

Alpine County Wildfire Risk Mitigation Plan

Public Workshop #2

April 2020



Questions / Comments

- For any immediate questions or concerns related to this Zoom workshop or online access, please contact:

Zach Wood (530) 721-5003

zwood@alpinecountyca.gov

- Questions or comments on the Wildfire Risk Mitigation Plan may also be emailed to Zach Wood throughout the presentation. A question answer session will occur at the end of the meeting. Verbal and typed questions can be submitted at that time through this meeting platform.

Presentation Overview

01 Project Background

02 Identifying Candidate Projects

03 Priority Projects

04 Next Steps

05 Question/Answer Session



01 Project Background

Purpose and Need

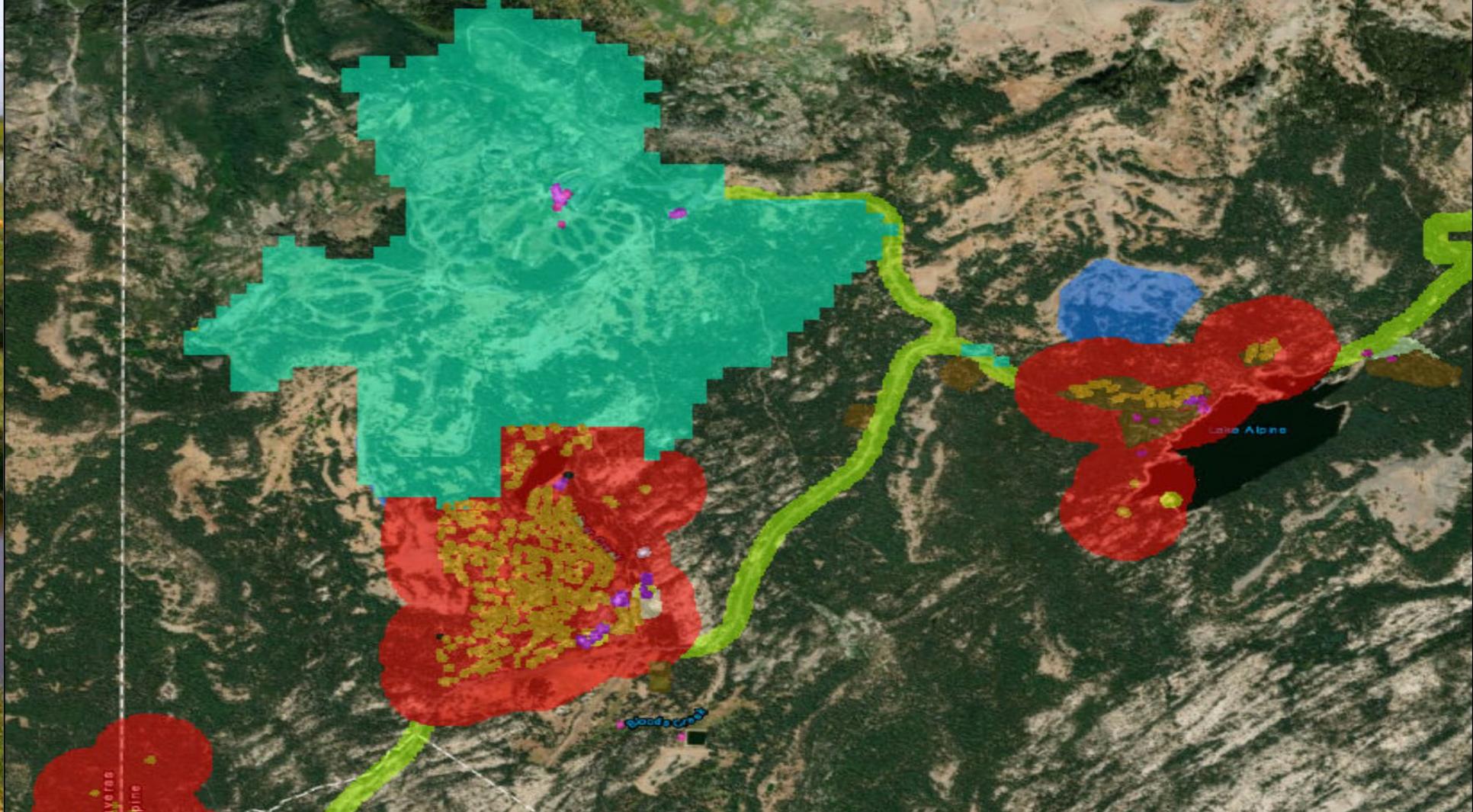
- Approximately 67% of residential units in Alpine County are located in high or very high wildfire hazard severity zones
- Fire trends across the West show longer fire season with larger fires
- Wildfire Risk Mitigation Plan (WRMP) will build off existing fire hardening efforts in the county and expedite the process of implementing projects to protect communities

Plan Goals & Objectives

- **Goal:** Reduce wildfire risks and protect important resources throughout Alpine County.
- **Objectives:**
 - Identify important resources and assets
 - Identify the high fire hazard areas
 - Define and prioritize projects

Workshop 1

- February 2020
- Described purpose of WRMP
- Presented areas of risk
- Defined project treatment methods
- Introduced project team and steering committee
- Materials available on website



