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## GRASS VALLEY

### Special City Council Meeting

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Monday, February 05, 2024 at 5:00 PM  
Council Chambers, Grass Valley City Hall | 125 East Main Street, Grass Valley, California  
Telephone: (530) 274-4310 - Fax: (530) 274-4399  
E-Mail: [info@cityofgrassvalley.com](mailto:info@cityofgrassvalley.com) Web Site: [www.cityofgrassvalley.com](http://www.cityofgrassvalley.com)

### AGENDA

Any person with a disability who requires accommodations to participate in this meeting should telephone the City Clerk's office at (530)274-4390, at least 48 hours prior to the meeting to make a request for a disability related modification or accommodation.

### MEETING NOTICE

City Council welcomes you to attend the meetings electronically or in person at the City Hall Council Chambers, located at 125 E. Main St., Grass Valley, CA 95945. Regular Meetings are scheduled at 7:00 p.m. on the 2nd and 4th Tuesday of each month. Your interest is encouraged and appreciated.

This meeting is being broadcast "live" on Comcast Channel 17 by Nevada County Media, on the internet at [www.cityofgrassvalley.com](http://www.cityofgrassvalley.com), or on the City of Grass Valley YouTube channel at <https://www.youtube.com/channel/UCdAaL-uwDN8iTz8bl7SCuPQ>.

Members of the public are encouraged to submit public comments via voicemail at (530) 274-4390 and email to [public@cityofgrassvalley.com](mailto:public@cityofgrassvalley.com). Comments will be reviewed and distributed before the meeting if received by 5pm. Comments received after that will be addressed during the item and/or at the end of the meeting. Council will have the option to modify their action on items based on comments received. Action may be taken on any agenda item.

Agenda materials, staff reports, and background information related to regular agenda items are available on the City's website: [www.cityofgrassvalley.com](http://www.cityofgrassvalley.com). Materials related to an item on this agenda submitted to the Council after distribution of the agenda packet will be made available on the City of Grass Valley website at [www.cityofgrassvalley.com](http://www.cityofgrassvalley.com), subject to City staff's ability to post the documents before the meeting.

Please note, individuals who disrupt, disturb, impede, or render infeasible the orderly conduct of a meeting will receive one warning that, if they do not cease such behavior, they may be removed from the meeting. The chair has authority to order individuals removed if they do not cease their disruptive behavior following this warning. No warning is required before an individual is removed if that individual engages in a use of force or makes a true threat of force. (Gov. Code, § 54957.95.)

**Council Chambers are wheelchair accessible and listening devices are available. Other special accommodations may be requested to the City Clerk 72 hours in advance of the meeting by calling (530) 274-4390, we are happy to accommodate.**

**CALL TO ORDER**

**PLEDGE OF ALLEGIANCE**

**ROLL CALL**

**AGENDA APPROVAL** - *The City Council reserves the right to hear items in a different order to accomplish business in the most efficient manner.*

**PUBLIC COMMENT** - There will be no General public comments on items not agenized in this Special Council meeting, however public comments are encouraged on agenized items. General public comments may be made at the next regular scheduled meeting held on February 13th, 2024.

**CONSENT ITEMS** - *All matters listed under the Consent Calendar are to be considered routine by the City Council and/or Grass Valley Redevelopment Agency and will be enacted by one motion in the form listed. There will be no separate discussion of these items unless, before the City Council and/or Grass Valley Redevelopment Agency votes on the motion to adopt, members of the Council and/or Agency, staff or the public request specific items to be removed from the Consent Calendar for separate discussion and action (roll call vote).*

- [1.](#) Adopt Resolution No. 2024-05 and Resolution No. 2024-006 Declaring Equipment of the City of Grass Valley Surplus

**CEQA:** Not a Project

**Recommendation:** That council 1) Adopt Resolution No 2024-05, and No. 2024-06 Declaring Equipment as Surplus and Authorizing Disposition of listed equipment.

**ITEMS REMOVED FROM CONSENT CALENDAR FOR DISCUSSION OR SEPARATE ACTION AND / OR ANY ADDED AGENDA ITEMS**

**ADMINISTRATIVE**

- [2.](#) Establish a Policy Governing the Use of the Mill Street Plaza Area by the Public and for City-Sponsored Events

**CEQA:** Not a Project

**Recommendation:** That Council review and approve the Mill Street Plaza Use & Events Policy subject to legal review.

- [3.](#) Wildfire Hazard and Risk Assessment for the City of Grass Valley

**CEQA:** Not a Project

**Recommendation:** That Council review and provide comments on the administrative draft of the Wildfire Hazard and Risk Assessment for the City of Grass Valley.

- [4.](#) Modifying Public Comment at the City Council Meetings

**CEQA:** Not a Project

**Recommendation:** That Council 1) have a discussion on how to improve the public comment portion of City Council meetings, and review and approve a resolution of the City Council of Grass Valley regarding public comment at council meetings

- [5.](#) City Manager and Community Development Department Restructuring

**CEQA:** Not a Project

**Recommendation:** That Council 1) review and approve the proposed reorganization of the City Manager and Community Development Departments; 2) approve the job description and associated salary schedule for the Deputy City Manager I/II, subject to legal review; 3) approve the reclassification of one of the approved Community Services Analyst I to a Community Services Analyst II, which is a flexibly staffed position; 4) approve adding the Deputy City Manager I and reclassifying a Community Services Analyst to a level II to the allotted/authorized City positions; 5) review the proposed agreements (including Appendix A) for the Deputy City Manager I position; 6) authorize the City Manager to execute the Deputy City Manager I agreement subject to legal review; and 7) authorize the Administrative Services Director to make any necessary budget adjustments and/or amendments to complete these actions.

**ADJOURN**

**POSTING NOTICE**

This is to certify that the above notice of a Special meeting of The City Council, scheduled for Monday, February 5, 2024 at 5:00 PM was posted at city hall, easily accessible to the public, as of 5:00 p.m. Wednesday, January 31, 2024.

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**Taylor Day, City Clerk**



**City of Grass Valley  
City Council  
Agenda Action Sheet**

**Title:** Adopt Resolution No. 2024-05 and Resolution No. 2024-006 Declaring Equipment of the City of Grass Valley Surplus

**CEQA:** Not a Project

**Recommendation:** that council 1) Adopt Resolution No 2024-05, and No. 2024-006 Declaring Equipment as Surplus and Authorizing Disposition of listed equipment.

**Prepared by:** Mark Buttron - Fire Chief

**Council Meeting Date:** 2/5/2024

**Date Prepared:** 1/31/2024

**Agenda:** Consent

**Background Information:** Pursuant to Government Code Section 37350, the city may declare items as surplus. The City of Grass Valley Fire Department has 16 Motorola APX 6000 handheld radios along with batteries and miscellaneous accessories to surplus and sell. The Fire Department has agencies interested in the purchase of surplus equipment. When sold the proceeds, projected to be between \$20,000.00 and \$35,000.00, will return to the Measure E fund from where the expenditures were made in 2017. The Fire Department also has 34 Scott NXG2 Self Contained Breathing Apparatus (SCBAs) that exceed the 15-year service life for use in the Fire Service. Having little to no value due to the service life maximum, upon surplus the SCBAs will be donated to Sierra College Fire Academy for use in the Academy to train the next generation of firefighters. Resolution 2024-005 reflects the sale of Motorola Radios; Resolution 2024-006 reflects the donation of Self Contained Breathing Apparatus to the Sierra College Fire Academy. A list of the equipment is attached for reference.

**Council Goals/Objectives:** The execution of this Resolution achieves Strategic Goal #5- High Performance Government and Quality Services.

**Fiscal Impact:** Revenues generated by sales will offset future equipment purchases by the City.

**Funds Available:** N/A

**Account #:** Various Accounts

**Reviewed by:** \_ City Manager

**Attachments:** Inventory List, R2024-05, R2024-06



## City of Grass Valley Fire Department-Equipment Inventory

Motorola APX 6000 Radio Surplus			SCBA Inventory	
APX RADIOS	BATTERIES	MISC EQUIPMENT	SCBA #	SCBA DESCRIPTION
756TSP6111	500001AF5EA1	IMPACT VEHICLE X3	115S0649000558	NXG 2 4.5 Airpak with MMR
756CTR1416	500001B84790	MOTOROLA VEH X4	115S0649003640	NXG 2 4.5 Airpak with MMR
756CTR1420	50000194C520	HIP HOLSTERS X13	115S0649003641	NXG 2 4.5 Airpak with MMR
756CTR1412	500001B0F6B1	BENCH CHARGER X1	115S0649003642	NXG 2 4.5 Airpak with MMR
756CTR1418	500001B3A971	CHARGER CUPS EXTRA X9	115S0649003649	NXG 2 4.5 Airpak with MMR
756CTR1414	500001CFEF41	PROGRAMMING CABLE X1	115S0649003651	NXG 2 4.5 Airpak with MMR
481CXP2319	500001CF5639		115S0649003680	NXG 2 4.5 Airpak with MMR
756CTR1419	5000025F5A3		115S0649005560	NXG 2 4.5 Airpak with MMR
756CWB0236	500001CF6F40		115S0649005582	NXG 2 4.5 Airpak with MMR
756CTR1423	500001B3C34B		115S0649005583	NXG 2 4.5 Airpak with MMR
756CWB0235	500001CEE0D1		115S0649005584	NXG 2 4.5 Airpak with MMR
756CTR1424	500001D03834		115S0649005586	NXG 2 4.5 Airpak with MMR
756CTR1413	5000022COA13		115S0649005587	NXG 2 4.5 Airpak with MMR
756CTR1425	5000025FD778		115S0649005588	NXG 2 4.5 Airpak with MMR
756CTR1411	5000025FBCEB		115S0649005589	NXG 2 4.5 Airpak with MMR
OOS- 756CTR1421	500001B38F38		115S0649005593	NXG 2 4.5 Airpak with MMR
	500002E71CC9		115S0649005594	NXG 2 4.5 Airpak with MMR
	50000290F813		115S0649008552	NXG 2 4.5 Airpak with MMR
	5000025C50A8		115S0946005595	NXG 2 4.5 Airpak with MMR
	500001B3991A		RED0406003317DA	NXG 2 4.5 Airpak with MMR
	5000027F3306		RED0406003405DA	NXG 2 4.5 Airpak with MMR
			RED0407005157DA	NXG 2 4.5 Airpak with MMR
			RED0506017071DA	NXG 2 4.5 Airpak with MMR
			RED0506017102DA	NXG 2 4.5 Airpak with MMR
			RED0506017103DA	NXG 2 4.5 Airpak with MMR
			RED0506017105DA	NXG 2 4.5 Airpak with MMR
			RED0506017106DA	NXG 2 4.5 Airpak with MMR
			RED0506017107DA	NXG 2 4.5 Airpak with MMR
			RED0506017111DA	NXG 2 4.5 Airpak with MMR
			RED0506017113DA	NXG 2 4.5 Airpak with MMR
			RED0506017123DA	NXG 2 4.5 Airpak with MMR
			RED0506017124DA	NXG 2 4.5 Airpak with MMR
			RED0506017142DA	NXG 2 4.5 Airpak with MMR
			RED0506017144DA	NXG 2 4.5 Airpak with MMR

**RESOLUTION NO. 2024-05**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GRASS VALLEY DECLARING MOTOROLA RADIOS AND ACCESSORIES SURPLUS AND AUTHORIZING DISPOSITION OF EQUIPMENT**

WHEREAS, The City Council may, pursuant to Government Code Section 37350, from time to time declare as surplus property certain personal property of the City which for reasons of wear and tear, defect or obsolescence deems the item unsafe or no longer useful to the City; and

WHEREAS, whenever the Council declares such personal property as surplus it may dispose of same when said disposal is for the benefit of the City and its constituents.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRASS VALLEY, as follows:

1. That all of the above recitals are true and correct.
2. That the attached list of equipment is no longer needed for municipal purposes and is hereby considered surplus.

The City Manager is hereby authorized to dispose of the subject equipment in a cost-effective manner.

ADOPTED as a resolution of the City Council of the City of Grass Valley at a regular meeting held on the 5th day of February 2024 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINING:

\_\_\_\_\_  
Ben Aguilar, Mayor

APPROVED AS TO FORM:

ATTEST:

\_\_\_\_\_  
Michael G. Colantuono, City Attorney

\_\_\_\_\_  
Taylor Day, Deputy City Clerk

**RESOLUTION NO. 2024-06**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GRASS VALLEY DECLARING SCOTT SELF CONTAINED BREATHING APPARATUS AND ACCESSORIES SURPLUS AND AUTHORIZING DISPOSITION OF EQUIPMENT**

WHEREAS, The City Council may, pursuant to Government Code Section 37350, from time to time declare as surplus property certain personal property of the City which for reasons of wear and tear, defect or obsolescence deems the item unsafe or no longer useful to the City; and

WHEREAS, whenever the Council declares such personal property as surplus it may dispose of same when said disposal is for the benefit of the City and its constituents.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRASS VALLEY, as follows:

1. That all of the above recitals are true and correct.
2. That the attached list of equipment is no longer needed for municipal purposes and is hereby considered surplus.

The City Manager is hereby authorized to dispose of the subject equipment in a cost-effective manner.

ADOPTED as a resolution of the City Council of the City of Grass Valley at a regular meeting held on the 5th day of February 2024 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINING:

\_\_\_\_\_  
Ben Aguilar, Mayor

APPROVED AS TO FORM:

ATTEST:

\_\_\_\_\_  
Michael G. Colantuono, City Attorney

\_\_\_\_\_  
Taylor Day, Deputy City Clerk



## City of Grass Valley City Council Agenda Action Sheet

**Title:** Establish a Policy Governing the Use of the Mill Street Plaza Area by the Public and for City-Sponsored Events

**CEQA:** Not a Project

**Recommendation:** That Council review and approve the Mill Street Plaza Use & Events Policy subject to legal review.

**Prepared by:** Timothy Kiser, City Manager

**Council Meeting Date:** 02/5/2024

**Date Prepared:** 01/31/2024

**Agenda:** Administrative

**Background Information:** With the imminent completion of Mill Street Plaza, the administration is in the process of formalizing previously informal policies regarding the closure and utilization of public right of way for downtown events. The City is committed to creating safe, healthy, and inviting public spaces that are accessible to everyone on an equitable basis. This policy delineates procedures and guidelines for the coordinated use of Mill Street Plaza and/or the historic district area of the City (referred to as Mill Street Plaza Area).

The primary objective of this policy is to safeguard individuals' rights to engage in expressive activities within the City's public spaces, establishing regulations that are minimally restrictive and reasonable in terms of time, place, and manner. While the City acknowledges the importance of facilitating expressive activities, it does not intend to designate Mill Street Plaza as a public forum for events and installations that deviate from the typical uses of all public rights of way in the City, except for the City's own events.

Private events and installations are permitted in alternative City venues, such as parks, ensuring a balance between public use and the preservation of Mill Street Plaza's intended purpose. The proposed policy is attached for the Council's review.

**Council Goals/Objectives:** This item executes portions of work tasks towards achieving/maintaining the Strategic Plan - Economic Development and Community Safety.

**Fiscal Impact:** The proposed action under this item would not create a Fiscal Impact beyond our budgeted positions.

**Funds Available:** Yes

**Account #:** General Fund

**Reviewed by:** \_\_\_ City Manager

**Attachments:** Mill Street Plaza Use & Events Policy

**CITY OF GRASS VALLEY ADMINISTRATIVE  
POLICIES AND PROCEDURES**



**Number:** \_\_\_\_\_  
**Effective Date:** 01/xx/2024  
**Revised:** \_\_\_\_\_  
**Authority:** \_\_\_\_\_  
**City Administrator:** \_\_\_\_\_

**SUBJECT: Mill Street Plaza Area Use & Events**

- I. **PURPOSE.** To establish a policy governing the use of Mill Street Plaza and/or the historic district area of the City by the public and for City-sponsored events.
  
- II. **POLICY:** It is the policy of the City to provide safe, healthy, and attractive public spaces that are open to all on an equitable basis. This policy identifies procedures and guidelines to manage the shared use of Mill Street Plaza and/or the historic district area of the City (Mill Street Plaza Area). It is the intent of the City to protect the rights of people to engage in expressive activities in the City’s public places and to establish the least restrictive and reasonable time, place, and manner of regulation of expressive activities. However, the City does not intend to establish Mill Street Plaza as a public forum for events and installations that are not consistent with uses of every right of way in the City other than the City’s own events. Private events and installations are permitted in other City venues, such as parks.
  
- III. **GUIDELINES:**
  - A. Anyone may use the Mill Street Plaza Area in the same manner as other public streets when it is not reserved for an event.
    - i. The use of Mill Street Plaza Area is subject to existing street and sidewalk use regulations, including but not limited to Chapter 12.16 (“Street and Sidewalk Use Regulations”) of the Grass Valley Municipal Code and the California Vehicle Code and California Streets and Highways Code.
    - ii. No person may block, impede, or obstruct the free passage of Mill Street Plaza Area, including through the temporary or permanent erection of structures or placement of objects, without first obtaining a valid encroachment permit. No person may intentionally interfere with or obstruct a permitted event.
  - B. Mill Street Plaza Area is subject to, and may be used consistently with, existing regulations pertaining to special events, parade, and encroachment permits, including but not limited to Chapters 12.28 (“Parades and

Processions”) and 12.48 (“Encroachments on Public Rights-of-Way”) of the Grass Valley Municipal Code.

- C. Events that involve the exclusive use of all or portions of Mill Street Plaza Area, the erection or installation of structures in Mill Street Plaza, or the maintenance of objects in Mill Street Plaza Area on a temporary or permanent basis, must meet the following criteria:

Such events must be the City’s own events. Private events of this type may be permitted in other City public places, such as parks.

- i. The City Manager will evaluate requests to conduct events in the Mill Street Plaza Area under these standards but, as such events will be the City’s own, it reserves the right to limit events to those appropriately funded with public resources:
  - a. All events must be open to the general public.
  - b. Any entry fees charged for events must be reasonably priced to allow public participation.
  - c. Events must serve the City’s objective to develop its economy by welcoming the general public to its downtown.
  - d. All events must be insured in an amount established by the City Manager from time to time in consultation with the City’s risk pool.
  - e. To maintain appropriate neutrality, the City does not sponsor religious, partisan, or political events.
  - f. The City will decline to conduct an event at a time when Mill Street Plaza is unavailable. The City will suggest alternative times or places.
  - g. Events must comply with applicable laws, such as those governing the sale and consumption of alcoholic beverages.
  - h. All else being equal, the City will select events on a first come, first served basis.
- ii. The City Manager shall refuse to conduct an event upon finding any of the following:
  - a. One or more of the approval criteria specified above is not met.
  - b. A requestor has knowingly made a false, misleading, or fraudulent statement of fact to the City regarding the event.
  - c. A requestor fails to comply with any conditions on which the City agreed to conduct the event .
  - d. The co-sponsor has damaged City property and has not paid in full for such damage or has other outstanding and unpaid debts related to a prior co-sponsored event with the City.

- iii. No requestor may use the words "City of Grass Valley" or the seal or logo of the City in any promotional materials or advertising without the City's prior written authorization.

**IV. RESPONSIBILITY FOR REVIEW:** The City Manager shall review this policy at least once every 3 years.



## City of Grass Valley City Council Agenda Action Sheet

**Title:** Wildfire Hazard and Risk Assessment for the City of Grass Valley

**CEQA:** Not a Project

**Recommendation:** That Council review and provide comments on the administrative draft of the Wildfire Hazard and Risk Assessment for the City of Grass Valley.

**Prepared by:** Timothy Kiser, City Manager

**Council Meeting Date:** 02/05/2024

**Date Prepared:** 01/30/2024

**Agenda:** Administrative

**Background Information:** Wildfires pose a significant concern for our community, prompting the City to take proactive measures in identifying and mitigating potential hazards. In a strategic initiative, the City has enlisted the services of the reputable consultant, "Dudek," to conduct a comprehensive risk assessment. This assessment aims to identify and prioritize areas of concern within the City of Grass Valley, its Sphere of Influence, and regions within 1.5 miles of the City and its Sphere of Influence. Notably, Dudek is also collaborating with Nevada County on a similar project, showcasing their expertise in tackling wildfire challenges at a broader scale.

The assessment area, which encompasses the City of Grass Valley and its surroundings, reveals a heightened potential for damaging wildfires. This conclusion is drawn from an analysis of regional fire and ignition history, existing vegetation types, fuels composition, terrain characteristics, local climate conditions, and the proximity of structures and infrastructure to wildland vegetation. An alarming statistic emerges, indicating that approximately 63% of the assessment area falls under the classification of a wildland urban interface or wildland urban intermix - areas where human development intersects with wildland vegetation. Throughout this extensive region, vegetation conducive to ignition and wildfire spread poses substantial risks to human life, safety, and property.

To comprehensively assess the potential wildfire impacts, a Wildfire Hazard and Risk Assessment was conducted, employing advanced modeling tools. This process involved integrating spatial datasets that influence wildfire risk to the community. The distinction between wildfire hazard and risk was crucial; while hazard signifies the existing wildfire environment and potential behavior, risk represents the intersection of hazard and resources or assets vulnerable to fire impact. By basing the assessment on wildfire hazard in areas adjacent to developed zones, the community's overall wildfire risk was determined. The results of this assessment indicate that approximately 77% of developed areas within the assessment zone face High, Very High, or Extreme relative risk.



The attached administrative draft report encapsulates Dudek's meticulous modeling and assessment efforts, providing an in-depth exploration of the assessment area's fire environment. The discussion delves into terrain, vegetation and fuels, weather patterns, and fire history, offering valuable insights into the factors influencing wildfire risk. The report also presents a detailed overview of model inputs and results, including a mapped depiction of regions categorized as Low to Extreme relative wildfire risk. The identification of these regions serves as a foundation for recommending targeted approaches to reduce wildfire risk, forming a crucial aspect of Dudek's comprehensive wildfire mitigation strategy.

The plan is attached for City Council's review and comment.

**Council Goals/Objectives:** This item executes portions of work tasks towards achieving/maintaining the Strategic Plan - High Performance Government & Quality Service.

**Fiscal Impact:** The study's cost is capped at \$33,000, and ample funds have been allocated in the City's contingency to cover the assessment expenses.

