



What is the effect of the treatments on moving the forest landscape toward a more sustainable condition that includes scale and intensity of historical disturbances?



Prescription broadcast burn in Carson National Forest

Intended monitoring:

Completed monitoring:

Calculate change in acreage by seral state and fire regime

Seral state and fire regime acreage will be analyzed by the R3 Analysis Framework - sometime in 2024.

Collate treatment shapefiles to measure the change in acres burned overtime.

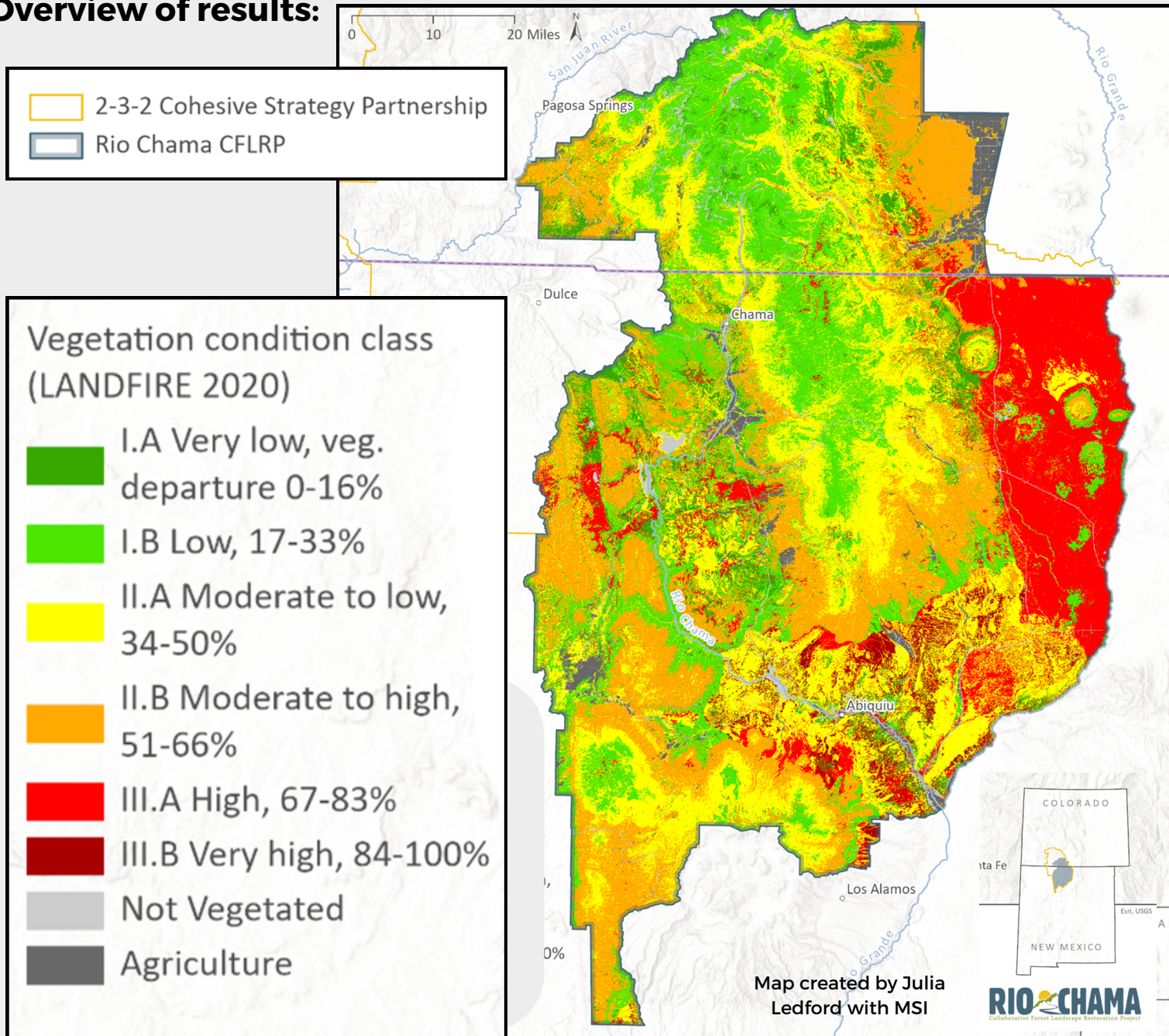
Natural ignition and prescribed fires were compiled - acreage burnt by fire regime was calculated using LANDFIRE fire regime data.

