

# MOSAIC FUELS TREATMENT

Grass Valley, California



## CITY COUNCIL CONSIDERATION PACKET

Sierra Nevada Conservancy Wildfire and Forest Resilience  
Directed Grant Program - Full Application Support

### PURPOSE

Request City support and coordination for completion of the MFT full grant application, including acreage verification, CEQA, and technical information.

### PREPARED FOR

City of Grass Valley City Council

### MEETING DATE

September 8, 2026



## Grass Valley Mosaic Fuels Treatment



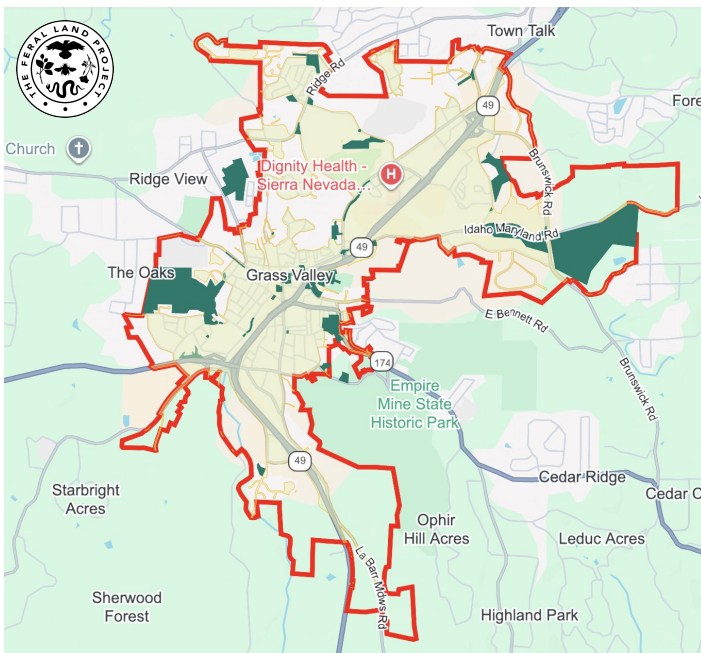
### What We Do

- Native planting
- Habitat restoration
- Wildfire resilience
- Invasive management
- Long-term stewardship

### Our Work in Grass Valley and With Local Partners

- NCRCD
- Bear Yuba Land Trust
- Grass Valley Measure B
- Consultation
- Native plant propagation
- Field work
- Planting/design support





## Grass Valley Mosaic Fuels Treatment

Approximate project area based on  
current City GIS data

 City Boundary

 Estimated  
Treatment area



**Before Mosaic  
Fuels Treatment**



**After Mosaic Fuels  
Treatment**



**Before Mosaic  
Fuels Treatment**



**After Mosaic Fuels  
Treatment**



Eureka St

**Before Mosaic Fuels Treatment**



Concept

**After Mosaic Fuels Treatment**

## The Mosaic Fuels Treatment Will

- Reduce wildfire risk
- Protect neighborhoods and evacuation routes
- Improve forest health
- Control invasive vegetation
- Restore native vegetation
- Establish long-term stewardship



www.theferallandproject.org

## What we need from the City

- Staff coordination
- Mapping and acreage confirmation
- CEQA coordination

**SNC Full Application Due November 2**

City partnership is essential to completing the application

## Together We Can

- Reduce wildfire risk
- Improve habitat
- Build healthier public lands

## Our Supporters



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# Grass Valley Mosaic Fuels Treatment

**Purpose.** This memorandum supplements the SNC Concept Proposal by explaining how approximately 350 acres of non-contiguous, City-owned lands will be prioritized, organized into treatment units, treated, documented, and maintained. It is a project-support document, not the complete regional MFT Strategy framework.

