



Douglas A. Ducey
Governor

Office of the State Forester

Arizona Department of Forestry and Fire Management



David Tenney
State Forester

16 May 2022

Arizona Sportsmen For Wildlife Conservation
PO Box 75731
New River, AZ 85087

Dear Arizona Sportsmen For Wildlife Conservation,

The Arizona Department of Forestry and Fire Management recently completed the Hardscrabble Mesa Mastication Project near Strawberry, Arizona (map and photos enclosed). This landscape-level restoration project reduced the risk of undesirable wildfire and improved habitat for elk, mule deer, and other wildlife species. Because we removed woody species, herbaceous cover should increase in coming years. This should improve the wildlife feed value of the land.

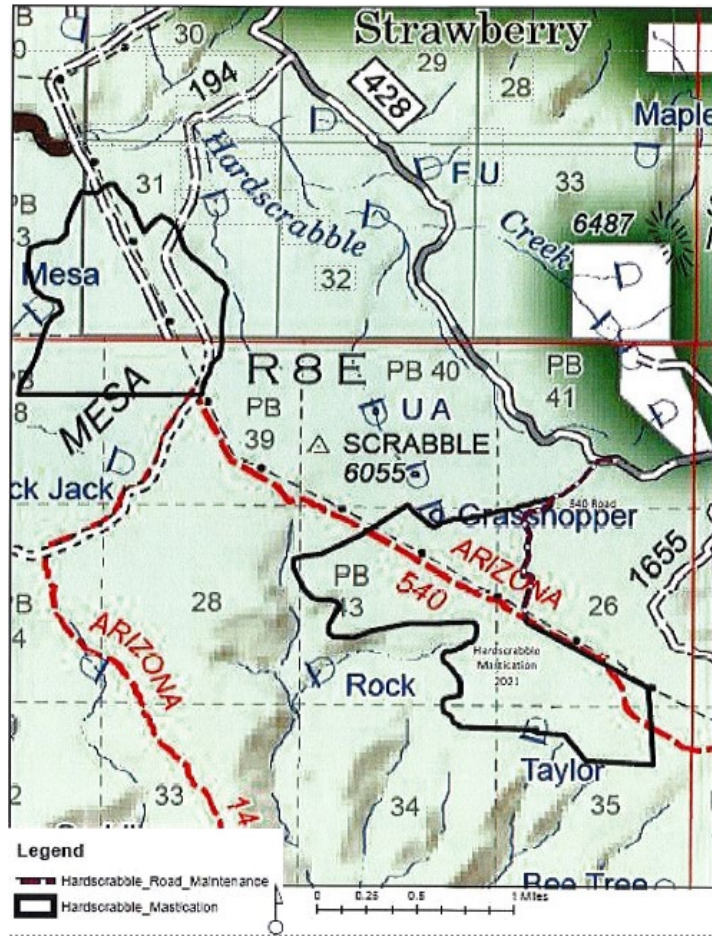
The total cost of the 1,160-acre treatment was \$582,801.80, averaging \$502/acre. We are pleased to inform you that 100% of your \$30,000 contribution went towards the treatment of 60 acres.

Thank you for your generosity and stewardship,

Christine Mares

Christine Mares
Forestry Contracts Specialist
cmars@dffm.az.gov
602-717-9015

Duty ♦ Respect ♦ Integrity



Pre-treatment (left) and post-treatment (right).

Hardscrabble Mesa Mastication Project in Partnership with Arizona Sportsmen for Wildlife Conservation (AZSFWC)



Delivering water and power™

Forest, Watershed, and Wildlife Conservation Partnerships

Arizona Game and Fish Department, Arizona Public Service, the Arizona Sportsman for Wildlife Conservation, Arizona Deer Association, and the Pine/ Strawberry Fuels Inc. joined Salt River Project (SRP) to support the Hardscrabble Mesa Mastication Project. The Project removed dense thickets of junipers to restore the landscape to the desired pre-historic conditions. Removing hazardous fuels such as juniper and brushes helps eliminate the threat of catastrophic forest fires, protecting nearby communities and wildlife habitats. The Project also helps protect the watershed and nearby high-voltage transmission power lines that provide water and power to the Valley.

As part of its efforts to reduce devastating wildfires, SRP is partnering with the Arizona Department of Forestry and Fire Management (DFFM) utilizing a Good Neighbor Authority Agreement (GNA) with the U.S. Forest Service (USFS) to undertake forest thinning projects on the Salt and Verde River and East Clear Creek watersheds.

Hardscrabble's Project area is also part of the US Department of Agriculture's 10-year strategy aimed at addressing the wildfire crisis by treating critical fire sheds with the help of partners. Fire sheds are large, forested landscapes with a high likelihood that an ignition could expose communities and infrastructure to wildfire. This project reduced catastrophic wildfire risk for the communities of Pine and Strawberry.

Hardscrabble Project Overview

The purpose of the Hardscrabble Mesa Mastication Project was to reduce fuels that increase wildfire risk to nearby communities, wildlife habitat, and the watershed. The Hardscrabble project is located southwest of the Pine and Strawberry communities. The project utilized a juniper mastication treatment on 1,197 acres. The treatment removed small juniper trees and brush that are contributing to an overgrown and unhealthy forest condition. Pine species, Emory oak and large diameter juniper were left to maintain diversity. The Project also improved two key watersheds, Rock Creek and Hardscrabble Creek, which flow into the Verde River watershed.



