



United States Department of Agriculture



Four Forest Restoration Initiative (4FRI)

4FRI Restoration Strategy

USDA Forest Service

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A. OVERVIEW OF 4FRI VISION AND OBJECTIVES

The Four Forest Restoration Initiative (4FRI) is a landscape-level effort to restore 2.4 million acres of ponderosa pine and mixed conifer forests on portions of the Apache-Sitgreaves, Coconino, Kaibab, and Tonto National Forests in Northern Arizona over the next 20 years. The vision of 4FRI remains unchanged. The 4FRI vision is to restore forest ecosystems, reduce threats of destructive wildfire to thriving forest communities, support sustainable forest industries that strengthen local economies, protect critical watersheds, conserve natural resources, and maintain aesthetic value as well as ensure the long-term success of this project and industry. These watersheds supply water uses including municipal, domestic, irrigation and industrial uses for millions of people in the Phoenix metropolitan area.

The Forest Service has made a long-term commitment to achieve healthy, resilient forests across the 4FRI landscape. We are ready and excited to continue the path forward with industry and partners. Our strategic goals include:

- Accelerate the pace and scale of restoration treatments
- Support sustainable forest restoration industries
- Apply an all-lands approach
- Collaborate and engage
- Innovate
- Improve and modernize Forest Service business practices
- Learn and adapt

Recently, Forest Service Chief Randy Moore set up a national Wildfire Risk Reduction Infrastructure Team to develop a 10-year Investment Strategy to reduce wildfire risk and improve resilience. Over the next decade, we intend to collaborate with partners to treat an additional 20 million acres on National Forest System lands and up to an additional 30 million acres on federal, state, tribal and private lands. The scope of the team is to minimize the threat of catastrophic wildfires in the West and to treat more acres in less time.

The vision and objectives of 4FRI are in alignment with the Chief's 10-year Investment Strategy. The 4FRI landscape includes 6 out of 10 of the highest priority fireheds in the Southwestern Region as shown in Figure 1. There are also 9 of the 10 Arizona high priority fire risk areas located in the 4FRI footprint. We are shifting our collective mindsets and strategy to center on a different and better approach. We are focusing our attention to specific acres and broadening the scale of treatment to more immediately reduce wildfire risk, protect communities and restore the health of forests.

Shared Stewardship and Collaboration

Critical work is ongoing by the Forest Service, key partners, 4FRI Stakeholders Group, and industry to actively restore forest ecosystems. The USDA Secretary and Governor of Arizona signed a Shared Stewardship Memorandum of Agreement in July 2020. This agreement defines the shared commitments to 4FRI and other high priority projects in Arizona.

The Forest Service convened with multiple parties including the 4FRI Stakeholders Group that includes over 40 key partners, industry, and communities to review lessons learned, define key enabling conditions and new approaches to redesign a 4FRI Restoration Strategy. These efforts included an Industry Roundtable on October 12, 2021 and 4FRI Stakeholder Meeting on October 18, 2021 to develop a collaboratively supported strategic approach to accelerate the pace and scale. Continued collaboration is crucial, as stakeholder involvement will help ensure strong public ownership in restoration treatments.

Specific highlights include:

1. 4FRI has established and maintained key partnerships to build restoration capacity through innovative Master Stewardship Agreements with The Nature Conservancy, National Forest Foundation, and National Wild Turkey Federation.
2. 4FRI is pioneering the use of Good-Neighbor-Agreements with the State of Arizona Department of Forestry and Fire Management and Salt River Project to expand capacity.
3. 4FRI created the Wood for Life Program to provide fuelwood to tribal communities.
4. Since 2010, approximately 258,000 acres have been mechanically treated or treatments are currently ongoing. In addition, prescribed fire is continually being conducted across the landscape, resulting in more acres treated to reduce fuels.
5. The Region recently signed (10/28/2021) a new 10-year Master Good Neighbor Agreement with Arizona Department of Forestry and Fire that will expand these efforts across Arizona.

Collaborative partnerships are critical to socialize support, increase shared funds, reduce joint risks, and implement projects at scale. With existing and new agreements, and continued innovations, the Forest Service can share resources and adapt this strategy with partners to attract and sustain forest industry.