**Funds Available:** Yes **Account #:** Various

**Reviewed by:** \_\_ City Manager

**Attachments:** Wildfire Hazard and Risk Assessment for Grass Valley

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# Wildfire Hazard and Risk Assessment

# City of Grass Valley,

# California

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**JANUARY 2024**

*Prepared for:*

**GRASS VALLEY FIRE DEPARTMENT**

125 East Main Street  
Grass Valley, California 95945  
*Contact: Chief Mark Buttron*

*Prepared by:*

**DUDEK**

853 Lincoln Way, Suite 105  
Auburn, California 95603  
*Contact: Scott Eckardt, RPF*  
*Matthew Crockett, Fire Protection Planner*



# Table of Contents

<b>SECTION</b>	<b>PAGE NO.</b>
Executive Summary .....	iv
1 Assessment Area Description.....	1
1.1 Location .....	1
1.2 Terrain .....	1
1.3 Vegetation and Fuels .....	2
1.4 Weather.....	7
1.4.1 Climate Change.....	8
1.5 Fire Hazard Severity Zones .....	8
1.6 Fire and Ignition History .....	10
1.7 Wildland Urban Interface/Intermix.....	13
1.7.1 Wildland Urban Interface.....	13
1.7.2 Wildland Urban Intermix.....	13
1.8 At-Risk Community .....	14
2 Hazard and Risk Assessment.....	15
2.1 Hazard Assessment.....	15
2.1.1 Extreme Fire Behavior .....	15
2.1.2 Ember Load.....	17
2.1.3 Hazardous Fuels .....	18
2.1.4 Wildfire Suppression Difficulty .....	18
2.1.5 Urban Tree Canopy Cover.....	18
2.1.6 Ignition Density .....	18
2.2 Risk Assessment .....	27
2.2.1 Development Areas .....	27
2.2.2 Extreme Fire Behavior .....	29
2.2.3 Ember Load.....	29
2.2.4 Hazardous Fuels .....	29
2.2.5 Wildfire Suppression Difficulty .....	30
2.2.6 Urban Tree Canopy Cover.....	30
2.2.7 Ignition Density .....	30
2.2.8 Composite Wildfire Risk .....	30
2.3 Model Results.....	31
3 Potential Wildfire Risk Reduction Approaches.....	37
3.1 Reducing Structural Ignitability .....	37
3.2 Vegetation Management.....	38

3.3 Community Outreach and Education ..... 40

3.4 Additional Wildfire Risk Reduction Approaches ..... 41

4 References ..... 21

**TABLES**

1. Effects of Topographic Features on Fire Behavior .....1

2. Assessment Area Vegetation Communities .....2

3. FHSZ Classifications in State Responsibility Area of Assessment Area .....8

4. FHSZ Classifications in Local Responsibility Area of Assessment Area .....8

5. Historical Wildfires within the Assessment Area ..... 10

6. Wildland Urban Interface/Intermix in the Assessment Area ..... 13

7. Fire Behavior Interpretation..... 16

8. Fire Behavior Modeling Weather and Fuel Moisture Inputs ..... 17

9. Development Area Proximity to Extreme Fire Behavior Ranking..... 29

10. Conditional Ember Load Index Ranking..... 29

11. Development Area Proximity to Hazardous Fuels Ranking ..... 29

12. Wildfire Suppression Difficulty Ranking..... 30

13. Urban Tree Canopy Cover Ranking ..... 30

14. Fire Hazard Data Layer Weighting Values ..... 31

15. Composite Wildfire Risk Layer Classifications ..... 31

16. Relative Risk Ratings for Developed Areas within the Assessment Area ..... 32

17. Relative Risk Ratings for Developed Areas within the City of Grass Valley and the City Sphere of Influence ... 32

**FIGURES**

1. Assessment Area Location.....3

2. Assessment Area Terrain .....4

3. Assessment Area Vegetation .....5

4. Assessment Area Fire Hazard Severity Zones .....9

5. Assessment Area Fire History ..... 11

6. Assessment Area Wildfire Ignition Locations..... 12

7. Assessment Area Wildland Urban Interface ..... 15

8. Assessment Area Flame Length ..... 19

9. Assessment Area Crown Fire Type ..... 20

10. Assessment Area Modeled Extreme Fire Behavior ..... 21

11. Assessment Area Ember Load Index ..... 22

12. Assessment Area Exposed Fuel ..... 23

13. Assessment Area Wildfire Suppression Difficulty ..... 24  
14. Assessment Area Tree Canopy Cover ..... 25  
15. Assessment Area High Historical Ignition Locations..... 26  
16. Assessment Area Building and Development Areas..... 28  
17. Assessment Area Community Relative Wildfire Risk ..... 34  
18. Grass Valley and Spheres of Influence Community Relative Wildfire Risk..... 35  
19. Grass Valley Areas of Very High and Extreme Relative Wildfire Risk ..... 36

**APPENDIX**

A Photograph Log

# Executive Summary

The potential for damaging wildfire exists within the assessment area (City of Grass Valley, the City Sphere of Influence, and the area within 1.5 miles of the City and its Sphere of Influence), as highlighted through regional fire and ignition history, existing vegetation types and fuels composition, terrain, local climate, and the proximity of structures and infrastructure to wildland vegetation. Approximately 63% of the assessment area is classified as a wildland urban interface or wildland urban intermix. These are areas where structures and other development meet or intermingle with wildland vegetation. Vegetation conducive to ignition and wildfire spread exists throughout the assessment area, presenting risks to human life, safety, and property.

To evaluate the extent of potential wildfire impacts in the assessment area, a Wildfire Hazard and Risk Assessment was conducted using wildfire hazard and risk modeling tools. Modeling was conducted by combining spatial data sets that influence wildfire risk to the community. While wildfire hazard represents the existing wildfire environment and potential wildfire behavior occurring in that environment, wildfire risk is the intersection of wildfire hazard and resources or assets that could be impacted by fire. Wildfire hazard in areas adjacent to developed areas (structure locations) was used as the basis for determining community wildfire risk. Based on the results of this Wildfire Hazard and Risk Assessment, areas of High, Very High, and Extreme relative risk cover approximately 77% of developed areas within the assessment area.

This report summarizes Dudek's modeling and assessment efforts and includes a discussion of the assessment area's fire environment, including terrain, vegetation and fuels, weather, and fire history, in addition to model inputs and model results. The model results map and identify regions categorized as Low to Extreme relative wildfire risk, highlighting areas where approaches could be implemented to reduce wildfire risk to the community. A description of potential wildfire risk reduction approaches is also provided.

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# 1 Assessment Area Description

## 1.1 Location

The assessment area encompasses 34,210 acres in western Nevada County, California (Figure 1). The assessment area includes the entirety of the City of Grass Valley (3,986 acres), the City Sphere of Influence (6,051 acres), and the area within 1.5 miles of the City and its Sphere of Influence (24,173 acres). The City of Nevada City borders the assessment area to the northeast. Unincorporated County areas surround the remaining portions of the assessment area. Highway 49 bisects the assessment area from north to south. State Route 20 and Highway 174 (Colfax Highway) bisect the assessment area from east to west.

## 1.2 Terrain

The assessment area is topographically diverse and includes features such as ridges, valleys, saddles, and canyons with significant differences in elevation, slope, and aspect. Each of these features affects fire behavior and alters how fire moves across the landscape. Generally, elevation in the assessment area gradually increases when moving from west to east, following the west slope of the Sierra Nevada Mountain range. The urban core of the City of Grass Valley exhibits flat to moderate slopes, with steeper areas generally located near the City's boundaries. Steep canyons and drainages exist within the assessment area, notably within the Deer Creek, Wolf Creek, South Fork Wolf Creek, and Slate Creek canyons. These canyons can facilitate wildfire spread toward urbanized areas due to continuous fuel beds, steeper slopes, and funneling of winds. Topography of the assessment area is presented graphically in Figure 2.

Terrain affects wildfire movement and spread. Steep terrain typically results in faster upslope fire spread due to the pre-heating of uphill vegetation. Flat areas typically result in slower fire spread when absent of windy conditions. Topographic features, such as saddles, canyons, and chimneys (land formations that collect and funnel heated air upward along a slope), may form unique circulation conditions that concentrate or funnel winds and accelerate fire spread. For example, fire generally moves slower downslope than upslope. Terrain may also buffer, shelter, or redirect winds away from some areas based on canyons or formations on the landscape. Saddles occurring at the top of drainages or ridgelines may facilitate the movement of wildfire from one canyon to the next. Various terrain features can also influence fire behavior, as summarized in Table 1.

**Table 1. Effects of Topographic Features on Fire Behavior**

Topographic Feature	Effect
Narrow Canyon	Surface winds follow canyon direction, which may differ from the prevailing wind; wind eddies/strong upslope air movement expected, which may cause erratic fire behavior; radiant heat transfer between slopes facilitates spotting/ignition on opposite canyon side.
Wide Canyon	Prevailing wind direction not significantly altered; aspect significant contributor to fire behavior. Wide canyons are not as susceptible to cross-canyon spotting except in high winds.
Box Canyon/ Chute	Air is drawn in from canyon bottom; strong upslope drafts. No gaps or prominent saddles to let heated air escape. Fires starting at the canyon bottom can move upslope very rapidly due to a chimney-like preheating of the higher-level fuels and upslope winds.

**Table 1. Effects of Topographic Features on Fire Behavior**

Topographic Feature	Effect
Ridge	Fires may change direction when reaching ridge/canyon edge; strong air flows likely at ridge point; possibility for different wind directions on different sides of the ridge. Ridges experience more wind. Fires gain speed and intensity moving toward a ridge. Fires burning at a ridge can exhibit erratic fire behavior. Strong air flows can cause a whirling motion by the fire. As the wind crosses a ridge it usually has a leeward eddy where the wind rolls around and comes up the leeward side.
Saddle	Potential for rapid rates of fire spread; fires push through saddles faster during upslope runs. Winds can increase when blowing through saddles due to the funneling effect of the constricted pass. On the other side, winds will slow, but erratic winds potentially occur at the saddle due to eddies.

Sources: NFPA 2011; Teie 1994

### 1.3 Vegetation and Fuels

The majority of the assessment area has been mapped as having woodland or forest cover. Urban areas represent 12% of the assessment area, concentrated in the urban core of the City of Grass Valley, and surrounding residential neighborhoods and commercial districts. Vegetation coverage for the assessment area is summarized in Table 2 and presented graphically in Figure 3. The following sections describe the dominant vegetation communities in the assessment area, including information about their relative wildfire hazard.

**Table 2. Assessment Area Vegetation Communities**

Vegetation Community	Total Acreage	Percent of Assessment Area
Montane Hardwood	13,592	40%
Sierran Mixed Conifer	9,276	27%
Urban	3,939	12%
Blue Oak Woodland	2,869	8%
Ponderosa Pine	1,540	5%
Annual Grassland	1,030	3%
Montane Hardwood-Conifer	1,000	3%
Barren	60	<1%
Blue Oak-Foothill Pine	194	1%
Closed-Cone Pine-Cypress	4	<1%
Cropland	95	<1%
Juniper	2	<1%
Lacustrine	27	<1%
Mixed Chaparral	482	1%
Montane Riparian	15	<1%
Pasture	1	<1%
Valley Oak Woodland	2	<1%
Wet Meadow	3	<1%

Source: Sierra Nevada RRK 2023



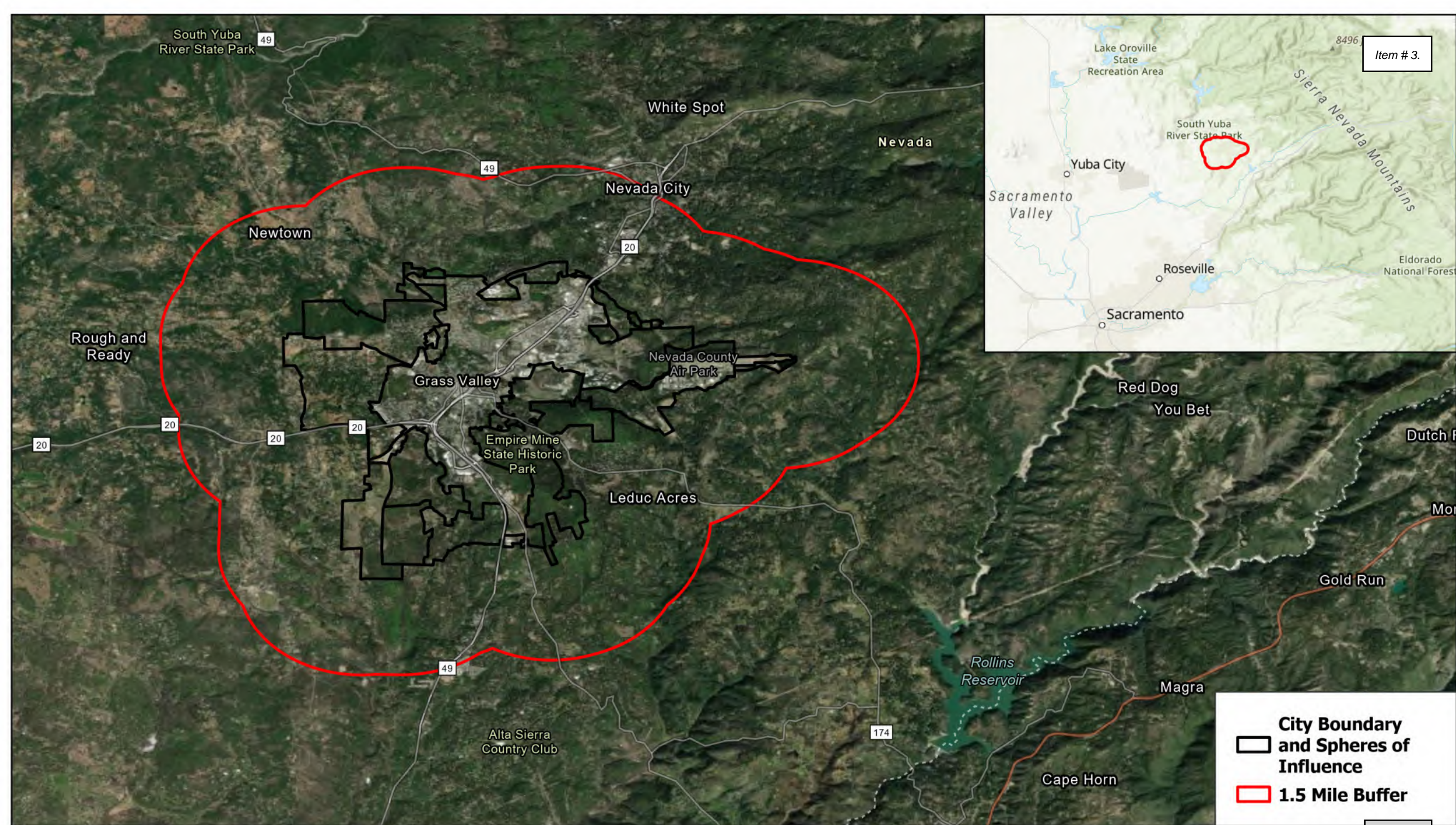
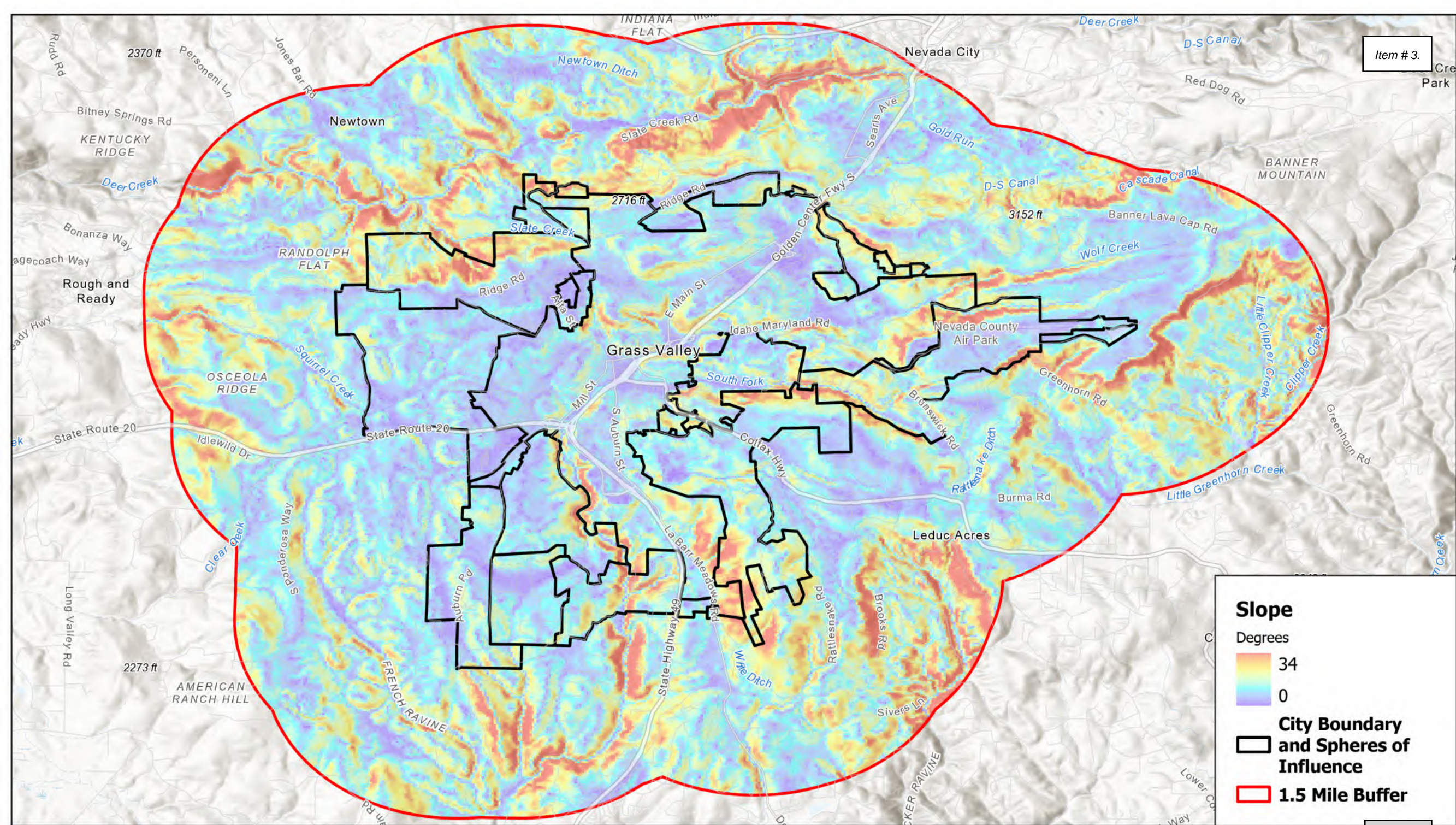


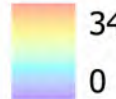
Figure 1. Assessment Area Location





**Slope**

Degrees



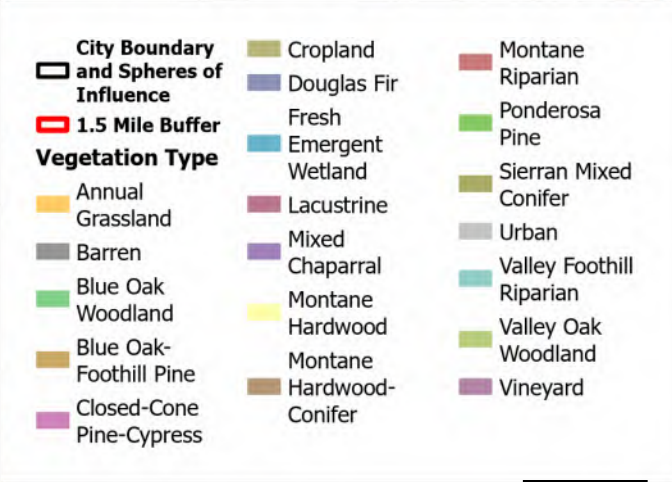
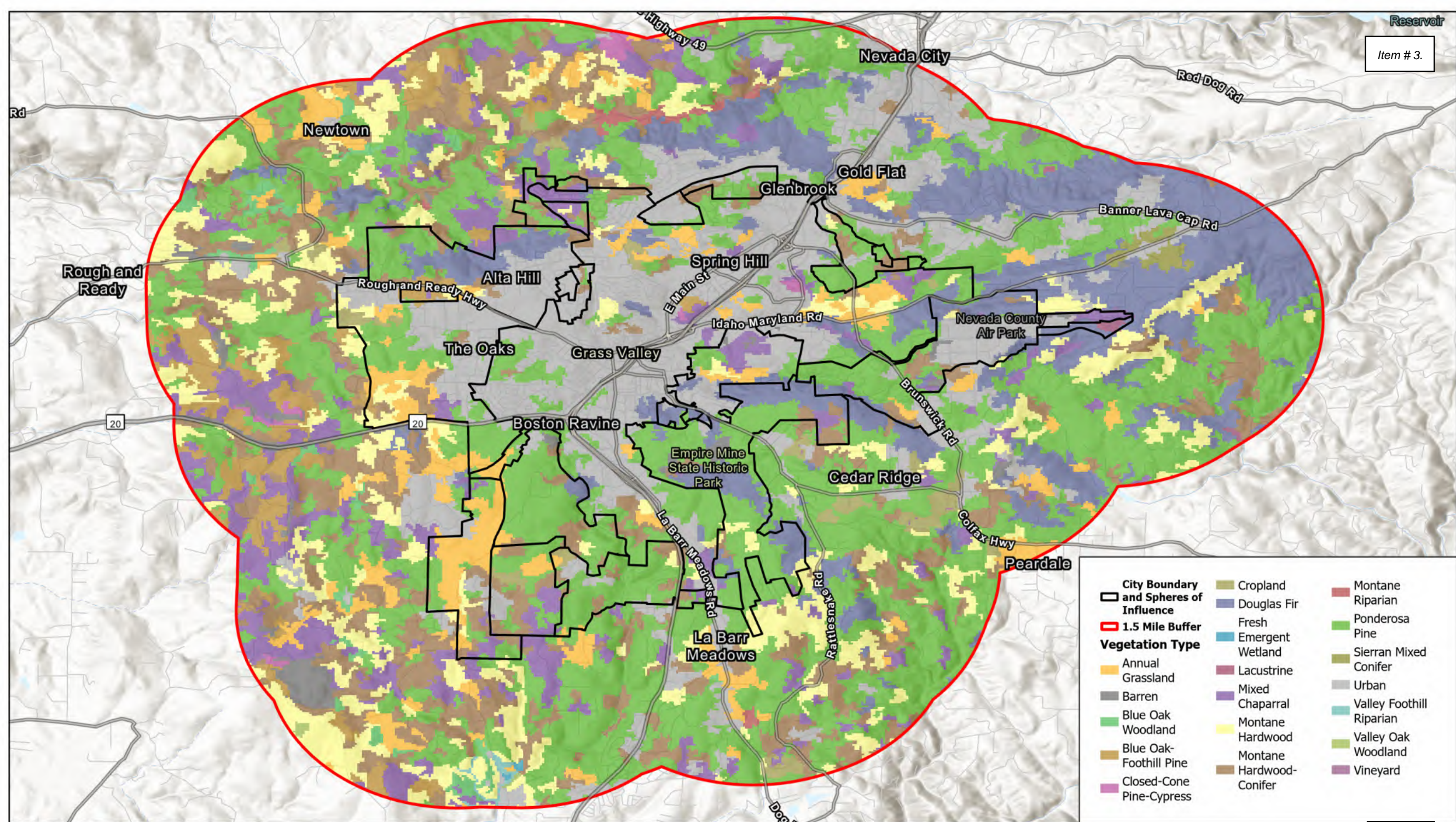
**City Boundary  
and Spheres of  
Influence**

**1.5 Mile Buffer**



Figure 2. Assessment Area terrain







### Montane Hardwood and Montane Hardwood-Conifer

Montane Harwood and Montane Hardwood-Conifer represent 43% of the assessment area. These vegetation communities are largely represented by oak and conifer species including canyon live oak, interior live oak, California black oak, ponderosa pine, Jeffrey pine, gray pine, incense cedar, and Douglas-fir. Montane Hardwood-Conifer vegetation includes a greater composition of conifer species. Shrubs such as manzanita, poison oak, coffeeberry, and ceanothus may also be present in these vegetation types, although poorly developed. Herbaceous vegetation is generally sparse but is often more prevalent in open canopy stands. The reduction of fire as an ecosystem process in these vegetation communities allows for an accumulation of fuels that had previously been consumed during regular, low-intensity fires. These vegetation types are often highly productive and lead to a build-up of woody vegetation in the understory, including significant increases in dead and downed woody material and ladder fuels connecting ground vegetation to tree canopies. As a result, some stands are more susceptible to severe, crown-consuming wildfires.

### Sierran Mixed Conifer

Sierran Mixed Conifer represents 27% of the assessment area. Sierran Mixed Conifer is largely represented by conifer species such as ponderosa pine, Jeffrey pine, sugar pine, incense cedar, and Douglas-fir. California black oaks are also commonly found in this vegetation type. These forests have a multilayered structure and are influenced by factors such as fire, climate, topography, historical management, and soils. The canopies of forested stands are often closed and have multiple layers with almost complete canopy cover overlap (Rundel et al. 1977). Shrubs often grow in the lower layer when there are gaps in the canopy and include species such as deer brush, manzanita, chinquapin, tan oak, bitter cherry, mountain whitethorn, gooseberry, rose, and mountain misery (Kosco 1980). Wildfire behavior in Sierran Mixed Conifer vegetation is highly dependent on forest structure and fuels characteristics. Wildfire hazard is generally highest in stands with minimal crown separation and high accumulations of ladder fuels that can facilitate surface to crown fire transition. Other factors such as drought and forest pests and disease can increase wildfire hazard due to reduced fuel moisture and the increased amount of dead and dying trees.

### Blue Oak Woodland

Blue Oak Woodland represents 8% of the assessment area. Blue oak is the dominant species, comprising 85 to 100 percent of the trees present. Trees are generally scattered, although canopies may be closed on better quality sites favorable to tree production. Shrubs may be present but are rarely extensive. Typical understory is composed of annual grasses and forbs. As such, wildfire behavior in Blue Oak Woodland is typically dependent on the structure of understory vegetation. Wildfires may move quickly through flashy surface fuels; however, fuel loads are generally low and typically do not promote high flame lengths.

### Grassland

Grassland areas represent 3% of the assessment area. Grasses are fine fuels that are loosely compacted with a low fuel load. Grasses have a high surface-area-to-volume ratio, requiring less heat to remove fuel moisture and raise the fuel to ignition temperature. They are also subject to early seasonal drying in late spring and early summer. Live fuel moisture content in grasses typically reaches its low point in early summer, and grasses begin to cure soon after. Due to these characteristics, grasses have the potential for a high rate of spread, rapid ignition, and facilitation of extreme fire behavior. Their low overall fuel loads typically result in faster-moving fires with lower flame lengths and heat output.

Untreated grasses can spread a fire into other adjacent surface fuel types (e.g., shrubs, small trees) or facilitate surface-to-crown fire transition where grasses exist beneath tree canopies.