## Executive Summary

This memorandum supports The Feral Land Project's application to the Sierra Nevada Conservancy's 2026 Wildfire and Forest Resilience Directed Grant Program for the Grass Valley Mosaic Fuels Treatment(MFT). Grass Valley owns a dispersed collection of forested properties, oak woodlands, grasslands, drainage corridors, wetlands, roadsides, trails, vacant parcels, and lands surrounding public facilities. Together these properties form a municipal landscape mosaic. Individually, many parcels are small; collectively, their condition can affect wildfire pathways, neighborhoods, evacuation and responder access, public infrastructure, drainage, invasive vegetation, habitat, and long-term municipal maintenance.

The project directly advances The Feral Land Project's mission: "Provide communities, institutions and wildlife with gardens, parks, green spaces, habitats and safe passageways. Repurpose, steward or rewild feral lands, waste sites and over-paved places into hospitable environments where life will thrive." Within this grant, that mission is expressed through two linked primary goals: reducing hazardous fuels and establishing or recovering site-appropriate native plant communities where revegetation can improve long-term wildfire resilience.

The City's wildfire-prioritization rubric and GIS data will establish initial parcel priority; field verification and environmental review will determine implementation readiness; and treatment-unit layout will convert priorities into mappable work areas. The project builds on an existing memorandum of understanding between FLP and the City and on related work already underway in partnership with City Measure B staff. FLP will lead implementation, with the City as landowner, CEQA and GIS partner, and long-term steward, supported by guaranteed Measure B capacity, CCC crews, and specialized contractors where appropriate.

|                        |                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant</b>       | The Feral Land Project, a California 501(c)(3) nonprofit                                                                |
| <b>Landowner</b>       | City of Grass Valley                                                                                                    |
| <b>Project area</b>    | Approximately 350 acres of non-contiguous City-owned lands; final acreage verified by City GIS                          |
| <b>Primary outcome</b> | Hazardous fuels reduction, native revegetation, and long-term stewardship of municipal natural lands                    |
| <b>Implementation</b>  | 2027 through December 31, 2029, following environmental compliance and grant execution                                  |
| <b>Long-term care</b>  | City maintenance for at least 10 years and SNC monitoring access for 25 years, consistent with program requirements [1] |

# 1. Meaning of “Mosaic” and Project Rationale

## 1.1 Primary meaning: the existing landscape

The word **mosaic** primarily describes the City's existing physical landscape: approximately 350 acres of varied, non-contiguous, City-owned open-space properties with different vegetation, terrain, access, public functions, wildfire risks, and maintenance needs.

The MFT strategy manages this municipal landscape mosaic as one system of inventory, prioritization, treatment, native revegetation, monitoring, and recurring stewardship.

## 1.2 Secondary meaning: the management response

Because conditions vary, treatments will vary. Roadsides may require frequent clearance; wooded parcels selective thinning; drainage corridors invasive control and erosion protection; and grasslands recurring fine-fuel management.

*The MFT strategy is not a new technique called “mosaic fuels treatment.” It is a coordinated response to a municipal landscape that is already fragmented, heterogeneous, and mosaic in character.*

## 1.3 Alignment with SNC priorities

SNC's June 2026 guidelines prioritize high-impact forest-health projects with direct benefits to communities, infrastructure, and natural resources. This project aligns by combining fuel reduction, native revegetation, invasive control, and long-term maintenance near homes, evacuation routes, public facilities, utilities, parks, trails, and drainage corridors.<sup>[1]</sup>

Native revegetation is not based on a claim that native plants are fireproof. Research links invasive grasses to greater fine-fuel continuity and increased fire occurrence.<sup>[7]</sup> USDA Forest Service guidance identifies site-specific revegetation as a way to establish plant communities with higher live fuel moisture and lower fuel-bed continuity; selected low-stature native perennials can also reduce fine-fuel height, loading, and continuity.<sup>[8][9]</sup>

Fuel reduction and revegetation will be designed together, with species, spacing, and maintenance tailored by site. Natural regeneration will be preferred where adequate. The project reduces risk but cannot prevent every ignition or wildfire.

# 2. FLP Mission, Native Revegetation, and Public Benefits

FLP's mission calls for treated lands to become safer, more functional, and more hospitable to life - not merely cleared. Native revegetation is therefore a primary goal alongside hazardous-fuels reduction, applied where it can resist invasive recolonization and support long-term stewardship.