02 Identifying Candidate Projects

Identify Candidate Projects

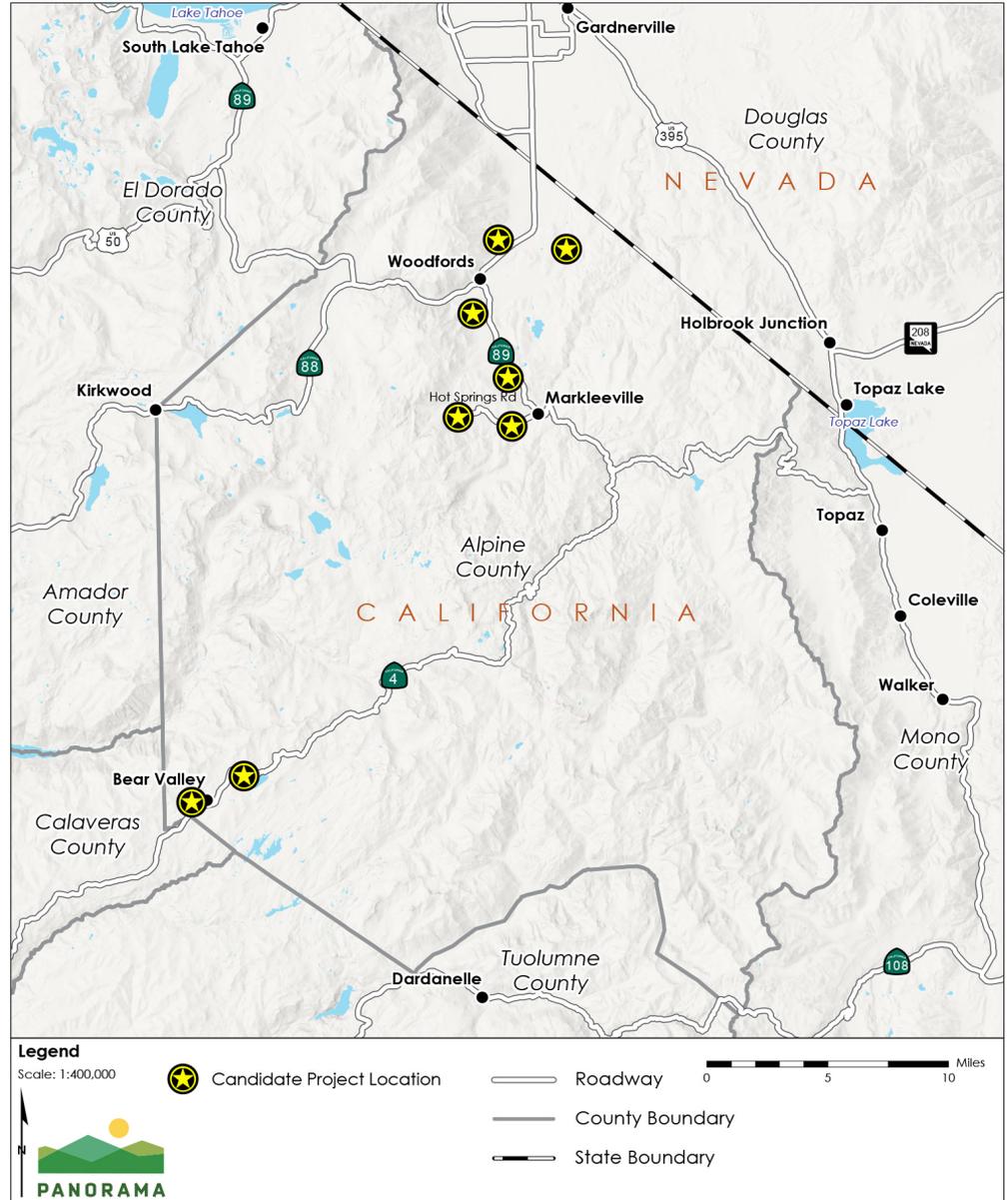
- **Data.** Models show where high fire hazard areas occur and which resources and assets are at risk.
- **Local Knowledge.** County members and steering committee identified recently completed projects in the County, as well as areas of particular concern based on their knowledge of fire response and evacuation procedures.

Identify Candidate Projects

- Identified a roster of projects across Alpine County
- Projects identified in:
 - Bear Valley
 - Grover Hot Springs/Shay Creek
 - Hung -A-Lel-Ti
 - Lake Alpine
 - Manzanita
 - Markleevillage
 - Mesa Vista
 - Turtle Rock Park