Hardscrabble Thinning Project Feb. 2022

(Before) Hardscrabble Thinning Project Feb. 2022



Hardscrabble Thinning Project Feb. 2022

(After) Hardscrabble Thinning Project Feb. 2022



Map of Project Area- Tonto National Forest



Hardscrabble Thinning Project Feb. 2022

The masticator cuts through trees and turns them into mulch that will be prescribed burned at a later date.

Press Release

<https://media.srpnet.com/strategic-thinning-tackling-dangerous-areas-near-payson-to-protect-communities-improve-forest-health/>

Healthy Forest Initiative-Hardscrabble Footage

<https://media.srpnet.com/asset/45862/498c7ce48f0e8e38b0b69814e556d21069cc38bf/?t=1#.YmhBoWkoWLc.link>

Healthy Forest Initiative Interviews-Hardscrabble Site

https://media.srpnet.com/asset/45859/b099a802e900a1d9cd9f205034a8d6477781645a/?t=1#.YmhBocu_z2A.link

Quote in Press Release made by AZSFWC

“Arizona Sportsmen for Wildlife Conservation (AZSFWC) is pleased to be involved and engaged on the watershed rehabilitation projects underway by SRP. Through our L. Gary Stinson Grant Program, AZSFWC awarded the Arizona Deer Association funding to work directly with SRP on the Hardscrabble Project southwest of Pine, AZ. AZSFWC and our non-profit members look forward to future collaborative efforts at restoring and rehabilitating even more forest habitat in Central Arizona,” said Jim Unmacht, Executive Director of Arizona Sportsmen for Wildlife Conservation.



Contact Information in Press Release





GNA PROJECT SNAPSHOT

Hardscrabble Mesa Mastication Project

Status: Completed

April 2022

Project Manager:	DFFM	Treatment Acres:	1,197
Project Location:	Strawberry, Gila County, 4th Cong Dist	Communities Protected:	Strawberry, Pine
Project Term:	08/19/21 – 7/25/26	Watersheds Protected:	Verde River
Funding Source:	SRP, USFS, AZGFD, DFFM	Land Ownership:	USFS
Federal Grant #:	21-GN-11031200-165	Total Project Cost:	\$582,801.80

Project Abstract

The purpose of the Hardscrabble Mesa Mastication Project was to restore grassland by removing encroaching juniper adjacent to high valued private land and infrastructure in and around the communities of Pine and Strawberry. Pine species, Emory oak and large diameter juniper were left to maintain diversity. Prior to treatment, trees and shrubs composed 22.6% of surface cover. After treatment, trees and shrubs composed 4.7% of surface cover. This reduced catastrophic wildfire risk for the communities of Pine and Strawberry. The project also improved two key watersheds, Rock Creek and Hardscrabble Creek, which flow into the Verde River watershed. Due to cultural and/or topographic concerns, 31 acres could not be treated.

Project Objectives

- 1,197 Acres of mastication treatment
- Reduce fuel connectivity
- Increase spacing between trees

Project Accomplishments

- 1,166 Acres of treatment completed
- Decreased shrub cover by 65.8%
- Decreased tree cover by 92.1%



