

# Collaborative Forest Landscape Restoration Ecological Indicators Report

Colorado Front Range Project



# The Omnibus Public Land Management Act of 2009

- Congress requires all Collaborative Forest Landscape Restoration (CFLR) projects to submit a 5-year report assessing whether, and to what extent, the CFLR program is fulfilling its purposes.
- The Forest Service is required to report on progress towards meeting the desired conditions that were developed specifically for the Colorado Front Range Project.
- The desired conditions for this landscape are guided by a set of key objectives within four ecological categories explicitly identified within the Act; they are Fire Regime Restoration, Fish and Wildlife Habitat Condition, Watershed Condition, and Invasive Species Severity.

# Scale

- 1,500,000 Acre CFLR Project Area
- 1,085,000 Acres of National Forest System Land
  - 800,000 Acres Would Benefit From Restoration Focused Management
  - 629,000 Acres Considered Priority for Treatment
- 400,000 Priority Acres Located on NFS lands
- 31,600 Acres Planned for Treatment in 10-Year Period of CFLR Project – 7.9% of the available 400,000 acres
- Over 14,000 Acres Completed
- Report is based on Monitoring Data from Over 7,300 Acres

# Desired Conditions

- *Desired Conditions Target for **Fire Regime Restoration**: 100 % change (relative to the desired condition) occurs across 7.9% of the landscape area by 2019 date.*
  - Decrease basal area
  - Increase quadratic mean diameters
  - Increase the ratio of ponderosa pine to other conifers
  - Decrease the litter and duff depths
  - Decrease or similar coarse woody material
  - Reduced crown fire potential at 90<sup>th</sup> percentile weather

# Fire Regime Restoration Score

## Landscape Scale

Score for monitored treatments, landscape scale, 2010 – 2013.

Score	Project Acres	% of CFLRP Landscape Area (156,839 ac)*
Good	870	6%
Fair	5,772	18%
Poor	679	1%
Total	7,321	25%

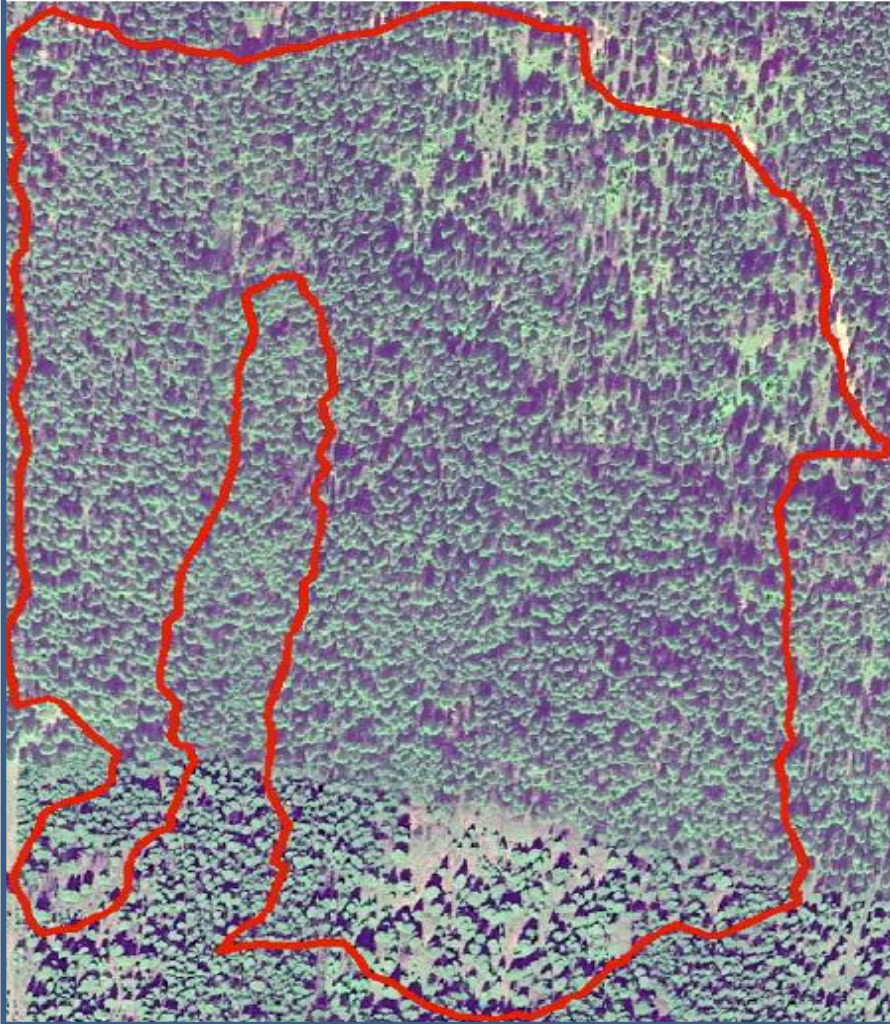
## Project Scale

Score for monitored treatments, project scale, 2010 – 2013.

