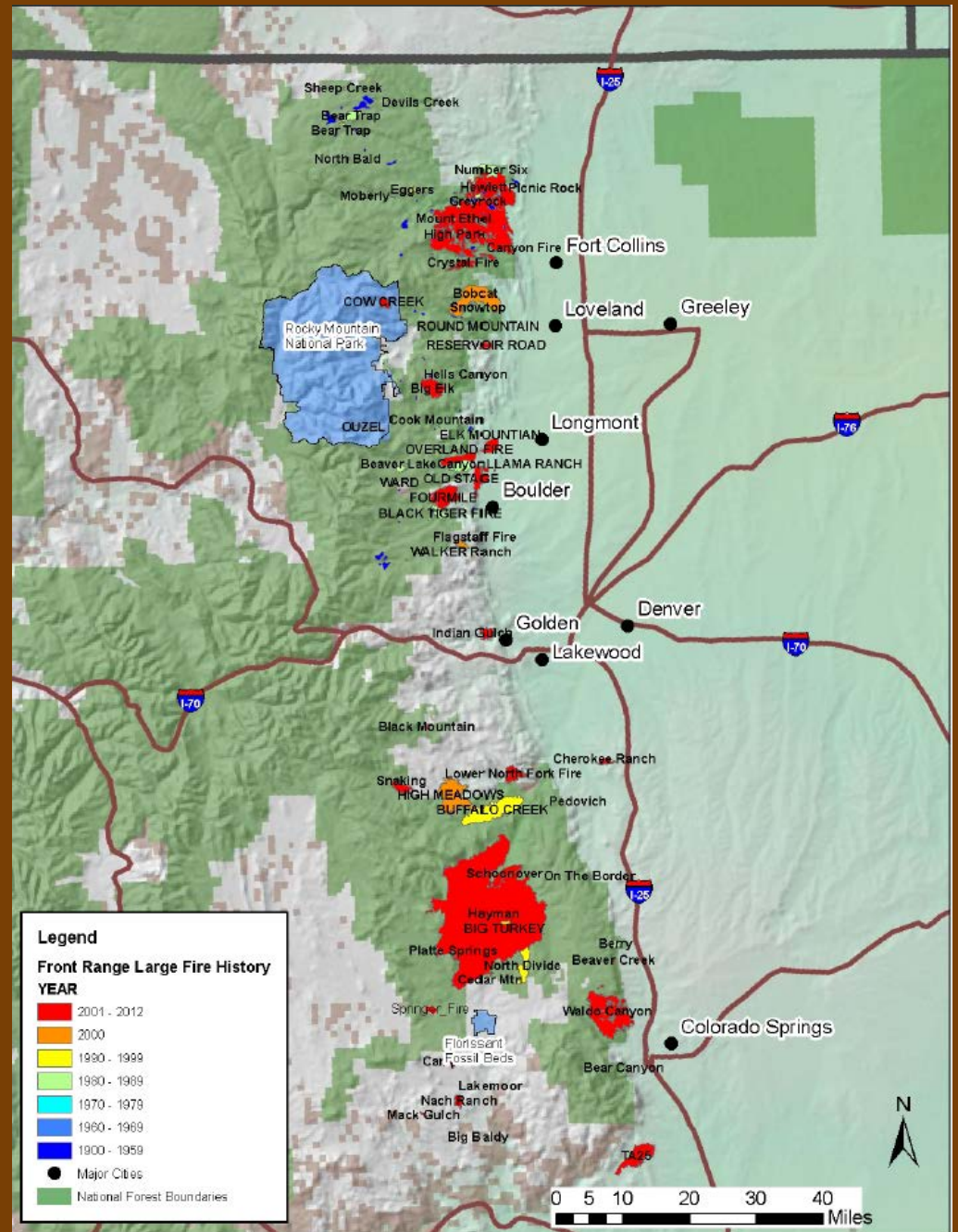


Wildfire Risk in Jefferson County

Paradise, California



Large Fire History 1900 to 2012