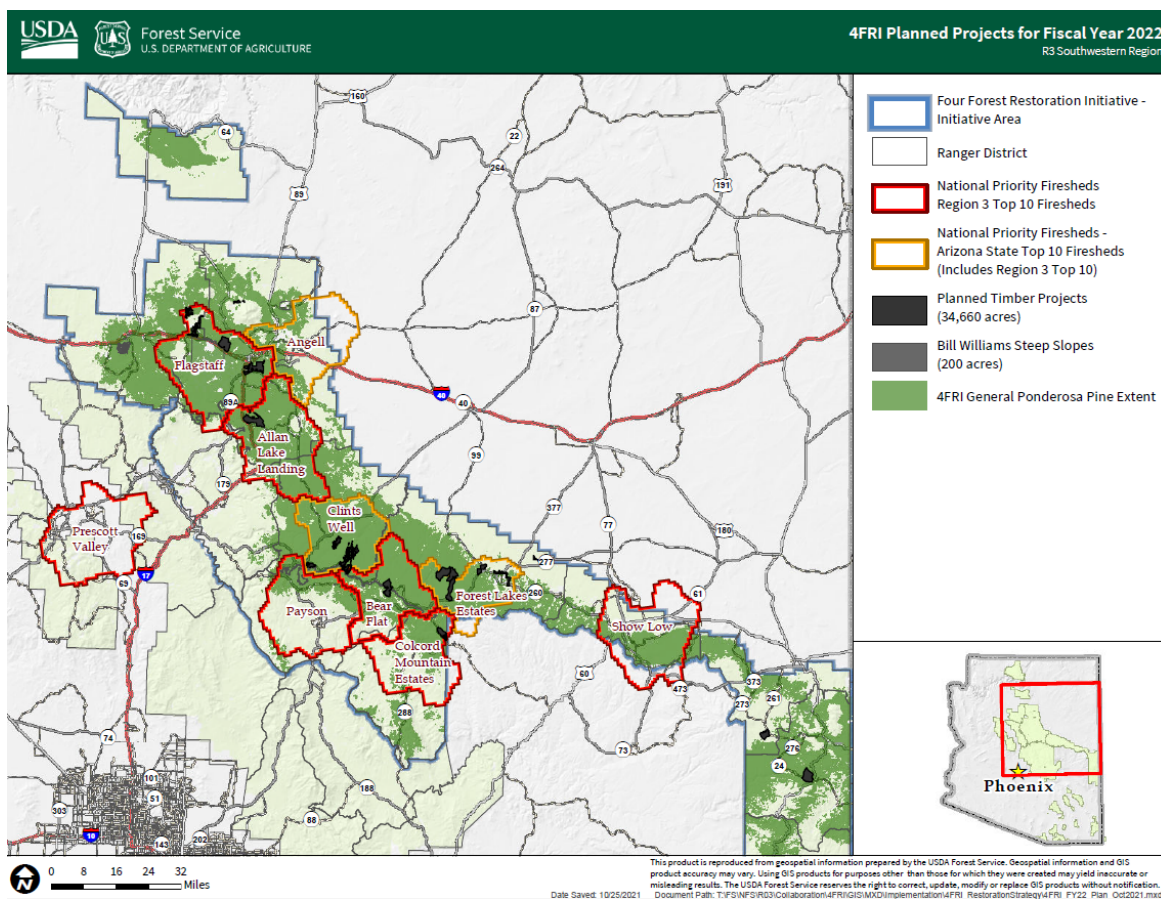


Figure 1: Map showing 7 of the top 10 firesheds (red polygons) across the Southwestern Region (remaining firesheds are located in New Mexico) in relation to the 4FRI footprint. Six of the regional top 10 firesheds in Arizona (red polygons) as well as nine of the Arizona state top 10 firesheds (6 red polygons and 3 orange polygons) are located within the 4FRI footprint. Map also shows the FY22 planned projects to be offered across 4FRI (black polygons).

B. OVERVIEW OF FOREST SERVICE RESTORATION STRATEGY

The cancellation of the Phase 2 Request for Proposals (RFP) for 520,000 acres of treatment has resulted in a collaboratively developed and redesigned 4FRI Restoration Strategy. The Forest Service has actively worked with key partners and 4FRI stakeholders to redesign a new 4FRI Restoration Strategy that is broadly supported by industry and local communities. The Forest Service remains committed to treating the full 4FRI footprint and proposes this would be best achieved through a multi-pronged approach. By applying a suite of treatment options there is higher confidence that acres can be treated to achieve the 4FRI objectives.

The Forest Service acknowledges the importance of supporting existing local industry and strives to ensure a continuation of acres made available to local industry. At the same time, the Forest Service recognizes the need to bring new industry to the state. To attract new industry, there will need to be commitments to provide a steady stream of available acres over a long period of time (20 years).

The Forest Service values our partners and their efforts to expand work to implement on the ground treatments and leverage funding to meet the needs of Arizona. We recognize the need to maintain and grow partnerships to help fund and implement projects. By utilizing existing agreements and setting up new agreements, the Forest Service can leverage resources from partners to help achieve desired outcomes. These agreements would also utilize existing local industry to provide for continuity of operations.