Reduce hazardous fuels and establish or recover site-appropriate native plant communities near neighborhoods, roads, trails, utilities, public facilities, and evacuation infrastructure.

Suppress invasive plants that can create continuous, flashy fuels after treatment or disturbance.

Improve the maintainability of municipal forests, woodlands, grasslands, drainages, and disturbed sites while protecting soil, habitat, and drainage functions.

Support three full-time FLP field positions, Measure B implementation capacity, and CCC participation where feasible.

Create a durable GIS record that allows the City to inspect, monitor native establishment, maintain, and retreat completed units over time.

### 3. Prioritization, GIS, and Field Layout

#### 3.1 Two-stage selection process

**Stage 1 - City priority.** The City's existing wildfire-prioritization rubric will control initial ranking. The final submission will reproduce or summarize the official criteria and weights exactly as supplied by the City; FLP will not substitute its own scoring system for City policy.

**Stage 2 - implementation screening.** High-priority parcels will then be screened for verified ownership, treatable acreage, vegetation condition, proximity to assets, slope, access, utilities, environmental and cultural constraints, biomass handling, cost, workforce suitability, and long-term maintenance feasibility. This prevents convenience from overriding public-safety priority while keeping unresolved parcels from delaying implementation-ready work.

#### 3.2 City GIS-backed parcel framework

City-prepared maps and GIS data will provide the authoritative spatial record for the project. The GIS package will verify City ownership, calculate unique and treatable acreage, identify public assets and evacuation relationships, map regional projects, document field assessment and treatment, and schedule future maintenance. GIS supports decision-making but does not replace field verification.

| GIS component         | Minimum content                                                                | Project use                                                                      |
|-----------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Ownership and area    | Parcel ID, legal status, gross acreage, exclusions, treatable acreage          | Confirm site control and prevent duplicate acreage                               |
| Risk and assets       | City priority, homes, roads, evacuation routes, facilities, utilities, trails  | Demonstrate direct community and infrastructure benefits                         |
| Field condition       | Vegetation class, fuel condition, slope, access, invasive plants, hazard trees | Support prescriptions and implementation screening                               |
| Landscape context     | Ponderosa West, Wolf Creek/Boston Ravine, Caltrans, nearby treatments          | Identify direct reinforcement, gap-filling, indirect support, or no relationship |
| Implementation record | Treatment-unit boundary, activity, date, implementer, biomass method           | Track unique acres and treatment activities                                      |
| Maintenance record    | Inspection date, condition indicators, return trigger, responsible party       | Support enduring City stewardship                                                |

#### 3.3 Field layout of treatment units

Prioritized lands will be divided into discrete, mappable treatment units based on vegetation, terrain, access, infrastructure, treatment objectives, and environmental requirements. Treatment units may encompass all or part of a parcel or follow linear features such as roads, trails, and drainage corridors. Each unit will receive a site-specific prescription, implementation method, monitoring approach, and maintenance interval.

### 4. Project-Specific Treatment Matrix

Treatment will be assigned according to the condition and function of each treatment unit. Final acreages and quantities will be added after City GIS verification, field assessment, environmental review, and applicable technical review. The matrix below establishes the project's decision framework without assigning unsupported precision.

| Unit condition                 | Primary objective                                     | Potential treatment                                                                               | Likely lead           | Maintenance                                      |
|--------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------|
| Roadside / evacuation corridor | Improve emergency access and reduce roadside exposure | Pruning; surface- and ladder-fuel reduction; invasive control; hazard-tree work; biomass removal; | FLP / Measure B / CCC | Annual inspection; retreat according to regrowth |