Picture 1: Plot 10 data collection site facing north pre-treatment

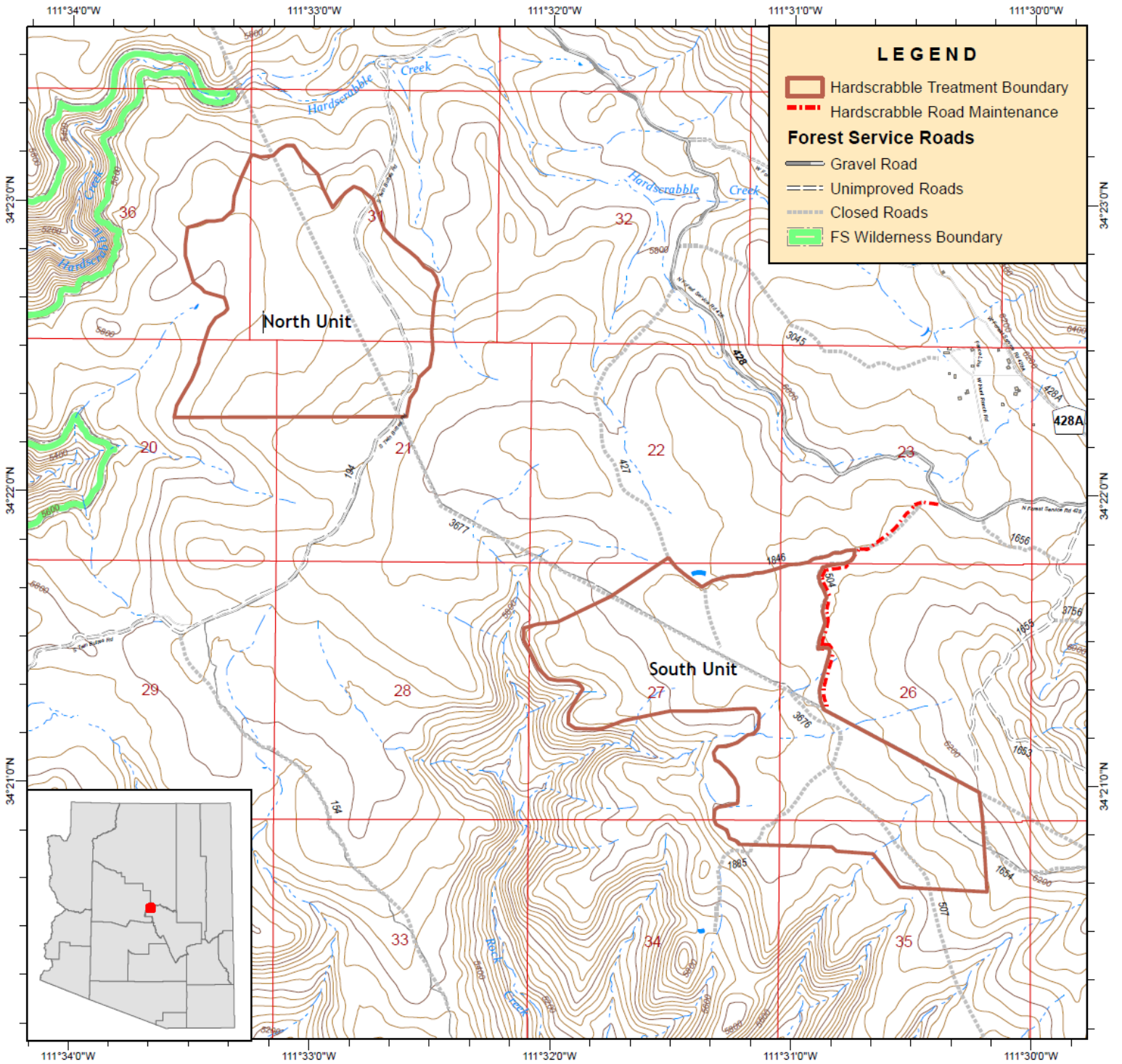


Picture 2: Plot 10 data collection site facing north post-treatment



GNA PROJECT SNAPSHOT

Overview Map



SRP: Newsroom >

Strategic Thinning Tackling Dangerous Areas Near Payson to Protect Communities, Improve Forest Health

February 24, 2022

Strategic Thinning Tackling Dangerous Areas Near Payson to Protect Communities, Improve Forest Health

Government Agencies, Arizona Companies Work to Help Prevent Forest Fires

Strategic forest thinning is underway north of Payson in an effort by SRP, the U.S. Forest Service (USFS), Arizona Department of Forestry and Fire Management (DFFM), and other partners to prevent catastrophic wildfires.

Arizona Game and Fish Department, Arizona Public Service (APS), the Arizona Sportsman for Wildlife Conservation, Arizona Deer Association, and the Pine/ Strawberry Fuels Inc. have also joined SRP to support the Hardscrabble Thinning Project, which will remove dense thickets of junipers and restore the landscape to a more natural condition, eliminating the threat of catastrophic wildfire, protecting nearby communities and habitat for wildlife from the impacts of wildfire including protecting the watershed and nearby high-voltage transmission power lines that provide water and power to the Valley.

The project is also part of the US Department of Agriculture's 10-year strategy aimed at addressing the wildfire crisis by treating critical firesheds with the help of partners. Firesheds are large, forested landscapes with a high likelihood that an ignition could expose communities and infrastructure to wildfire. Payson and nearby communities are within one of the top firesheds in the country.

In 2021, Governor Doug Ducey signed the \$100 million HB 2001, which includes \$25 million for the Arizona Healthy Forest Initiative. An initiative designed to reduce wildfire fuels around communities and increase partnerships.



That is why state and federal agencies along with companies and non-governmental organizations have committed to investing in forest restoration through partnerships, education and supporting industry. The Hardscrabble project will clear approximately 1,200 acres of overgrown brush and small trees that threaten surrounding communities, watersheds and power infrastructure if a wildfire were to start in the area.

The forested lands of northern Arizona have been hit by devastating wildfires and are primed for more infernos like those that impacted California and Colorado. Many forested lands in northern Arizona have thousands of trees per acre and have suffered from extreme drought, which can fuel large wildfires that are uncontrollable with catastrophic impacts.

"Partnerships are a vital component to the work that we are doing here on forest restoration projects," said Elvy Barton, SRP forest health management principal. "Thinning projects like this allow for a decrease in the wildfire risk. This will allow for healthier trees that will be resilient to climate change effects, including drought."

SRP manages the water supply for much of the Valley – most of which comes from **[8.3 million acres of land](#)** <

<https://srpnet.com/water/arizona-water.aspx?cmpid=va-srp-1->

[ARN-R-WA-WEAA-WACON-20191007-GENRL-A-E-PD-G-N](#)in

northern Arizona. Snowfall and rain provide the water that travels through the watershed into SRP reservoirs, which is then delivered to 2.5 million homes and businesses in the Phoenix metropolitan area via an extensive network of canals.