The Forest Service is actively committed to the 4FRI vision and is working closely with industry and 4FRI Stakeholders to find an effective strategy, including more immediate action than would have occurred with a large single contract. We will continue to accelerate treatments in high priority locations, provide wood products to existing industry now and into the future, and will explore pathways for innovative approaches that attract and sustain forest products industry. We welcome and are seeking further dialogue with industry on market research and partners on these commitments to further define the details. We commit to a transparent, open process to refine the path forward. We recognize that the path forward may include another large-scale proposal or a combination of new agreements and contracts.

Accomplishments and Expected Outcomes

The restoration strategy is quicker and more diverse with opportunities for existing and new industry. It uses a variety of scales, different contracts and agreements, over multiple time frames (5,10, 20 years) to expand industry and jobs (1,400 jobs and \$56.6M income in FY2021).

Based on pending and completed National Environmental Policy Act (NEPA), there is a need to treat approximately 700,000 to 880,000 acres over the next 20 years to meet desired conditions and reduce wildfire risk using a variety to approaches include mechanical thinning and prescribed burning. These acres include the high priority partner projects, providing acres to maintain existing industry and both product and non-product removal areas with implementation tools to be determined. This is in addition to 258,000 acres already completed under 4FRI over the past 10 years.

Considering the total acres treated and planned under this strategy (up to 1.2 million acres) across the 2.4 million acres landscape, the outcome is approximately treating 47% of the 2.4 million acres.

Based on new information for restoring fire-adapted ecosystems in 4FRI for fire resiliency (RMRS GTR 424), blending financial and resiliency objectives are critical to defining the overall outcomes for success. On average only 40% to 50% of a planning area's acres need to be strategically treated to reduce 80% of the exposure from wildfire. This collaborative effort will help to further understand and define tradeoffs

between financial and fire resiliency objectives, while we continue to implement this 4FRI Restoration Strategy.

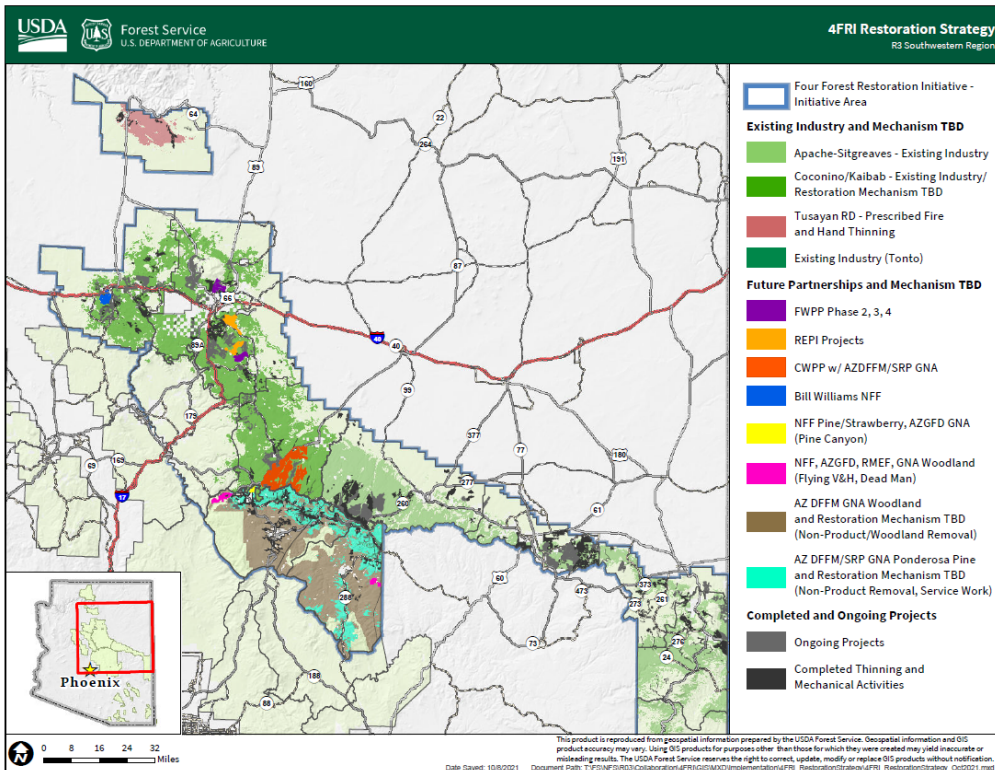


Figure 2. Map showing 4FRI high priority partnership areas and acres that have been treated over the past 10 years.