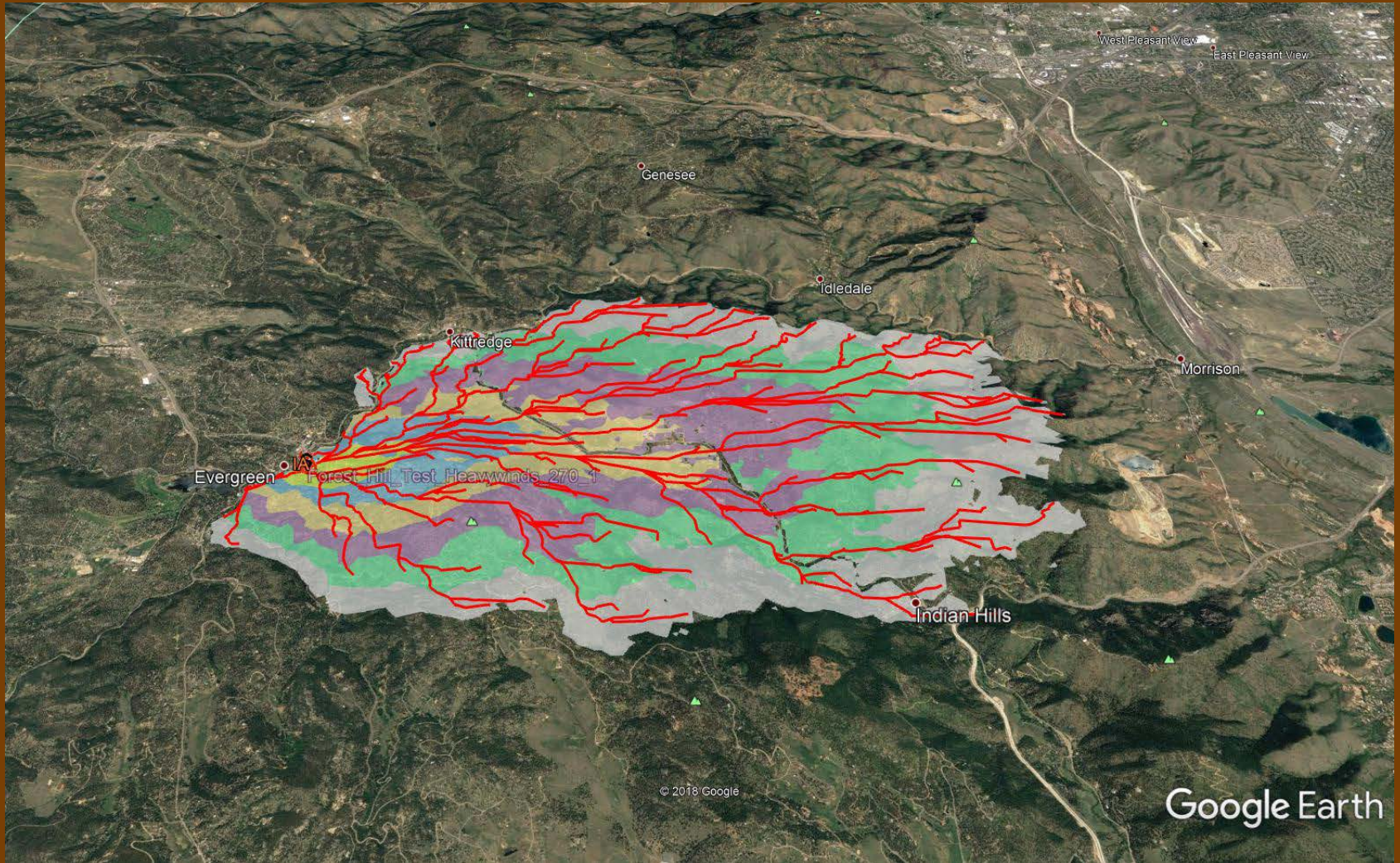


A “Typical Day”

August RH 25% NW winds @ 25



A "Bad Day"



Expected Outcomes

For a 100,000 acre fire in West JeffCo:

- **10,000 homes in the fire footprint**
- **100 businesses destroyed**
- **60,000 people evacuated**
- **\$5 billion to \$10 billion in losses**
- **\$250 million in direct and indirect costs**

Verisk/ISO Stateline Report

Top five counties by number of housing units in high and extreme wildfire risk category

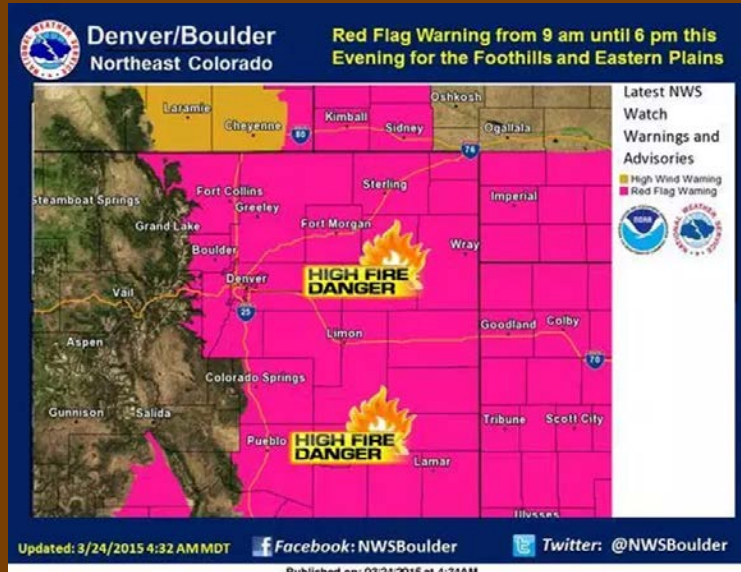
| | |
|-----------|--------|
| | |
| Jefferson | 40,800 |
| Larimer | 36,700 |
| Boulder | 25,100 |
| El Paso | 22,500 |
| Summit | 20,300 |

Why?

Topography



Fuels



Weather

Weather





- **Landscape Resilience**
- **Fire Adapted Communities**
- **Safe and Effective Fire Response**

Landscape Resilience









1958



1989



CUSP, Hayman Fire

Safe and Effective Fire Response

- **10 acres**
 - **Evergreen Fire**
 - **Elk Creek Fire**
 - **Indian Hills Fire**
 - **Inter Canyon Fire**
 - **North Fork Fire**
 - **Genesee Fire**
 - **Foothills Fire**
 - **West Metro Fire**
 - **Arvada Fire**
 - **And many more...**



Weaknesses in Fire Response

- Declining volunteers
- Budget difficulties
- Limited staffing
- Long response times
- Ineffective mobilization program
- Resource drawdown
- Lack of heavy equipment
- Lack of handcrews
- Variable aircraft availability
- Lack of communications between agencies
- Lack of state resources

Fire Adapted Communities

- **Educated and Involved Residents**
- **Defensible Space**
- **Hardened Homes**
- **Refuge Areas**
- **Evacuation systems**
- **Effective Codes and Enforcement**



Engineering

Implement ICC WUI codes for structural ignition resistance.

Implement codes for building separation, access roads and refuge areas.



Landscape Resilience



- **By 2030, treat 7200 acres annually in the Upper South Platte watershed**
- **Annual Cost - \$21.6 million**

Education

- Educate landowners on:
 - Reasons to mitigate
 - Hardening homes
 - Preparation for fires
 - Evacuation procedures