For as little as \$3 a month, SRP customers and others are encouraged to donate to the reforestation efforts through the [SRP Healthy Forest Initiative](#) < <https://srpnet.com/water/healthy-forest-initiative.aspx>>. One-hundred percent of the contributions will go toward forest restoration projects and SRP will match every dollar you contribute up to \$200,000 per year.

This is exciting news for Rich VanDemark, forestry operations manager for the Department of Forestry and Fire Management, who has been in forestry for several decades.

“We’re not just talking the talk, we’re sharing resources, we’re sharing talent and techniques and innovation all to get work done and move the needle,” Rich said. “Arizona is primed for catastrophic wildfires because there is limited moisture compared to other parts of the world and the country and we have an overabundance of woody biomass.”

And the issue didn’t start overnight.



“Hundreds of years of fire suppression was the first step. And then climate change that resulted in longer and drier seasons and fire seasons that are now more

than 100 days long throughout the summer,” said William Dudley, Hazardous Fuels Specialist with the Tonto National Forest. “With the trees that are closer together and underbrush, you will see canopy fires that are harder to extinguish.”

APS has over 6,000 miles of transmission lines and 32,000 miles of distribution lines across the state and one of the most diverse ecosystems in the Southwest.

“This is a great example of the cooperation and partnerships with a cohesive strategy. We all understand the problem, the challenges, and we're all working together to try to minimize that risk,” said Wade Ward, fire mitigation specialist supervisor with APS.

“Pine Strawberry Fuel Reduction is proud to be a part of this vital project continuing our mission of reducing the risk of catastrophic wildfire in the communities of Pine and Strawberry,” said Scott Kehl, Pine Strawberry Fuel Reduction Director at Large.

The project was a natural fit for the Arizona Game and Fish Department.

“The Department has a long history of partnering on restoration efforts around the town of Payson. The surrounding forest has grown decadent and modern forest treatments provide tremendous benefits for both wildlife and the overall health of the ecosystem. Through partnerships like SRP, we can align shared goals and combine resources to maximize on the ground benefits,” said Dan Sturla, Landowner Relations & Habitat Enhancement Program Manager with the Arizona Game and Fish Department.

The goal is also to have a sustainable forest product industry, which is critical to restoring forest lands. Expanding existing industry capacity and attracting new forest product companies are critical to achieving meaningful progress. It will also have the added benefit of providing more rural jobs, increasing infrastructure and equipment investments, and helping drive rural economic development opportunities.

“Arizona Sportsmen for Wildlife Conservation (AZSFWC) is pleased to be involved and engaged on the watershed rehabilitation projects underway by SRP. Through our L. Gary Stinson Grant Program, AZSFWC awarded the Arizona Deer Association funding to work directly with SRP on the Hardscrabble Project southwest of Pine, AZ. AZSFWC and our non-profit members look forward to future collaborative efforts at restoring and rehabilitating even more forest habitat in Central Arizona,” said Jim Unmacht, Executive Director of Arizona Sportsmen for Wildlife Conservation.