C. RESTORATION STRATEGY PROPOSAL

There are six key decisions that comprise the proposal for the restoration strategy. Overall, the six points fit into the categories that have been identified with the Stakeholder Group: (1) resolve enabling conditions, (2) focus on high priority projects, (3) identify acres to implement to maintain local industry, (4) identify remaining acres that need further assessment regarding implementation tools.

The six key decisions are summarized here and described in detail below:

1. Immediately prioritize and expand the highest-priority partnership projects
2. Immediately implement 5-year plans which provide 295,000 acres over 20 years to maintain existing industry
3. Use prescribed fire and non-commercial thinning as the primary approach on approximately 86,000 acres (over 20 years) from Tonto and Kaibab NFs
4. Conduct a rapid assessment and optimization effort using best available science including priority firesheds on the Coconino and Kaibab NFs
5. Focus on resolving enabling conditions for industry success
6. Identify mechanisms to fund and implement road and bridge needs across the 4 forests (backlog and ongoing maintenance)

Key Decision 1:

Immediately prioritize and expand the highest-priority, partnership projects to significantly reduce the risk of catastrophic wildfire to communities on approximately 135,000 acres. These projects are critical to

partners through expanded Good Neighbor Authority (GNA) and Master Stewardship Agreements (MSA) (Bill Williams, Flagstaff Mountain, CC Cragin, Sierra/Anchas). This step recognizes that our solution must address immediate, pressing safety needs that are most threatening to communities today. We will repeat step one indefinitely (with new areas) while we work in parallel on steps four and five so that the agency continues to reduce wildfire risk. This strategy recognizes the necessity for implementing a multi-pronged approach with partners using MSA/GNAs and contracts as part of the whole solution.

High priority partner projects on the Coconino NF will include product removal. High priority partner projects on the Kaibab will not have product removal and instead focus on fuel reduction. High priority partner projects on the Tonto NF will have limited commercial timber product and work will primarily be composed of hazardous fuels mechanical mastication and non-commercial thinning work. The details of cost sharing with partners on these high priority projects still need to be resolved since the Forest Service cannot bear the full costs of these projects.

Table 1: High priority partner projects:

| High Priority Projects | Partners | Acres Planned for Treatment over next 5-10 years | Cost per acre* | Total Forest Service Contributions* | Total Partnership Contributions | Full Estimated Project Cost** |
|--|------------------------------------|--|----------------|-------------------------------------|-----------------------------------|-------------------------------|
| Coconino NF | | | | | | |
| Flagstaff Watershed Protection (FWPP) Phases 2, 3, 4 ¹ | Coconino County, City of Flagstaff | 2,500 | \$5,807.57 | \$11,615,150 | \$2,903,788 (based off 20% match) | \$14,518,937 |
| Readiness and Environmental Protection Initiative (REPI) ² | Department of Defense | 8,000 | \$2,500 | \$10,687,500 | \$10,687,500 | \$21,375,000 |
| Innovations projects ³ | NFF, ERI | 5,000 | \$2,500 | \$944,000 | \$236,000 (based off 20% match) | \$1,180,000 |
| CC Cragin Watershed ⁴ | DFFM, SRP, NWTF | 39,300 | \$1,600 | \$31,440,000 | \$31,440,000 | \$62,880,000 |
| Coconino NF Totals | - | 54,800 | - | \$54,686,650 | \$45,267,288 | \$99,953,937 |
| Kaibab NF | | | | | | |
| Bill Williams (non-product removal and complex terrain) | DFFM, NFF, Coconino County | 3,800 | 9,130 | 27,760,000⁵ | 6,940,000 | 34,700,000 |
| Tonto NF | | | | | | |
| Ponderosa pine treatments (includes both product and non-product service work) | DFFM / NFF | 12,000 | \$700 | \$4,200,000 | \$4,200,000 | \$8,400,000 |

| | | | | | | |
|--|-----------------------------------|----------------|----------|----------------------|---------------------|----------------------|
| Woodland acres (mastication) | DDFM / NFF | 62,000 | \$800 | \$24,800,000 | \$24,800,000 | \$49,600,000 |
| Woodland acres (Flying V&H, Dead Man Mesa) (mastication) | GNA with NFF, AZGFD, RMEF | 4,976 | \$585 | \$2,000,000 | \$910,960 | \$2,910,960 |
| Pine Canyon Treatments (w/ potential helicopter logging) | Potential Agreement with partners | 500 | \$12,000 | \$4,800,000 | \$1,200,000 | \$6,000,000 |
| Tonto NF Totals | - | 79,476 | - | \$35,800,000 | \$31,110,960 | \$66,910,960 |
| High Priority Project Totals | - | 138,076 | - | \$118,246,650 | \$83,318,248 | \$201,564,897 |

*Costs needed for the Forest Service specifically in FY22 and FY23 are provided in Table 5

**Costs provided here are general estimates conceptually representing total costs

¹FWPP- Pending additional monitoring results and reinitiating consultation with FWS. Project costs do not include required road work (estimated to be \$255,000) and the small amount of product value.

