

Forest Operations Training Program: career paths for forestry machine operators, truck drivers, and maintenance & repair professionals

SWERI Wood Utilization Team; Fall 2021 Seminar
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WESTERN FOREST SITE CONDITIONS: SETTING THE STAGE



- Overcrowded, unhealthy stands



- Insect infestations; drought



- Large-scale wildfires



Source: Luke Runyon, KUNC

- Heavily impacted watersheds.....

➤ DOGS & CATS LIVING TOGETHER?



Source: Pinterest



Source: PetMD

**NO, WAIT.....
(We need solutions!)**

THE SOLUTION: FOREST RESTORATION & FUELS REDUCTION THINNING TREATMENTS

Before:



Overstocked stand

After:



Restored Stand

Q & A:

Q: HOW WILL THE WORK BE ACCOMPLISHED?



Source: Construct Connect Canada

A: Tools & Talent

- Machines
- People
- Trucks
- Know How



More Q & A:

Q: Do We Have The Available Workforce?

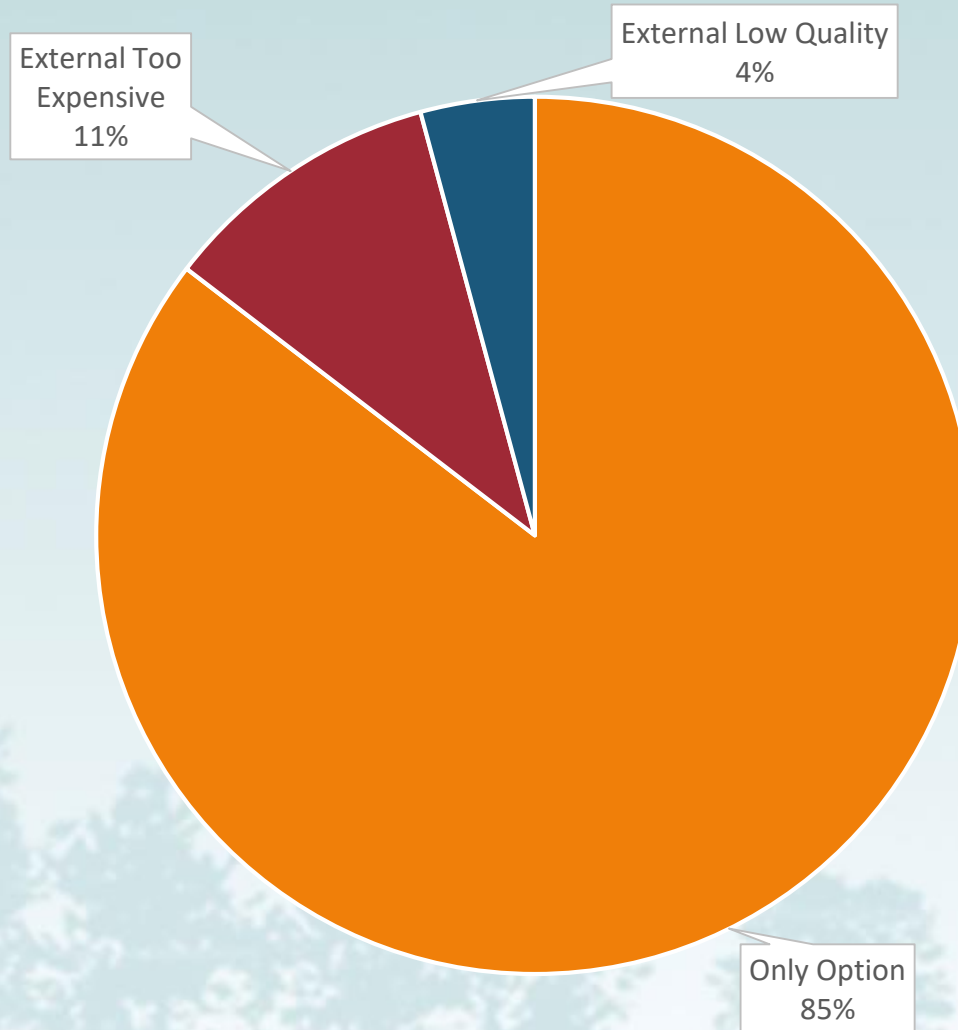
A: Not According To Our Contractor Survey & a Recently Completed Economic Study Involving a Large USDA Forest Service Stewardship Project in Arizona

BARRIERS TO SUCCESS

Relative Rank	Barriers	Mean Rank
1	Finding skilled workers	2.67
2	Limited access to forest products markets	3.79
3	Limited contract availability	3.95
4	High transportation costs	4.59
5	Lacking the appropriate equipment for the job	5.56
6	Short operating seasons	5.57
7	Strict merchandising specifications and biomass disposal requirements of landowners	6.15

33 of 66 respondents identified “Finding skilled workers” as the #1 barrier to success

Reason for relying on internal training



■ Only Option ■ External Too Expensive ■ External Low Quality

FOUR FOREST RESTORATION INITIATIVE (4FRI) MAP



4FRI Boundaries



Sawmills



Kaibab
National
Forest



Coconino
National
Forest



Tonto
National
Forest



Apache-
Sitgreaves
National Forest

- ❖ Largest forest restoration stewardship project in the US stretching from the Grand Canyon in the NW to the New Mexico state line in the SE
- ❖ Overall goal is to plan & implement forest restoration treatments of ponderosa pine forests along Arizona's Mogollan Rim across approx. 2.4 M acres of the total 8.3 M acre National Forest footprint
- ❖ Original goal was to treat 50,000 acres per year for 20 years