SRP Forest Health Update

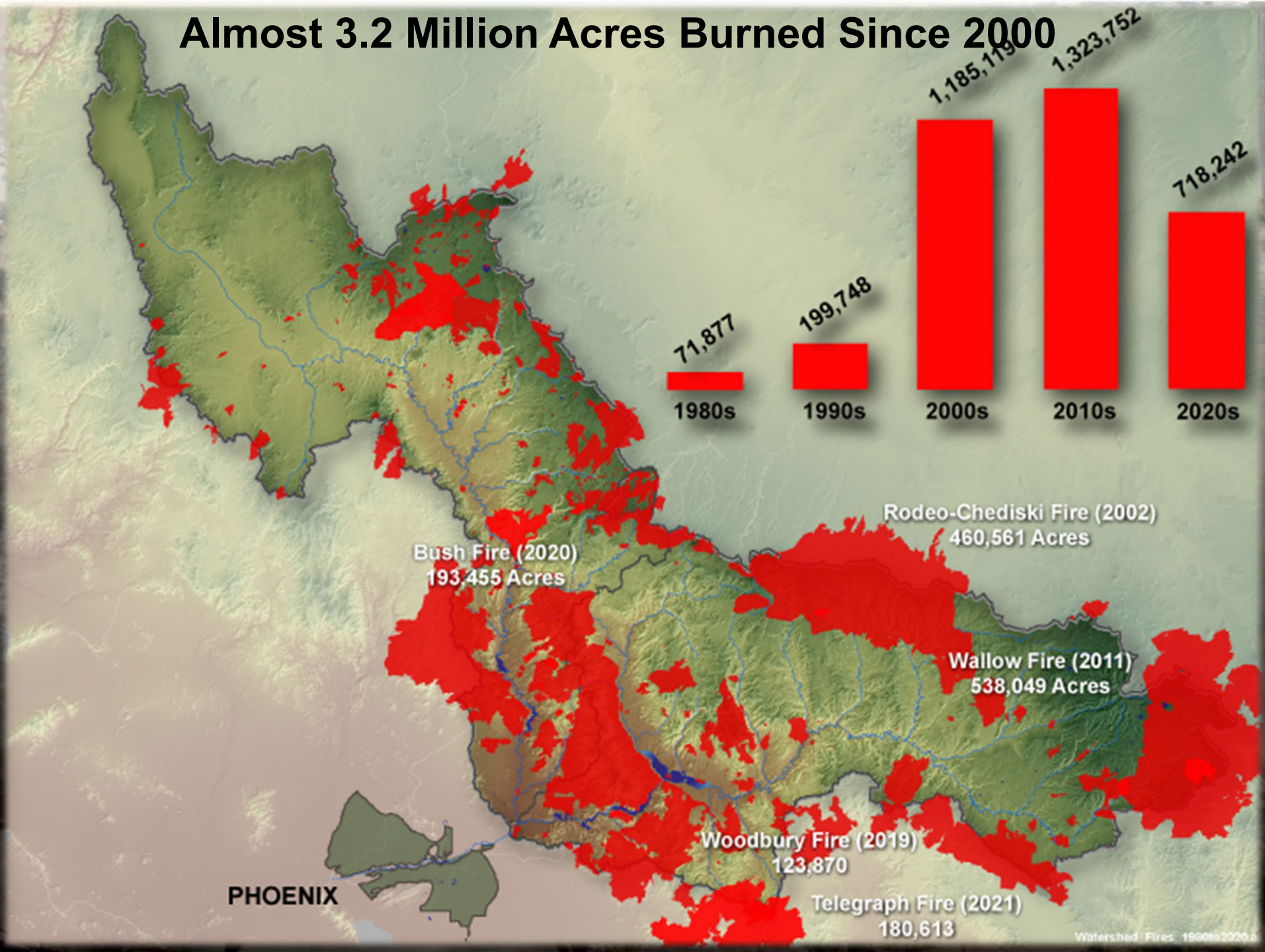
Elvy Barton | May 2022

Agenda

- Wildfire Consequences
- Forest Restoration Challenges
- SRP Partnerships
- Forest Thinning Projects
- Benefits of Forest Thinning
 - Water Benefits
 - Carbon Benefits



Almost 3.2 Million Acres Burned Since 2000



SPREADING LIKE

WILDFIRE

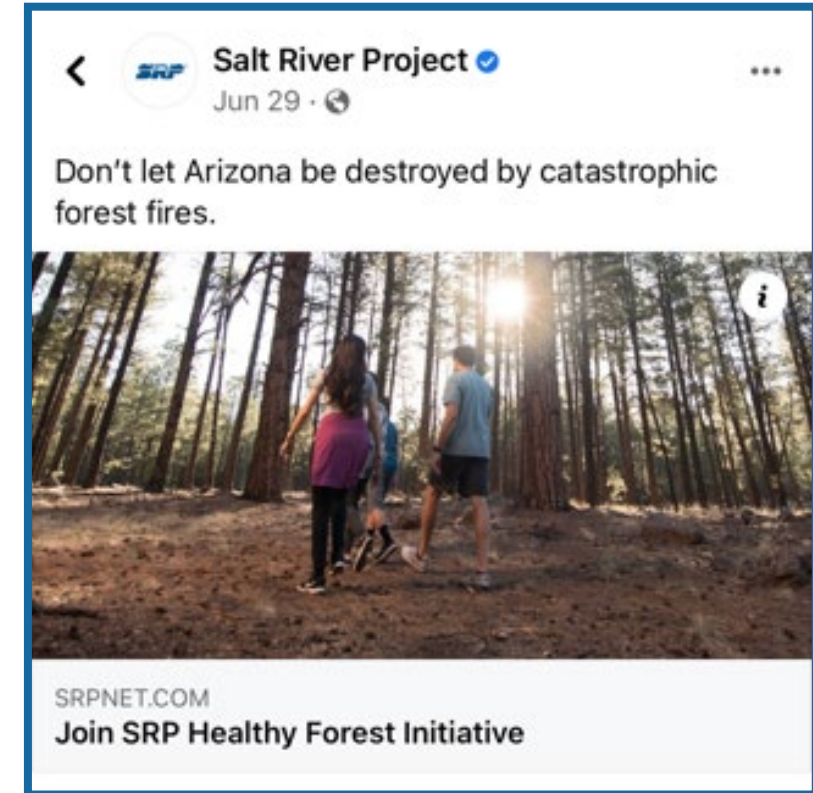
Forest Restoration Challenges

- Over 1,000,000 acres need restoration
 - 5 National Forests
- Limited industry capacity
 - 15,000 acres/ year
- Limited forest product markets and low value products
- Drought, disease and insect infestations, climate change magnify the problem