### Urban

Urban land cover represents 12% of the assessment area. Fire burning in undeveloped areas can pass to urban areas through the presence of flammable or non-maintained landscape or ornamental vegetation. The characteristics and presence of urban vegetation significantly impact the potential for wildfires and their spread within urban environments. The type, density, and condition of vegetation in urban areas influence the availability of fuel for fires. When urban areas contain dense and highly flammable vegetation like dry grasses, shrubs with volatile oils, or trees with combustible foliage, the risk of fires igniting and spreading rapidly increases. Additionally, the accumulation of dead leaves, branches, and plant debris contributes to fuel loads and elevates fire hazard. Urban vegetation also influences the ignition and spotting potential of wildfires. Wind-carried embers and burning debris can ignite new fires in urban areas, especially when highly flammable vegetation is near structures. This raises the risk of embers landing on or near buildings, leading to fire spread within urban areas and an increased likelihood of structure ignitions.

## 1.4 Weather

The assessment area is generally characterized by a Mediterranean climate with hot, dry summers followed by cool, wet winters. Weather components such as temperature, relative humidity, wind, and lightning also affect the potential for wildfire. High temperatures and low relative humidity dry out fuels that feed wildfires, creating a situation where fuel will ignite more readily and burn more intensely. Thus, during periods of drought, the threat of wildfire increases (County of Nevada 2017).

Winds can be significant at times in the assessment area and drive wildfire spread. While less common, north/northeast winds in Nevada County can occur during hot, dry conditions, which can lead to “red flag” days indicating extreme fire danger. In addition to wind speed, wind shifts can occur suddenly due to temperature changes or the interaction of wind with topographical features such as slopes or steep hillsides (County of Nevada 2017). Predominate winds are from the southwest but commonly become north to northeast following weather system changes. The regional prevailing weather pattern is a diurnal wind pattern. This results in a daytime wind from the south/southwest (up-canyon), and nighttime winds from the north/northeast (down-canyon). During the summer season, diurnal winds can be slightly stronger than the winds during the winter season due to greater pressure gradient forces. These winds can contribute to fire hazards when appropriate conditions exist for wildfire ignition and spread. Surface winds can also be influenced locally by terrain variations. The varied terrain of the assessment area also affects wind velocity and patterns. Annually, fire weather conditions often become critical in late July through October.

It should be noted, however, that microclimates exist due to the diversity in elevation and aspects within the assessment area. As such, conditions are variable on a daily and seasonal basis throughout the assessment area. Microclimatic conditions can greatly affect fire hazards and would need to be considered when determining vegetation treatments and implementation timing. Such conditions are often not captured in weather station datasets or recorded in easily referenced weather almanacs but are usually well known to locals, land managers, and local fire agency personnel.

### 1.4.1 Climate Change

According to the Sierra Nevada Region Report for California’s Fourth Climate Assessment (Dettinger et al. 2018), wildfire is expected to increase in frequency and intensity within the Sierra Nevada region as a result of climate change. Effects of climate change including increased temperatures, higher likelihood of severe weather events including heat waves and dry lightning storms, and reduced precipitation and snowpack. These effects are expected the increase wildfire severity. Overall, the region is expected to become dryer, reducing fuel and air moisture content over longer periods of time. This is likely to exacerbate wildfire severity as conditions would be more favorable to extreme wildfire behavior. Reduced precipitation is also expected to increase tree mortality in the region leading to an increased accumulation of hazardous fuels.

## 1.5 Fire Hazard Severity Zones

Fire Hazard Severity Zones (FHSZs) are geographical areas designated pursuant to California Public Resources Code Sections 4201 through 4204; they are classified as Very High, High, or Moderate in State Responsibility Areas, or as Local Responsibility Area Very High FHSZ designated pursuant to California Government Code Sections 51175 through 51189. California Public Resources Code Sections 4201–4204 and Government Code Sections 51175–51189 direct the California Department of Forestry and Fire Protection (CAL FIRE) to map areas of significant fire hazard based on fuels, terrain, weather, and other relevant factors. The resulting FHSZs define the application of various mitigation strategies to reduce the risk associated with wildland fires (OSFM 2023). The model used to determine the extent of FHSZs is based on an analysis of potential fire behavior and fire probability predicated on the frequency of fire weather, ignition patterns, expected rate of spread, ember (brand) production, and past fire history (OSFM 2023). Structures built in FHSZs are subject to more stringent fire-hardening requirements than those that are not. The FHSZ classifications for State Responsibility Area (SRA) and Local Responsibility Area (LRA) lands in the assessment area are provided in Figure 4 and Tables 3 and 4.

**Table 3. FHSZ Classifications in State Responsibility Area of Assessment Area**

FHSZ Classification	Acres in Assessment Area	Percent of Assessment Area
Very High	21,345	62%
High	7,290	21%

Source: CAL FIRE 2023a

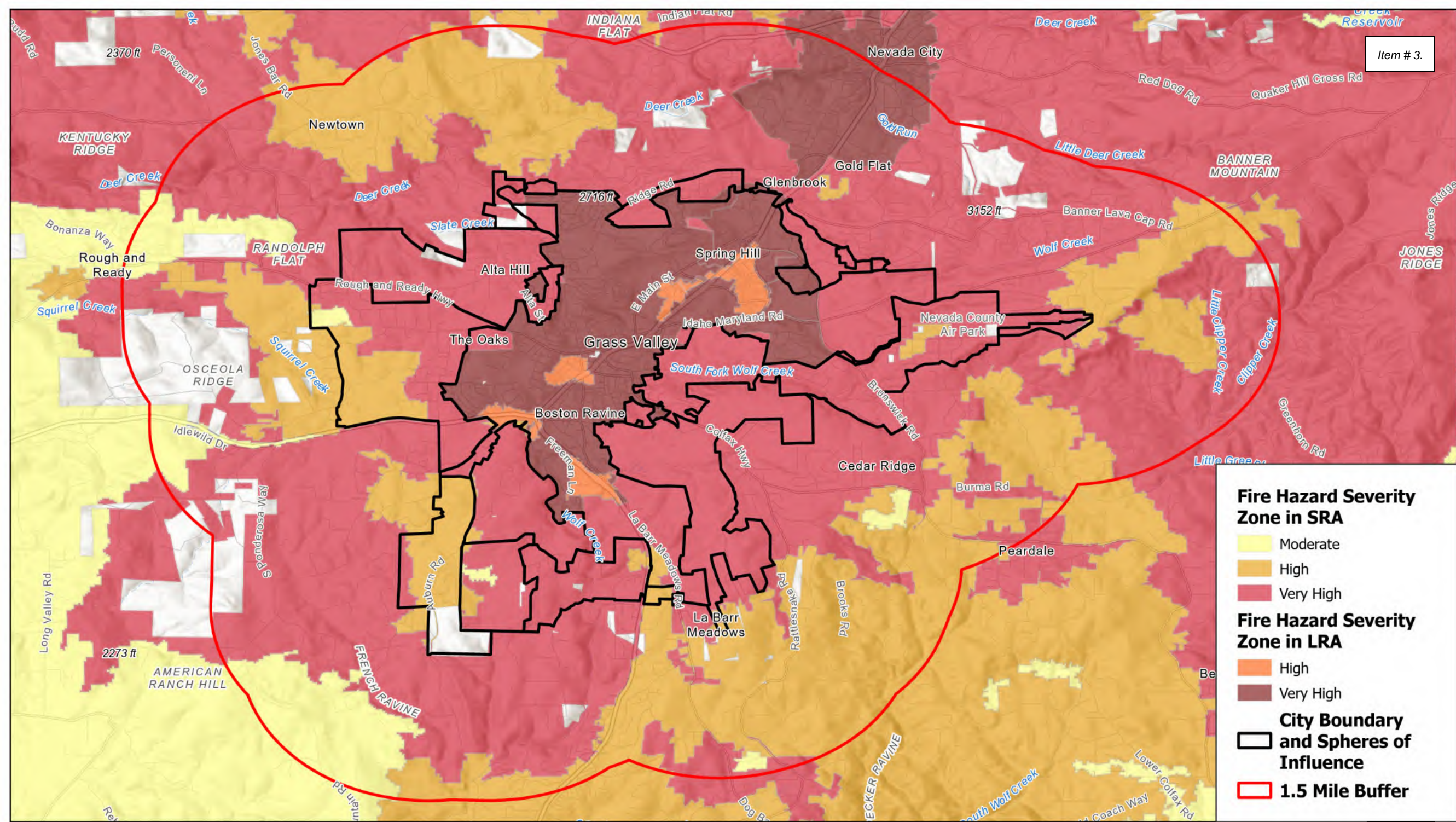
**Table 4. FHSZ Classifications in Local Responsibility Area of Assessment Area**

FHSZ Classification	Acres in Assessment Area*	Percent of Assessment Area
Very High	2,558	7%

Source: CAL FIRE 2023b

\*Includes a portion of the Nevada City FHSZ in LRA







## 1.6 Fire and Ignition History

Fire history can provide an understanding of a variety of factors related to fires, including frequency, type and behavior, most vulnerable community areas, and significant ignition sources, among others. One important use for this information is as a tool for pre-planning. It is advantageous to know which areas may have burned recently and therefore may provide a tactical defense position, what type of fire burned in the area, and how a fire may spread. CAL FIRE’s Fire and Resource Assessment Program (FRAP) summarizes fire perimeter data from the late 1800s to 2022 (fires over 10 acres in size).

According to this data set, eight wildfires have occurred within the assessment area (Table 5 and Figure 5). Most recently in August 2021, the human-caused Bennet Fire burned 50 acres near East Bennet Road and resulted in mandatory evacuations. The Jones Fire in August 2020 burned 706 acres and destroyed over 20 structures after lightning strikes ignited the fire approximately 1 mile southwest of the South Yuba River Bridge. Other recent fires in the assessment area include the arson-caused Auburn Fire in 2016 which was started near South Auburn Street burning 28 acres and threatening nearby structures, and the McCourtney Fire in 2017 which ignited along McCourtney Road and burned 76 acres just north of Quail Valley Country Club.

Although considerable numbers of historical wildfires have occurred in proximity to the assessment area, the relatively low number of historical wildfires within the assessment area suggests that the vegetation within undeveloped and non-maintained areas has likely matured and accumulated a significant amount of dead and dying material, which results in increased fuel loads that can contribute to high-severity wildfire.

**Table 5. Historical Wildfires within the Assessment Area**

Year	Fire Name	Total Acreage
1916	Unnamed	3,923
1951	Rattlesnake	586
1994	Trauner	536
2016	Auburn	24
2017	Rex	12
2017	McCourtney	76
2020	Jones	706
2021	Bennett	50

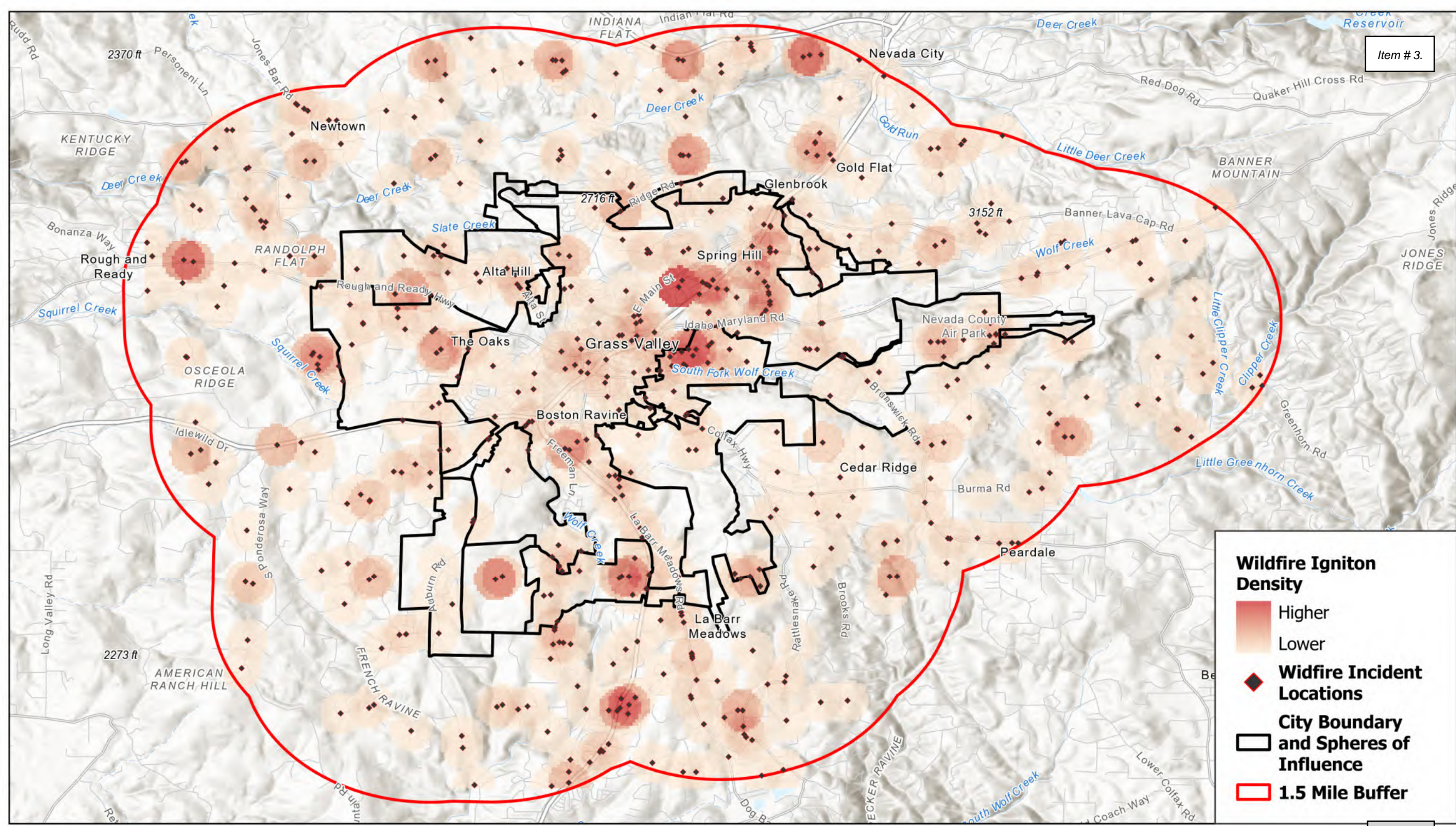
Source: CAL FIRE 2023c

An analysis of wildfire ignition data can also help to understand where ignitions are occurring and inform wildfire mitigation project development. The National Interagency Fire Occurrence dataset contains a spatial database of wildfires that occurred in the United States from 1992 to 2020 using wildfire records were acquired from the reporting systems of federal, state, and local fire organizations (Short 2023). Wildfire ignition data from 2020 to 2023 was obtained from the Wildfire Incident Locations database for incidents reported to the Integrated Reporting of Wildland Fire Information (IRWIN) system (NIFC 2023). Between 1992 and 2023, 831 wildland fire ignitions have been recorded within the assessment area. These are visually presented in Figure 6. Ignitions generally occur along main roadways (Highways 20, 49, and 174, Idaho Maryland Road, Brunswick Road, McCourtney Road, and South Auburn Street), near the Nevada County Air Park, and in vegetation proximate to residential areas.









**Wildfire Ignition Density**

- Higher
- Lower

**Wildfire Incident Locations**

- ◆

**City Boundary and Spheres of Influence**

- ▭

**1.5 Mile Buffer**

- ▭

Figure 6. Assessment Area Wildfire Ignition Locations



## 1.7 Wildland Urban Interface/Intermix

The wildland urban interface (WUI) is an area in which wildfire risk mitigation projects may be conducted to reduce wildland fire threats to communities at risk. The pattern of development and land use within the assessment area creates conditions that can be described as either a wildland urban interface or a wildland urban intermix. The wildland urban interface/intermix has been mapped (Sierra Nevada RRK 2023). Table 6 presents the acreage of land in each classification for the assessment area. These are visually presented in Figure 7. Both conditions present advantages and disadvantages with respect to reducing wildfire risk, as described in the following sections.

**Table 6. Wildland Urban Interface/Intermix in the Assessment Area**

Wildland/Urban Type	Acres in Assessment Area	Percent of Assessment Area
Interface	3,930	11%
Intermix	17,799	52%
Non-WUI	12,485	36%

Source: Sierra Nevada RRK 2023

### 1.7.1 Wildland Urban Interface

The area where urban development occurs within 1.5 miles of an area of vegetation measuring at least 5 square kilometers (and with at least 75% vegetation) would be characterized as a wildland urban interface (Interface or WUI) (Sierra Nevada RRK 2023). The wildland fire risk associated with WUI areas includes propagation of fire via house-to-house fire spread, landscaping-to-house fire spread, or ember intrusion. For Grass Valley, the WUI is concentrated within the downtown core, along Highway 49, and in more densely developed neighborhoods near the downtown core.

Advantages and disadvantages associated with WUI areas are provided below.

#### WUI Advantages

- Community water supply systems in place
- Multiple homes accessed by a single road.
- Emergency equipment protects multiple assets at once.
- Houses usually only exposed to flammable fuels on one side.

#### WUI Disadvantages

- High housing density
- Congested roads during emergencies
- Limited options if the community water systems fail.

### 1.7.2 Wildland Urban Intermix

Intermix areas are those where housing and vegetation intermingle. In an intermix area, wildland vegetation is continuous, and more than half of the land area is vegetated with combustible fuels (Sierra Nevada RRK 2023). The wildland fire risk associated with intermix areas includes vegetation-to-house fire spread or ember intrusion. For Grass Valley, the intermix is located along the edges of the WUI and in less densely developed neighborhoods

(Sunset View, The Oaks, Glenbrook, Bennett Road, Freeman Road, Allison Ranch Road, and near Empire Mine State Historic Park).

Advantages and disadvantages associated with intermix areas are provided below.

### Intermix Advantages

- Low housing density
- Diversity in water supply systems

### Intermix Disadvantages

- Increased risk to firefighters
- Emergency equipment can only protect single assets.
- Delayed emergency equipment response times due to the following:
  - Rural roads (single lane, windy, heavy fuel loading)
  - Long driveways
- Congested roads during emergencies
- Diversity in water supply systems
- Houses surrounded by vegetation.

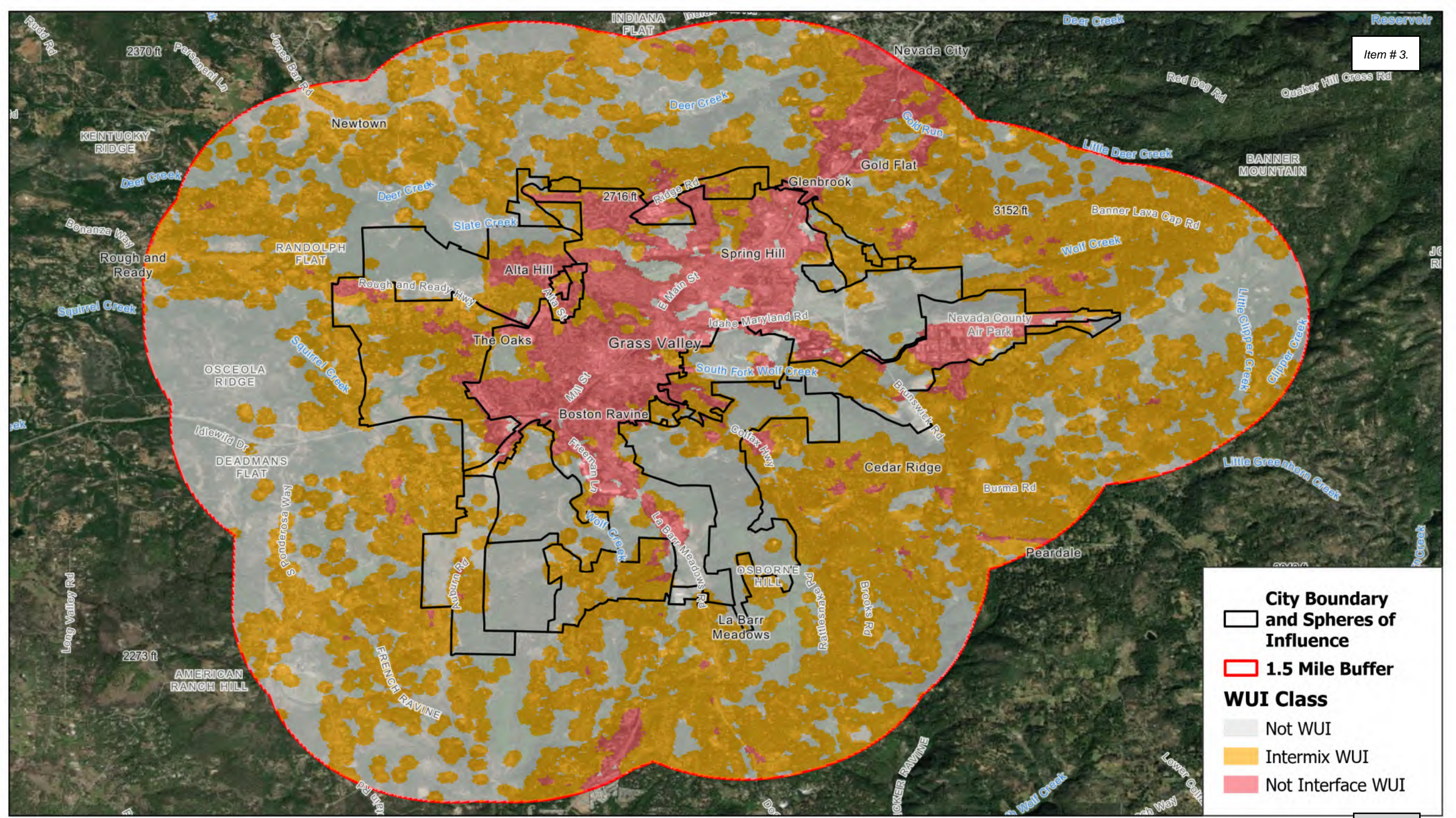
## 1.8 At-Risk Community

The Healthy Forest Restoration Act of 2003 identifies at-risk communities as an area:

- (A) that is comprised of—
- (i) an interface community as defined in the notice entitled “Wildland Urban Interface Communities Within the Vicinity of Federal Lands That Are at High Risk From Wildfire” issued by the Secretary of Agriculture and the Secretary of the Interior in accordance with title IV of the Department of the Interior and Related Agencies Appropriations Act, 2001 (114 Stat. 1009) (66 Fed. Reg. 753, January 4, 2001); or
  - (ii) a group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) within or adjacent to Federal land.
- (B) in which conditions are conducive to a large-scale wildland fire disturbance event; and
- (C) for which a significant threat to human life or property exists as a result of a wildland fire disturbance event.

In addition to this definition, the California Office of the State Fire Marshal maintains a list of Communities at Risk. The National Fire Plan directs funding to be provided for projects designed to reduce the fire risks to communities. These high-risk communities identified within the WUI were published in the Federal Register in 2001 and include those communities neighboring federal lands. The City of Grass Valley is identified as a Community at Risk in the Federal Register.





**City Boundary and Spheres of Influence**

- City Boundary
- Spheres of Influence

**1.5 Mile Buffer**

**WUI Class**

- Not WUI
- Intermix WUI
- Not Interface WUI





## 2 Hazard and Risk Assessment

A focused wildfire hazard and risk assessment was conducted for the assessment area to identify areas of relatively higher wildfire risk and potential areas for future wildfire risk mitigation efforts. This assessment was conducted in a geographic information systems (GIS) environment and involved analyzing and processing several GIS data sets as well as modeling potential fire behavior within the assessment area. All GIS analysis was conducted in a 30-meter raster environment. The wildfire hazard and risk assessment was conducted in two distinct steps:

- **Hazard Assessment:** The hazard assessment component involved evaluating six different wildfire-related data sets. It also included modeling potential fire behavior for the assessment area to evaluate flame length and crown fire potential, used as metrics to evaluate extreme fire behavior.
- **Risk Assessment:** The risk assessment component involved evaluating the hazard assessment data sets in relation to community areas. This involved evaluating and processing structure location data to map the development area. It also included ranking and weighting the hazard data sets based on their relative contribution to wildfire risk. The result was a new composite wildfire risk GIS map layer for the assessment area.

The following sections outline the assessment approach, identify input data layers, and summarize the assessment results.