Candidate Projects

Data Analysis



Alpine County Fire Hazards Mitigation Plan

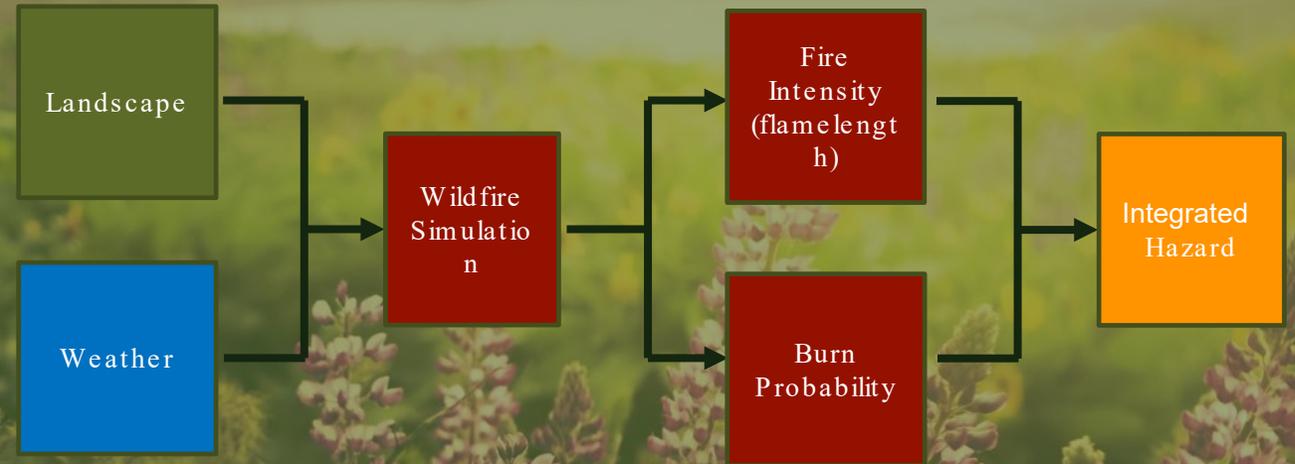
SYLLABUS

- Modeling & Risk Assessment Recap
- Project Development



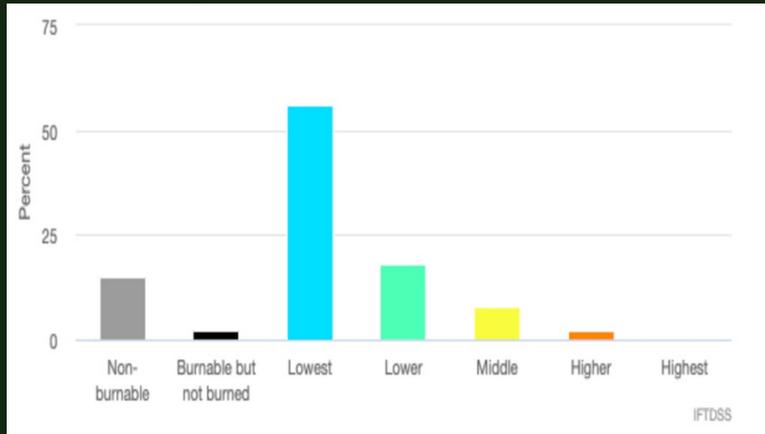
Integrated Hazard Modeling

- Integrated Hazard

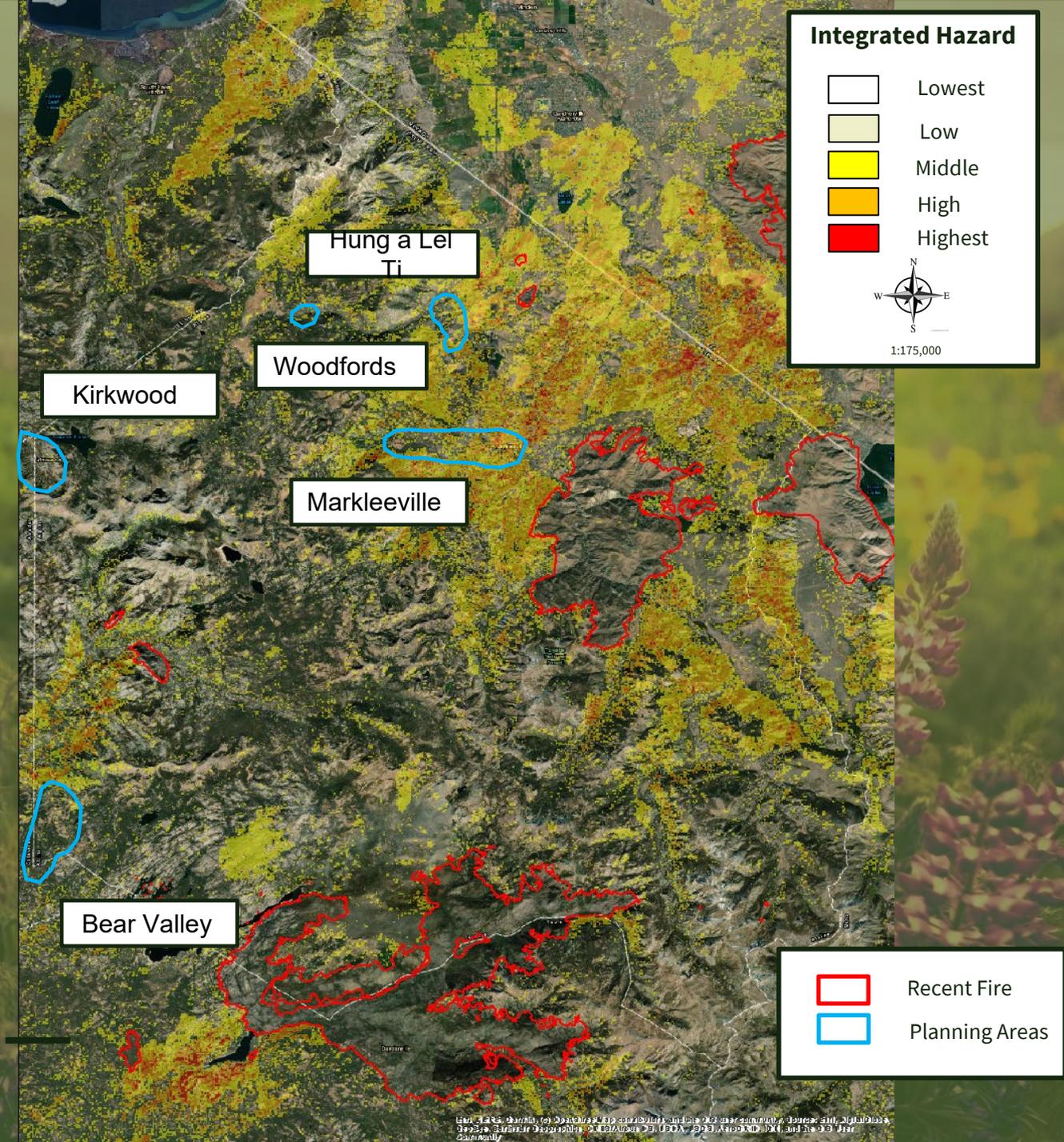


Integrated Hazard Modeling

- Integrated Hazard
 - Creates a single characteristic
 - Easily mapped
 - Scalable
 - Straight forward Information

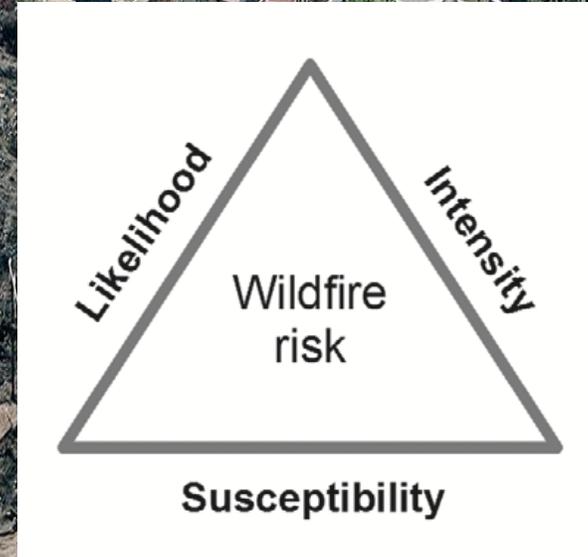


- Middle, Higher, and Highest ~ 50,000 acres
- 40 – 60 million \$



Wildfire Risk Assessment

- Likelihood = burn probability
(Integrated Hazard)
- Intensity = flame length
(Integrated Hazard)
- Susceptibility = High Valued Resource and Asset Analysis



High Valued Resources and Assets (HVRA)

In coordination with the steering committee

- Account and map

Residential Structures

Education Facilities (Daycare/Schools/Colleges)

Recreational Facilities - campgrounds, rv parks (non ski area)

Business and Public Structures

Places of Worship

Non Habitable/Unknown Structures (barns/sheds)

Health and Elder Care Facilities

High Hazard Buildings

Airport/Helibase

Communication infrastructure (cell towers, microwave towers, etc)

Potable water storage (e.g., tanks); snow making infrastructure

Major Evacuation corridors (ingress and egress routes)

Minor Evacuation corridors (ingress and egress routes)