²REPI- This is assuming the REPI portion of the funding is \$5 million plus additional funds from partners.

³Innovations- Costs vary by project, so costs are based on a subset of projects.

⁴CC Cragin- Assumes a 50% match from AZDDFM/SRP based on recent SRP proposal presented at Industry Roundtable Meeting 10/12/21. Both the exact match and final acreage figures are still being negotiated. Roads costs are not included, biomass removal and haul costs are high.

⁵Bill Williams – FS/Partnership contributions could vary in range from 20 and 80%.

Key Decision 2:

Immediately implement 5-year plans which provide 295,000 acres over 20 years to maintain existing industry. This plan sets aside on average 270,000 acres for eastside industry (12,000-15,000 acres/yr), 16,500 for Tonto (approximately 800-1,000 ac/yr) with some product removal, and 18,500 acres on the Coconino and Kaibab NFs for westside industry for FY 2022 only. This step shores up existing industry and removes the market uncertainty that would have been created through the Phase 2 RFP. This strategy recognizes that our solution must include an avenue for existing industry to continue to survive and thrive in this difficult market.

These acres include the portions of high priority partnership projects listed above proposed to implement specifically in FY22. See table 4 for funding requests for FY22-FY26.

Apache-Sitgreaves National Forests

Implement the full 4FRI 5-year plans for timber and fuels specifically for the ASNFs (FY2022-2026). The specific projects approved under this decision are listed in the 10/25/21 version of the 4FRI 5-yr plans for timber and hazardous fuels. The acres available on the ASNFs will not be considered for future large-scale agreements across 4FRI. This forest comprises the “east side” of the 4FRI footprint and has an established industry in place. This decision will continue and reinforce the only existing successful forest restoration program in Arizona, the “Bridge the Gap” program in the White Mountains of Eastern Arizona, led by the Eastern Arizona Counties Organization (ECO) and the Apache-Sitgreaves National Forests. It is critical to give local existing industry the opportunity to continue to perform reliably with long-term, stable wood supply predictability. This program has resulted over the last 10 years in the successful mechanical treatments of an average of 12,000 to 15,000 acres annually using the classic model of timber sales purchased periodically by local industry.

Tonto National Forest

Implement the 4FRI 5-year plans (FY 2022- FY 2026) for both Timber and Hazardous Fuels for the Tonto National Forest. Planned work during this 5-year timeframe include timber removal at an estimated 2,000 acres/year and an estimated 30,000 acres/year via hazardous fuels treatments (est. 15k acres/yr. via mechanical/thinning methods and 15k acres/yr. via prescribed fire and/or beneficial wildfires). On average, over a twenty-year timeframe (2022 – 2042) the annual timber program on the Tonto will be an estimated 1,100 acres per year.

The specific projects approved under this decision point are listed in the 10/25/21 versions of the 4FRI 5-yr plans for timber and hazardous fuels. The majority of areas needing treatment on the Tonto NF (Payson and Pleasant Valley Ranger Districts) are primarily woodlands that provide limited opportunities for timber removal and are more significantly dependent on hazardous fuels treatments. Project objectives include reducing hazard fuels, increasing forest resilience, and improving natural and cultural resource conditions. The Tonto NF will continue to implement this workload using a combination of USFS procurement systems and by working with partners, including the National Forest Foundation, AZ-Dept. of Forestry and Fire Management, AZ Game and Fish, and Salt River Project to augment USFS procurement capacities.

| 4FRI National Forests | Acres of timber planned to offer FY22 | Acres of hazardous fuels planned FY22 | Acres of prescribed fire planned FY22 |
|-----------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Coconino NF | 14,447 | 1,060 ^a | 35,000 |
| Kaibab NF | 4,025 | 2,100 | 20,000 |
| Tonto NF | 1,800 | 12,167 | 17,662 |
| Apache-Sitgreaves NFs | 14,388 | 10,000 ^b | 43,881 |
| FY22 Totals | 34,660 | 25,327 | 116,543 |

Table 2: FY22 total acres planned to offer across 4FRI for timber, hazardous fuels, and prescribed fire.

^aAssumed to be Acres of Hazardous Fuels Reduced not through prescribed fire use or timber sales (hand thin, mastication, etc.)

^bRepresents mechanical treatment acres using whole tree logging that reduces hazardous fuels

Key Decision 3:

Use prescribed fire and non-commercial thinning as the primary approach on approximately 86,000 acres (over 20 years) from Tonto and Kaibab NFs. These acres were not viable under the Phase 2 RFP due to limited timber availability. These areas will be treated under 4FRI but will only provide marginal product removal and as such will not contribute measurably to industry.