### 2.1 Hazard Assessment

#### 2.1.1 Extreme Fire Behavior

Several wildfire types exist, as summarized below:

- **Ground Fire:** A fire burning on the ground that consumes organic material beneath surface litter (NWCG 2023).
- **Surface Fire:** A fire that burns loose debris on the surface, which includes dead branches, leaves, and low vegetation (NWCG 2023).
- **Crown Fire:** A fire that has burned upward from the ground and into the tree canopy. There are three types of crown fires:
  - **Passive Crown Fire:** A crown fire in which individual or small groups of trees torch out, but solid flaming in the canopy cannot be maintained except for short periods. Passive crown fire encompasses a wide range of crown fire behavior from the occasional torching of an isolated tree to a nearly active crown fire. Also called torching (Scott and Reinhardt 2001).
  - **Active Crown Fire:** A crown fire in which the entire fuel complex becomes involved, but the crowning phase remains dependent on heat released from the surface fuels for continued spread. Also called running and continuous crown fire (Scott and Reinhardt 2001).
  - **Independent Crown Fire:** A crown fire that spreads without the aid of a supporting surface fire (Scott and Reinhardt 2001).



Another component of fire behavior is spotting, the transfer of fire brands (embers) ahead of a fire front which can ignite smaller vegetation fires (NWCG 2023). These smaller fires can burn independently or merge with the main fire. Spotting can also result in structural ignitions when transported embers reach a receptive fuel bed (e.g., combustible roofing), especially in wind-driven fires. Structure fires as well as vegetation-fueled fires can generate fire brands. Additionally, landscape features like ridges can dramatically affect fire behavior by changing prevailing wind patterns, funneling air, and increasing wind speeds, thereby intensifying fire behavior.

Each of the aforementioned fire types may occur within the assessment area, depending on site-specific conditions. Fire behavior is the manner in which a wildland fire reacts to weather, fuels, and topography. The difficulty of controlling and suppressing a wildfire is typically determined by fire behavior characteristics, such as rate-of-spread, fireline intensity, torching, crowning, spotting, fire persistence, and by resistance to control (NWCG 2023). Extreme fire behavior is that which precludes methods of direct control (e.g., flame lengths 8 feet and greater), behaves unpredictably and erratically, and typically involves high spread rates, crowning and/or spotting, the presence of fire whirls, and a strong convective column (NWCG 2023).

Fire behavior characteristics are an important component in understanding fire risk and fire agency response capabilities. Flame length—the length of the flame of a spreading surface fire within the flaming front—is measured from midway in the active flaming combustion zone to the average tip of the flames (Andrews et al. 2008). While it is a somewhat subjective and nonscientific measure of fire behavior, it is extremely important to fireline personnel when evaluating fireline intensity, and is worth considering as an important fire variable (Rothermel 1993). Fireline intensity is a measure of heat output from the flaming front and also affects the potential for a surface fire to transition to a crown fire. The information in Table 7 presents an interpretation of flame length and its relationship to fire suppression efforts.

**Table 7. Fire Behavior Interpretation**

Flame Length	Fireline Intensity	Interpretation
Under 4 feet	Under 100 BTU/ft/s	Fires can generally be attacked at the head or flanks by persons using hand tools. Hand line should hold the fire.
4 feet to 8 feet	100–500 BTU/ft/s	Fires are too intense for a direct attack on the head by persons using hand tools. Hand line cannot be relied on to hold the fire. Equipment such as dozers, pumpers, and retardant aircraft can be effective.
8 feet to 11 feet	500–1,000 BTU/ft/s	Fires may present serious control problems—torching out, crowning, and spotting. Control efforts at the fire head will probably be ineffective.
Over 11 feet	Over 1,000 BTU/ft/s	Crowning, spotting, and major fire runs are probable. Control efforts at the head of fire are ineffective.

Source: Roussopoulos and Johnson 1975.  
 Note: BTU/ft/s = British thermal units per foot per second.

Fire behavior in the assessment area was modeled using the Interagency Fuel Treatment Support System (IFTDSS) using the Landscape Fire Behavior tool. Landscape Fire Behavior in IFTDSS is driven by FlamMap, a fire behavior mapping and analysis software application that computes potential fire behavior characteristics over an entire landscape under constant weather and fuel moisture conditions input by the user. The fire behavior analysis did not incorporate burn probability. The 2022 LANDFIRE data set (embedded in the IFTDSS software application) was used to represent the terrain (elevation, slope, and aspect) and the vegetation/fuel for the assessment area.

From a wildfire behavior modeling perspective, the assessment area exhibits characteristics that result in inaccuracies in the LANDFIRE Landscape file, specifically fuel model designations. LANDFIRE fuel models are determined through satellite imagery and are generally most accurate when representing large continuous tracts of natural vegetation. The assessment area includes patches of natural vegetation intermixed with structures and urbanized areas. When analyzing the default LANDFIRE landscape fuels data, it was noted that many areas of natural vegetation were not recognized due to their proximity to urbanized areas (and were therefore mapped as non-vegetation). The converse was also evident, as many urban areas were assigned vegetative fuel models even though the ground surface is non-burnable. This is due to the considerable amount of urban vegetation in the assessment area and the 30-meter scale of the LANDFIRE mapping data.

The 2019 National Land Cover Database (NLCD) was used to modify the fuel model layer for the assessment area to better represent fuel models in urbanized areas. The NLCD is created in cooperation with the Multi-Resolution Land Characteristics Consortium, a partnership of federal agencies that produce nationally consistent land cover datasets for the United States. The NLCD includes an impervious surfaces layer, which allows for the identification of urban ground cover, including paved areas and structures.

Landscape fire behavior was modeled using the inputs provided in Table 8, consistent with modeling efforts conducted for Nevada County's Community Wildfire Protection Plan update effort.

**Table 8. Fire Behavior Modeling Weather and Fuel Moisture Inputs**

Input	Value
Wind Speed	20 mph
Default Wind Azimuth	45 degrees
Wind Flow Type	Downslope
1-hour Fuel Moisture	3%
10-hour Fuel Moisture	5%
100-hour Fuel Moisture	8%
Live Herbaceous Fuel Moisture	30%
Live Woody Fuel Moisture	60%
Foliar Moisture Content	100%
Crown Fire Calculation Method	Scott and Reinhardt 2011

Landscape fire behavior modeling outputs (flame length and crown fire type) were utilized to identify areas anticipated to experience extreme fire behavior. Modeled flame length and crown fire types are presented in Figures 8 and 9, respectively. Areas with modeled flame lengths greater than or equal to 8 feet were aggregated with areas where crown fires were modeled to create a GIS layer representing extreme fire behavior for the assessment area. Areas of extreme fire behavior are presented in Figure 10.

## 2.1.2 Ember Load

It is estimated that up to 90% of structure losses from wildfire are caused by embers rather than the main fire front (IBHS 2020). Ember load quantifies the relative number of airborne embers that may fall onto an area from a nearby wildfire. Ember load relates to spotting distance, which quantifies the distance airborne embers may travel from their source. Ember load data was obtained from the Conditional Ember Load Index dataset created by Pyrologix (Pyrologix 2021). This data set incorporates surface and canopy fuels characteristics, climate, and topography to

determine the relative amount of embers landing per pixel in a 30-meter raster environment. This dataset does not account for burn probability. Figure 11 presents the Ember Load layer for the assessment area.

### 2.1.3 Hazardous Fuels

Hazardous fuels are excess woody materials on the ground or in the forest understory or canopy that can increase the severity of a wildfire. When proximate to communities, hazardous fuels can promote extreme wildfire conditions that can overpower wildfire suppression efforts and result in substantial damages. Hazardous fuels data was obtained from the Total Fuel Exposed to Fire dataset. This dataset exists within the Regional Resource Kit for the Sierra Nevada Region, a data hub provided by the California Wildfire and Forest Resilience Task Force. This dataset quantifies the sum of standing dead fuels, ladder fuels, and dead and down fuels, represented as the total amount of biomass available to contribute to the extreme fire intensity and spread rates that lead to high severity fire (Sierra Nevada RRK 2023). Figure 12 presents the Proximity to Hazardous Fuels layer for the assessment area.

### 2.1.4 Wildfire Suppression Difficulty

The wildfire Suppression Difficulty Index (SDI) is a spatial data layer that considers the effect of terrain, fuels, anticipated fire behavior during extreme fire weather conditions, firefighter line production rates, and proximity to roads and trails (access) in rating the relative difficulty in performing fire suppression activities. The data is categorized into six classes, ranked from lowest to highest difficulty. The SDI dataset was obtained from Pyrologix and the USDA Forest Service's Contemporary Wildfire Hazard Across California (USFS 2019). Figure 13 presents the SDI for the assessment area.

### 2.1.5 Urban Tree Canopy Cover

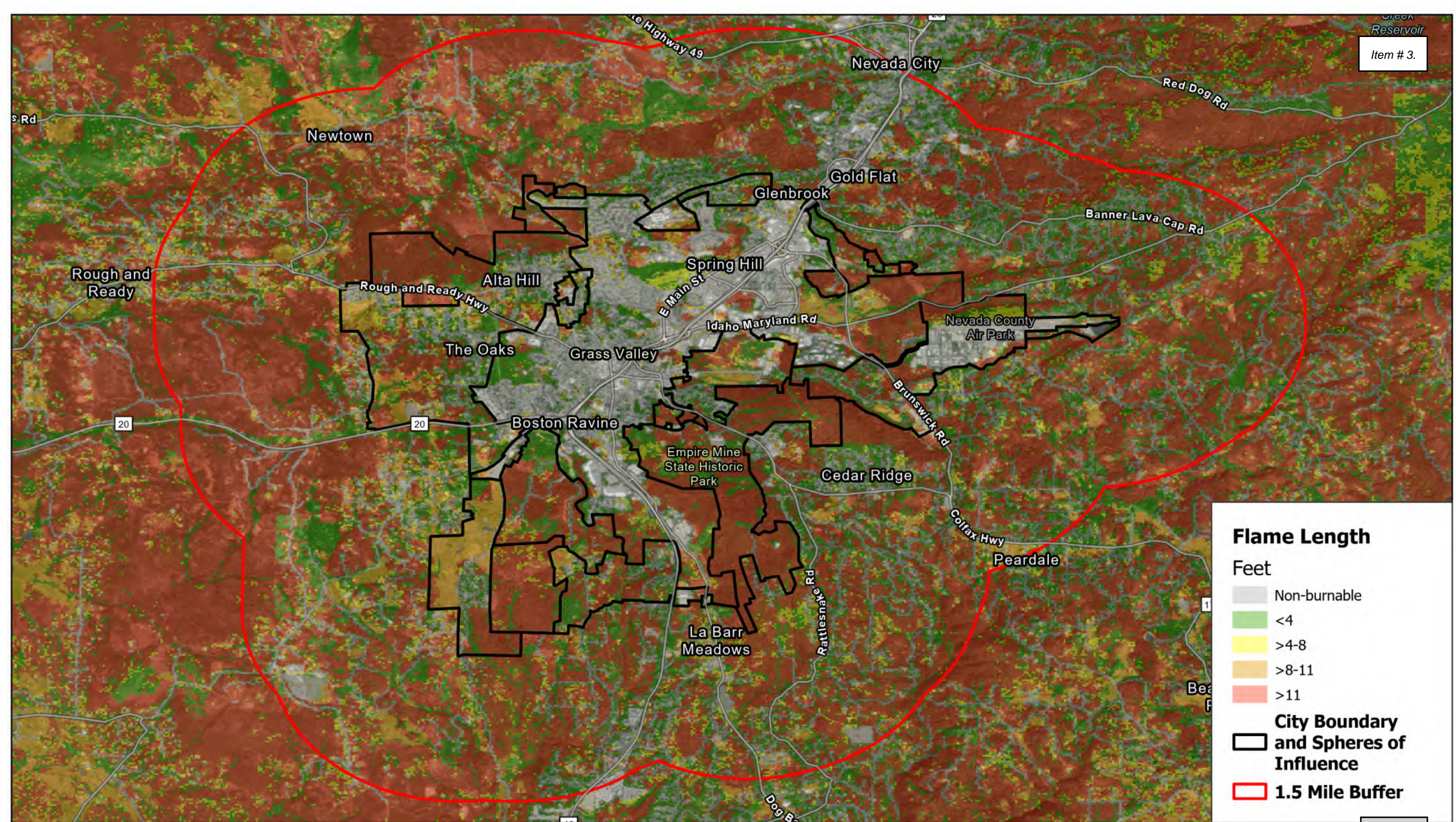
Urban vegetation can contribute to the transmission of wildfires from natural vegetation to developed regions. During intense wildfires, embers that land in urban vegetation can result in additional fire starts within communities, even if they are located a significant distance away from the primary fire front. Some tree species (e.g., conifers) have characteristics that may make them highly flammable, including the production of needle or leaf litter and peeling bark, or the presence of volatile oils and resins. Dense urban tree canopies, particularly those comprised of conifer species, can increase the likelihood of crown fire within urban areas.

Urban tree canopy cover was obtained from the USA NLCD Tree Canopy Cover database which displays the proportion of the land surface covered by trees for the years 2011-2021 (USFS 2023). Figure 14 presents the urban tree canopy cover for the assessment area.

### 2.1.6 Ignition Density

As described in Section 1.6, the assessment area frequently experiences vegetation fires, with 831 ignitions occurring between 1992 and 2023. Using the ignition data for the assessment area, a density analysis was performed to determine areas with high ignition density. These areas are presented in Figure 15.





**Flame Length**

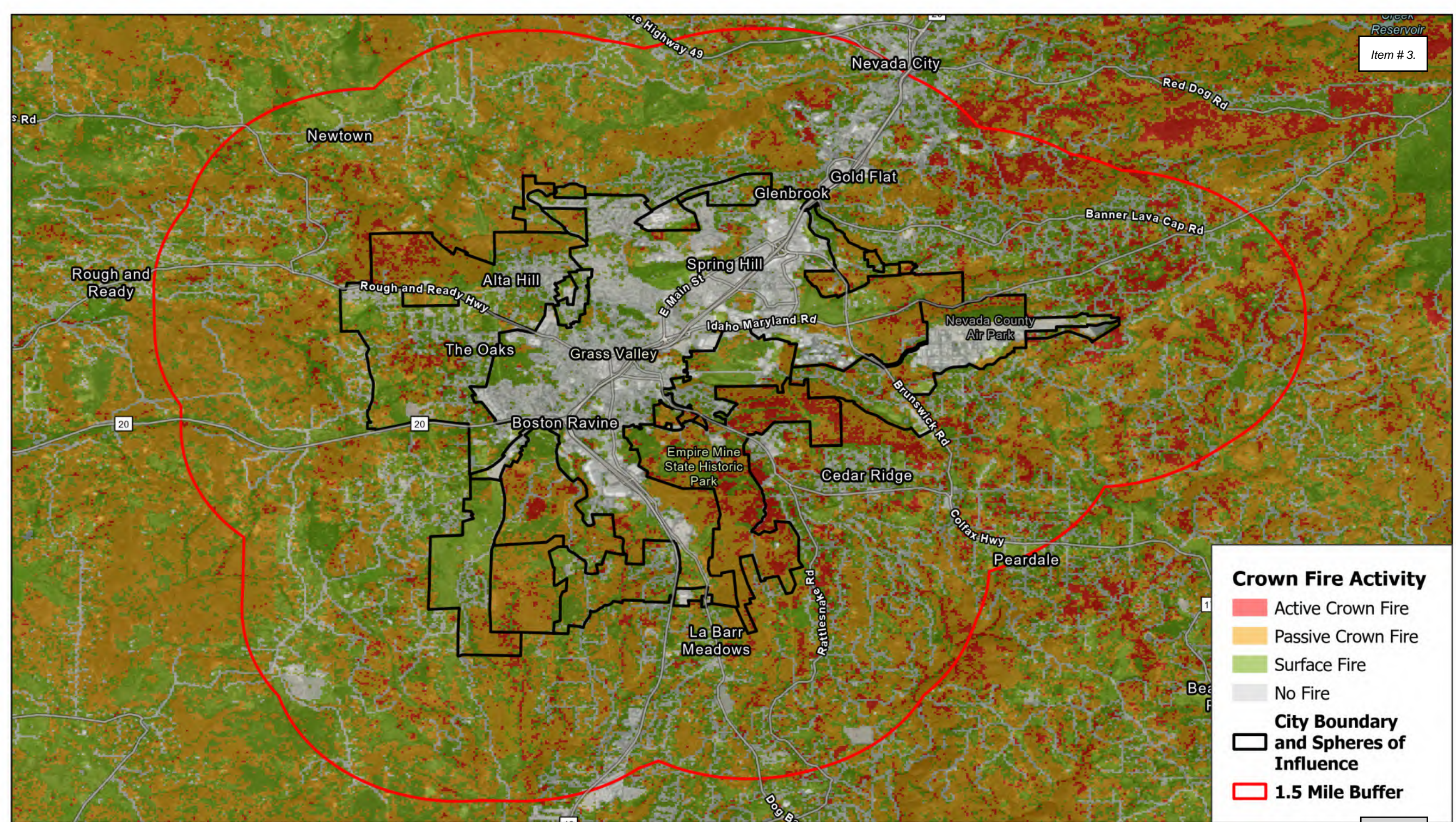
Feet

- Non-burnable
- <4
- >4-8
- >8-11
- >11

**City Boundary and Spheres of Influence**

- 1.5 Mile Buffer





**Crown Fire Activity**

- Active Crown Fire
- Passive Crown Fire
- Surface Fire
- No Fire
- City Boundary and Spheres of Influence**
- 1.5 Mile Buffer**

Figure 9. Assessment Area Crown fire type



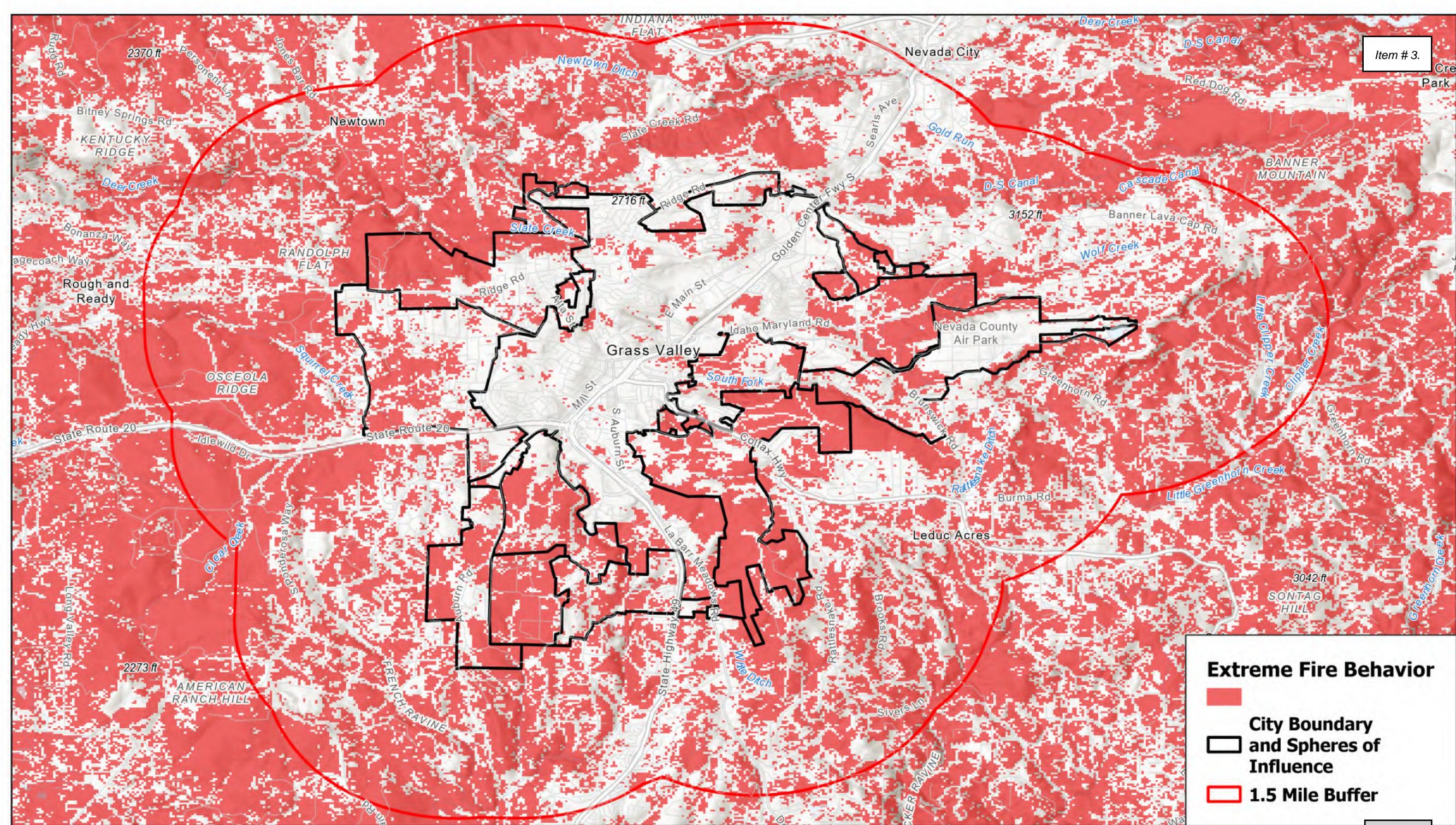
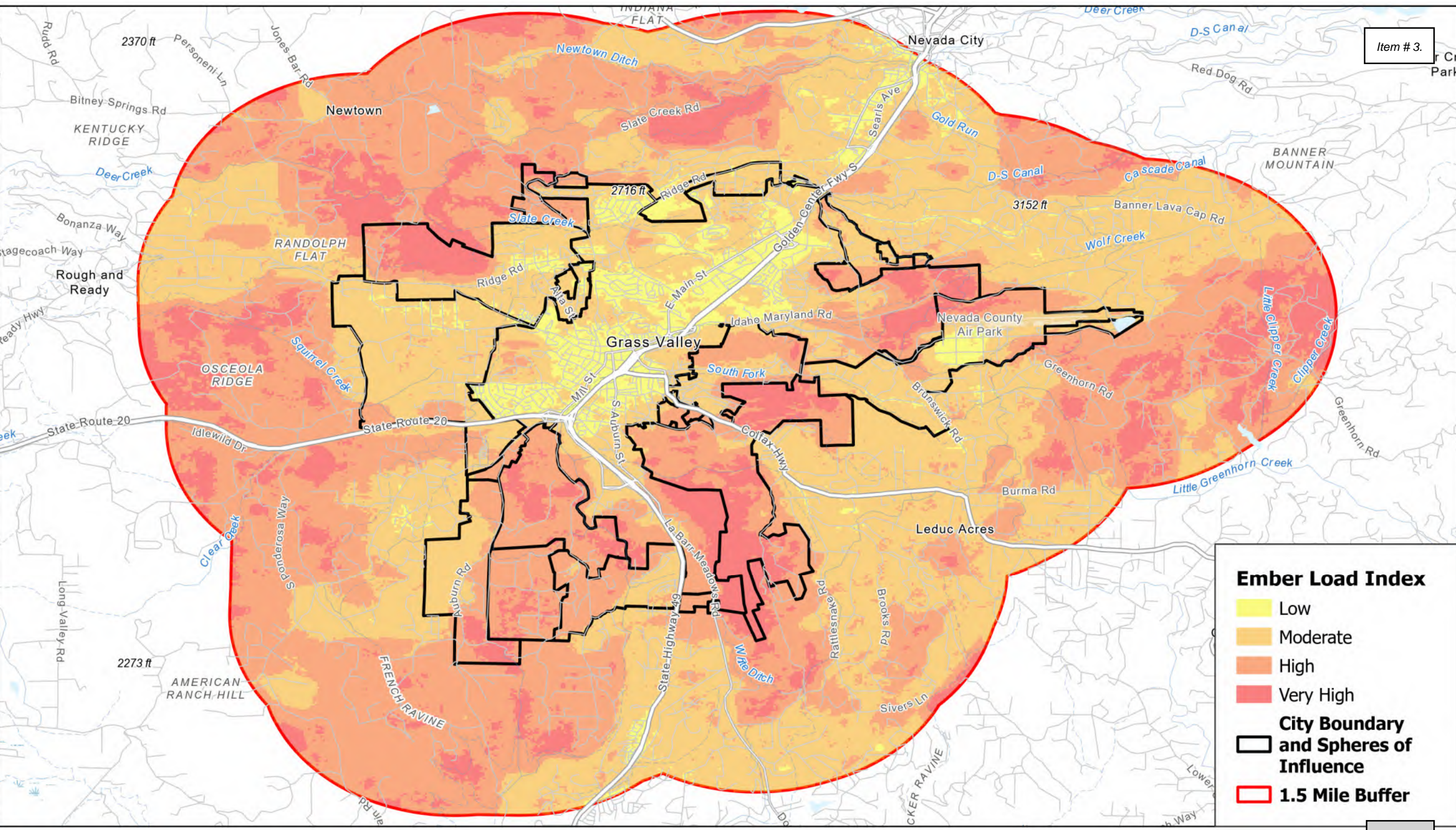