|                                      |                                                                                                                                     |                                                                                                                                                                  |                                  |                                                 |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------|
|                                      |                                                                                                                                     | enhance with native perennial plants where appropriate                                                                                                           |                                  |                                                 |
| Community-edge parcel                | Reduce continuity near homes and developed assets                                                                                   | Selective thinning; pruning; ladder- and surface-fuel reduction; slash treatment                                                                                 | FLP / Measure B / CCC            | Inspect every 1-3 years                         |
| Forested open space / oak woodland   | Improve structure while retaining appropriate canopy                                                                                | Small-tree thinning; understory treatment; pruning; dead-material and invasive control; native understory recovery where appropriate                             | FLP / CCC / Measure B            | Condition-based inspection and retreatment      |
| Creek or drainage corridor           | Reduce hazardous vegetation while protecting drainage and ecological function                                                       | Selective hand treatment; invasive control; hazard-tree work; erosion protection enhance with native, riparian plants where appropriate; limited biomass removal | FLP / Measure B / Specialist     | Seasonal or post-storm review where appropriate |
| Trail or park corridor               | Protect public access and recreational assets; when suitable, enhance with native perennial plants.                                 | Pruning; brush and surface-fuel reduction; invasive control; hazard-tree work                                                                                    | FLP / Measure B / CCC            | Annual or use-based inspection                  |
| Grassland / vacant lot               | Reduce recurring fine-fuel accumulation; when suitable replace with maintainable native perennial cover and protect treatment gains | Mowing; grazing where feasible; hand treatment; invasive control; site preparation; native seeding or planting; erosion protection                               | FLP / Measure B / CCC            | Seasonal or annual treatment                    |
| Invasive-dominated or disturbed site | Replace recurring invasive fuels with maintainable native perennial cover and protect treatment gains                               | Repeated invasive control; site preparation; native seeding or planting; erosion protection                                                                      | FLP / CCC / Measure B            | Establishment and invasive follow-up            |
| Hazard-tree location                 | Protect roads, structures, trails, utilities, and crews                                                                             | Qualified assessment; climbing; technical felling; crane work; processing or removal                                                                             | Measure B / Qualified contractor | Periodic and event-based inspection             |
| Sensitive or lower-risk site         | Protect ecological values and avoid unnecessary disturbance                                                                         | Monitoring; buffers; limited hand treatment; targeted hazard correction                                                                                          | City / FLP / specialist          | Threshold-based intervention                    |

## 4.1 Treatment accounting

The project will distinguish between unique treated acres (the geographic footprint receiving one or more treatments) and treatment-activity acres (work reported by activity type). An acre receiving thinning, invasive control, and slash treatment remains one unique treated acre, even though each activity may also be tracked separately.

## 4.2 Native revegetation as a primary project goal

Native revegetation is a primary goal alongside fuels reduction. In units left invasive-dominated, erodible, or ecologically degraded, the project may establish locally appropriate perennial native communities to resist recolonization, stabilize soil, support habitat, and protect treatment gains. Revegetation will be prescription-based: species, density, spacing, and maintenance must avoid recreating fuel continuity; natural regeneration will be protected where adequate, and active seeding or planting used where native perennials are depleted or invasive pressure is high.<sup>[7][8][9]</sup>

## 5. Implementation Readiness and Responsibilities

| Function                                | Primary responsibility                                                                       |
|-----------------------------------------|----------------------------------------------------------------------------------------------|
| Grant recipient and reporting           | FLP, with City administrative support                                                        |
| Landowner and site access               | City of Grass Valley                                                                         |
| CEQA Lead Agency                        | City of Grass Valley                                                                         |
| Authoritative parcel data and maps      | City of Grass Valley                                                                         |
| Prioritization rubric                   | City of Grass Valley                                                                         |
| Field planning and treatment layout     | FLP with City and technical input                                                            |
| Routine field implementation            | FLP and Measure B                                                                            |
| CCC work                                | California Conservation Corps, subject to consultation and feasibility                       |
| Climbing, technical felling, crane work | Qualified contractors                                                                        |
| Forestry or specialized review          | RPF, arborist, biologist, cultural-resource specialist, or other professional where required |
| GIS treatment tracking                  | FLP using City base data and mapping support                                                 |
| Long-term stewardship                   | City of Grass Valley with potential for FLP support/partnership                              |

### 5.1 Existing Implementation and Need for Expanded Capacity

FLP is already carrying out related work through an existing memorandum of understanding with the City of Grass Valley, with projects underway in partnership with City Measure B staff. This demonstrates that the partnership and implementation approach are already established. To date, FLP's participation has relied largely on volunteer labor and parcel-specific funding, limiting the scale and continuity of the work. SNC funding would provide the dedicated staffing and coordinated capacity needed to expand this existing effort into a sustained citywide program.