SRP Partnerships

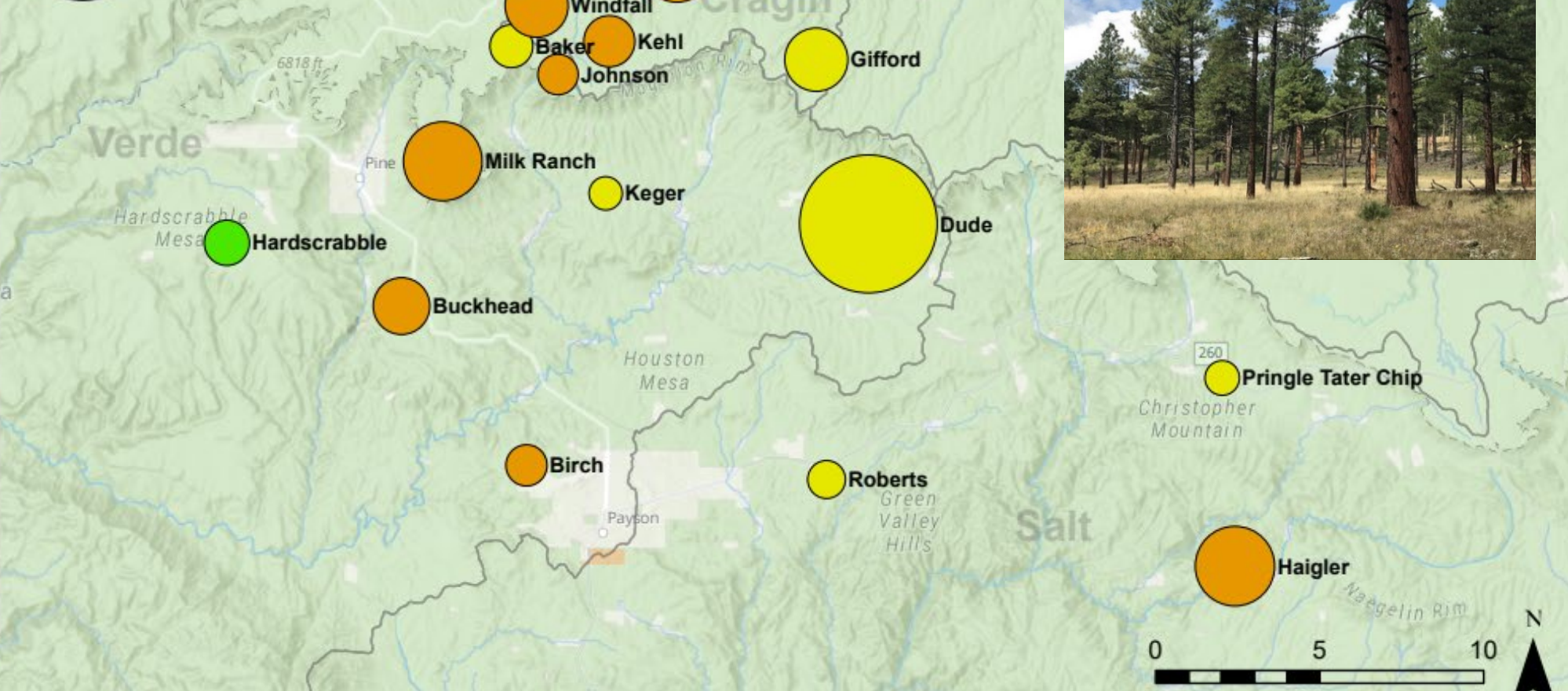
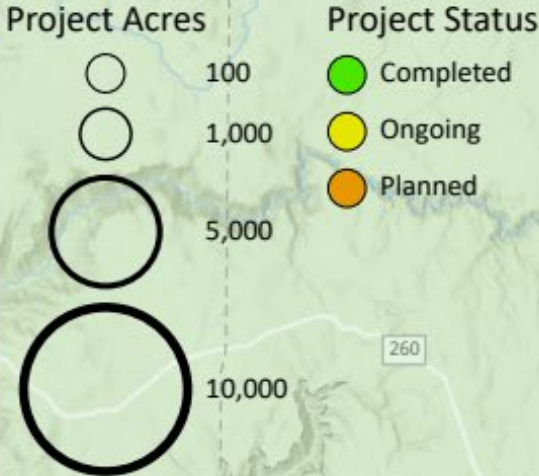
- SRP – AZ Dept. of Forestry and Fire Management – Forest Service MOUs
 - Tonto National Forest: 45,000 acres over 10 years
 - Cragin Watershed: 31,000 acres over 10 years
- SRP – AZ Game and Fish Dept.
- SRP – Town of Payson
 - Payson funds 27.2% of SRP's costs for Cragin projects
- AZ Sportsman for Wildlife Conservation MOU
- Others: Strawberry/Pine, NWTF, Deer Association, APS
- SRP Healthy Forest Initiative



SRP Forest Projects

Project Name	Acres
General Springs	3,519
Baker	1,010
Roosevelt	2,284
Gifford	2,700
McCarty	1,500
Kinder	3,500
Kehl	1,700
Johnson	800
Clover	2,300
Coldwater	3,300
Windfall	2,700
Milk Ranch	4,000
Moqui	6,000
Total	35,313