Figure 10. Assessment Area Modeled Extreme Fire Behavior





**Ember Load Index**

- Low
- Moderate
- High
- Very High

**City Boundary and Spheres of Influence**

**1.5 Mile Buffer**

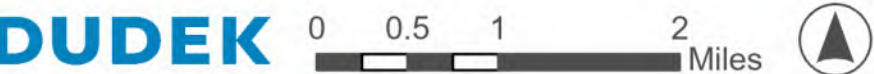
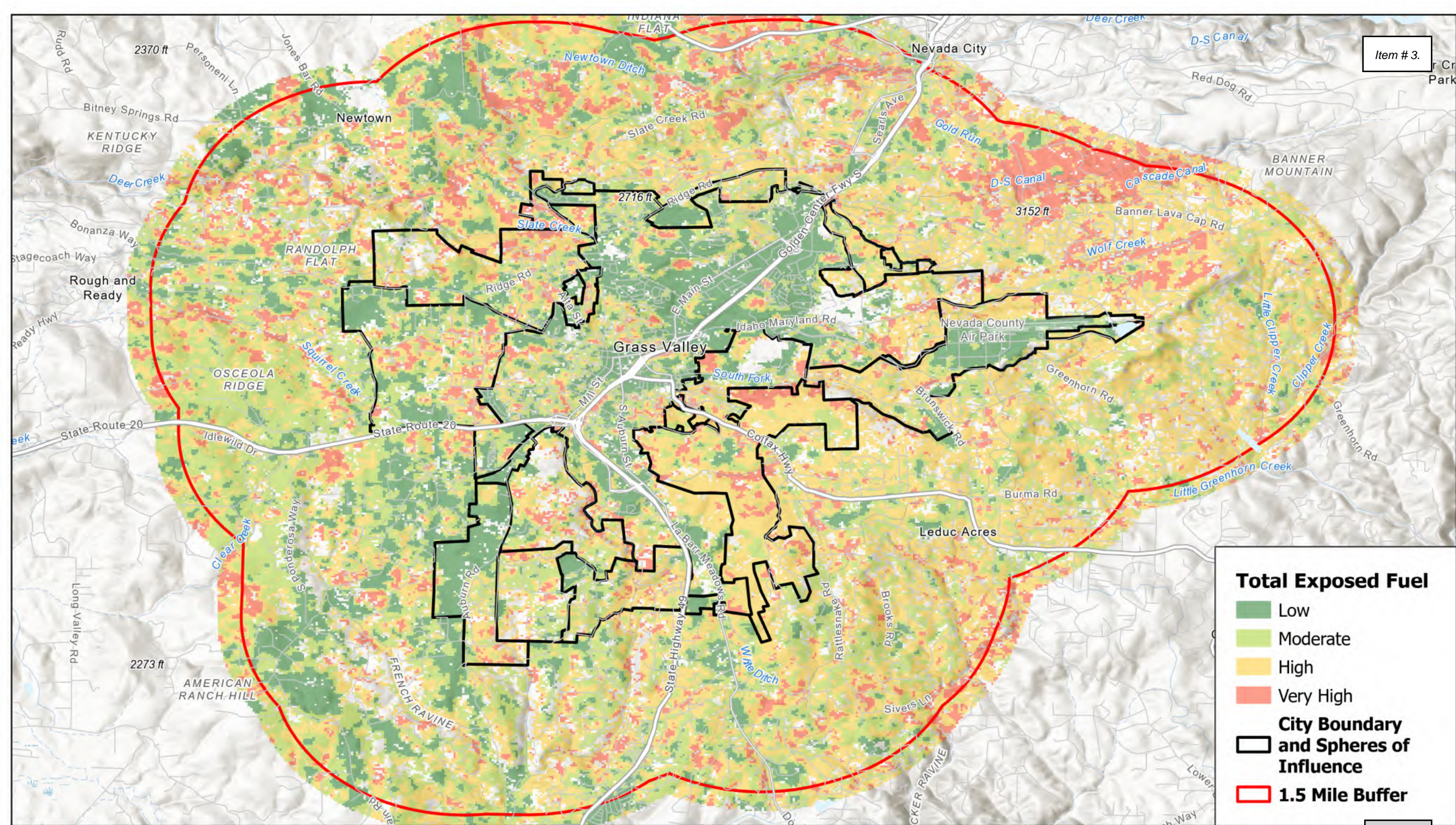


Figure 11. Assessment Area Ember Load Index





**Total Exposed Fuel**

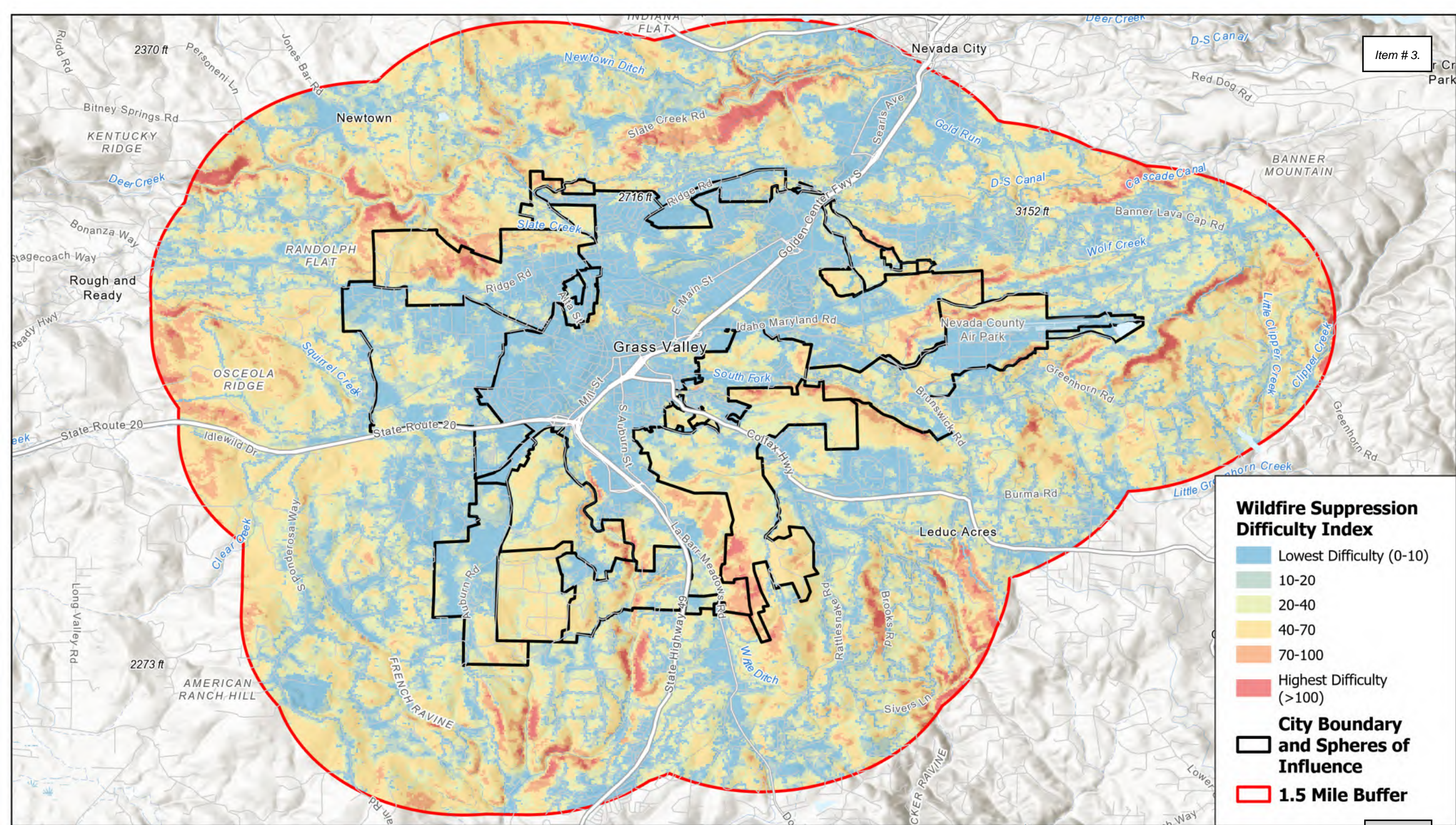
- Low
- Moderate
- High
- Very High

**City Boundary  
and Spheres of  
Influence**

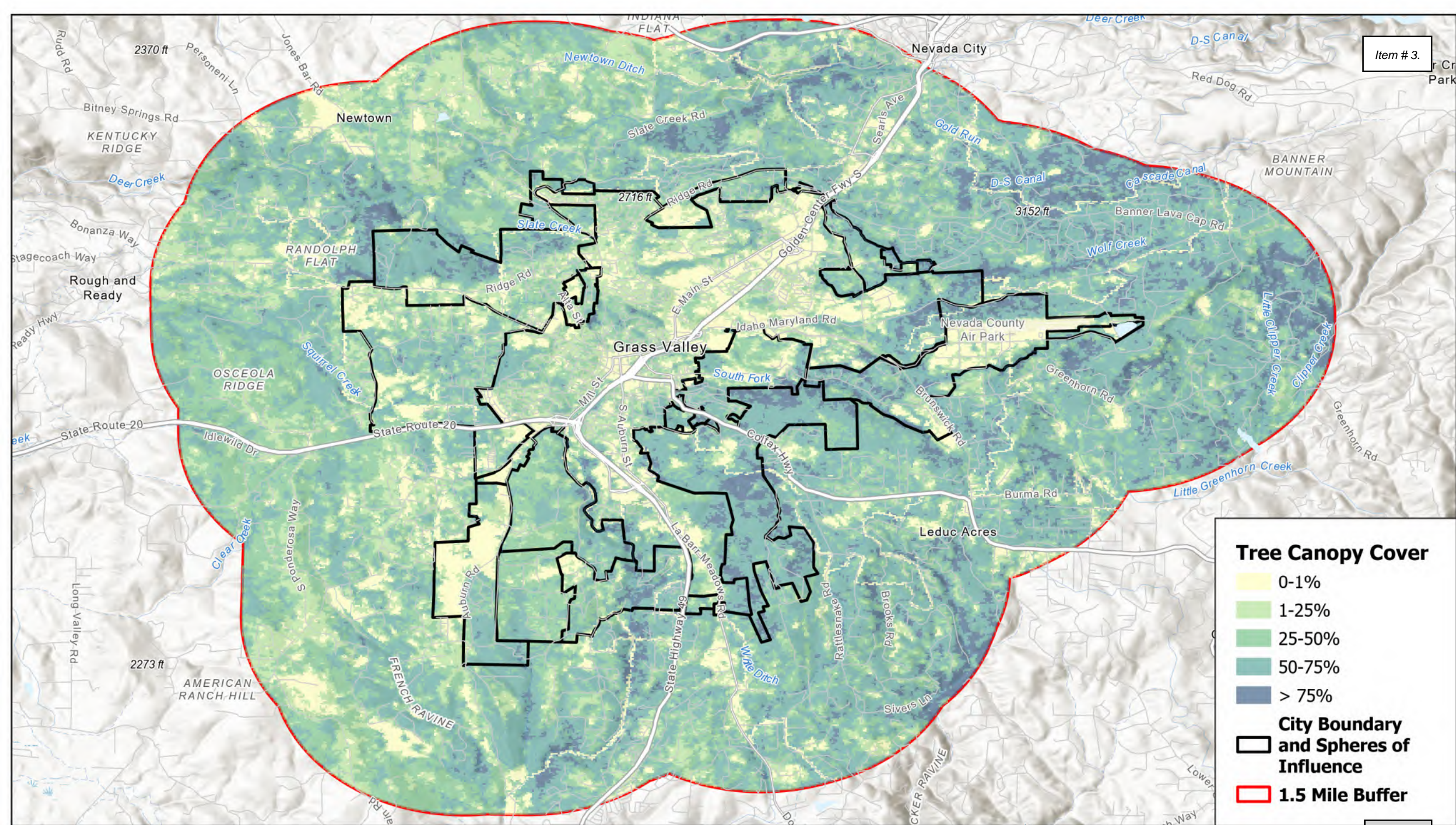
**1.5 Mile Buffer**











**Tree Canopy Cover**

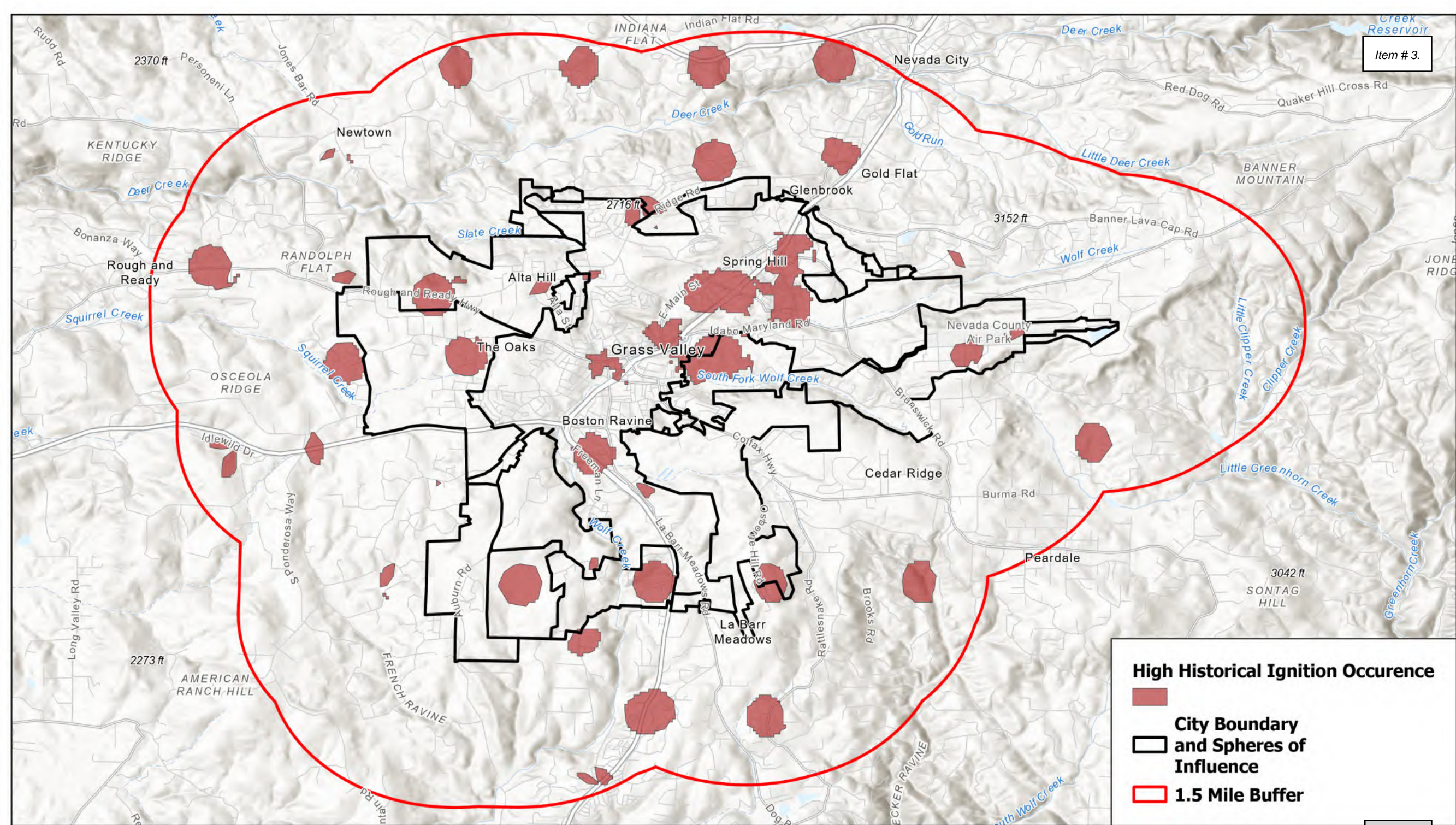
- 0-1%
- 1-25%
- 25-50%
- 50-75%
- > 75%

**City Boundary  
and Spheres of  
Influence**

**1.5 Mile Buffer**







Item # 3.

- High Historical Ignition Occurrence**
- High Historical Ignition Occurrence
  - City Boundary and Spheres of Influence
  - 1.5 Mile Buffer

Figure 15. Assessment Area High Historical Ignition Locations



## 2.2 Risk Assessment

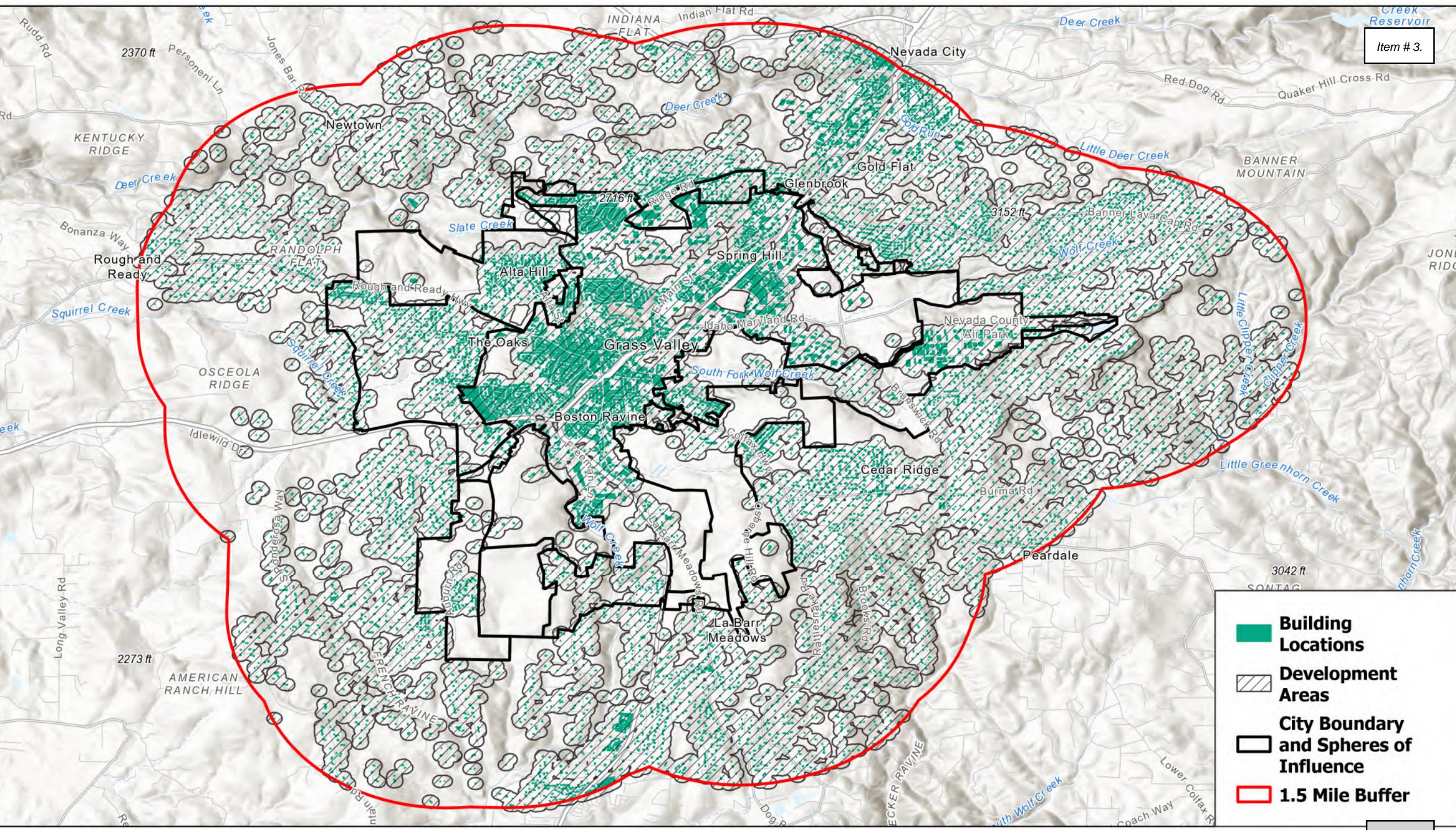
Wildfire risk for the assessment area focused on risk to developed areas, specifically, the area occupied by and adjacent to buildings (structures). To evaluate wildfire risk in the assessment area, the hazard input data sets (described above) were further analyzed and processed in GIS, as described below:

- The assessment area's development area (structure locations) was mapped and delineated.
- Hazard data set values were assigned a scale ranking value (between 1-4, where 1 represented lowest relative risk and 4 represented highest relative risk) to further refine their contribution to wildfire risk to developed areas (e.g., extreme fire behavior proximate to developed areas received a scale ranking of 4 and extreme fire behavior further from developed areas received a ranking of 1). A ranked GIS data layer was generated for each.
- Ranked hazard data set layers were assigned a weighting value of 1-4 (where 1 represented lowest relative risk to developed areas and 4 represented highest relative risk to developed areas). A weighted GIS data layer was generated for each.
- A GIS overlay analysis procedure was run on all the weighted GIS data layers to generate a single Composite Wildfire Risk layer for the assessment area. The Composite Wildfire Risk layer represents risk to developed areas and was categorized into five relative risk ratings. The risk ratings are relative, meaning the categories were assigned according to the maximum and minimum risk ratings observed throughout the assessment area.

### 2.2.1 Development Areas

Accurate mapping of developed areas was needed to effectively identify areas that are subject to risks from wildfire. Building footprint mapping data (Microsoft 2022) was used to determine the development area within the assessment area. This dataset is a collection of high-quality building footprints generated using AI and computer vision techniques. Building footprints were clipped to the assessment area boundary then visually compared with digital aerial imagery in a GIS to confirm data accuracy. No building footprint omissions or errors were observed during the visual assessment. Building footprints were then buffered by 300 feet using GIS tools to create the development area layer. The development area represents the area of land within 300 feet of structures, inclusive of building footprints. Development areas within the assessment area are presented in Figure 16.





-  Building Locations
-  Development Areas
-  City Boundary and Spheres of Influence
-  1.5 Mile Buffer



## 2.2.2 Extreme Fire Behavior

Areas with modeled flame lengths greater than or equal to 8 feet were aggregated with areas where crown fires were modeled to create a GIS layer representing extreme fire behavior for the assessment area. The extreme fire behavior areas data was then buffered outward to 1,000 feet. Finally, this data was assigned a relative risk ranking value between 1 and 4 based on buffer distance and a new GIS layer (Proximity to Extreme Fire Behavior layer) was created. Table 9 presents the assigned relative risk ranking values.

**Table 9. Development Area Proximity to Extreme Fire Behavior Ranking**

Buffer Distance	Assigned Ranking Value
<200 feet	4
>200-350 feet	3
>350-1,000 feet	2
>1,000 feet	1

## 2.2.3 Ember Load

The Conditional Ember Load Index dataset was clipped to the development area boundary. This data was then assigned a relative risk ranking value between 1 and 4 based on the percent of maximum ember observed within development areas, and a new GIS layer (Ember Load layer) was created. Table 10 presents the assigned relative risk ranking values.

**Table 10. Conditional Ember Load Index Ranking**

Ember Load Classification	Assigned Ranking Value
Low (<25%)	1
Moderate (25-50%)	2
High (50-75%)	3
Very High (>75%)	4

## 2.2.4 Hazardous Fuels

This dataset was clipped to the assessment area and hazardous fuels ranked in the 75<sup>th</sup> percentile and greater were selected. The selected hazardous fuels data was then buffered outward to 1,000 feet. Finally, this data was assigned a relative risk ranking value between 1 and 4 based on buffer distance and a new GIS layer (Proximity to Hazardous Fuels layer) was created. Table 11 presents the assigned relative risk ranking values.

**Table 11. Development Area Proximity to Hazardous Fuels Ranking**

Buffer Distance	Assigned Ranking Value
<200 feet	1
>200-350 feet	2
>350-1,000 feet	3
>1,000 feet	4

## 2.2.5 Wildfire Suppression Difficulty

This dataset was clipped to the development area and relative risk ranking values between 1 and 4 were assigned based on the data set ranges. A new GIS layer (Wildfire Suppression Difficulty layer) was created. Table 12 presents the assigned relative risk ranking values.

**Table 12. Wildfire Suppression Difficulty Ranking**

Wildfire Suppression Difficulty Range	Assigned Ranking Value
0-20 (Lowest Difficulty)	1
>20-40	2
>40-100	3
>100 (Highest Difficulty)	4

## 2.2.6 Urban Tree Canopy Cover

This dataset was clipped to the development area and relative risk ranking values between 1 and 4 were assigned based canopy cover percentage. A new GIS layer (Urban Tree Canopy Cover layer) was created. Table 13 presents the assigned relative risk ranking values.