### 5.2 Leveraged implementation capacity

The proposal includes guaranteed Measure B in-kind support for field labor, equipment, supervision, scheduling, and technical coordination. If FLP is invited to submit a full proposal, the City's commitment materials should document labor classifications and hours, loaded rates, equipment types and valuation, supervisory time, availability during the grant period, and confirmation that resources are not double-counted under another funded project.

FLP will maintain the required contractor and public-works compliance needed for its role. Major unit costs will be supported before a full proposal through payroll calculations, prevailing-wage classifications, City labor and equipment schedules, CCC consultation, contractor estimates, vendor quotations, and review of the indirect-cost method.

### 5.3 Implementation sequence

|                      |                                                                                                                |
|----------------------|----------------------------------------------------------------------------------------------------------------|
| <b>1. Confirm</b>    | City authorization, ownership, GIS inventory, rubric, agreements, and data standards.                          |
| <b>2. Prioritize</b> | Apply the City rubric; field-verify vegetation, access, assets, constraints, and treatment feasibility.        |
| <b>3. Prepare</b>    | Complete environmental and technical review; develop prescriptions; lay out treatment units; assign crews.     |
| <b>4. Implement</b>  | Complete unit-specific treatments; document labor, equipment, boundaries, activities, and biomass disposition. |
| <b>5. Transition</b> | Inspect completed work; establish monitoring and maintenance intervals; transfer final records to the City.    |

## 6. Regional Landscape Context

The project is designed to complement, not duplicate, major investments around Grass Valley. The Ponderosa West Grass Valley Defense Zone is a multiphase shaded fuel break west of the City;

Nevada County reports a 1,200-acre Phase I project area, 728 acres of maintenance, and 236 acres of Phase II treatment.<sup>[4]</sup>

In June 2026, SNC awarded the City \$720,000 to treat approximately 240 acres in Wolf Creek, Boston Ravine, and other southern Grass Valley locations.<sup>[5]</sup>

Caltrans' State Route 49 Grass Valley Wildfire Evacuation Route Project addresses bottlenecks along an eight-mile corridor through shoulder widening, a continuous center turn lane, roadway and drainage work, bridge improvements, and related measures intended to improve emergency traffic flow and responder access.<sup>[6]</sup>

City mapping will identify which proposed treatment units directly reinforce these projects, extend a corridor, occupy a credible untreated gap, provide indirect support, or have no identified relationship.

## **7. Monitoring, Maintenance, and Enduring Benefit**

The project will track unique treated acres, activity acres by treatment type, completed treatment units, roadside or trail mileage where applicable, hazard trees addressed, biomass disposition, jobs supported, leveraged resources, CCC participation, and native revegetation. Where planting or seeding occurs, records will include area, material quantities, establishment condition, survival where practical, and invasive cover. Treatment boundaries and activities will be recorded in GIS and supported by completion inspections and photographs.

### **7.1 Maintenance triggers**

Reestablishment of ladder-fuel continuity or excessive surface fuels;

Invasive-species recurrence, dense shrub resprouting, or failure of native revegetation to establish;

Fine-fuel height or density above the treatment objective;

Obstruction of roads, trails, access, or sight distance;

Development of new hazard trees or storm damage;

Erosion or failure of site-protection measures; and

Changes in adjacent infrastructure, land use, or public-safety needs.

