Zuni Mountain CFLR – Bluewater & Puerco Collaborative Forest Landscape Restoration Projects

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- Implementation of the Bluewater Project will be complete in 2020-21, with approximately 25,000 acres of ponderosa pine forest restored.

- Puerco is the continuation of the Bluewater Landscape Restoration Project, and will restore the western half of the Zuni Mountains.
  - Approximately 31,000 of commercial treatments w/prescribed fire
  - Decision expected in March 2020

Project Challenges:

- Longer winter season.

  - Late start in the season

- Working towards the

  Continental Divide.

  - Poor road conditions.
  - Changing soil surface characteristics.

- Changing stand

  characteristics.

  - Trees greater than 18" required hand falling.
  - Poor access to the unit slowed down timber removal.

Internal Challenges:

- Operational
  - Measuring Decks for Contracts
  - Writing Contracts
  - Old Paint
  - Unverified Unit Boundaries
  - Minimal Transportation Evaluation

- Staffing and Capacity
  - Turn over and short staffed.

- MSO Injunction

Partner Challenges

- Reduced capacity
  - Lost one logger.
    - Partner continues to seek more capacity.
  - Slower truck turn around times.
    - Continually evaluate haul routes for shortest distance.
  - Limited truck drivers available.
    - Continue to seek more capacity.
    - Internally evaluate best logging routes for all old units.
  - Reduced treatment rates.
    - New Negotiated rates.
    - Reevaluation of stand RXs

FY2019 Overview

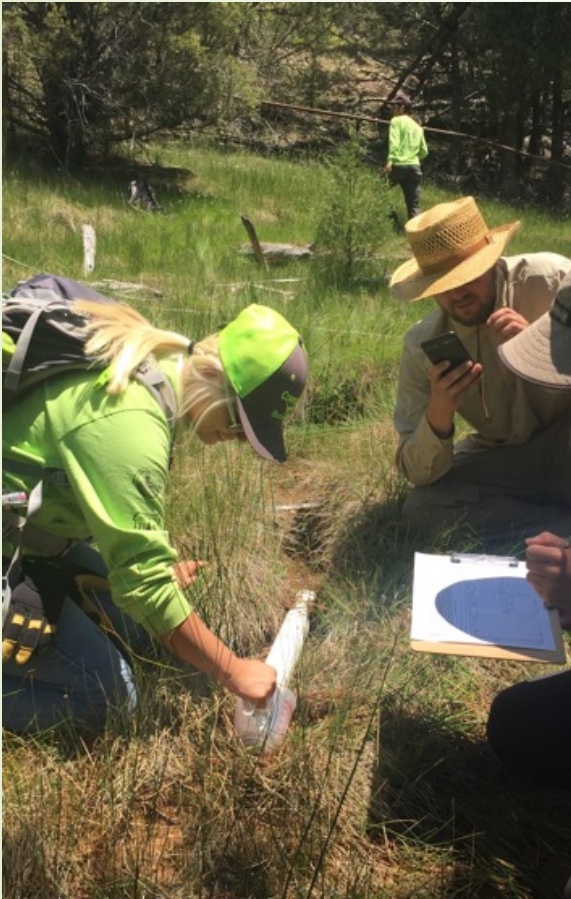| Accomplished:	Acres	2018 Comparison
Acres Treated through Prescribed Burning:	3,713	+2,270
Acres Mechanically Thinned:	823	-1,177
Number of acres mitigated to reduce fire risk	4,536	+1,093

Additionally:

Additional $1,225,000 of late year funding added for the future treatment in the Puerco Projects Area.

5,491 Acres funded for future harvest.

RX Fire Update

Water Quality Monitoring in the Zuni Mountains

FSYC, UNM, Spring
Stewardship Institute

FSYC, UNM, Spring
Stewardship Institute

ZBS observed in TD 6/2019

Socioeconomic Monitoring

TREAT modelling and qualitative descriptions of community benefits

➡ TREAT is used to measure the ripple effects through the local economies from FS investment in forest restoration.

*FY 2019 Jobs Supported/ Maintained (FY19 CFLR/CFLN/WO **and matching** funding)*

FY 2019 Jobs Supported/Maintained	Jobs (Full and Part-Time) (Direct)	Jobs (Full and Part-Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	10	11	450,003	568,668
Forest and watershed restoration component	32	36	390,735	517,281
Mill processing component	6	12	187,718	403,731
Implementation and monitoring	3	4	275,982	310,063
Other Project Activities				
TOTALS:	51	63	$1,304,438	$1,799,743

➡ To understand TREAT output within the context of surrounding communities, we gather additional qualitative information about how the Zuni Mountain CFLRP influenced social and economic conditions.

Socioeconomic Benefits in Context

In addition to TREAT analysis, we found:

- With a single FTE multiple people may have benefited from the wages and training that one FTE represents.

- The ratio of FTE to number of people employed is highest for mill and trucking jobs, indicating job stability for local workers.

- 100% of the jobs accounted through socioeconomic monitoring efforts were for local contractors and employees based out of Grants, NM area.

- $2,099,719.45 in wages supported the employment of 93 individuals to support restoration work in Cibola and McKinley counties, two of the most economically disadvantaged counties in the country.

Socioeconomic Benefits in Context

In addition to TREAT analysis, we found:

- Youth Corps provide employment opportunities to local youth and protect recreational infrastructure.

- Several CFRP grants have been awarded to local businesses to build on the successes of the Zuni Mountain CFLRP
  - Zuni CFRP provides funding and capacity to implement prescribed fire in the landscape while training local tribes and agencies.

- The Zuni Mountain CFLRP supported increased recreational opportunities in the CFLR landscape

ADAPTIVE MANAGEMENT

- The Zuni Mountain Landscape Strategy (2011) includes "continuously improving management through an *adaptive management* process driven by the multi-party monitoring process."

- DEFINITION - *a structured, iterative process of robust decision making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring.* What does that really mean?

  - Through collaboration and monitoring, we will make decisions together that are scientifically based, informed by actual project data, and comfortable for the collective group.

Adaptive Management

Remarking 2015

Modified tree marking to better meet the desired conditions for the landscape.

- Reduced opening sizes
- Left larger "groups" of trees
- Increased basal area by 5-10%

Zuni Mountain CFLR
Old and Large Tree Retention Strategy

In November 2015, the Cibola Forest Supervisor made the decision not to cut any trees in excess of 24" diameter (DBH) throughout the Zuni Mountain Collaborative Forest Landscape Restoration Project area, which includes all of the Zuni Mountains. The Puerco Project proposes to retain all trees over 24"diameter to assist in moving the area toward desired uneven-aged conditions.