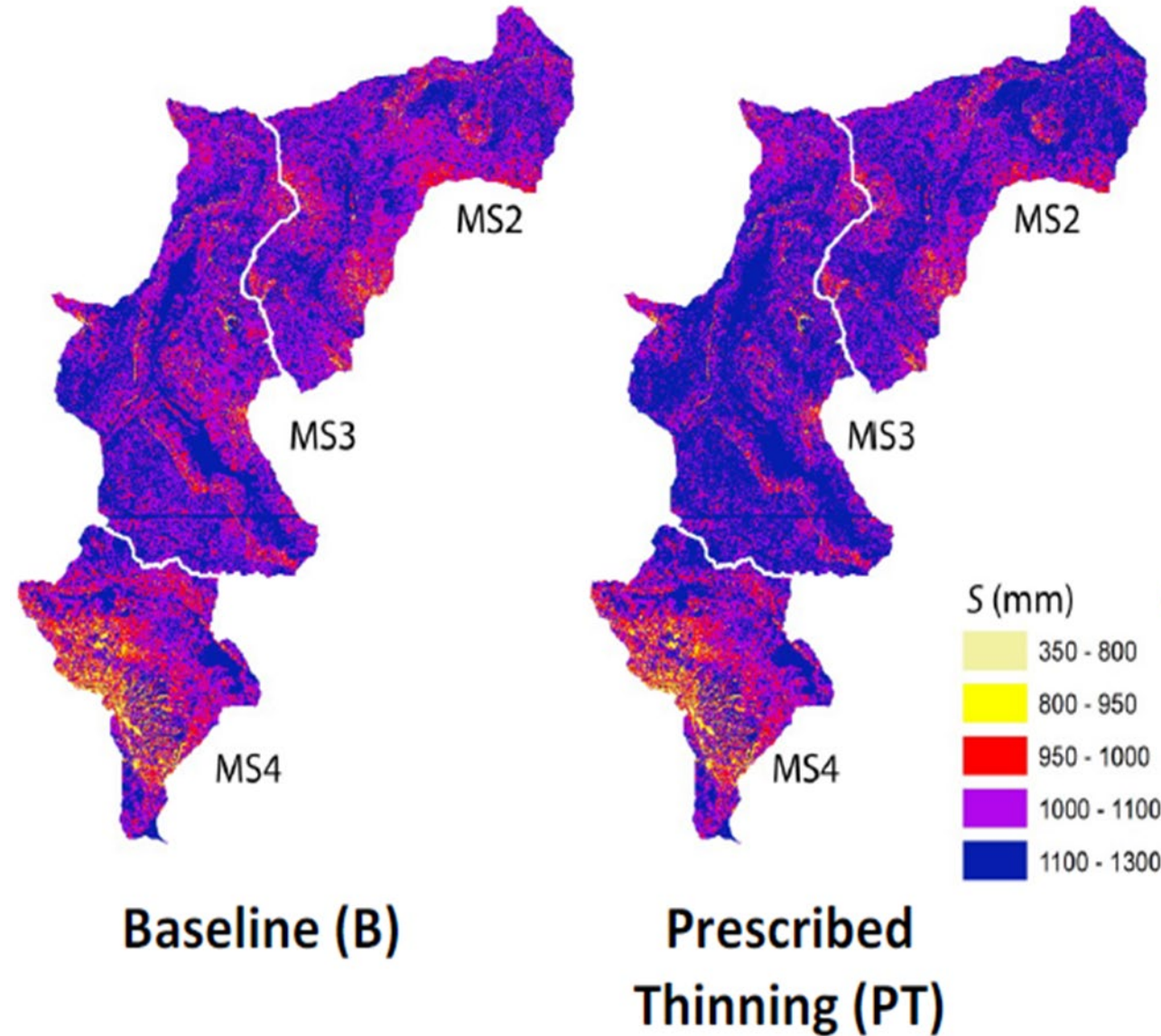
Sparky	80
Hardscrabble	1,200
Dude	8,903
Keger	209
Roberts	588
Pringle Tater Chip	312
Buckhead	2,158
Birch	868
Lookout	116
Diamond	325
Haigler	4,056
Total	18,815



