community Tree Council (ACTC) serves as the Advisory Council to the UCF Program 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 2023, the UCF Program awarded Community Challenge Grants to municipalities and Non-Governmental Organizations, which launched urban forestry projects, including rainwater harvesting for ongoing tree care in the Sonoran Desert, citizen science projects supporting ongoing tree care and maintenance in low Tree Equity Score communities, and tree inventories to aid in tree establishment and maintenance. DFFM provided seed money through the 2022 Bipartisan Infrastructure Law allocation to pilot a workforce development program called the Arizona Arboriculture Pre-employment Program (AAPP) in partnership with Arizona Western College's (AWC) Continuing Education Program in Yuma, a city with a low Tree Equity Score. Eight of the ten accepted students completed the course and secured urban forestry internships at various tree-care companies, ACTC, the City of Yuma, and DFFM.

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