Key Decision 4:

Conduct a rapid assessment and optimization effort using best available science including priority firesheds on the Coconino and Kaibab NFs. Approximately 300,000-350,000 acres (over 20 years) will be assessed to prioritize which acres to treat to reduce the risk of wildfire the quickest beginning with FY2023 treatments. This approach uses new science to target acres to reduce risk, and lower costs by treating fewer acres in a shorter timeframe. The outcome will inform needs for a new larger-scale agreement or contract while we also resolve enabling conditions. This step uses best available science to partners with industry to be a part of the long-term approach.

Work closely with the 4FRI Stakeholder Group to define priorities for project implementation and collaboratively conduct an optimization effort. The result of this effort will be collaboratively designed 5-year plans for timber and hazardous fuels for the Kaibab and Coconino NFs starting in FY23 (FY22 is covered under decision point #2). This assessment and optimization effort is expected to begin in January 2022 and be completed within several months.

Key Decision 5:

Focus on resolving enabling conditions for industry success (creating incentives to reduce costs, market conditions, eliminating uncertainty of biomass disposal including purchase power agreements, ensuring raw material availability by areas in advance, maintaining roads and bridges, covering losses due to wildfire, transportation plans, fire liability risks). This step recognizes the dependence that a long-term solution has on market conditions that the Forest Service can influence, but ultimately does not control. While we will press for resolution here, if we are unable to influence the enabling conditions for a long-term market solution, the agency will still meet its mission to reduce wildfire risk by continuing to prioritize projects via step one. The 4FRI Restoration Strategy is dependent on resolution of these enabling conditions that were identified jointly through the 4FRI Industry Roundtable and the 4FRI Stakeholder Group.

Scale and Timing:

- Strategically prioritize areas and timing by values at risk
- Provide existing & new industry opportunities at all scales
- Provide contracts or agreements for multiple time frames (5-year plans, 10–20-year outlook)
- Integrate timing of thinning and fuel treatments

Material Availability: Publicly review volume availability by areas in advance of contracts and/or agreements

Infrastructure and Financial Risks:

- Provide incentives for investment to reduce costs/risks (e.g. liability for wildfire losses)
- Resolve uncertainty of biomass disposal and purchase of bioelectricity prior to any next step
- Review financial information requirements and risks
- Jointly assess net costs; share costs/risks with all stakeholders/partners over the long-term.

Simplify the Process:

- Make information publicly available for review prior to contracts or agreements
- Align funding cycles with contract or agreement work
- Simplify complexity to increase implementation

Key Decision 6:

Identify mechanisms to fund and implement road and bridge needs across the 4 forests. We need a full transportation system plan and funds to support industry and recreation; critical to scale and local economies. We need to account for priority of areas, timing of entry, capacity to plan, design, advertise, contract and complete the work.

Background on road funding issues:

In general, timber sales support road maintenance and reconstruction but low value timber does not cover these costs. There has been a steady decrease in the number of timber sales over the last 30 years in the Southwest which does not cover road maintenance. Road maintenance and reconstruction needs exceed the level of Forest Service appropriated funding available for roads. The cost and timing of road repair, reconstruction and maintenance is affecting the pace and scale of restoration across 4FRI.

Road funding needs:

We need to develop a funding plan for the long-term transportation needs across 4FRI. With additional funding, work on main haul roads can be accomplished via contract, relieving the purchaser of responsibility for pre-haul maintenance. An Indefinite Delivery Indefinite Quantity road maintenance

/reconstruction contract for all forests in AZ and NM will be advertised in the coming months. This would allow Forests to quickly award task orders for road maintenance/reconstruction/surfacing. Some ideas to resolve these funding needs include developing material pits in strategic locations, reducing the overall cost to surface main haul roads and using a flat fee per ton of material removed on contracts and agreements.

The 4FRI road system consists of 73 bridges and 12,534 miles of road.

- High Clearance Roads: 10,544 miles (native surface)
- Passenger Car Roads: 1,990 miles (126 paved, 1,678 gravel, 184 native surface)
- Open roads (ML 2-5) account for 76% of the road system on the 4FRI forests and 47% in the Region
- Bridge projects take 3-5 years to complete.

Total annual 4FRI road maintenance costs range from \$6-10M - (FY21 - \$3M CMRD; plus additional annual costs - \$3-7M). These are essential to access acres, reduce haul times, distances, and minimize annual maintenance costs. The total deferred cost (backlog) is approximately \$65M (Roads \$41M; and Bridges \$24M).