The City will serve as the long-term steward and, consistent with SNC requirements, will ensure that treated areas are maintained for at least ten years following project completion. Maintenance may be performed through City operations, a separately funded stewardship agreement with FLP, or other qualified service providers. The final land-tenure agreement will also provide SNC monitoring access for 25 years.<sup>[1]</sup>

## **8. Scope Boundary and Future Expansion**

The broader MFTS anticipates a future, scalable regional native plant propagation nursery that could expand reliable access to locally appropriate plant and seed material. Native revegetation within selected Grass Valley treatment units is part of the current project. Nursery construction, facility expansion, seed-processing infrastructure, and regional production capacity are separate future investments and are not included in the SNC grant scope or budget.

The FLP also intends to pursue future coordination with Caltrans to extend the MFTS methodology into state highway corridor work, including highway rights-of-way, interchanges, on- and off-ramps, underpasses, and other associated lands. This future expansion could apply the project's integrated approach to fuel reduction, invasive plant management, native revegetation, monitoring, and recurring stewardship across transportation corridors connected to Grass Valley.

Any future nursery or Caltrans corridor project will require its own feasibility analysis, site review, agency authorization, capital and operating budget, environmental compliance, governance, partnerships, and funding proposal.

## 9. Project Development and Verification

The project will establish a verified initial implementation area through City GIS review and available parcel records. Before field implementation, FLP and the City will complete site assessments, confirm treatment-unit boundaries, assign acreage by treatment activity, finalize site-specific treatment prescriptions, identify applicable environmental compliance requirements, and establish appropriate maintenance intervals.

The current project scope and budget are based on the approximately 350 acre municipal open-space inventory and the anticipated range of eligible treatment activities. Parcel-specific treatment commitments and final acreage totals will be based on completed GIS verification, field assessment, environmental review, technical consultation, and budget validation. Additional treatment units will be incorporated only after their ownership, conditions, treatment needs, access, environmental requirements, and costs have been confirmed.

## Conclusion

The Grass Valley Mosaic Fuels Treatment converts a fragmented set of municipal lands into a coordinated implementation and stewardship program. The project builds on an active partnership between FLP and the City of Grass Valley and would expand work already underway with Measure B staff into a coordinated and sustainably staffed citywide program. Its distinguishing contribution is not a new fuel-treatment technique, but the use of City prioritization, GIS, field verification, treatment-unit design, documented implementation, native revegetation, and recurring maintenance to manage distinct and varied public properties as one wildfire-resilience system consistent with FLP's mission to create safe, hospitable places where life can thrive.

## References:

- [1. Sierra Nevada Conservancy. Wildfire and Forest Resilience Directed Grant Program Guidelines, June 2026.](#)
- [2. California Department of Forestry and Fire Protection. "Fuels Reduction."](#)
- [3. Jain, T.B., et al. Effectiveness of Fuel Treatments at the Landscape Scale: State of Understanding and Key Research Gaps. USDA Forest Service / Joint Fire Science Program, 2021.](#)
- [4. Nevada County. "Ponderosa West Grass Valley Defense Zone."](#)
- [5. Sierra Nevada Conservancy. "The SNC Awards New Wildfire Resilience and Recreation Grants; Starts Two New Grant Programs." June 5, 2026.](#)
- [6. California Department of Transportation. "State Route 49 Grass Valley Wildfire Evacuation Project."](#)
- [7. Fusco, E.J., et al. "Invasive Grasses Increase Fire Occurrence and Frequency Across U.S. Ecoregions." \*Proceedings of the National Academy of Sciences\* 116, no. 47 \(2019\): 23594-23599.](#)
- [8. Chambers, J.C., L. Evers, and L.A. Joyce. "Climate Adaptation." In \*Science Framework for Conservation and Restoration of the Sagebrush Biome, Part 2: Management Applications\*. USDA Forest Service RMRS-GTR-389, 2019.](#)
- [9. Crist, M.R., J.C. Chambers, and J.A. Skinner. "Wildland Fire and Vegetation Management." In \*Science Framework for Conservation and Restoration of the Sagebrush Biome, Part 2: Management Applications\*. USDA Forest Service RMRS-GTR-389, 2019.](#)