Measure landscape departure from Natural Range of Variation using US Forest Service Terrestrial Condition Assessment (TCA)

Not analyzed - TCA is only analyzed for US Forest Service managed lands and does not align with 2-3-2 goals for cross-boundary assessment.



Overview of results:



CFLRP vegetation departure, utilizing the LANDFIRE 2022 vegetation condition class:

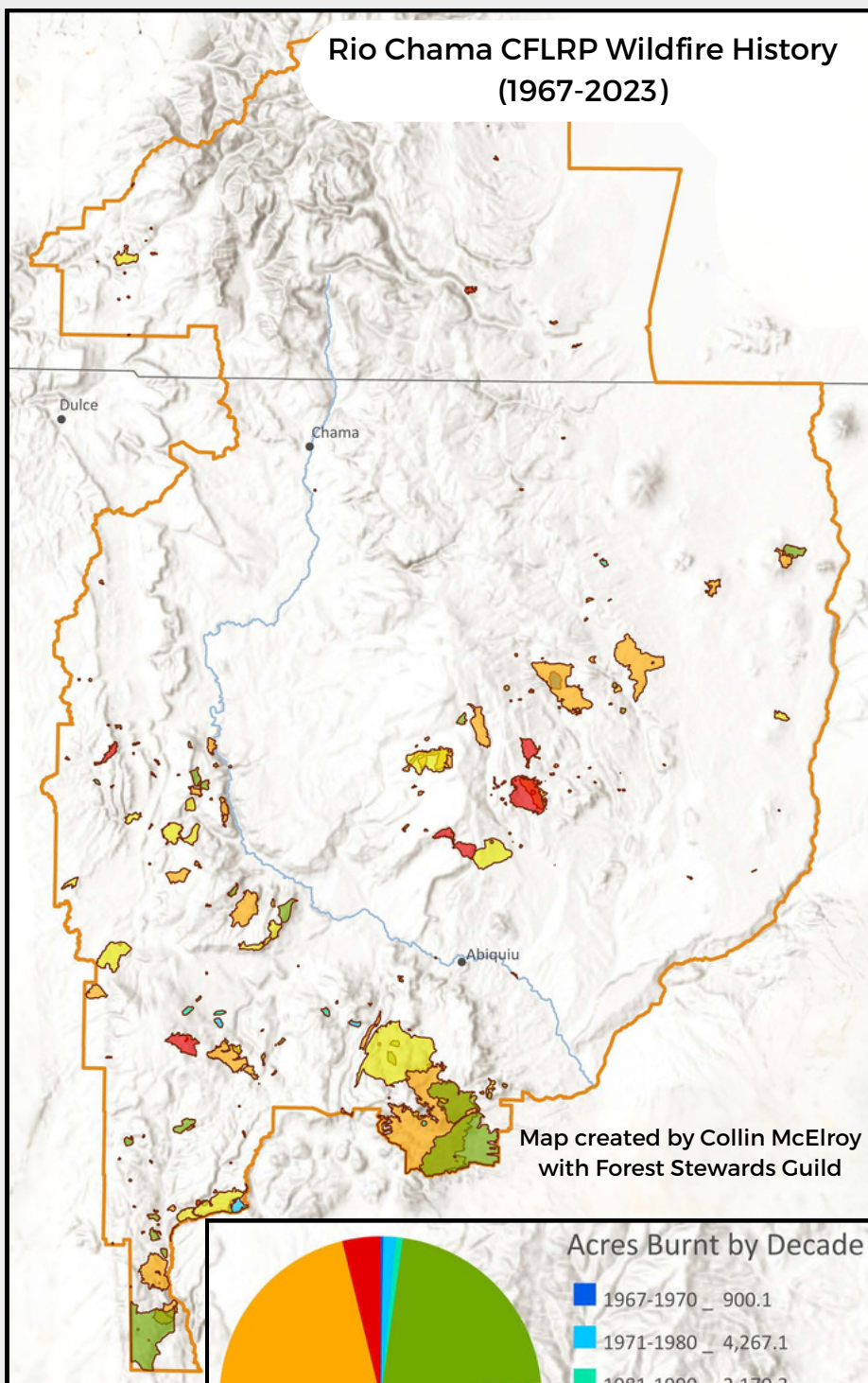
Vegetation Condition Class	Description	Acres	% of CFLR
I.A	Very Low (0-16% Vegetation Departure)	205,596	5.4
I.B	Low (17-33% Vegetation Departure)	766,443	20.1
II.A	Moderate to Low (34-50% Vegetation Departure)	1,157,403	30.4
II.B	Moderate to High (51-66% Vegetation Departure)	893,453	23.5
III.A	High (67-83% Vegetation Departure)	528,102	13.9
III.B	Very High (84-100% Vegetation Departure)	85,276	2.2
Water		17,334	0.5
Snow/Ice		19	0.0
Developed		44,763	1.2
Barren/Sparse		23,471	0.6
Agriculture		87,743	2.3