Economic Incentives

- **Cost sharing for mitigation**
- **Low cost or free slash removal**
- **Property tax credits**

| | | |
|--|---|---|
| CREDIT |  | <i>EXAMPLE: Taxpayers with children under age 13 may receive a credit for a percentage of childcare expenses.</i> |
| Reduces tax liability dollar-for-dollar. Additionally, some credits are refundable, meaning that a credit in excess of tax liability results in a cash refund. | | |
| DEDUCTION |  | <i>EXAMPLE: Taxpayers may be able to deduct a percentage of the costs they incur for wildfire mitigation.</i> |
| Reduces gross income due to expenses taxpayers' incur. | | |
| INCOME DEFINITION |  | <i>EXAMPLE: Employees do not pay taxes on contributions employers make to medical savings accounts.</i> |
| Excludes income that would constitute part of a taxpayer's gross income. | | |
| EXEMPTION |  | <i>EXAMPLE: Alcoholic beverages produced for personal consumption are exempt from sales and use taxes.</i> |
| Reduces gross income for taxpayers because of their status or circumstances. | | |
| TAX RATE |  | <i>EXAMPLE: Insurance companies with an office in Colorado may be eligible for lower insurance tax rates.</i> |
| Reduces tax rates on some forms of income. | | |

Enforcement

- **Inspection of properties for defensible space standards**



Emergency Response

- **Improve the capabilities of the fire response to reduce the risk of runaway events.**





EMERGENCY MANAGEMENT

Fire Management

Authority

C.R.S. 30-10-512

Sheriff to Act as Fire Warden

- The sheriff shall act as fire warden of their respective county.
- Responsible for the coordination of fire suppression efforts.

Authority

C.R.S. 30-10-512

Sheriff to Act as Fire Warden

- Responsible for the coordination of fire suppression efforts.
 - Unincorporated areas outside the boundaries of a fire protection district.
 - Or exceed the capabilities of the fire protection district to control or extinguish.

Authority

C.R.S. 30-10-513 (1) (b)

Coordination of Fire Suppressions Efforts

- Assist the Fire Chief in control or extinguishment
- Solicit additional assistance
- Assume command

Authority

C.R.S. 30-10-513 (1) (c)

Coordination of Fire Suppressions Efforts

- Appoint a Incident Management Team
- Assume financial responsibility
- Authority for ordering and monitoring resources.

Authority

C.R.S. 30-10-513 (1) (d)

Coordination of Fire Suppressions Efforts

- Seek assistance from the State
- Delegate authority to the Division of Fire Prevention and Control
 - Unified Command
 - Federal Fire

Authority

C.R.S. 30-10-513.5 (1) (a)

Liability for Expenses

- May request assistance in controlling or extinguishing a fire on property not within a Fire Protection District.
 - constitutes a danger to the health and safety of the public,
 - Risks serious damage to property

Authority

C.R.S. 30-10-513.5 (1) (a)

Liability for Expenses

- Any Fire Protection District or Municipality assisting in controlling or extinguishing a fire on “No-Mans Land”, is entitled to reimbursement from the property owner for reasonable and documented costs.

Funding

Based on the fire characteristics.

Size

Complexity

Property Ownership

Coordinated through:

Fire Management Officer

Division of Fire Prevention and Control

State Office of Emergency Management

Funding Sources

Emergency Fire Fund (EFF): Funds wildfire command and control resources for counties that are a party to, or a member of the EFF Program.

Wildfire Emergency Response Fund (WERF): Funds the initial attack response resources on local wildfires

Resource Mobilization Fund: Reimbursement for incidents in accordance with the State Mobilization Plan

FMAG (Fire Management Assistance Grant)

JCSO

Fire Management

Fire Management Officer

The Sheriff's representative on wildfires.

- Assists with initial attack resource management
- Coordinates aircraft, and Hand-crew mobilization
- Incident complexity analysis
- Assist in transition and delegation issues

JCSO

Fire Management Incident Management Team

Sponsoring agency for Local Type 3 Team

- Develop and maintain roster
- Train and exercise the team
- Coordinate deployment
- Support IMT operations
- Process reimbursement processes

JCSO

Fire Management Administrative

Fire Restrictions: Coordinated with Federal, State and Local agencies

- Monitor conditions
- Fuel Moisture
- Weather
- Fire Behavior

Implement and rescind as conditions permit

JCSO

Fire Management Administrative

Aircraft Contracting:

Contract aerial firefighting capability

Annual Operating Agreement (AOP):

Manage the AOP process

Fire Mitigation:

- Public outreach and education
- Site assessments

Training in Wildland and ICS Classes



Questions



Forest Management
Past, Present and Future



JEFFERSON
COUNTY COLORADO
Open Space

JCOS Forest Management

1976-2008

| Years | Parks | Summary of Work |
|-----------|--|--|
| 1976-1989 | White Ranch Elk Meadow | Treated large mountain pine beetle outbreak (entire parks) Several smaller projects (e.g., 15 acres) |
| 1990-1998 | White Ranch Alderfer Meyer Ranch Lookout Mountain | 41 fuels reduction projects totaling ~780 acres Project size ranged up to 90 acres |
| 1999-2008 | White Ranch Elk Meadow Flying J Ranch Mount Falcon Pine Valley Ranch | 71 fuels reduction projects totaling ~1,100 acres Project size ranged up to 200 acres Prescribed burns also implemented on ~1,600 acres Collaboration w/ fire districts and CO State Forest Service |



Lookout Mountain Park

Shaded fuel break creation 1996



White Ranch Park

Prescribed burn 2008



JCOS Forest Management

2009-2018

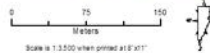
| Years | Parks | Project Type | Acres | Collaborators |
|-----------|---|--------------------------------------|-------|---|
| 2015-2018 | Alderfer Flying J Ranch White Ranch Beaver Ranch | Fuels reduction | 235 | Coalition for Upper South Platte Upper South Platte Partnership Colorado State Forest Service Denver Mountain Parks Elk Creek Fire District |
| 2013-2014 | White Ranch Elk Meadow Flying J Ranch | Fuels reduction / prescribed fire | 90 | Colorado State Forest Service Local fire districts |
| 2011-2012 | Alderfer Flying J Ranch Lookout Mountain | Fuels reduction/ fuel breaks | 76 | Colorado State Forest Service |
| 2009-2010 | Elk Meadow White Ranch | Fuels reduction / prescribed fire | 187 | Colorado State Forest Service Local fire districts Denver Water Board |

Pre & Post Enhancement

Alderfer / Three Sisters Park
Pre-treatment 2014



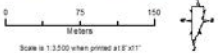
Pinus ponderosa Enhancement Boundary
Jeffco Open Space



Alderfer / Three Sisters Park
Post-treatment 2016



Pinus ponderosa Enhancement Boundary
Jeffco Open Space



JCOS Forest Management

Present and Future

| Years | Parks | Project Type | Acres | Collaborators |
|-----------|----------------|--------------------------------------|-------|---|
| 2019-2020 | Flying J Ranch | Restoration / fuels reduction | 150 | Denver Mountain Parks Colorado State Forest Service |
| 2019-2020 | Alderfer | Fuel break along Buffalo Park Rd. | 34 | Evergreen Fire Protection District |
| 2019-2021 | Reynolds | Fuel break along Foxtan Road | 27 | Elk Creek Fire District Colorado State Forest Service |
| 2020-2023 | Meyer Ranch | Restoration / fuels reduction | >41 | Denver Mountain Parks Jefferson Conservation District Colorado State Forest Service Private landowners |