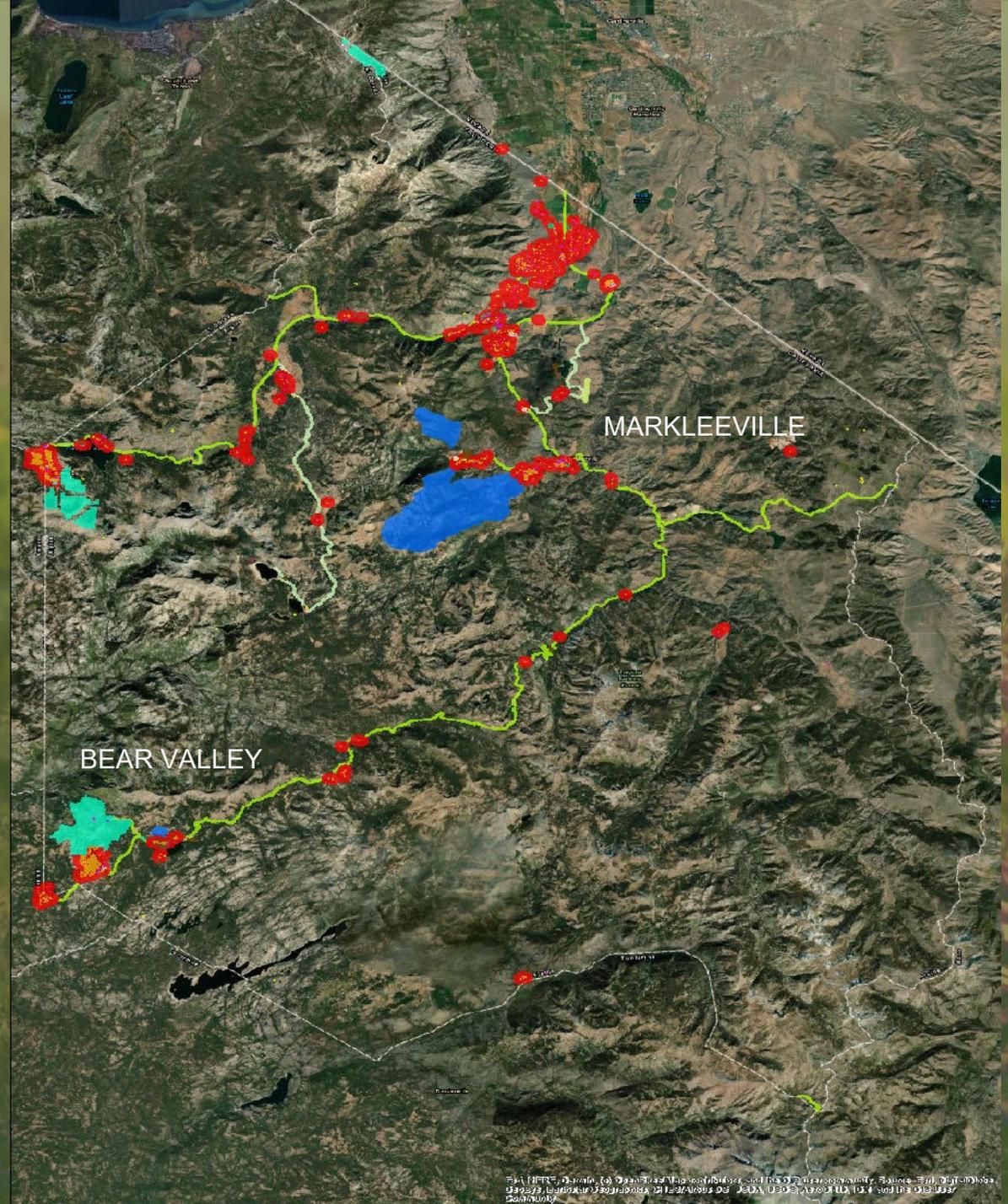
Community Evacuation/Refuge/Safe Zones/Areas

Cemeteries or significant resource buildings, areas

Watersheds of special significance

Wildland Urban Interface Defense

Ski Area Terrain



High Valued Resources and Assets (HVRA)

In coordination with the steering committee

- Account and map
- Relative Importance survey
 - 8 Responses
 - Water district
 - USFS
 - Alpine County staff
 - CALFIRE
 - Fire Safe Council
 - Resident

HVRA	Uniqueness/Rarity/Endemism	Replaceability	Safety/Critical Infrastructure	Total Score
Residential Structures	2.13	3.63	3.25	9.01
Education Facilities (Daycare/Schools/Colleges)	2.63	4.38	3.5	10.51
Recreational Facilities - campgrounds, rv parks (non ski area)	3.25	3.63	2.38	9.26
Business and Public Structures	2.63	4	4	10.63
Places of Worship	2.13	3.67	2.71	8.51
Non Habitable/Unknown Structures (barns/sheds)	1.71	2.57	1.71	5.99
Health and Elder Care Facilities	2.17	4	4.14	10.31
High Hazard Buildings	3	3.83	3.33	10.16
Airport/Helibase	2.57	3	4	9.57
communication infrastructure (cell towers, microwave towers, etc)	3.13	3.88	4.5	11.51
Potable water storage (e.g., tanks); snow making infrastructure	3.13	4.13	4.5	11.76
Major Evacuation corridors (ingress and egress routes)	3.13	4	4.25	11.38
Minor Evacuation corridors (ingress and egress routes)	2.88	3.13	3.88	9.89
Community Evacuation/Refuge/Safe Zones/Areas	3.25	2.86	4.13	10.24
Cemeteries or significant resource buildings, areas	3.25	4.5	n/a	7.75
Watersheds of special significance	3.25	4	n/a	7.25
Wildland Urban Interface Defense	5.0	5.0	n/a	10.00
Ski Area Terrain	3.14	4	n/a	7.14

High Valued Resources and Assets (HVRA)