Acres burned by fire regime in fiscal year 2023:

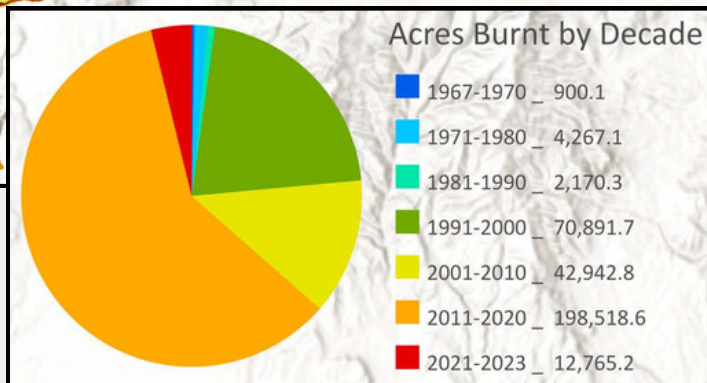
Fire regime data is sourced from the 2022 LANDFIRE Biophysical Settings (BPS). Fire data was from fiscal year 2023 (FY23).

8606.60 acres 0.2% of CLFRP	Fire Regime I (acres)	Fire Regime II (acres)	Fire Regime III (acres)	Fire Regime IV (acres)	Fire Regime V (acres)
Suppression only fires	211.71	0.22	20.68	5.56	-
Fires managed for multiple resource objectives	2700.89	0.44	239.07	991.85	56.04
Prescribed Fire	3750.11	-	298.00	331.58	0.44
Total Acres Burned	6662.71	0.67	557.75	1328.98	56.49

Rio Chama CFLRP Wildfire History (1967-2023)



Map created by Collin McElroy with Forest Stewards Guild



Notes from the field:

LANDFIRE (Landscape Fire and Resource Management Planning Tools) vegetation condition class (VCC) is a “discrete metric that quantifies the amount that current vegetation has departed from the simulated historical vegetation reference conditions”. Although VCC provides baseline numbers for the CLFR, it is likely that different approaches, models, and/or analysis will be used for CFLRP landscape modeling in the future (and run with 2022 data to summarize comparable baseline data).

LANDFIRE fire regime data takes into account current vegetation type to classify five fire regimes which represent different fire severity and fire return intervals.

Defining historic ecological conditions requires complex discussion and review of Traditional and Western sources of knowledge. The Rio Chama CFLRP landscape has a rich history of human-vegetation interaction and while historic ecological conditions inform our understanding of potential vegetation, they do not provide a perfect reference for a healthy system. The complexities of a rapidly changing climate, shifting weather patterns, policy legacies, and expanded development suggest that tracking change against desired future conditions can better inform current management actions.

Table summarizes adaptive management (AM) watch-outs as defined in Edition 1 of the 232 Partnership Multiparty Monitoring plan. AM watch-outs were determined by the 232 Partnership at the February 2023 meeting in Taos, NM. Yellow boxes indicate the watch-out was met, or not measured, and should be considered for collaborative discussion.

AM Watch-out

Commentary

Methodology not accounting for climate change	What tools/approaches can be applied?
A notable stochastic event occurs within the CFLR footprint.	No notable stochastic event occurred in 2023.
Type of burning is siloing (i.e., all federal or all NWCG)	No recording system available at this time.
Decreasing number of federal and/or non-federal burns	Baseline data only - no comparative data.
Forests are not moving toward desired conditions.	Baseline data only - no comparative data.
Untreated forest stands resemble desired conditions more than treated stands	Baseline data only - no comparative data

Monitoring Committee Recommendations and Takeaways

- Define sustainability
- Climate change, as identified in the AM watch-out, is missing from fire regime and landscape analysis.
- When would it be best to use the Fuel Treatment Effectiveness Monitoring (FTEM) application (IFTDSS) vs. Vegetation Condition Class (Landfire)?

Rio Chama CFLRP monitoring efforts and collaborative discussions are ongoing. Please direct comments and questions to cody@forestguild.org