Flying J Ranch Park

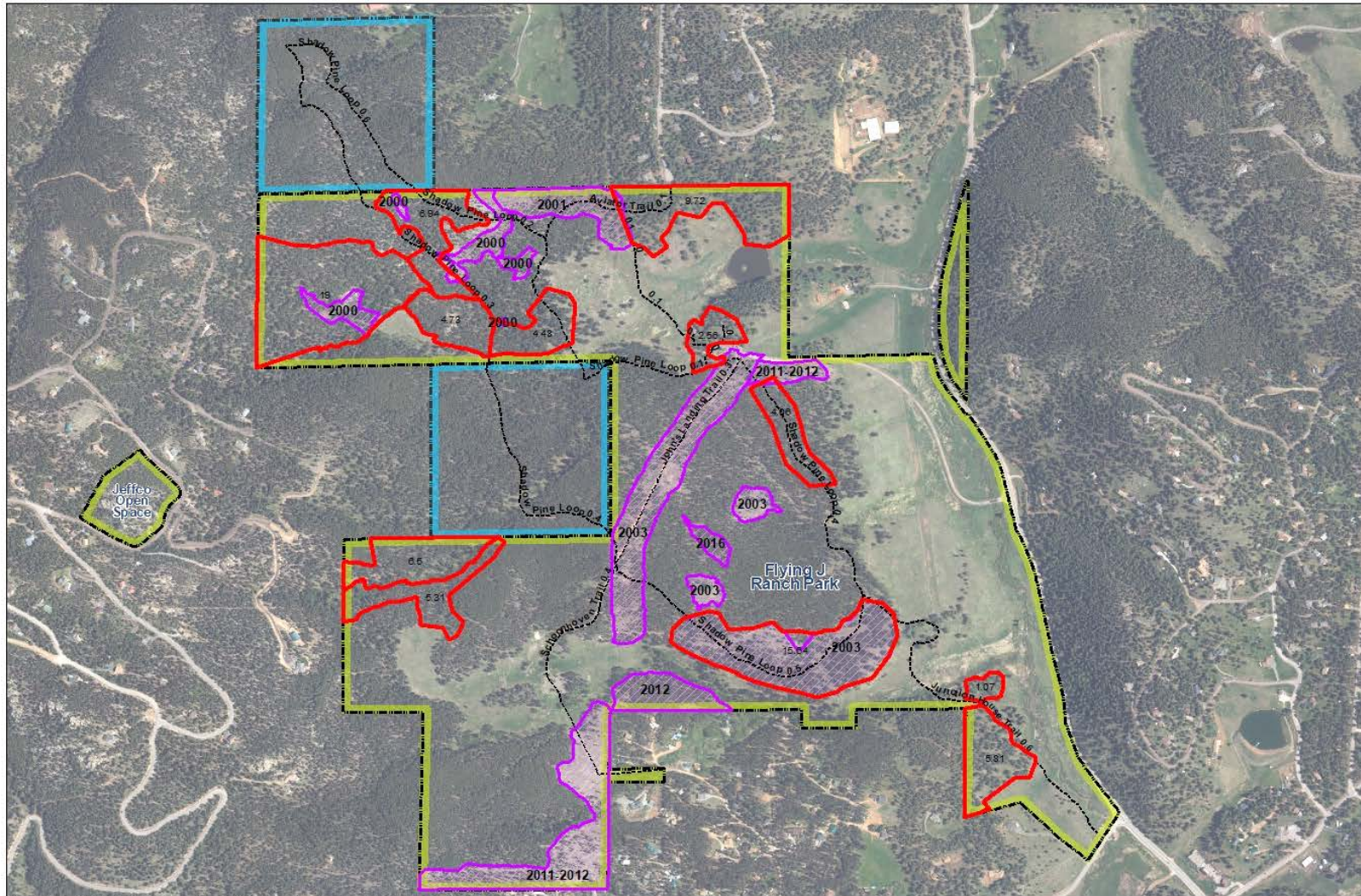
Fuels reduction treatment



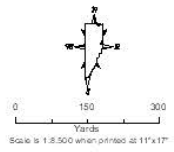
Flying J Ranch Park

Timeline of past projects

Flying J Ranch Park - Current & Previous Forestry Management Blocks



- Legend**
- Current Management Boundary
 - Previous Management Boundary
 - Jeffco Open Space Boundary
 - Denver Mountain Parks Boundary
 - Jeffco Open Space Shared-use Trail