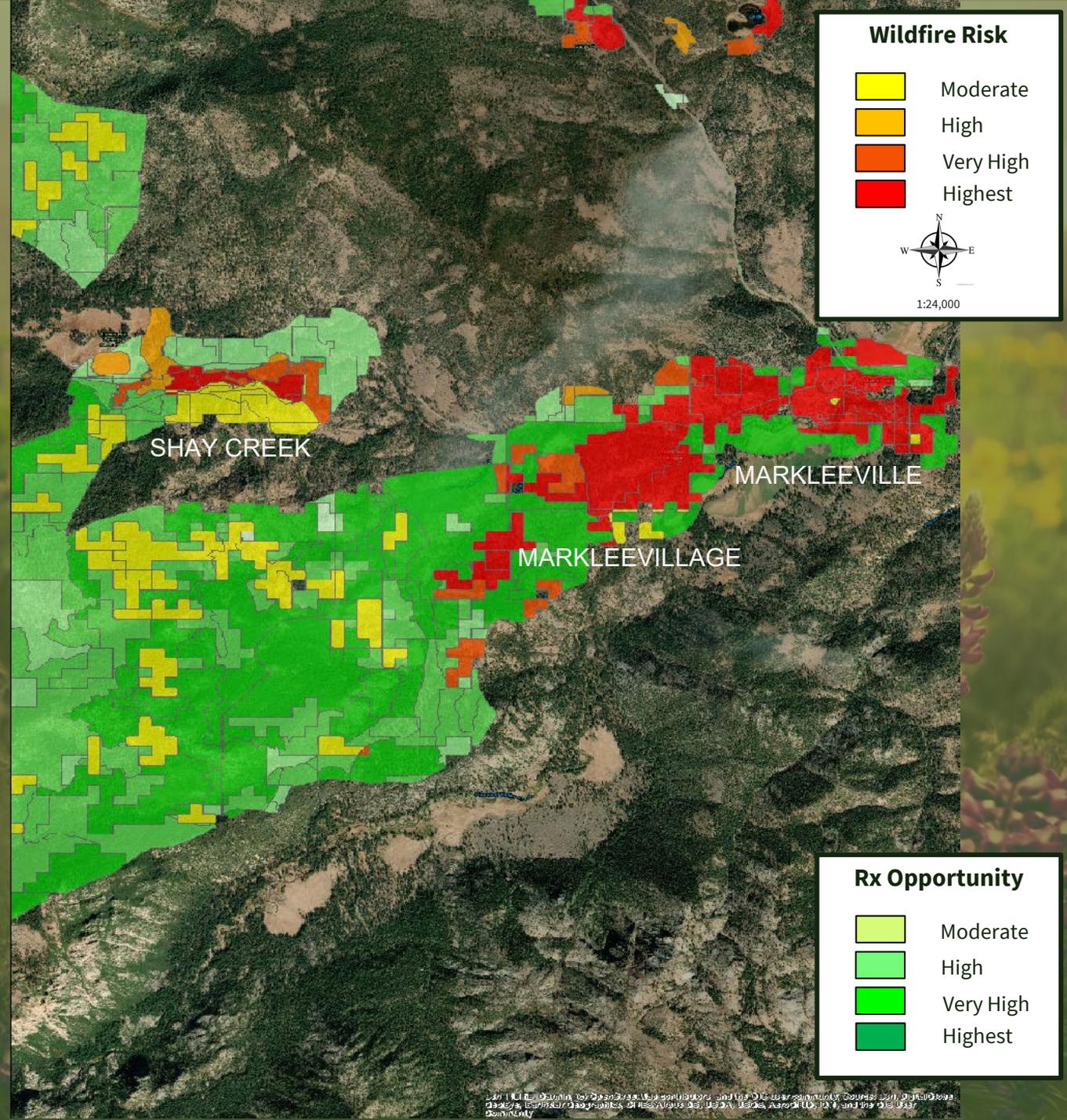
In coordination with the steering committee

- Account and map
- Relative Importance survey
- Response Function survey
 - 6 Responses
 - USFS
 - Alpine County staff
 - CALFIRE
 - Resident

HVRA	Flame Length 0-2ft	Flame Length 2-4ft	Flame Length 4-6ft	Flame Length 6-8ft	Flame Length 8-12ft	Flame Length 12+ft
Residential Structures	neg 1.17	neg 2.17	neg 2.67	neg 3.00	neg 3.00	neg 3.00
Education Facilities (Daycare/Schools/Colleges)	neg 1.17	neg 2.33	neg 2.67	neg 3.00	neg 3.00	neg 3.00
Recreational Facilities - campgrounds, rv parks (non ski area)	neg 0.50	neg 1.50	neg 2.33	neg 2.83	neg 2.83	neg 2.83
Business and Public Structures	neg 1.17	neg 2.17	neg 2.50	neg 3.00	neg 3.00	neg 3.00
Places of Worship	neg 1.17	neg 2.17	neg 2.67	neg 3.00	neg 3.00	neg 3.00
Non Habitable/Unknown Structures (barns/sheds)	neg 0.67	neg 1.83	neg 2.50	neg 2.83	neg 2.83	neg 3.00
Health and Elder Care Facilities	neg 1.33	neg 2.67	neg 2.67	neg 3.00	neg 3.00	neg 3.00
High Hazard Buildings	neg 1.80	neg 2.40	neg 2.80	neg 3.00	neg 3.00	neg 3.00
Airport/Helibase	0.00	neg 0.67	neg 2.00	neg 2.83	neg 3.00	neg 3.00
communication infrastructure (cell towers, microwave towers, etc)	neg 0.83	neg 1.83	neg 2.50	neg 2.83	neg 3.00	neg 3.00
Potable water storage (e.g., tanks); snow making infrastructure	neg 0.17	neg 1.33	neg 2.33	neg 2.83	neg 3.00	neg 3.00
Major Evacuation corridors (ingress and egress routes)	pos 0.40	0.00	neg 1.40	neg 1.80	neg 2.40	neg 2.80
Minor Evacuation corridors (ingress and egress routes)	pos 0.50	neg 0.17	neg 1.33	neg 1.83	neg 2.50	neg 2.83
Community Evacuation/Refuge/Safe Zones/Areas	neg 0.17	neg 0.83	neg 1.83	neg 2.17	neg 2.50	neg 2.50
Cemeteries or significant resource buildings, areas	neg 0.50	neg 1.33	neg 2.17	neg 2.67	neg 3.00	neg 3.00
Watersheds of special significance	pos 2.50	pos 1.67	pos 0.67	neg 1.17	neg 2.17	neg 2.83
Wildland Urban Interface Defense	pos 2.00	pos 1.33	neg 0.17	neg 1.00	neg 2.17	neg 2.67
Ski Area Terrain	pos 1.50	pos 0.83	neg 0.50	neg 1.50	neg 2.33	neg 2.83