**Table 13. Urban Tree Canopy Cover Ranking**

Canopy Cover Percentage	Assigned Ranking Value
0-25%	1
>25-50%	2
>50-75%	3
>75-100%	4

## 2.2.7 Ignition Density

Areas representing higher historical ignition occurrences were extracted and assigned a ranking value of 4. All other areas were not assigned a risk score. A new GIS layer (Ignition Density layer) was created.

## 2.2.8 Composite Wildfire Risk

To develop the Composite Wildfire Risk layer for developed areas, the initial step was to assign weighting values to each ranked fire hazard layer (discussed in previous sections). As with the scale ranking, the weighting values used were between 1 and 4, where 1 represented lowest relative risk and 4 represented highest relative risk. Weighting value assignments for each ranked hazard data layer are presented in Table 14.

**Table 14. Fire Hazard Data Layer Weighting Values**

Ranked Hazard Data Layer	Weighting Value
Proximity to Extreme Fire Behavior	4
Ember Load	3
Proximity to Hazardous Fuels	2
Wildfire Suppression Difficulty	1.5
Urban Tree Canopy Cover	1
Ignition Likelihood	1

Following the assignment of weighting values, all six weighted data layers were overlaid in a GIS to create the Composite Wildfire Risk layer for developed areas. This layer was then classified into five Relative Risk Rating categories, as presented in Table 15.

**Table 15. Composite Wildfire Risk Layer Classifications**

Percent of Maximum	Relative Risk Rating
Minimum Value	Low
5 <sup>th</sup> Percentile	Moderate
20 <sup>th</sup> Percentile	High
60 <sup>th</sup> Percentile	Very High
>60 <sup>th</sup> Percentile	Extreme

It should be noted that the risk ratings presented in Table 15 are relative, and risk scores are assigned according to the maximum and minimum risk scores observed throughout the assessment area. For example, areas mapped as Low and Moderate risk may be subject to impacts from wildfire especially considering risk associated with airborne embers. However, these impacts were modeled to be less severe than those modeled and rated as High to Extreme. The Composite Wildfire Risk layer for developed areas within the entire assessment area is presented in Figure 17. Additionally, the Composite Wildfire Risk layer for developed areas was clipped to the City of Grass Valley and the City Sphere of Influence boundary. A map depicting this layer is presented in Figure 18. Finally, a map depicting the Composite Wildfire Risk layer for developed areas clipped to the City of Grass Valley and the City Sphere of Influence boundary and representing only Very High and Extreme relative risk ratings is presented in Figure 19.

## 2.3 Model Results

Relative wildfire risk results for developed areas within the entire assessment area are presented in Table 16. Areas of High, Very High, and Extreme relative risk cover 19,428 acres, or 77% of developed areas. Alone, areas classified as Extreme risk cover 9,124 acres, or 36% of developed areas. Low and Moderate risk areas encompass 1,835 acres, roughly 8% of the developed area.



**Table 16. Relative Risk Ratings for Developed Areas within the Assessment Area**

Relative Risk Rating	Acres	Percent of Assessment Area
Low	149	<1%
Moderate	1,686	7%
High	3,370	13%
Very High	6,934	28%
Extreme	9,124	36%
Non-developed Area	12,207	15%

Relative wildfire risk results for developed areas only within the City of Grass Valley and the City Sphere of Influence are presented in Table 17. Areas of High, Very High, and Extreme relative risk cover 527 acres, or 36% of development areas within the City and City Spheres of Influence. Areas classified as Extreme relative risk account for 1,613 acres, or 16% of development areas in this area. Low and Moderate risk areas encompass 1,405 acres, roughly 14% of this area.

**Table 17. Relative Risk Ratings for Developed Areas within the City of Grass Valley and the City Sphere of Influence**

Relative Risk Rating	Acres	Percent
Low	122	1%
Moderate	1,284	13%
High	1,071	11%
Very High	1,843	19%
Extreme	1,613	16%
Non-developed Area	3,924	40%

Generally, Low and Moderate relative risk areas exist within the urbanized core of the City, with higher risk areas commonly observed along the perimeter edges of the City. Areas of special concern within the City and the City Spheres of Influence include areas with high concentrations of Very High and Extreme relative wildfire risk. These areas are presented graphically in Figure 19 and listed below:

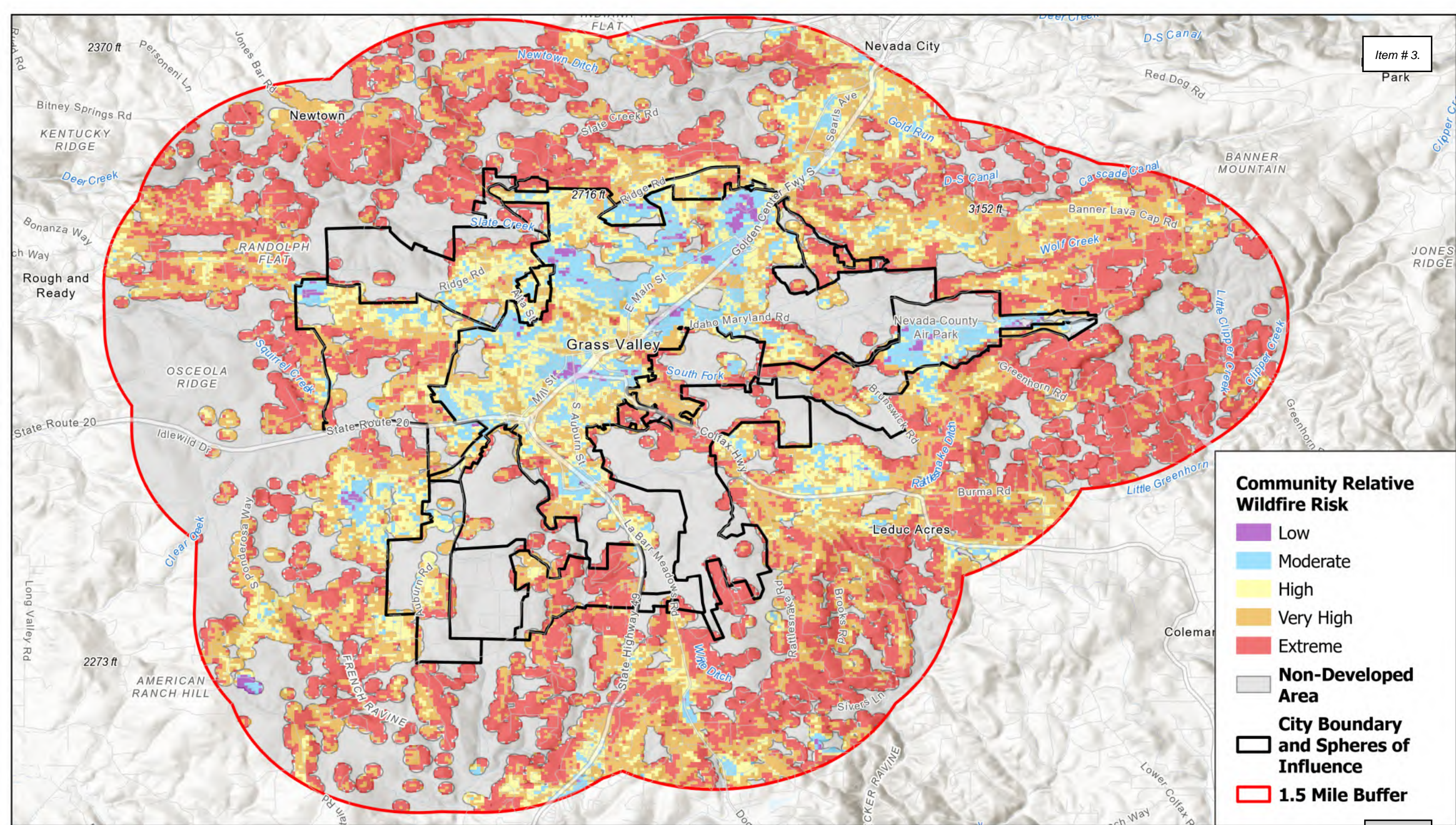
- Communities surrounding Condon Park
- The area near Doris Drive, Hill Street, Washington Street, and Bragg Avenue
- The Empire Mine State Historic Park area, including developed areas north and west of the park
- The Oaks community area
- Communities near East Bennett and Brunswick Roads
- Communities near Bubbling Wells Road
- The community north of Dorsey Drive and immediately east of Highway 20
- Communities near the Slate Creek drainage
- Communities near Crestview Drive, Smith Road, Elder Drive, near Ellens and Wolf Creek

- Communities near Manor Drive, Glenbrook Drive, and Apple Avenue

Wildfire hazard in the assessment area and its corresponding wildfire risk is dynamic and influenced by multiple factors, such as terrain, vegetation and fuels, weather conditions, and developed area proximity to areas presenting high wildfire hazard. Wildland urban interface/intermix areas exist extensively, covering 63% of the assessment area. These areas experience the highest relative risk from wildfire due to their proximity to vegetation conducive to wildfire ignition and spread. As described, extreme wildfire behavior is anticipated to occur in many areas throughout the assessment area, influenced by steep terrain and heavy fuel loads. Additionally, the assessment area is subject to frequent wildfire ignitions and has experienced several wildfires in recent years including the Bennett, Jones, and McCourtney Fires.

As discussed, 77% of development areas within the assessment area were classified as either High, Very High, or Extreme relative wildfire risk. Therefore, it is recommended that the community take a proactive approach to wildfire risk reduction, especially those located in the areas identified above. A list of potential wildfire risk reduction approaches is also provided in Section 3.





**Community Relative Wildfire Risk**

- Low
- Moderate
- High
- Very High
- Extreme
- Non-Developed Area
- City Boundary and Spheres of Influence
- 1.5 Mile Buffer

Figure 17. Assessment Area Community Relative Wildfire Risk



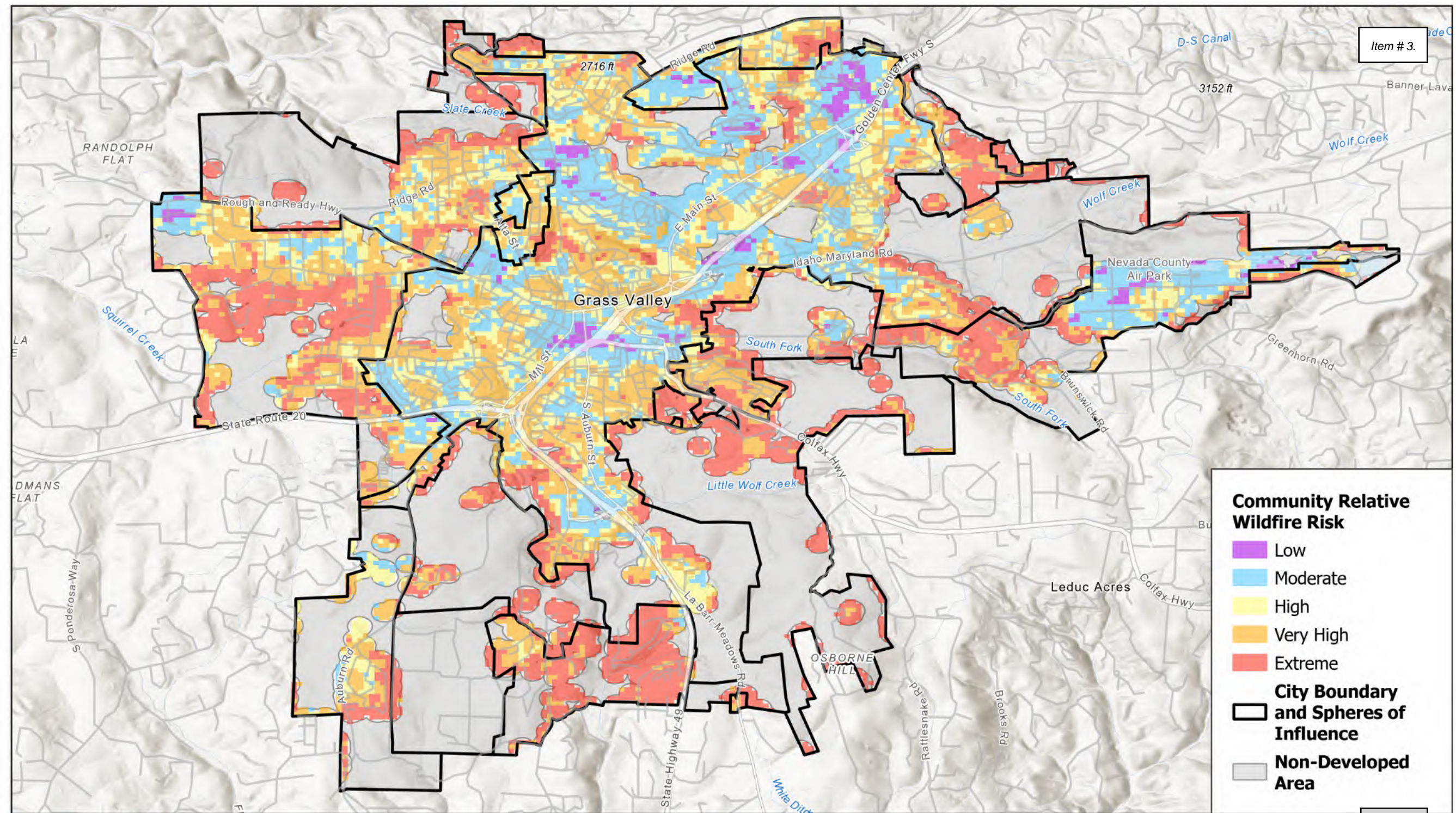
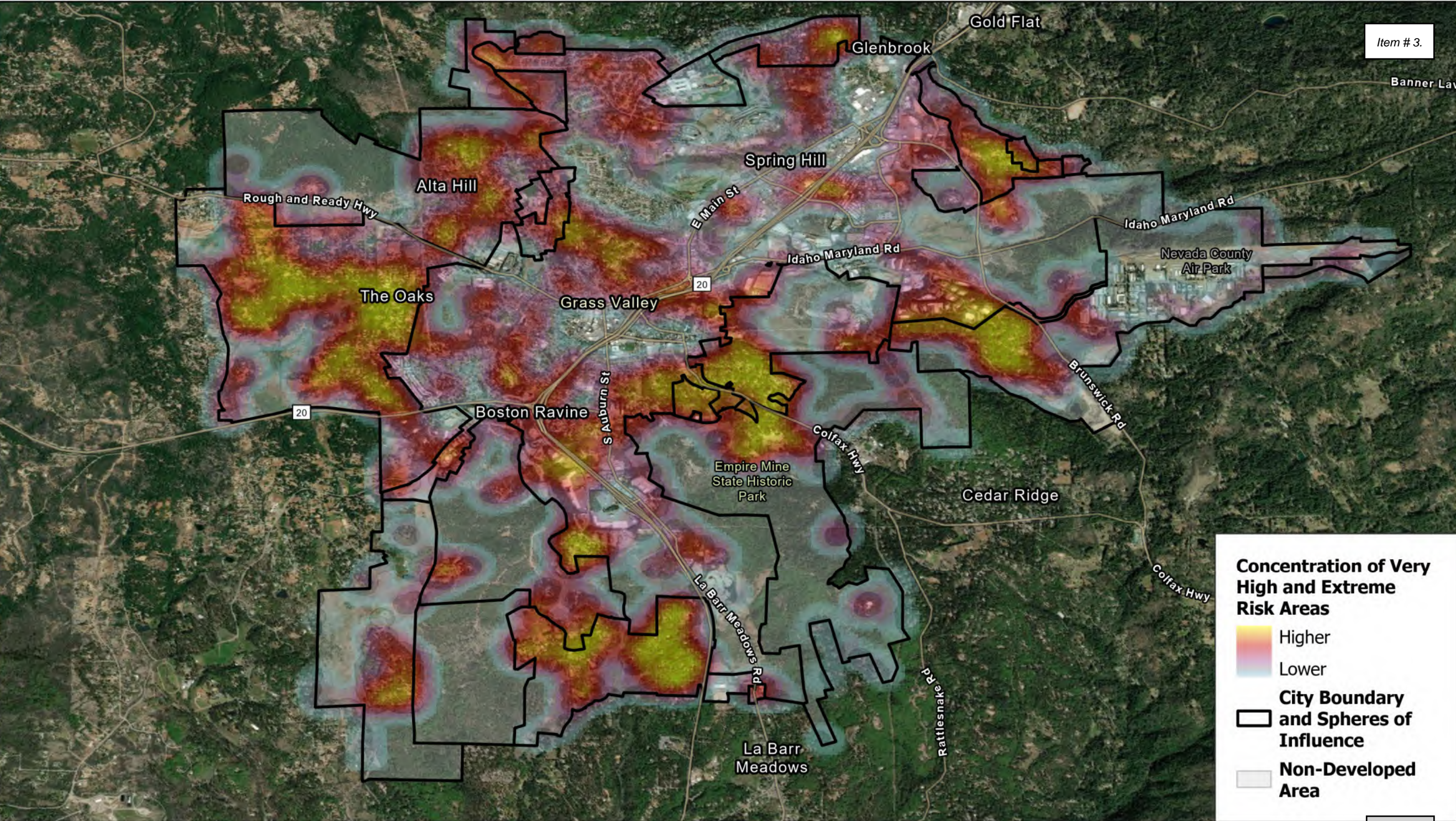


Figure 18. Grass Valley and Spheres of Influence Community Relative Wildfire Risk





**Concentration of Very High and Extreme Risk Areas**

- Higher
- Lower
- City Boundary and Spheres of Influence
- Non-Developed Area

Figure 19. Grass Valley Areas of Very High and Extreme Relative Environmental Risk



# 3 Potential Wildfire Risk Reduction Approaches

The following sections identify potential approaches that can be implemented to reduce wildfire risk to the community. Further analysis and detailed planning, permitting, environmental review, and community outreach regarding specific projects may be necessary.

## 3.1 Reducing Structural Ignitability

Terrain, vegetation, and climatic conditions in the assessment area combine to create a unique situation capable of supporting large-scale, high-intensity, and sometimes damaging wildfires. There are two main components to reducing structural ignitability: structural hardening and defensible space. The following sections identify actions that can be implemented by homeowners on private properties to reduce the potential for structure ignitions.

### 3.1.1 Structural Hardening

The main way in which structures ignite is via direct fire exposure (flame impingement, convection, radiation) or via ember exposure (Maranghides et al. 2022). To reduce structural ignitability, efforts need to address direct fire and ember exposure (Maranghides et al. 2022). Addressing structural ignition potential is an effective mitigation strategy for preventing wildfires and increasing WUI ignition resistance (Zhou 2013). Research has found that structural characteristics, especially roofing, play a significant role in reducing structural vulnerability to fire and the likelihood of burning (Bracmort and Gorte 2012; Kolden and Henson 2019; Manzello et al. 2011; Zhou 2013). Further, reducing a structure's likelihood of ignitions reduces the risk for individual homeowners and the risk associated with fire spreading to other homes and wildland areas (Mockrin et al. 2020).

Although fire-resistant construction standards are mandatory for new buildings in the assessment area, hardening of existing structures is voluntary. Hardening of the homes and other structures to enhance survivability during a wildfire would include retrofitting the most vulnerable home features, including roofs, vents, eaves and soffits, windows, walls, decks, rain gutters, patio covers, chimneys, garages, and fences. Adopting mandatory home hardening provisions of building and fire codes is problematic because existing, nonconforming structures were typically approved and built to the codes in effect at the time of construction. A burning structure contributes to wildfire spread via radiant heat generation (to nearby structures) and ember generation (to downwind structures). Retrofits to existing structures can reduce fire risk, and some cost-sharing and grant programs are available to offset costs. Resources for hardening structures can be found on the following websites:

- [Wildfire Home Retrofit Guide](#)
- [Protect Your Property from Wildfire](#)
- [Prepare for Wildfire](#)
- [Low Cost Retrofit List](#)
- [Preparing Your Home](#)

### 3.1.2 Defensible Space

Reducing structure exposure to wildfire is also achieved via vegetation management in defensible space areas. The following three zones are identified for defensible space areas. Recommendations for management actions that can be taken by homeowners in each of these zones can be found on Grass Valley's website at <https://www.cityofgrassvalley.com/post/defensible-space>.

- **Zone 0 (0–5 feet):** Zone Zero, sometimes referred to as the “Ember Resistant Zone,” is the area nearest the house and includes the surfaces of the structure itself, vegetation, equipment, outdoor furniture, toys, or anything else that can be ignited by embers. No vegetation or combustible items are recommended within this zone to avoid ignitions from windblown embers landing on or near the structure. Clear soil, rocks, gravel, or concrete should be used instead of landscape mulch or wood chips. This area is especially crucial since research from the Insurance Institute for Business and Home Safety (IBHS) shows that the first 0 to 5 feet around the house has the greatest impact on reducing the risk of losing a home to wildfire.
- **Zone 1 (5–30 feet):** Zone 1, sometimes referred to as the “Home Protection Zone,” extends from 5 feet from the structure to 30 feet. This zone should be designed to create and maintain a landscape that, if ignited, will not transmit fire to the home. This includes having a minimum planting zone with low density planting to medium density planting as you move farther away from the structure. Depending upon the type of wildland vegetation in the area and the steepness of the slope, this zone should have an area at least 30 feet wide (50 feet for slopes above 20%) that is lean, clean, and green. Trees should be spaced to allow minimum 10' clearance to structure at full maturity.
- **Zone 2 (30–100 feet):** Zone 2, sometimes referred to as the “Reduced Fuel/Thinning Zone,” extends from 30 feet to at least 100 feet. This zone also serves as a connection to the natural environment in promoting habitat restoration while eliminating continuous, dense vegetation, to decrease the energy and speed of a wildfire. To help with this function, vegetation should not be removed to the bare soil, and use of heavy equipment on hillsides should be avoided as they can cause soil erosion and mudslides.

## 3.2 Vegetation Management

Vegetation management actions outside of defensible space areas may be conducted by fire and land management agencies for the purposes of wildfire risk reduction. A list of potential vegetation management practices is provided below. Project type (e.g., roadside fuel reduction, shaded fuel break, invasive species treatment), location, and treatment prescriptions would need to be determined and planned to meet overall project objectives. Coordination with agencies and landowners and completion of environmental review and agency permitting would also be necessary.

- **Grazing.** Grazing is a method of using livestock to reduce fine fuel loading of live herbaceous growth, shrubs, and new growth of trees. Livestock, such as goats or sheep, browse on grasses, forbs, shrubs, and fresh growth of young trees, thereby removing vegetation from the overall fine fuel load of the site. Grazing is effective in managing fine fuels and preventing the expansion of brush into grasslands. Livestock have different grazing habits, and not all livestock are ideally suited for grazing treatments. Most livestock, with the exception of goats, do not consume live or dead, tough, woody plant material in significant quantity because this material is generally unpalatable. Additionally, livestock does not effectively create fuel breaks, but is well-suited to initiate access to a site for hand crews or to maintain new annual growth.



- **Manual Treatments.** Manual techniques involve pruning, cutting, or removing trees or other forest vegetation by hand or manual equipment. Manual treatments involve removing dead wood, piling material, lopping and scattering, and spreading chips/mulch. Lopping and scattering is the process of breaking down vegetative material into smaller pieces, usually with a chainsaw, and scattering (as opposed to concentrating) the material across the treatment area. Manual treatment is most effective in small treatment areas or areas with difficult access where using heavy equipment is infeasible. Manual treatment also allows for selective management or targeted vegetation removal and is typically used in conjunction with other techniques. Proper hand crew training and supervision is necessary to reduce danger to workers using sharp tools on steep and/or unstable terrain, or where other environmental hazards exist. Hand tools include chain saws, shovels, Pulaski hoes, McLeod fire tools, line trimmers, weed wrenches, pruning shears, and loppers. Personal protection equipment typically includes long pants and long-sleeved shirts, gloves, safety goggles, hard hats, chaps, and sturdy boots.
- **Mechanical Treatments.** Mechanical practices include all methods employing motorized heavy equipment to remove or alter vegetation. Mechanical practices rearrange vegetation structures; compact or chip material; and move material to landings, staging areas, or burn piles. Mechanical equipment typically uses rubber tires or tracks, although skids and cables are also used. In some instances, two or more pieces of equipment work in concert to achieve a management standard. Mechanical equipment includes masticators, tractors, skid-steers, chippers, mowers, grinders, crushers, and skidders. Mechanical treatments are commonly used to create fuel breaks, which are wide strips of land where vegetation management has occurred so that wildfires burning into them can be more easily controlled. Fuel breaks are not intended to stop fire spread, especially where embers can be transported via strong winds over the fuel break, but rather to modify fire behavior and enhance firefighting capabilities.
- **Prescribed Fire.** Prescribed fires reduce fuel volume through combustion and are permitted under specific regulations when conditions permit adequate combustion and fire control. Prescribed fires use planned activities with low- to moderate-intensity fire and defined goals. Prescribed fires are performed in conjunction with specific land management objectives, such as reducing fuel loads, increasing overall forest or habitat health, and/or protecting communities from wildfire (USDA 2022). Prescribed fires can accomplish land management objectives to control undesirable vegetation, prepare sites for harvesting/seeding, control plant pathogens and pests, improve wildlife habitat, improve plant production or quality, remove debris, restore ecological sites, and maintain native plant diversity and composition. Prescribed fires can occur in small, designated areas or over larger expanses. Two types of prescribed fire, pile burning and broadcast burning, are often implemented in conjunction with manual treatment and mechanical treatment methods as a means of treating vegetative debris, or to enhance effectiveness in advance of an herbicide treatment.
- **Chemical Techniques.** Chemical applications use herbicides to kill vegetation or prevent growth and are typically used in combination with other fuel reduction treatments. Herbicides do not remove vegetation from treatment areas; therefore, dead plant material remains without further treatment (except in cases where pre-emergent herbicides are used to control annual plants). Herbicide application is typically performed by hand and may include sponging, spraying, or dusting chemicals onto undesirable vegetation. Hand application provides flexibility and is ideally suited for small treatment areas. Roadside herbicide application may employ a boom affixed to or towed behind a vehicle. Herbicide application requires specific storage, training, and licensing to ensure safe use.