Source: Arizona Commerce Authority

FOUR FOREST RESTORATION INITIATIVE (4FRI) IN ARIZONA

MECHANICAL THINNING AND WOOD UTILIZATION EMPLOYMENT FOR FY 2017

(HJERPE AND MOTTEK-LUCAS 2021)

Job Description	FTE Annual Jobs
Commercial logging	57.7
Support activities for agriculture and forestry	13.6
Electric power generation – Biomass	25.0
Maintenance and repair construction of highways and bridges	5.2
Sawmill	87.2
All other miscellaneous wood product manufacturing	8.0
Truck transportation	25.4
Total	222.1

12,450 acres treated in 2017



Goal: 50,000 acres/year

222 jobs



800 – 1,000 jobs

NORTHERN ARIZONA FOREST OPERATIONS TRAINING PROGRAM (FOTP)



A Vision:

“The vision is to build a training program that provides training for forest equipment operators, logging truck drivers, and equipment repair specialists to build the workforce capacity required to carry out the necessary restoration and ongoing management of the southwestern forests.”

- *Dr. Han-Sup Han, 2020
Director; Forest Operations & Biomass
Utilization Program, NAU Ecological
Restoration Institute*

& A 4-Phase Process:

- Planning
- Implementation
- Construction
- Sustainability

FOTP REGIONAL WORKFORCE TRAINING SYSTEM FLOWCHART

As per USDC Economic Development Administration's Good Jobs Challenge Notice of Funding Opportunity

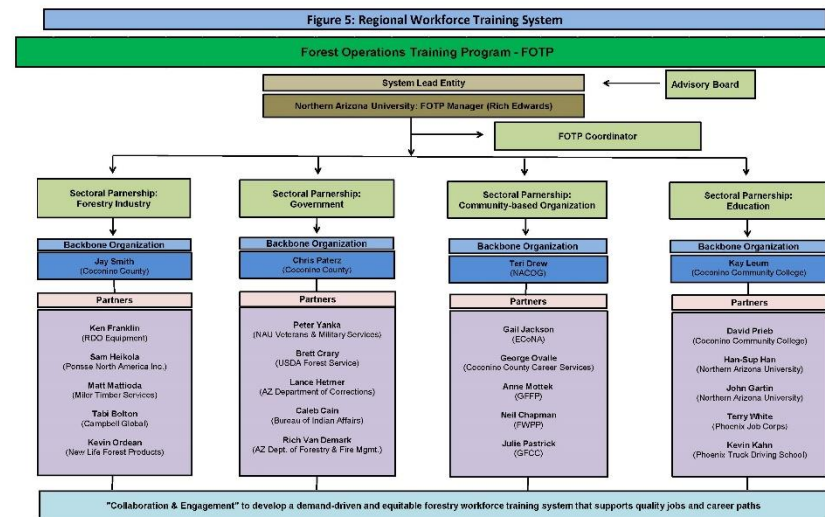
Includes:

Northern Arizona University as **System Lead Entity** &

4 Sectoral Partnerships with associated backbone organizations and partners:

1. *Forestry Industry* - Coconino County
2. *Government* – Coconino County
3. *Community-based Organizations* - Northern Arizona Council of Governments
4. *Education* – Coconino Community College

Creates collaboration & engagement to develop a demand-driven and equitable forestry workforce training system that supports quality jobs and career paths



NACOG: Northern Arizona Council of Governments; ECO/NA: Economic Collaborative of Northern Arizona; GFFP: Greater "Digital" Forests Partnership; FWPP: Flagstaff Watershed Protection Project; GFCC: Greater Flagstaff Chamber of Commerce

FUNDING SOURCES

- US Dept. of Commerce's Economic Development Administration(EDA)
- \$350k Oct 2020 – Sep 2022; Current EDA planning grant
 - Training programs & curriculum development
 - Establishing collaboration & partnerships
 - Development of strategies for financial sustainability, student recruitment, and job deployment
- \$5M EDA implementation grant – application in progress
- Training programs to be offered by spring 2023
- Construction – potential facility sites being evaluated; process initiated
- Third EDA construction grant – application process will begin in January 2022
- Sustainability of program - will be an ongoing effort! Initial plan will be contained in the implementation grant

FOTP TARGET AUDIENCES:



- Displaced workers from closed coal-powered plants & mines
- High school graduates
- Native Americans
- Post-incarceration skill development initiatives
- Veterans



Source: Rural Technology Initiative



Source: East Valley Institute of Technology

FOTP CAREER PATHS:



- Forest Equipment Operator
- Heavy Equipment Maintenance & Repair Professional
- CDL Truck Driver



Source: Rural Technology Initiative



Source: East Valley Institute of Technology

FOTP KEY PARTNERS:



- Arizona Dept. Forestry & Fire Mgt.
- Community Colleges
- Equipment Manufacturers
- N. Arizona COG Counties
- Northern Arizona University
- State of Arizona
- USDA Forest Service
- Others....(& TBD)
- &.....



Source: Rural Technology Initiative



Source: East Valley Institute of Technology

Perhaps, you!

Thank you!

CONTACT INFORMATION

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