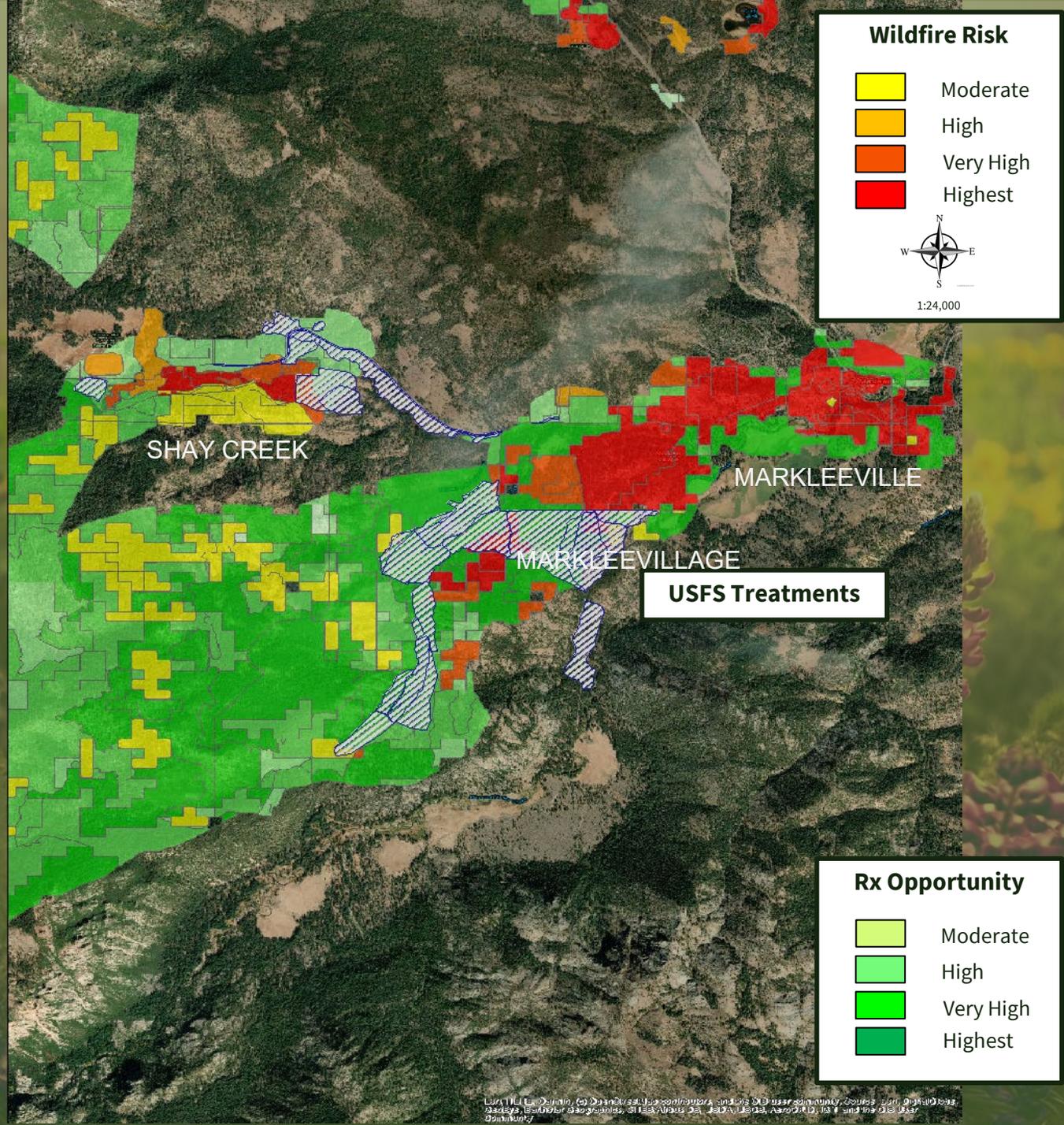
Project Development

- Validate
 - Field Knowledge
 - Remote Sensing



Project Development

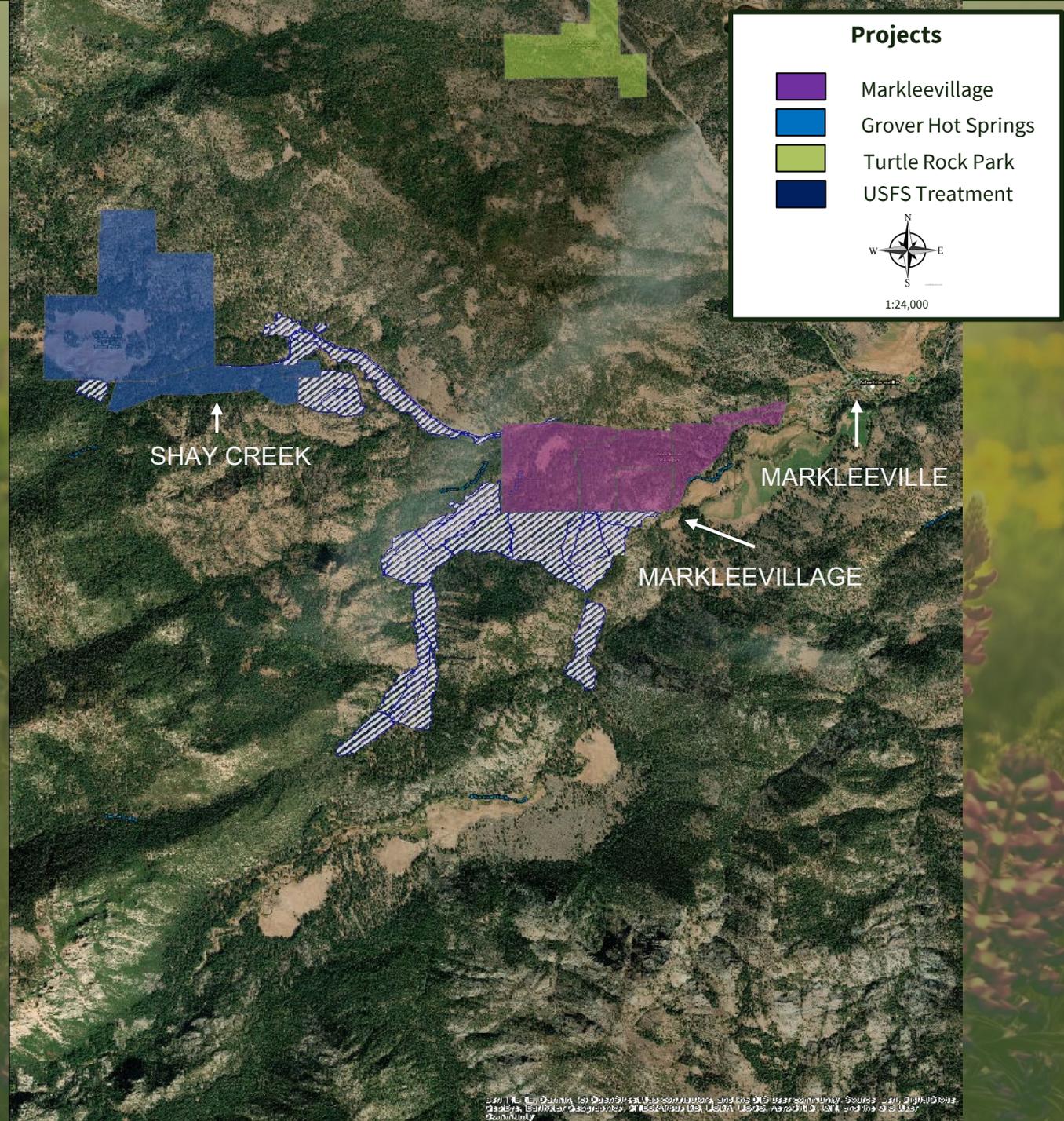
- Validate
 - Field Knowledge
 - Remote Sensing
- Update
 - Recently completed work
 - Planned work