### 3.3 Community Outreach and Education

Community outreach and education is an important component in community wildfire hazard reduction efforts. Such efforts increase the community's knowledge and awareness of wildland fire, can assist in prevention and preparedness efforts, and are an important component in planning and implementing vegetation management projects. Following are examples of community outreach programs:

- **Ready, Set, Go!**: The Ready Nevada County website (<https://readynevadacounty.org/>) breaks down wildfire preparedness into three actions—Ready, Set, Go—with resources provided for approaching each action. The County provides a handbook of these actions at:  
<https://www.nevadacountyca.gov/DocumentCenter/View/44617/2022-Ready-Nevada-County-Handbook-PDF>
- **City of Grass Valley Emergency Preparedness Guide**: This brochure provides general guides and best practices for emergency preparedness, particularly wildfire emergencies. Topics covered include emergency planning, defensible space and vegetation management, and evacuation planning. This educational brochure can be downloaded at the following link:  
[https://www.cityofgrassvalley.com/sites/main/files/file-attachments/emergency\\_prep\\_brochure\\_2019\\_grs\\_v.5.pdf?1582814072](https://www.cityofgrassvalley.com/sites/main/files/file-attachments/emergency_prep_brochure_2019_grs_v.5.pdf?1582814072)
- **Nevada County Emergency Preparedness Toolkit**: The County compiled a toolkit that residents may visit to find educational resources related to wildfire preparedness topics: Emergency Preparedness, Emergency Alerts, Defensible Space Resources, Wildfire Research Fact Sheets, and a YouTube playlist of informational videos from Ready Nevada County. <https://www.nevadacountyca.gov/2792/Preparedness-Toolkit>
- **Ready Nevada County Dashboard**: This dashboard an interactive informational tool to be used before, during and after a major event. This tool provides real time updates on Red Flag Warnings, Evacuation Warning & Order Areas, Community Reverse 911 messages, weather, Public Safety Power Shutoff information and more:  
<https://nevcounty.maps.arcgis.com/apps/MapSeries/index.html?appid=dfae8e3b36e3455bbf9dcc865349e72e>
- **CodeRED**: CodeRED is an opt-in notification system used by the County of Nevada to notify residents in an emergency. These alerts may be received as text, email, landline, cell phone, and TTY. Message and data rates may apply to sent and/or received texts. Interested residents may opt-in at:  
<https://public.coderedweb.com/CNE/en-US/CA8B57E20D17>.
- **Genasys Protect (formerly Zonehaven)**: The City of Grass Valley and Nevada County adopted Genasys Protect (formerly Zonehaven) to provide specific, timely and accurate information regarding evacuations. Genasys Protect divides geographic regions into smaller zones, based on several factors, and is accessible online. CodeRED is Nevada County's Emergency Alert System and has the capacity to relay evacuation information during a wildfire event. Community members can access Genasys Protect online to view current evacuation orders by zone using the interactive map feature accessible at the following link:  
<https://protect.genasys.com/zones/US-CA-XNE-GRS-E222?z=13.184711644240117&latlon=39.22087118546949%2C-121.04232317608148>
- **Defensible Space Inspection Request**—The County and Ready Nevada County jointly administer the County's Defensible Space Inspection Program to educate residents on defensible space requirements and home hardening principles. Embers are the number one cause of structure ignition during wildfire, and a



coupled approach of creating effective defensible space with focused home hardening retrofits can increase a structures likelihood of surviving a wildfire. Property owners or occupants can request a defensible space inspection by going to <https://nevadacounty.iotform.com/231176343180046>

- **Red Flag Warnings.** A Red Flag Warning means that critical fire weather conditions are either occurring now or will shortly. A combination of strong winds, low relative humidity, and warm temperatures can create extreme fire behavior. The National Weather Service provides daily fire weather forecasts in coordination with local fire agencies. The Red Flag Warning program enables firefighting agencies to manage critical resources and prepare appropriate suppression responses for protecting life and property. Red Flag Warnings are typically issued within 24 hours of an impending critical fire weather event. Residents can sign up for Sever Weather Alerts at:  
<https://www.weather.gov/enterprise/>
- **Firewise Communities.** The Firewise USA recognition program,<sup>1</sup> administered by the National Fire Protection Association, promotes collaboration within communities to organize and improve the ignition resistance of homes and communities. Communities can receive a Firewise Community designation through the California Office of the State Fire Marshal's Community Wildfire and Preparedness and Mitigation Division. In addition to financial support for conducting risk reduction projects, homeowners living within a Firewise Community are qualified to receive insurance discounts with the California Fair Plan. Thirteen Firewise Communities existing within or partially within the City or the City Sphere of Influence.

### 3.4 Additional Wildfire Risk Reduction Approaches

The following techniques may minimize ignition potential, reduce risks to assessment area assets and resources, and/or alter vegetation conditions within suitable areas identified in this assessment as demonstrating high fire probability:

- **Post-Fire Vegetation Management:** Treatment in burned areas to promote forest canopy re-growth. Work may include removal or treatment of dead/dying trees, brush, and exotic or invasive weeds or other vegetation.
- **Reforestation/Tree Planting:** Planting trees or shrubs to achieve management goals may include restoration of degraded areas, wind flow alteration, ember defense, and increased ground surface shading.
- **Invasive Species Removal:** Removal and treatment of invasive plants that displace native species and/or increase fire hazards via high fuel loading rates or increased ignitability and flammability.
- **Fire Road Maintenance:** Minor grading or natural material resurfacing to ensure fire agency apparatus can drive on existing fire access roads.
- **Roadside fuel management:** vegetation management along key roadways that may be needed during evacuations and are exposed to natural fuel beds should be treated to reduce the potential that the roadway is compromised by fire. Thinning and selective plant removal, from 50 to 100 feet wide on both edges of key evacuation routes in high fire burn probability areas is prudent.
- **Ignition and Spread Prevention:** Modifications including flashy fuel treatment, restoration, ignition-resistant mat installation, and use restrictions (e.g., no parking).

<sup>1</sup> <https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Firewise-USA>

- **Structural Hardening:** Efforts to reduce structure ignition via radiant heat, direct flame impingement, or ember intrusion (e.g., installation of dual-pane windows, replacement of combustible roof materials, installation of ember-resistant attic vents).
- **Community Outreach:** Public education and engagement to raise wildfire risk awareness and encourage wildfire risk reduction efforts (e.g., maintenance of defensible space, participation in chipper programs).
- **Utility Hardening/Undergrounding:** Moving overhead powerlines below ground, or retrofitting overhead power line networks to minimize arcing, conductor contact, and other hazards.
- **Patrols:** Patrolling fire hazard areas to deter, detect, and report fire starts.
- **Inspection/Monitoring:** Conducting defensible space or structural hardening inspections or monitoring open space areas for trespass or fire activity.
- **Chipper Program:** Providing chippers to incentivize fuels reduction and defensible space maintenance work on residential properties.
- **Infrastructure:** Equipment purchase, installation, permitting, and maintenance intended to alert the communities about wildfires (e.g., fire detection cameras), or provide data to fire managers (e.g., remote automated weather stations).



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# Appendix A

## Photograph Log





**Photo 1.** Brush and ladder fuels within a portion of Condon Park.



**Photo 2.** Brush and ladder fuels within a portion of Condon Park, near adjacent structures.





**Photo 3.** Dense forest adjacent to the Grass Valley Wastewater Treatment Plant, a critical City facility.



**Photo 4.** Thinned/treated forest on the opposite side of Allison Ranch Road from the Grass Valley Wastewater Treatment Plant.





Photo 5. Standing dead trees resulting from the 2016 Auburn Fire (from South Auburn Street).



Photo 6. Heavy roadside vegetation along East Empire Street, across from Empire Mine State Historic Park.





**Photo 7.** Standing dead trees resulting from the 2021 Bennett Fire (from East Bennett Road).



**Photo 8.** Standing dead trees resulting from the 2021 Bennett Fire (from Whispering Pines Lane).





**Photo 9.** Ladder fuels on undeveloped parcels along Whispering Pines Lane.



**Photo 10.** Dense roadside vegetation along Glenwood Road.





**Photo 11.** Vegetation behind houses in the Morgan Ranch neighborhood.



**Photo 12.** Dense and dying vegetation in the drainage below houses on Jan Road and Hill Street.





## City of Grass Valley City Council Agenda Action Sheet

**Title:** Modifying Public Comment at the City Council Meetings

**CEQA:** Not a Project

**Recommendation:** That Council 1) have a discussion on how to improve the public comment portion of City Council meetings, and review and approve a resolution of the City Council of Grass Valley regarding public comment at council meetings

**Prepared by:** Timothy Kiser, City Manager

**Council Meeting Date:** 02/05/2024

**Date Prepared:** 01/31/2024

**Agenda:** Administrative

**Background Information:** In an effort to enhance the public comment portion of City Council meetings, staff is proposing implementing improvements, including a streamlined process for public participation through the location on agenda of public comment, speaker cards or a combination. Residents and stakeholders are encouraged to express their views on relevant agenda items or public comment for items not on the agenda by filling out speaker cards, providing essential details such as their name, and the topic they wish to address. This initiative aims to ensure an organized and efficient public comment session, allowing the City Council to better understand and address community concerns. Additionally, we are exploring options involving the time allocated for public comments, fostering a more inclusive dialogue between citizens and their elected representatives. These enhancements reflect our commitment to transparency, community engagement, and an open democratic process during City Council meetings.

Attached is a draft resolution for the Council's information and consideration.

**Council Goals/Objectives:** This item executes portions of work tasks towards achieving/maintaining the Strategic Plan - High Performance Government & Quality Service.

**Fiscal Impact:** The proposed action has no fiscal impact.

**Funds Available:** N/A

**Account #:** N/A

**Reviewed by:** \_\_\_ City Manager

**Attachments:** Resolution 2024- 04

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GRASS VALLEY  
REGARDING PUBLIC COMMENT AT COUNCIL MEETINGS**

**WHEREAS**, section 54954.3(a) of the Ralph M. Brown Act requires legislative bodies of local agencies to provide an opportunity for members of the public to address the legislative body on items of public interest within the subject matter jurisdiction of the legislative body;

**WHEREAS**, section 54954.3(b)(1) of the Ralph M. Brown Act allows legislative bodies to adopt reasonable regulations to ensure the intent of section 54954.3(a) is carried out;

**WHEREAS**, the City of Grass Valley desires to require members of the public wishing to address the City Council to fill out numbered speaker cards so that speakers may be called to speak in numerical order, in accordance with the Ralph M. Brown Act;

**NOW THEREFORE BE IT RESOLVED** by the City Council of the City of Grass Valley as follows:

1. **Recitals.** The foregoing recitals are true and correct and incorporated herein.
2. **Speaker Cards.** Grass Valley City Clerk is hereby authorized and directed to distribute speaker cards to members of the public wishing to address the City Council. Members of the public are hereby required to fill out speaker cards to provide public comment at meetings of the City Council so they may be called to offer public comment in numerical order. While cards shall request a name and address, providing that information is optional.
3. **Effective Date.** This Resolution shall take effect immediately upon adoption.
4. **Certification.** The Grass Valley City Clerk shall attest to the passage and adoption of this Resolution and its approval by the City Council and shall cause the same to be listed in the records of the City.

**ADOPTED** as a Resolution by the City Council of the City of Grass Valley at a regular meeting thereof held on the 5th day of February, 2024, by the following vote:

AYES:  
NOES:  
ABSTAINS:  
ABSENT:

\_\_\_\_\_  
Jan Arbuckle, Mayor

ATTEST:

APPROVED AS TO FORM:

\_\_\_\_\_  
Taylor Day, City Clerk

\_\_\_\_\_  
Michael G. Colantuono, City Attorney





## City of Grass Valley City Council Agenda Action Sheet

**Title:** City Manager and Community Development Department Restructuring

**CEQA:** Not a Project

**Recommendation:** That Council 1) review and approve the proposed reorganization of the City Manager and Community Development Departments; 2) approve the job description and associated salary schedule for the Deputy City Manager I/II, subject to legal review; 3) approve the reclassification of one of the approved Community Services Analyst I to a Community Services Analyst II, which is a flexibly staffed position; 4) approve adding the Deputy City Manager I and reclassifying a Community Services Analyst to a level II to the allotted/authorized City positions; 5) review the proposed agreements (including Appendix A) for the Deputy City Manager I position; 6) authorize the City Manager to execute the Deputy City Manager I agreement subject to legal review; and 7) authorize the Administrative Services Director to make any necessary budget adjustments and/or amendments to complete these actions.

**Prepared by:** Timothy Kiser, City Manager

**Council Meeting Date:** 02/05/2024

**Date Prepared:** 01/30/2024

**Agenda:** Administrative

**Background Information:**

As the City has evolved over the years, the complexity of rules and requirements governing its operations has also increased. In response to the dynamic needs of our growing community, our staff is proposing a strategic reorganization within the City Manager and Community Developer Departments. This proposal introduces the creation of a new position, Deputy City Manager I/II, designed to be flexibly staffed, allowing for adaptability based on experience and education. Simultaneously, we suggest reclassifying the role of a Community Services Analyst I (CSA I) to a Community Services Analyst II (CSA II).

The envisioned Deputy City Manager position is a singular role with two classification levels (Deputy Director I/II), offering a structured approach based on job experience and educational qualifications. This position assumes a high degree of independence in its responsibilities, playing a pivotal role in supporting the City Manager by overseeing the efficient operation of municipal services. Moreover, the Deputy City Manager I/II will serve as the primary custodian of official city records and be entrusted with the full spectrum of City Clerk duties. This role demands individuals with robust organizational, leadership, and communication skills, coupled with a comprehensive understanding of municipal governance.

In parallel, the proposed reclassification of the existing CSA I to a CSA II reflects a transition from an entry-level position requiring general supervision to a journey-level role expected to perform a diverse array of complex duties with minimal guidance. Both reorganizations are structured as reclassifications of existing positions, ensuring a measured fiscal impact without an increase in staffing levels.

This restructuring is strategically designed to create advancement opportunities from within the organization while maintaining a commitment to controlling costs and not expanding the overall number of approved City positions. The attached Job Description for the Deputy City Manager I/II and the corresponding salary schedule are provided for Council review and approval, highlighting the transparent and deliberate nature of this proposal.

**Council Goals/Objectives:** This item executes portions of work tasks towards achieving/maintaining the Strategic Plan - High Performance Government & Quality Service and Productive and Efficient Workforce.

**Fiscal Impact:** Salary impacts will be a minimal increase to net neutrality if the current staff is successful with promoting from within the organization. Additional funding is also available from a larger variety of funds with the positions taking on additional duties.

**Funds Available:** Yes

**Account #:** Various

**Reviewed by:** \_\_ City Manager

**Attachments:**

- 1. Job Description for Deputy City Manger I/II
- 2. Proposed agreement including Appendix A



City of Grass Valley  
JOB DESCRIPTION



**Deputy City Manager I/II (Flexibly Staffed)**

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**Department: City Administration**

**FLSA Status: Exempt**

**Reports To: City Manager**

**Unit: Contract (At Will)**

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**SUMMARY OF JOB PURPOSE** *Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

This is a single position with two classification levels (Deputy Director I/II) based on job experience and education that acts with a high degree of independence of action. This position plays a crucial role in assisting the City Manager in overseeing the efficient operation of municipal services and will serve as the primary custodian of official city records. This position requires strong organizational, leadership, and communication skills, as well as a comprehensive understanding of municipal governance.

**DISTINGUISHING CHARACTERISTICS**

Under the direction of the City Manager, assists in planning, organizing, and directing assigned activities and operations of the City; coordinates activities among and with other departments; provide staff assistance to the City Manager and City Council; represents City Manager with City Staff, community organizations, other agencies, and the public; provide direct oversight for Front Counter activities, City Hall Online Technology, Risk Management, Insurance Claims, and other assigned programs; serve as the City Clerk and perform all duties in accordance with the Job Description for City Clerk and performs other job related work as required.

This position is designated as management for Labor Relations purposes and is considered exempt under the Fair Labor Standards Act (FLSA).

**Deputy City Manager I:** Serves as the City Clerk and performs all duties and responsibilities of the City Clerk’s job description and as defined in the Municipal Code. This position serves as a member of the City executive team with responsibilities for establishing and overseeing programs and policies that affect multiple departments and the City as a whole; has responsibility for all written and other types of presentations to the City Council and other commissions, boards and policy adopting bodies; demonstrates professional competence while working as a team member and exercises independent judgment in a number of confidential and sensitive areas; duties and



**Deputy City Manager I/II (Flexibly Staffed)**

responsibilities are performed in accordance with municipal codes, ordinances, City policy, federal, and state regulating entities.

**Deputy City Manager II:** All duties defined under Deputy City Manager I and may act as City Manager in his/her absence. Deputy City Manager II shall also exercise supervision over entire departments assigned by the City Manager.

This is a full-time, salaried, executive-level position in the City Manager’s Department. The Deputy City Manager I/II serves at the pleasure of the City Manager on a contract basis (at will), and receives administrative direction from the City Manager.

**DISTINGUISHING CHARACTERISTICS**

The Deputy City Manager I/II is a Department Head level class responsible for the overall operation of the City’s Front Counter activities, City Clerk Duties, City Hall Online Technology, Risk Management, and Insurance Claims. The Deputy City Manager II is distinguished from Deputy City Manager I by having additional experience and overseeing entire Departments as assigned by the City Manager. This classification is distinguished from the next higher class of City Manager in that the latter has overall responsibility for administering all of the City’s operations.

**SUPERVISION RECEIVED AND EXERCISED**

Receives administrative direction from the City Manager. Exercises direct and indirect supervision over departments, divisions, management, professional, technical and office support personnel.

**ESSENTIAL FUNCTIONS** *The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.*

**Deputy City Manager I, Typical Duties**

1. Responsible for all duties and responsibilities of the City ‘s Job Description
2. Assist the City Manager in developing, planning, implementing, and administering City-wide goals and objectives, as well as policies and procedures necessary to provide City services;
3. Plans, organizes, assigns, directs, reviews and evaluates the activities, operations, and staff assigned.





**Deputy City Manager I/II (Flexibly Staffed)**

4. Conduct comprehensive management analyses related to municipal policies, organization, and procedures.
5. Provide staff assistance to the City Council, committees, commissions, and the City Manager.
6. Respond to citizen complaints or requests for information.
7. Supervise risk management functions, including liability programs.
8. Coordinate safety programs and oversee insurance claims.
9. Direct the development of information technology and work with Department Heads to develop policies and procedures.
10. Advocate for and oversee coordination of existing City services.
11. Develop, plan, and implement departmental goals and objectives.

**Deputy City Manager II, Typical Duties**

12. Represent the City Manager at meetings, make presentations, and act as the City Manager when required.
13. Confers with and provides professional assistance to City staff members on City matters.
14. Works with the City Manager on City policy, appropriate service, and staffing levels; allocates resources accordingly.
15. Plans, directs and coordinates, through subordinate managers, the department's work plan; meets with management staff to identify and resolve problems; assigns projects and programmatic areas of responsibility.
16. Participates in various professional organizations, and serves on various boards, commissions and committees; attends civic and other community organizations to explain and promote the activities and functions of the department and to establish favorable public relations.
17. Stays abreast of legislation, new trends and innovations in the areas of responsibility.
18. Responds to difficult or sensitive complaints and requests for information from the public, news media (subject to City Manager approval) and City staff.
19. Attends and makes presentations at council, interagency, committee and other meetings and conferences.
20. Directs, prepares, and oversees the preparation of a wide variety of reports and presentations to the City Council, City Executive Team and outside agencies; reviews press releases and materials for dissemination to the media and public.
21. Provides high level research, analysis and recommendations to the City Manager,



**Deputy City Manager I/II (Flexibly Staffed)**

Planning Commission and/or City Council on matters relating to policy development, strategies, management planning, project management, departmental, intergovernmental and community problems.

22. Works with community organizations citizen groups in developing and implementing programs to achieve City priorities and solve problems in areas of assignment.
23. Prepares and reviews City Council and/or Planning Commission agenda reports, follows up on policy concerns prior to meetings.
24. Plans, directs, coordinates and implements Code Compliance actions; assigns work activities, projects and programs; reviews and evaluates work products, methods and procedures; meets with staff to identify and resolve problems, may take the lead in managing more complex code enforcement cases.
25. Ability to manage multiple State and Federal grants.
26. Ability to manage consultants that provide specific service to the City.
27. Maintains a physical presence in the office which is necessary to perform essential services.

**KNOWLEDGE, SKILLS AND ABILITIES:** *The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

Deputy City Manager I should have basic knowledge, skills, and abilities where a Deputy City Manager II should have actual experience and advanced knowledge, skills, and abilities.

**Knowledge of:**

1. Administrative principles and methods, including goal setting, program and budget development, implementation and control, personnel management and supervision.
2. City organization and functions; pertinent local, State, and Federal laws, ordinances, and rules.
3. Principles and practices of program development and administration.
4. Practices of contract negotiation, preparation, and administration.
5. Principles and practices of computer-based project management and project scheduling.
6. Principles and practices of leadership, team building, and conflict resolution.
7. Various Grants
8. Methods and techniques of marketing, advertising, media relations, and public relations.
9. English usage, spelling, grammar and punctuation.





**Deputy City Manager I/II (Flexibly Staffed)**

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10. Modern office practices and technology including personal computer hardware and software.
  11. Principles and practices of risk management, information technology, and service provision to the homeless.
  12. Municipal risks, liabilities, and insurance coverages.
  13. Organizational management practices.
  14. Principles of public program administration and relevant laws and regulations.
  15. Modern methods of records management and safe work practices.

**Ability to:**

16. Plan, organize, assign, direct, review, and evaluate the activities, operations, and staff.
17. Select, train, motivate, and evaluate staff.
18. Develop, implement, and interpret goals, objectives, policies, procedures, and work standards.
19. Analyze complex problems, evaluate alternatives, and make sound recommendations related to City activities.
20. Analyze various City department support needs and ensure prompt and efficient delivery of service, materials, and supplies.
21. Interpret, apply, and ensure project compliance with applicable federal, state, and local policies, procedures, laws, regulations, codes, and ordinances.
22. Negotiate and administer service contracts.
23. Use and apply principles and practices of budget preparation, financial principles, and administration.
24. Prepare clear, concise, and accurate reports, correspondence, and other written materials including bids and financial information.
25. Establish maintain and foster positive and harmonious working relationships with those contacted in the course of work.
26. Use tact, initiative, prudence, and independent judgment within general policy, procedural and legal guidelines.
27. Use computer technology and applications in the performance of daily activities.
28. Meet the physical requirements to safely and effectively perform assigned duties.
29. Organize, implement, and supervise departmental goals and City objectives.
30. Interpret and apply policies, laws, and regulations.
31. Prepare complex reports and documents.
32. Analyze problems, identify solutions, and implement recommendations.
33. Effectively negotiate solutions and contracts.
34. Plan, organize, direct, and supervise the work of staff.



**Deputy City Manager I/II (Flexibly Staffed)**

- 35. Make presentations and represent the City in public forums.
- 36. Use computer programs effectively and communicate clearly.

**Minimum Qualifications:**

*Any combination of training and experience that would provide the required knowledge, skills and abilities is qualifying. A typical way to obtain the required qualifications would be:*

**Deputy City Manager I (Minimum Qualifications)**

- 1. Three years of increasingly responsible administrative and managerial experience in a public agency, including two years of City Clerk experience.
- 2. Equivalent to an associate's degree from an accredited college or university with major course work in public or business administration, or a closely related field AND at least two (2) years of management experience.
- 3. Have a Certified Municipal Clerk Certificate (CMC) thru the International Institute of Municipal Clerks (IIMC) is highly desirable.