Forest Health Water Benefits

Water Benefit Overview

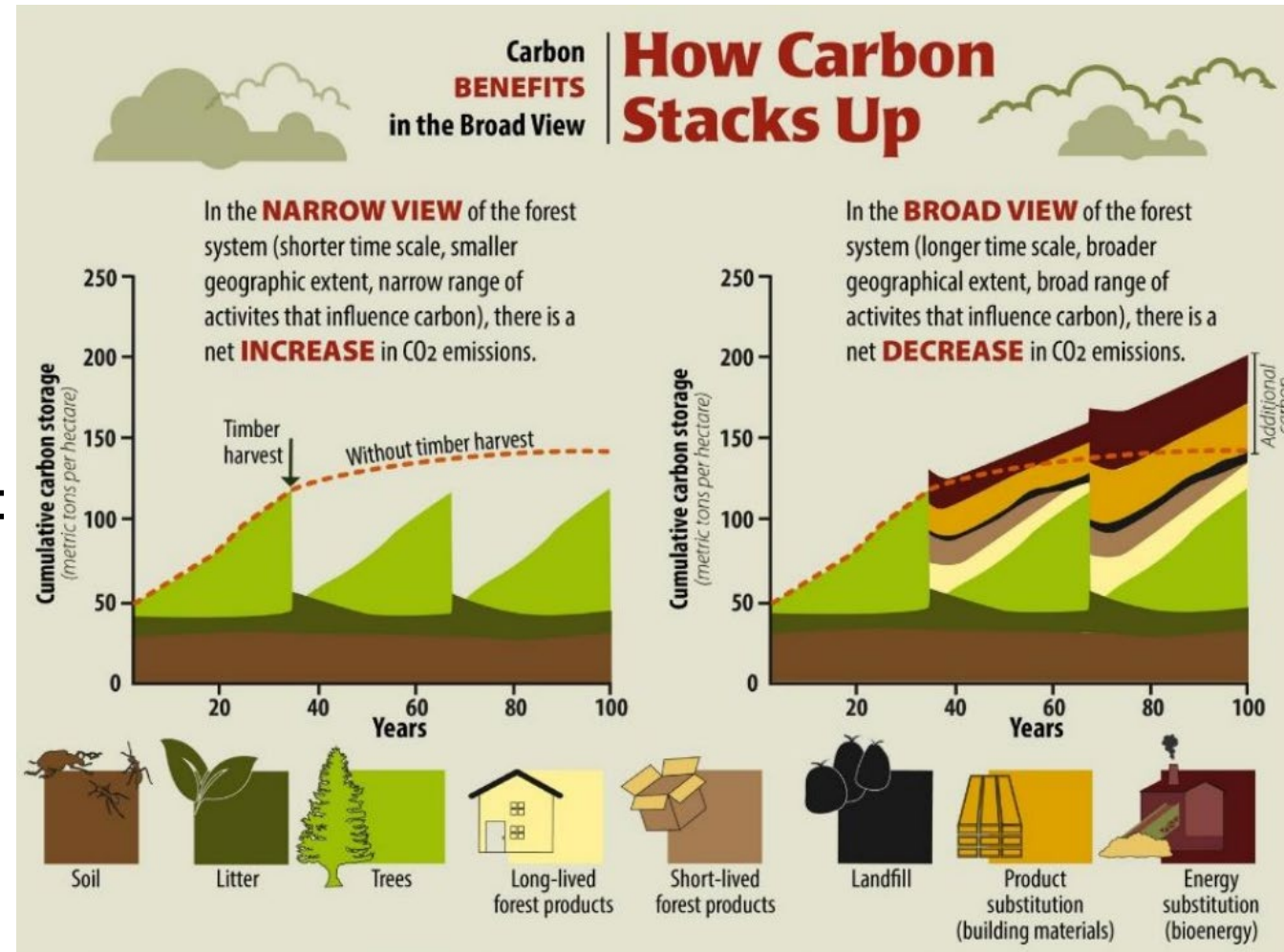
- **Watershed Hydrological Monitoring Model**
 - Developed in partnership with ASU and SRP
 - Endorsed by Bonneville Environmental Foundation
- **Water Benefits from three Categories**
 - Reduced evapotranspiration
 - Increased water stored in soils
 - Increased in streamflow



Forest Health Carbon Benefits

Carbon Benefit Overview

- Methodology: Avoided Wildfire Emissions Accounting
 - Developed by Spatial Informatics Group
 - Under review by Climate Forward
- Carbon Benefits From Four Categories:
 - Avoiding catastrophic wildfire
 - Sequestering carbon in remaining trees
 - Sequestering carbon in wood products
 - Avoiding delayed forest regeneration



thank you!

AZ Sportsmen For Wildlife Conservation GRANT COMPLETION REPORT

Use tab or arrow keys to move between fields and shift-tab to go back
Fillable Fields will expand as you type.

Project Title: Hardscrabble habitat improvement

Organization: Arizona Deer Association

Event/Project Completion Date:

Project Location (Include info such as event center, hunting unit, etc.):

Submitted By: John Koleszar

E-mail: elkhabiotat@gmail.com

Phone #: 480-0720-2393

Today's Date: 05/09/2022

AZSFWC Recognition:

- AZSFWC Logo and Link to AZSFWC on organization's website?** (attach screen print image) yes
- License Plate Image w/link to MVD on organization's website?** (attach screen print image) Yes
- AZSFWC Logo displayed at event?** (attach photo(s)) Yes
- AZSFWC recognized in all marketing materials & post event articles?** (attach all samples) Yes
- List any social media recognition of AZSFWC** (include all screen print images)
- Was there any media or press coverage?** (attach copies if available) Yes
- List any other recognition?**

Summarize Project Accomplishments : The project has been applauded by SRP and in all of their press releases.

Measurable Results (Fill in all that are applicable): See Press release

- Attendees** (If project was an event, list total # of participants, excluding staff, visiting parents, etc): _____
- Visitors** (If the project is an interpretive display, list total # of annual visitors): _____
- Brochures, Pamphlets, etc.** (If the project is a brochure, publication, poster or video, list the total produced and distributed): _____
- Other** (please explain):

Budget (specifically describe how AZSFWC funds were used; e.g. program promotion, type of equipment, materials and/or supplies, etc.) **ATTACH COPIES OF ALL RECEIPTS:**

Budaet Item	Planned	Actual
No Receipts as this was all handled by SRP. Total cost was		
\$582,000.00		