There is more information available in a Forest Service 4FRI roads briefing paper dated 10/19/21.

Table 3: Summary of deferred costs for roads and bridges (does not include annual maintenance costs).

| Years | Road Costs | Bridge Costs | Total |
|--------------|-------------------|---------------------|-----------------|
| 1-5 | \$10M | \$3.25M | \$13.25M |
| 6-10 | \$12.5M | \$9.75M | \$22.25M |
| 11-15 | \$12M | \$8.5M | \$22.25M |
| 16-20 | \$6M | \$3M | \$9M |
| TOTAL | \$40.5M | \$24.5M | \$65M |

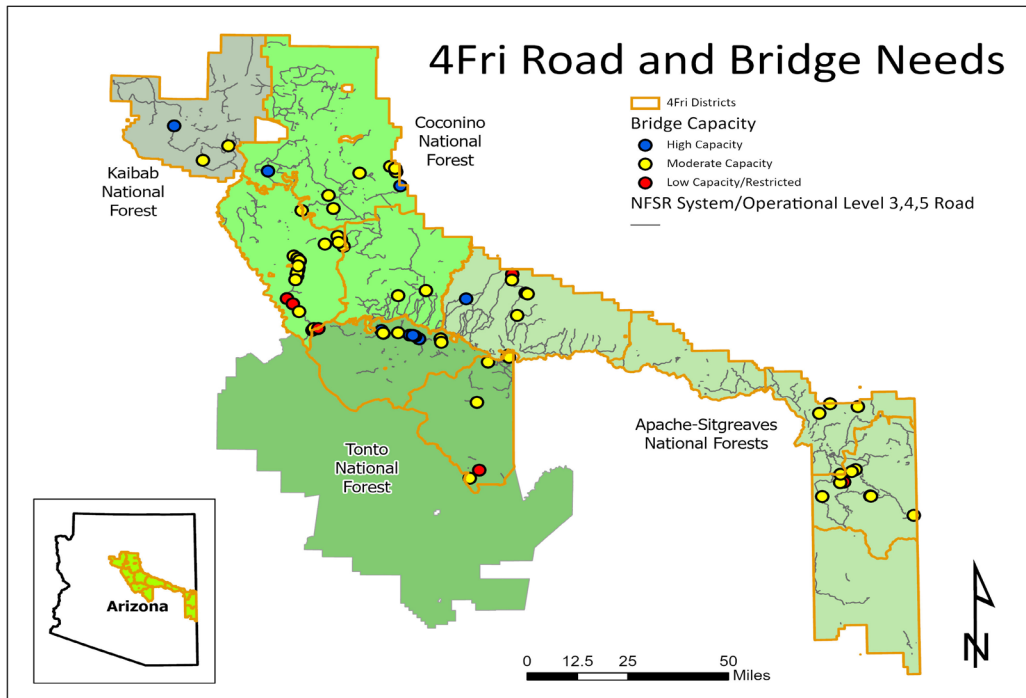


Figure 3: Map showing road and bridge needs across the 4FRI landscape.

D. FUNDING THE RESTORATION STRATEGY

We are fully committed to working with partners to achieve the restoration needs at scale, addressing needs for more sustainable industry solutions and to further define cost-sharing strategies.

In FY 2022, the Agency is committing \$54 million to accelerate the needs for implementing high priority projects, annual road maintenance, and address the backlog on deferred maintenance on roads and bridges. These funds support approximately 35,000 acres in mechanical thinning in FY 2022.

The 4FRI Forests are currently working to fully integrate this overall strategy and decision including objectives for fuels treatments into 5-year plans. Further work is underway on defining the full costs and needs and to develop cost-sharing strategies with partners for the high priority projects.

Overall summaries of costs needed to implement 4FRI program of work over the next 5 years (2022-2026) are provided here.

Table 4: 4FRI 5-yr timber and fuels program costs by forest including high priority partner projects

| Forest annual needs for 4FRI projects (includes high priority projects) | FY22 | FY23 | FY24 | FY25 | FY26 | Totals |
|---|-------------|-------------|-------------|-------------|-------------|---------------------|
| Apache-Sitgreaves NFs | | | | | | |
| *Discretionary costs- timber and hazardous fuels | \$5,189,095 | \$5,676,408 | \$5,618,774 | \$5,883,892 | \$5,793,237 | \$28,161,406 |