**Deputy City Manager II (Minimum Qualifications)**

- 1. Equivalent to a bachelor's degree from an accredited college or university with major course work in public or business administration, or a closely related field AND five (5) years of progressively responsible as a City Clerk or similar government position, including at least four (4) years of management experience.
- 2. A Master's Degree in public administration, business administration, urban or regional planning, engineering, or a closely related field is desirable.

**GENERAL QUALIFICATIONS**

**License Requirements**

A valid California Class C driver license or higher is required at the time of appointment. Individuals who do not meet this requirement due to a disability will be reviewed on a case-by-case basis.

**Physical Requirements**

Incumbents appointed to this class must have the mobility to work in a standard office or



**City of Grass Valley  
JOB DESCRIPTION**



**Deputy City Manager I/II (Flexibly Staffed)**

field environment, use standard office equipment and attend off-site meetings; intermittently operate a motor vehicle on surface streets with occasional exposure to weather conditions, and construction and traffic hazards; mobility to traverse uneven terrain, periodically standing, stooping, bending, climbing and kneeling to perform fieldwork; intermittently sit at desk for long periods of time; lift light to moderately heavy weights; vision to read handwritten and printed materials and a computer screen; hearing and speech to communicate in person and by telephone; manual dexterity to operate small equipment, tools and standard office equipment and supplies, and to manipulate both single sheets of paper and large document holders (binders, manuals, etc.).

**Working Conditions**

Employees work in an office environment with moderate noise levels, controlled temperature conditions and no direct exposure to hazardous physical substances, and in the field and are occasionally exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, substantial heights, vibration, confined workspaces, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives, and contractors in interpreting and enforcing departmental policies and procedures. The incumbent may be required to work various shifts on evenings, weekends and holidays, and participate in after-hours on-call assignments.

**GENERAL**

The City reserves the right to revise or change classification duties and responsibilities as the need arises. This description does not constitute a written or implied contract of employment.

I have read and understand the contents of this job description, and I have received a copy of this job description for my records.

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Adopted:

Revised:

**EMPLOYMENT AGREEMENT BETWEEN THE CITY OF GRASS VALLEY  
AND Name  
Deputy City Manager I**

**1. Effective Date**

This Agreement shall become effective when it has been executed by “Director”, hereinafter referred to as “Deputy City Manager I” or Employee, and the City Manager, as duly approved by Resolution of the City Council, has executed it.

**2. Term of Employment**

Deputy City Manager I shall serve at the pleasure of the City Manager and on an “at will” basis during the term of this Agreement, subject to the terms and provisions of this Agreement as set forth below.

**3. Duties; Hours of Work**

A. Deputy City Manager I shall perform those functions and duties as specified in job classification and by direction of the City Manager. Deputy City Manager I shall perform such duties in accordance with the highest professional and ethical standards of the Deputy City Manager I position. Deputy City Manager I shall not engage in any activity that is, or which may become, incompatible with the City of Grass Valley, as provided by federal, state, and local law. During the term of this Agreement, Deputy City Manager I shall be exclusively employed by the City, unless prior written authorization otherwise is received from the City Manager.

B. Deputy City Manager I shall maintain a regular work schedule consistent with that approved for other-Directors of the City. Deputy City Manager I’s duties may involve expenditures in time in excess of eight (8) hours per day and/or forty (40) hours per week and may also include time outside normal office hours such as attendance at City Council and Commission meetings. Deputy City Manager I shall not be entitled to additional compensation for this time.

**4. Compensation**

A. Deputy City Manager I shall receive an annual base salary of \$110,140.00, payable in equal bi-weekly payments to be made at the same time as other employees are paid.

B. Deputy City Manager I’s compensation shall be reviewed with the City Manager at least annually in connection with the annual review or at any other times as may be determined by the City Manager. Compensation may be increased as determined by the City Manager within the salary range (Compensation and Benefits - Appendix A) for the Deputy City Manager I.

C. Salary may be reduced in the event Deputy City Manager I receives an unsatisfactory evaluation, either at the annual evaluation or at any additional evaluation completed by the City Manager. Compensation may be reduced as determined by the City Manager within the salary range (Compensation and Benefits - Appendix A) for the Deputy City Manager I.



D. As consideration for the annual opportunity to be considered for increased compensation pursuant to sub-paragraph B above, Employee specifically waives any right to a 4/5 vote of the City Council prior to removal from his or her position, as may be provided under City Charter Article IX, Section 2. Employee acknowledges that the City Manager is the appointing authority and may also remove Employee from this position without action of the City Council.

### **5. Health Insurance**

The City shall pay the full premium for health insurance for the Deputy City Manager I, including their dependents, for health coverage (medical, dental, and vision) benefit options as provided to other employees.

Employees waiving medical insurance coverage shall receive two hundred fifty dollars (\$250) per month less the costs of any elected dental or vision insurance per month. Employees waiving health care coverage must produce evidence of insurance through another source. Any payment due Employees for waiving medical insurance coverage shall be paid in a lump sum once per month and shall be considered taxable compensation; however, such compensation is not PERSable.

### **6. Annual Leave**

Deputy City Manager I shall receive vacation benefits equal to those of Department Heads, as set forth in the "Compensation and Benefits - Appendix A". Deputy City Manager I may cash out up to four weeks of Annual Leave and/or vacation each Calendar Year upon City Manager's prior approval and consistent with Internal Revenue Service rules governing constructive receipt. Vacation and/or Annual Leave time cashed out pursuant to this provision shall be subtracted from the accumulated Vacation and/or Annual Leave balances when paid.

### **7. Retirement**

Employees designated as local public safety (Police) "classic" employees by the City are currently provided retirement benefits under the Public Employee's Retirement System's Local Safety (Police) 3% at age 50 formula with a 9% employee contribution. Employees are also provided retirement benefits under Social Security.

"Classic" public safety (Police) designated employees will pay a pre-tax contribution for retirement for the employee share under CalPERS retirement plan of 9%. The employee shall pay the full amount of the employee's contribution rate to Social Security.

Employees designated as local public safety (Fire) "classic" employees by the City are provided retirement benefits under the Public Employees Retirement System's (PERS) Local Public Safety (Fire) 3% at 55 formula. Employees are also provided retirement benefits under Social Security.

"Classic" public safety (Fire) designated employees will pay a pre-tax contribution for retirement for the employee share under CalPERS retirement plan of 9%. The employee shall pay the full amount of the employee's contribution rate to Social Security.

New public safety employees hired after January 1, 2013 or “Non Classic” public safety (Fire or Police) designated employees, upon placement in a full-time employment status shall have the PERS 2.7% @ 57 formula, as provided by the terms of the contract in effect between the City and PERS. The employee contribution rate shall be 50 percent of the “normal cost” rounded to the nearest quarter of 1 percent, as determined by PERS.

Miscellaneous employees who are considered “classic” members by PERS will be responsible for paying the full employee contribution to the California Employees Retirement System, which is currently 8%. Miscellaneous employees who are considered “new” members by PERS will be responsible for paying 50 percent of the “normal cost” pursuant to the Pension Reform Act of 2013. The employee shall pay the full amount of the employee’s contribution rate to Social Security.

### **8. Deferred Compensation**

Subsequent to the first year of employment under this contract, City will deposit to Deputy City Manager I’s deferred compensation account via bi-weekly payroll a performance bonus contribution of up to \$4,000 annually.

The City’s contribution amount shall be based upon job performance and be dependent upon receipt of Deputy City Manager I’s performance evaluation. The City’s contribution amount shall be determined in the sole discretion of the City Manager and may be less than \$4,000.

In the event this agreement terminates or is not renewed, Deputy City Manager I shall be entitled to retain the amount of deferred compensation accumulated as of the date of termination or non-renewal.

After such time as Deputy City Manager I resigns or is terminated, City shall transfer ownership of any deferred amount on deposit in a deferred compensation plan to succeeding employers upon Deputy City Manager I’s written request.

### **9. Annual Performance Evaluation**

The City Manager and/or their designee shall evaluate Deputy City Manager I’s performance at least once annually. The City Manager and Deputy City Manager I shall annually develop mutually agreeable performance goals and criteria which the City Manager shall use in reviewing Deputy City Manager I’s performance in the following year. It shall be Deputy City Manager I’s responsibility to initiate this review each year.

### **10. Indemnification**

City shall defend, hold harmless and indemnify Deputy City Manager I against any claim, demand, judgment, or action of any type or kind arising within the course and scope of Deputy City Manager I’s employment to the extent required by Government Code Sections 825 and 995. Notwithstanding anything to the contrary in this section, pursuant to Government Code Section 53243.1, if the City provides funds for the legal criminal defense of Employee, any funds provided for that purpose shall be fully reimbursed by Employee to the City if Employee is convicted of a crime involving an abuse of office or position.



Employee recognizes that City shall have the right to compromise and settle all actions or proceedings in which City is providing Employee a defense, even if Employee objects to such compromise or settlement.

### **11. Other Terms and Conditions of Employment**

A. The City Council may from time to time fix other terms and conditions of employment relating to the performance of Deputy City Manager I, provided such terms and conditions are not inconsistent with or in conflict with the provision of this Agreement, the Grass Valley Charter or Municipal Code, or other applicable law.

B. The provisions of the City's Civil Service Rules and Regulations ("Rules") shall apply to Deputy City Manager I to the extent they explicitly apply to the position of Deputy City Manager I, except that if the specific provisions of this Agreement conflict with the Rules, the terms of this Agreement shall prevail. Without limiting the generality of the exception noted in the previous sentence, however, no provision of the Rules or this Agreement shall confer upon Deputy City Manager I a property right in his or her employment or a right to be discharged only upon cause. Deputy City Manager I is not a member of the competitive/ classified service and is an "at will" employee serving at the pleasure of the City Manager and may be dismissed at any time with or without cause, subject only to the provisions of this Agreement. The provisions of Article IX, Section 2, requiring a 4/5 vote of the City Council to remove a Department Head do not apply to this Agreement and are specifically waived by Employee as provided in Section 4(D) of this Agreement. Notwithstanding any other provision of this Agreement, Deputy City Manager I shall not violate any policy prohibiting discrimination, harassment, retaliation, workplace violence, or other similar misconduct as set forth in the Rules and in federal, state law, and local law.

C. Deputy City Manager I shall be exempt from paid overtime compensation.

### **12. Termination**

A. Deputy City Manager I is not part of the competitive (classified) service and therefore is an "at will" employee. As an "at will" employee, Deputy City Manager I may be terminated by the City Manager with or without cause, without right of appeal, and without advance notice or City Council action.

B. If Deputy City Manager I is terminated by the City Manager without cause, Deputy City Manager I after termination will be entitled to up to three months of severance pay at Deputy City Manager I's base salary rate plus payment in a lump sum of the following: 1) 100% of any accrued, but unused Personal Leave and vacation leave, if any; and 2) 50% of the value of unused sick leave, if applicable, to the extent not used for PERS Service Credit, if any. Deputy City Manager I shall be entitled to severance pay under this subsection only upon execution of a claim waiver and release of liability. Severance pay, if any, shall be paid monthly until Employee is gainfully employed or the 3-month limit has been reached, whichever is less. Employee shall provide notification of gainful employment to City immediately upon commencing such employment if such employment commences within three months of Employee's termination from City. Notwithstanding anything to the contrary in this subsection, pursuant to Government Code Section 53243.2, if the Agreement

is terminated, any cash settlement related to the termination that Employee may receive from City shall be fully reimbursed to City if Employee is convicted of a crime involving an abuse of his or her office or position.

C. If Deputy City Manager I is terminated by the City for cause, Deputy City Manager I is not entitled to any severance pay whether or not advance notice of termination is provided; however, payment for accrued, unused Personal Leave, sick leave and/or vacation leave, if applicable, shall be paid as provided in sub-paragraph B above. If Deputy City Manager I is terminated for cause, Deputy City Manager I must be given notice of the cause and supporting evidence. Deputy City Manager I is entitled to meet with the City Manager at which time Deputy City Manager I may reply orally and/or in writing to the cause and supporting evidence. The meeting is not an evidentiary hearing. There is no right to appeal the City Manager's decision. The City Manager's decision is final, and nothing in this subsection shall be deemed to impose a "for cause" requirement to terminate Employee's employment with City. The specification of causes for termination below is solely for the purpose of determining whether Employee is entitled to severance pay. For purposes of this Agreement, the term "for cause" shall include, but is not limited to, any of the following:

- (a) use of alcohol or drugs that impedes performance of duties;
- (b) conviction of a felony or misdemeanor involving moral turpitude (a plea or verdict of guilty or a conviction following a plea of nolo contendere is deemed a conviction for this purpose);
- (c) a proven claim of either sexual harassment or abuse of employees in violation of law or adopted City policy;
- (d) failure to maintain licenses and professional certifications required of the Deputy City Manager I by the job description;
- (e) willful and repeated failure to carry out the lawful directives or policy decisions of the City Council; or
- (f) willful abandonment of the position or continued and unexcused absence from duty.

D. Deputy City Manager I may voluntarily terminate his or her employment, by resignation or retirement or some other similar manner, upon at least one-month notice. In this circumstance, Deputy City Manager I is not entitled to any severance pay.

E. In the event an Employee dies while employed by the City, his/her beneficiary or those entitled to his/her estate shall be paid for any earned salary and any in lieu payments for personal leave and any banked vacation or sick leave at the rates established in this Agreement to which the Employee is entitled as of the final day on City payroll. City may request appropriate documentation to ensure such persons are beneficiaries or otherwise entitled to participate in Employee's estate.

### **13. Compliance With Law**



This Agreement is subject to all applicable provisions of federal, state, and local laws, including the Grass Valley Municipal Code, except for the application of specific provisions of the City Charter which are waived as set forth herein.

#### **14. General Provisions**

- A. This Agreement constitutes the entire agreement between the parties. City and Deputy City Manager I hereby acknowledge that they have neither made nor accepted any other promise or obligation with respect to the subject matter of this Agreement.
- B. If any provision or any portion of this Agreement is held to be unconstitutional, invalid or unenforceable, the remainder of the Agreement shall be deemed severable and shall not be affected and shall remain in full force and effect.
- C. Any notice to City pursuant to this Agreement shall be given in writing, either by personal service or by registered or certified mail, postage prepaid, addressed as follows:

Tim Kiser, City Manager  
 City of Grass Valley  
 125 East Main Street  
 Grass Valley, CA 95945

Any notice to Deputy City Manager I shall be given in a like manner, and, if mailed, shall be addressed to Deputy City Manager I at the address shown in City's personnel records. For the purpose of determining compliance with any time limit stated in this Agreement, a notice shall be deemed to have duly given (a) on the date of delivery, if served personally, or (b) on the second (2<sup>nd</sup>) calendar day after mailing, if mailed.

- D. If an action at law or in equity is necessary to enforce or interpret this Agreement, the prevailing party in that action shall be entitled to reasonable and actual attorneys' fees and costs with respect to the prosecution or defense of the action.
- E. A waiver of any of the terms and conditions of this Agreement shall not be construed as a general waiver and either party shall be free to enforce any term or condition of this Agreement with or without notice to the other notwithstanding any prior waiver of that term or condition.

#### **15. Amendments**

This represents the entire agreement between the parties. Amendments to this agreement may be made at such times as approved by the City Manager and Deputy City Manager I and shall be in writing.

Dated: \_\_\_\_\_

\_\_\_\_\_  
Tim Kiser, City Manager

Dated: \_\_\_\_\_

\_\_\_\_\_  
XXXX XXX, Deputy City Manager I

Approved as to form:

Dated: \_\_\_\_\_

\_\_\_\_\_  
Michael G. Colantuono, City Attorney



# Appendix A - Compensation and Benefits

## Life Insurance and Long-Term Disability, EAP, Retiree Health Plan, other Benefits, and Special Provisions

### A. EMPLOYEE CONTRIBUTIONS

Employee contributions towards health benefits are on a pre-tax basis and subject to IRS rules.

### B. LIFE INSURANCE

The City shall provide term Life insurance benefits for the Employee, without cost to the Employee, of 1.5 times their annual salary up to two hundred thousand dollars (\$200,000) for the Employee, five thousand dollars (\$5,000) for the Employee's spouse and fifteen hundred dollars (\$1,500) for eligible dependent children without cost to the employee.

### C. SHORT TERM/LONG TERM DISABILITY INSURANCE

Short Term – There is no short-term disability coverage however employee may elect to pay into State Disability Insurance (SDI) at no cost to the City, or they may use any leave bank to cover short term disability exceeding 10 workdays and with a doctor's note.

Long Term - The City shall provide without cost to the Employee an income protection insurance program that shall insure an Employee's income to a maximum of sixty-six and two thirds percent (66 2/3%) of monthly earnings with a ceiling of six thousand dollars (\$6,000) in calculated base. Conditions of coverage shall be controlled by the master agreement with the insurance company.

### D. EMPLOYEE ASSISTANCE PROGRAM

The City has an established Employee Assistance Program. This program provides confidential counseling help for employees and their families. The Employee Assistance program provides for up to 3 visits.

### E. RETIREE HEALTH PLAN BENEFIT

Employees who become subject to this Plan on or before July 1, 2011, who retire from the City in good standing, who have at least five years of Grass Valley service, who elect to retain CalPERS medical coverage and who are of full retirement age shall be entitled to payment of up to \$500 towards the CalPERS premium for a single party until such time as the Employee is eligible to receive Medicare or is hired and has healthcare coverage available from the new employment.

# Appendix A - Compensation and Benefits

Employees who become subject to this Plan after July 1, 2011, who retire from the City in good standing, who have at least ten years of Grass Valley service, who elect to retain CalPERS medical coverage and who are of full retirement age shall be entitled to payment of up to \$250 towards the CalPERS premium for a single party until such time as the Employee is eligible to receive Medicare or is hired and has healthcare coverage available from the new employment.

If the Employee so desires, his/her spouse may be added at the additional cost difference of the Employee plus one and the Employee pays the difference. If the Employee retiree selects a health plan that costs less than the City's contribution, they will not be eligible to receive the cash difference. All premium contributions must be received one month in advance and it is the responsibility of the Employee retiree to ensure that the City receives payment. Failure to pay the retiree's contribution in a timely manner (i.e., within 30 days of due date) will result in the loss of the benefit.

Employees waiving health care coverage shall receive two hundred fifty dollars (\$250) per month less the cost of any elected dental or vision insurance per month until eligible for Medicare or is hired and has healthcare coverage available from the new employment. Employees waiving health care coverage must produce evidence of insurance through another source. Any payment due Employees for waiving medical insurance coverage shall be paid in a lump sum per month.

## Personal Leave

The purpose of Personal Leave is to provide Employees the ability to accrue time for vacation, sick leave and personal leave situations.

Employees shall accrue Personal Leave hours at a rate of no less than 256 hours and no more than 328 hours per year based on years of service as set forth below. One twenty-sixth (1/26) of such Personal Leave amount shall accrue each pay period.

No Employee may carry a balance of more than 520 hours of their Personal Leave. Employees who have accumulated 520 hours of Personal Leave will accrue no further Personal Leave until they have used Personal Leave in an amount sufficient to bring their accumulated Personal Leave balance below 520 hours. Employees may convert up to 160 hours of accrued Personal Leave to salary compensation once each year. Personal Leave conversion of a maximum of 160 hours to salary must be submitted by December 20th of each year. 100% of Personal Leave hours in excess of the maximum accrual amount may be converted to banked PERS service credit in accordance with CalPERS regulations.

Employees who become subject to this Plan after July 1, 2011, must convert all accumulated Vacation Leave, Sick Leave to "Personal Leave". Those hours of Sick Leave or Vacation Leave combined in excess of 520 hours will be placed in a Sick Leave and Vacation Leave bank account to be utilized by the Employee, or paid out upon separation from service as set forth herein, or converted to banked PERS service credit in accordance with CalPERS regulations. Upon separation



## Appendix A - Compensation and Benefits

from service, the City shall pay employee a one-time lump sum calculated on Fifty (50%) Percent of the employee's banked unused Sick Leave and one hundred (100%) percent of the employee's banked Vacation Leave. (For example, if an employee is compensated for 450 hours of sick leave at the 50% rate, the uncompensated 225 hours would go to PERS service credit as allowed by PERS.)

Employees will accrue Personal Leave time at the following rates:

1 to 2 years of city service = 256 hours  
 2 plus years to 5 years = 272 hours (10.46 hours biweekly)  
 5 plus years to 10 years = 296 hours (11.38 hours biweekly)  
 10 plus years to 20 years = 316 hours (12.15 hours biweekly)  
 20 plus years = 328 hours (12.62 hours biweekly)

After 2 plus years of city service, credit for prior public service may be included for purposes of calculating annual time subject to the City Manager approval. Prior public service shall be similar in nature to the duties being performed by the Employee for City to be eligible for this benefit.

### Certifications

The City shall pay the costs associated with obtaining and maintaining special certificates that are required by the State of California, the City of Grass Valley or any governmental agency to obtain and maintain as a condition of employment.

### Holidays

Employees are entitled to 12 paid holidays as listed below.  
 Recognized Holidays shall include:

New Year's Eve	New Year's Day
Presidents Day	Veterans Day
Martin Luther King Day	Thanksgiving Day
Memorial Day	The Day After Thanksgiving
July 4 <sup>th</sup>	Christmas Eve
Labor Day	Christmas Day

A paid holiday is equivalent to eight hours, for a total of 96 hours per year. Holiday hours are accrued outside of Personal Leave, must be used within the calendar year accrued. Unused holiday hours may not be carried over into any subsequent calendar year or "cashed out."

# Appendix A - Compensation and Benefits

## Special Provisions

### A. PUBLIC SAFETY ALLOWANCE

The Police Chief, Deputy Police Chief, and Fire Chief shall be provided a uniform and cleaning allowance. The amount of the benefit will be the same as established under Unit 6 for the Police Chief & Deputy Police Chief and under Unit 8 for the Fire Chief.

The Police Chief & Deputy Police Chief shall receive an annual stipend of \$1,000 for attending community events.

### B. VEHICLE ALLOWANCE

The Police Chief, Deputy Police Chief, Fire Chief and Public Works Director shall be provided a vehicle. Other Employees may be granted a car allowance subject to the City Manager's approval and in accordance with City adopted policies. Employees will have access to City "Pool" vehicles for conducting City business or will be eligible for mileage reimbursement for personal vehicle use when conducting City business in accordance with City adopted policies.

### C. TRAINING/MEMBERSHIPS

Employees shall be entitled to training, travel, workshops, and professional memberships, for the purpose of personal growth and enrichment subject to the annual amounts budgeted each year in the respective department for this purpose. City agrees to reimburse Employee for reasonable expenses for training, travel, workshops and professional memberships which have been authorized by the City Budget and approved in advance by the City Manager. Employee must submit expense receipts, statements or personal affidavits, and audit thereof in like manner as other demands against the City.

### D. PUBLIC EMPLOYEES RETIREMENT SYSTEM

All Employees will be members of the California Public Employees Retirement System as provided by the terms of the contracts between the City of Grass Valley and the California Public Employees Retirement System.



# Appendix A - Compensation and Benefits

## Salary Schedule

<i>Position</i>	<i>Annual Salary</i>		
	<i>Min</i>	<i>Mid</i>	<i>Max</i>
Police Chief	\$ 159,478.26	\$ 189,779.13	\$ 220,080.00
Administrative Services Director	\$ 139,107.94	\$ 166,077.84	\$ 193,047.75
Fire Chief	\$ 152,149.54	\$ 181,115.46	\$ 210,081.38
Community Development Director	\$ 130,413.71	\$ 156,052.85	\$ 181,692.00
City Engineer	\$ 130,413.71	\$ 156,052.85	\$ 181,692.00
Utilities Director	\$ 130,413.71	\$ 156,052.85	\$ 181,692.00
Public Works Director of Operations	\$ 130,413.71	\$ 156,052.85	\$ 181,692.00
City Planner	\$ 108,665.00	\$ 123,677.25	\$ 138,689.50
Deputy Police Chief	\$ 143,530.43	\$ 170,801.21	\$ 201,476.00
Deputy Administrative Services Director	\$ 132,628.24	\$ 153,185.62	\$ 173,743.00
<b>Deputy City Manager I</b>	<b>\$ 108,665.00</b>	<b>\$ 123,677.25</b>	<b>\$ 138,689.50</b>
<b>Deputy City Manager II</b>	<b>\$ 139,107.94</b>	<b>\$ 166,077.84</b>	<b>\$ 193,047.75</b>
City Clerk	\$ 86,941.63	\$ 100,249.57	\$ 113,557.50
Deputy City Clerk/Management Services Analyst	\$ 78,248.07	\$ 90,224.91	\$ 102,201.75