Leaflet | Data: OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar (Imagery), Swire, GeoEye, AeroGRID, IGN, and the GIS User Community

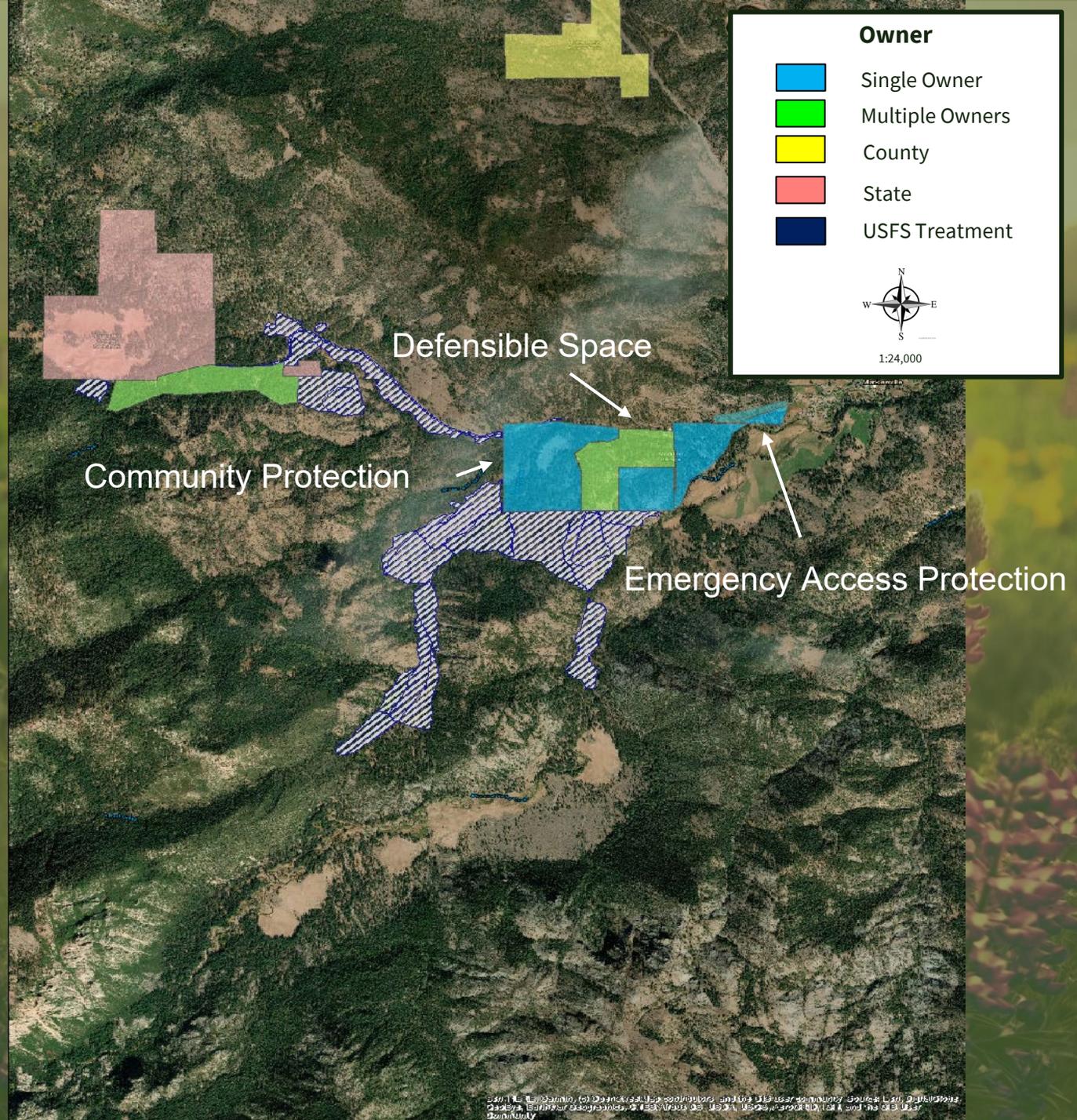
Project Development

- Validate
 - Field Knowledge
 - Remote Sensing
- Update
 - Recently completed work
 - Planned work
- Strategize
 - Synthesize objectives
 - Achievable goals