| | | | | | | |
|--|---------------------|-------------------------|---------------------|---------------------|---------------------|---------------------------------|
| **S&E - salary needs | \$9,300,000 | \$9,765,000 | \$10,253,250 | \$10,765,912 | \$11,304,208 | \$51,388,370^a |
| Coconino NF | | | | | | |
| Discretionary costs-timber and hazardous fuels | \$12,618,244 | \$12,618,244 | \$14,403,279 | \$16,516,833 | \$12,482,492 | \$68,639,092^d |
| S&E - salary needs | \$9,922,921 | \$10,915,213 | \$11,460,974 | \$12,034,022 | \$12,635,724 | \$56,968,854 |
| Kaibab NF | | | | | | |
| Discretionary costs-timber and hazardous fuels | 10,058,000 | 7,656,700 | 8,805,205 | 10,125,986 | 11,644,884 | 48,290,775 |
| S&E - salary needs | \$5,078,957 | 5,455,141 | 5,632,468 | 5,810,956 | 5,990,620 | 27,968,142 |
| Tonto NF | | | | | | |
| Discretionary costs-timber and hazardous fuels | 4,541,155 | 15,265,399 ^b | 7,042,635 | 13,818,446 | 11,473,434 | 52,141,069 |
| S&E - salary needs | \$4,487,916 | \$4,712,312 | \$4,947,927 | \$5,195,324 | \$5,455,090 | \$24,798,569^c |
| Totals | \$61,196,288 | \$72,064,417 | \$68,164,512 | \$80,151,371 | \$76,779,689 | \$358,356,277 |

*Discretionary costs include: timber and hazardous fuels (contracts, GNA, fleet, materials/supplies, surveys/prep/timber admin- outside of force account) – road maintenance costs are covered in table 6 so not included here

**Salary costs include: full salary needs including seasonals (any and all forest staff time spent on 4FRI in total)

^a NFSE funding represents only salaries that support 4FRI activities. Adjustment of 5% per annum applied to NFSE for ASNFs to account for inflation @ 2.5% and salary COLA @ 2.5%.

^b FY23 for the Tonto includes the high cost of Pine Canyon treatments

^c salary needs include 5% annual adjustment

^d FY24-26 are estimates and could be higher due to cost increases

Table 5: Summary of costs for high priority partner projects

| High Priority Projects | FS Funding needed FY22 | FS Funding needed FY23 | Total FS Funding Needed (full project timelines 5-10 yrs) | Partner Contributions (full project timelines 5-10 yrs) | Full Estimated Project Cost (full project timelines 5-10 yrs) |
|--|------------------------|------------------------|---|---|---|
| Coconino NF | | | | | |
| FWPP | \$0 | \$0 | \$11,615,150 | \$2,903,788 (based off 20% match) | \$14,518,937 |
| REPI | \$0 | \$5,677,500 | \$10,687,500 | \$10,687,500 | \$21,375,000 |
| Innovations projects | \$410,000 | \$0 | \$944,000 | \$236,000 (based off 20% match) | \$1,180,000 |
| Cragin Watershed | \$5,160,000 | \$5,112,800 | \$31,440,000 | \$31,440,000 | \$62,880,000 |
| Coconino NF totals | \$5,570,000 | \$10,790,300 | \$54,686,650 | \$45,267,288 | \$99,953,937 |
| Kaibab NF | | | | | |
| Bill Williams | 5,100,000 | 1,700,000 | 27,760,000 | 6,940,000 | 34,700,000 |
| Tonto NF | | | | | |
| Ponderosa pine treatments (includes both product and non-product service work) | \$417,000 | \$1,000,000 | \$4,200,000 | \$4,200,000 | \$8,400,000 |
| Woodland acres (mastication) | \$960,000 | \$2,310,000 | \$24,800,000 | \$24,800,000 | \$49,600,000 |

| | | | | | |
|---|---------------------|---------------------|----------------------|---------------------|----------------------|
| Woodland acres (Flying V&H, Dead Man Mesa) (mastication) | \$623,000 | \$540,000 | \$2,000,000 | \$910,960 | \$2,910,960 |
| Pine Canyon Treatments (w/ potential helicopter logging) | \$0 | \$3,760,000 | \$4,800,000 | \$1,200,000 | \$6,000,000 |
| Tonto NF Totals | \$2,000,000 | \$7,610,000 | \$35,800,000 | \$31,110,960 | \$66,910,960 |
| Totals High Priority Projects | \$12,670,000 | \$20,100,300 | \$118,246,650 | \$83,318,248 | \$201,564,897 |

Table 6: Summary of annual road and bridges maintenance costs and total backlog costs across 4FRI landscape.

| Roads and Bridges | Total Costs |
|------------------------------|--|
| Annual maintenance - roads | \$6-10M/yr (\$200M over 20 years) |
| Annual maintenance – bridges | \$3.25M/yr (\$65M over 20 years) |
| Road backlog | \$41,000,000 |
| Bridge backlog | \$24,000,000 |