Last Revised 3/4/2019



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COUNTY COLORADO
Open Space

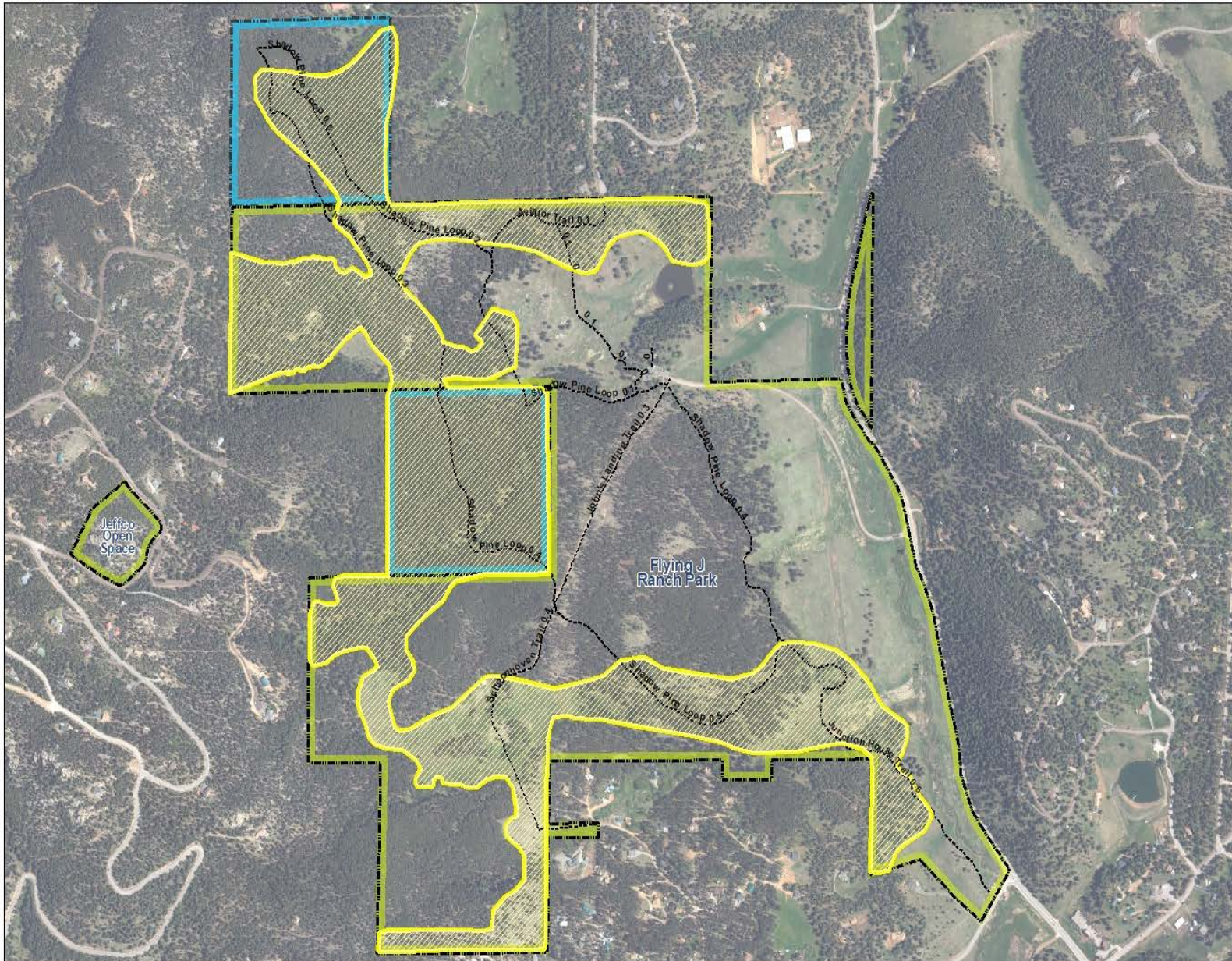


Data Source: Jeffco Open Space, Jeffco GIS, USGS, NHD, COOT, DMRCO

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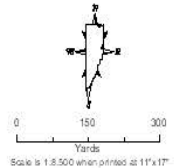
jeffco.us/open-space

Flying J Ranch Park - Landscape-Scale Fuel Break



Legend

-  Landscape-Scale Fuel Break
-  Jeffco Open Space Boundary
-  Denver Mountain Parks Boundary
-  Jeffco Open Space Shared-use Trail



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Data Source: Jeffco Open Space, Jeffco GIS, USGS, NHD, COOT, USDOC

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