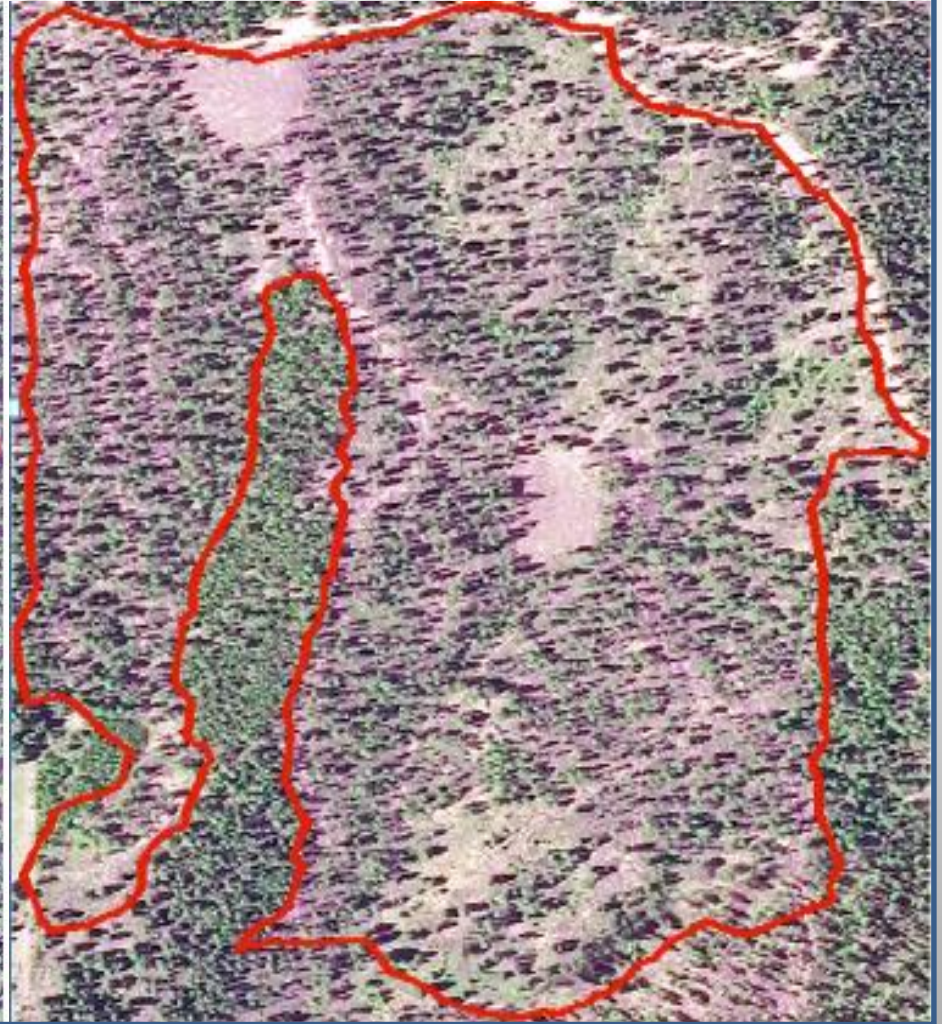
Score	Project Acres	% Of Total Project Area
Good	870	11.9%
Fair	5,772	78.8%
Poor	679	9.3%
Total	7,321	100.0%

# NAIP Aerial Imagery

Pre-treatment



Post-treatment



# Desired Conditions

- *Desired Conditions Target for **Fish and Wildlife Habitat Condition**: 100 % change (relative to the desired condition) occurs across 7.9% of the landscape area by 2019 date.*
- Protection and enhancement of old-growth conditions
- Providing improved and sustainable fish and wildlife habitats
- Reducing the potential for high-severity stand-replacing fires that negatively impact habitats

# Desired Conditions

- *Desired Conditions Target for **Watershed Condition**: 0 % change (relative to the desired condition) occurs across 7.9% of the landscape area by 2019 date.*
- Improve the condition class of those watersheds rated as Class II (at-risk) or Class III (impaired), and maintain the condition of Class I (properly functioning) watersheds
- Improve the Fire Regime Condition Class (FRCC) attribute where the attribute is rated as either Class II or Class III, and to maintain it where it is



# Desired Conditions

- *Desired Conditions Target for Landscape Scale **Invasive Species Severity**: 7.9% of the CFLR landscape area was restored by reducing invasive species severity (preventing, controlling, or eradicating targeted invasive species) to meet desired conditions by 2019 date.*
- Maintaining or decreasing the occurrence and cover of invasive plant species

# Achievements

- Identification of desired conditions for forest structure at varying scales
- Assessment of historic stand conditions in the Front Range
- Techniques and results for measuring and monitoring landscape-scale spatial heterogeneity with aerial imagery
- Development of monitoring plans for key variables and metrics of interest
- Social and economic monitoring
- Adaptive management process development
- Assessment of silvicultural and general progress of the Front Range CFLRP.
- Adaptive NEPA: Upper Monument Creek Restoration Initiative
- Wildlife monitoring (planning phase 2012-2014; first year of implementation 2014)
- Understory plant community monitoring (planning phase 2013-2014; first year of implementation scheduled for 2015)

# Next Steps

- Continue to monitor effects of treatments on forest structure at various scales (stand, project, landscape) using the techniques and information generated to date
- Develop and implement refined protocols for monitoring surface fuels, age- and size diversity of residual trees, and spatial heterogeneity of forest structure at diverse scales
- Fully implement monitoring of wildlife and understory plants
- Systematically analyze and manage monitoring data from all efforts
- Evaluate all data in the context of all applicable National Reporting Ecological Outcome Measures
- Implement the adaptive management process more fully and effectively each year by using the monitoring data, field trips, collaborative discussions, etc. to modify treatment prescriptions as and when needed, following the adaptive management cycle that our collaborative has developed
- Identify and complete an “Adaptive NEPA” process on the Arapaho-Roosevelt NF similar to the Upper Monument Creek Restoration Initiative on the Pike-San Isabel NF
- Complete work on a US Forest Service General Technical Report on the

# Ecological Indicators Report

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<http://frontrangeroundtable.org/uploads/>

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