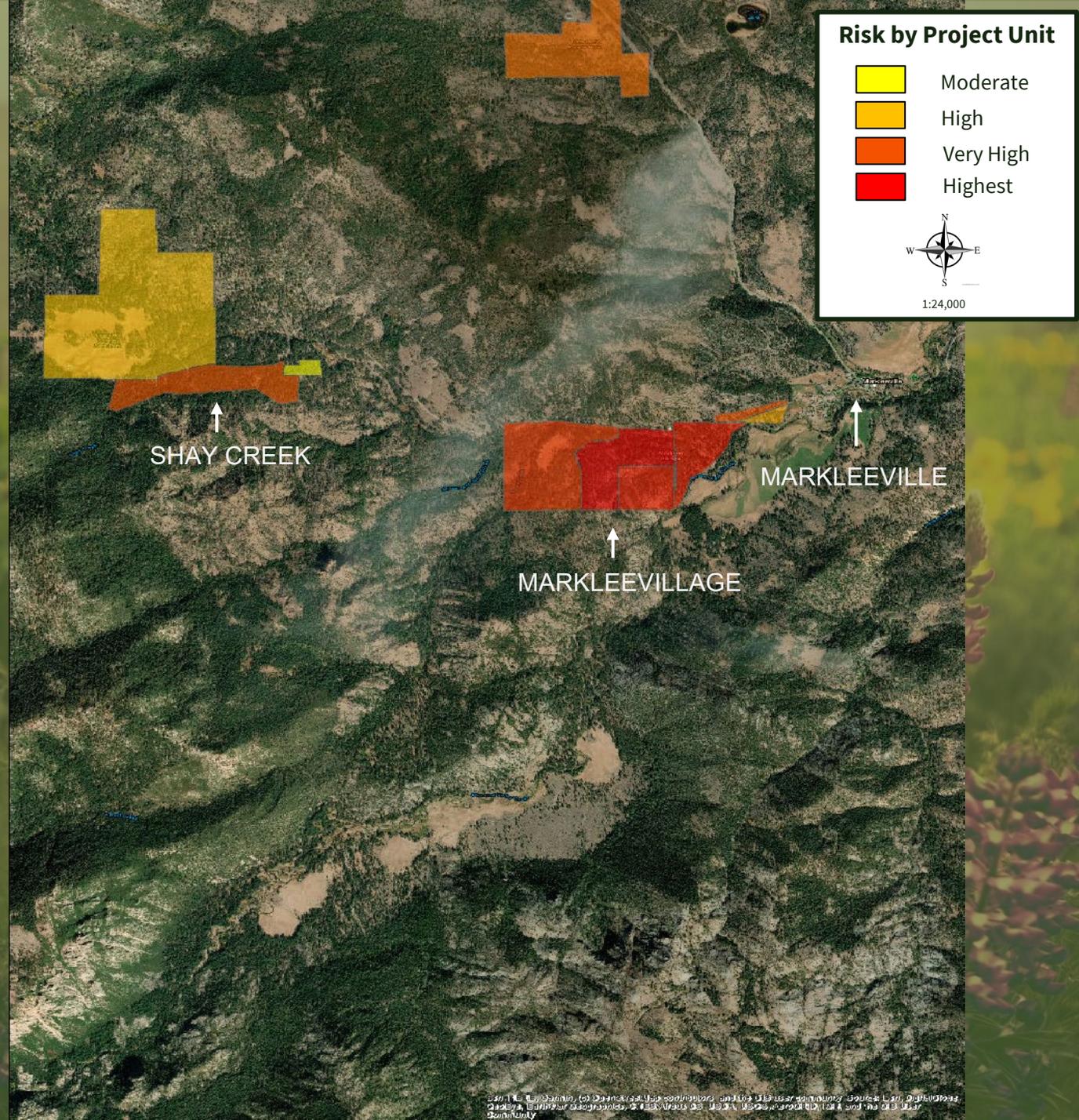
Project Development

- Validate
 - Field Knowledge
 - Remote Sensing
- Update
 - Recently completed work
 - Planned work
- Strategize
 - Synthesize objectives
 - Achievable goals
- Delineate
 - By owner
 - By goal



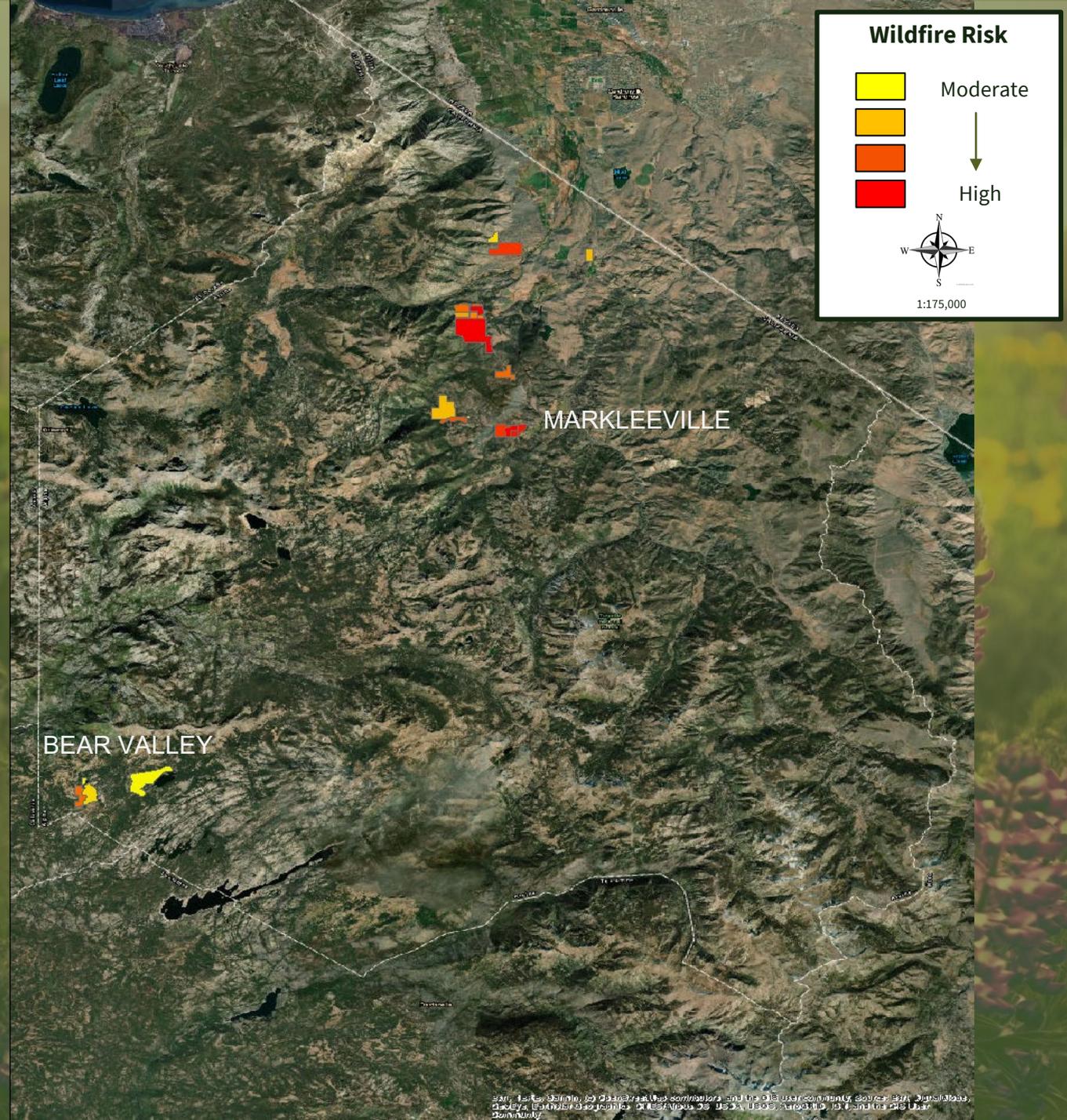
Project Development

- Validate
 - Field Knowledge
 - Remote Sensing
- Update
 - Recently completed work
 - Planned work
- Strategize
 - Synthesize objectives
 - Achievable goals
- Delineate
 - By owner
 - By goal
- Prioritize
 - By risk



Project Development

- Validate
 - Field Knowledge
 - Remote Sensing
- Update
 - Recently completed work
 - Planned work
- Strategize
 - Synthesize objectives
 - Achievable goals
- Delineate
 - By owner
 - By goal
- Prioritize
 - By risk
 - County specific criteria



Alpine County Fire Hazards Mitigation Plan



03 Priority Projects

Identify Priority Projects

- Steering committee prioritized projects considering:
 - Wildfire risk to HVRAs
 - Consistency with CWPP
 - Project size
 - Probability of success
 - Land ownership
 - Environmental approvals
- Identified three priority projects

Priority Projects

Markleevillage

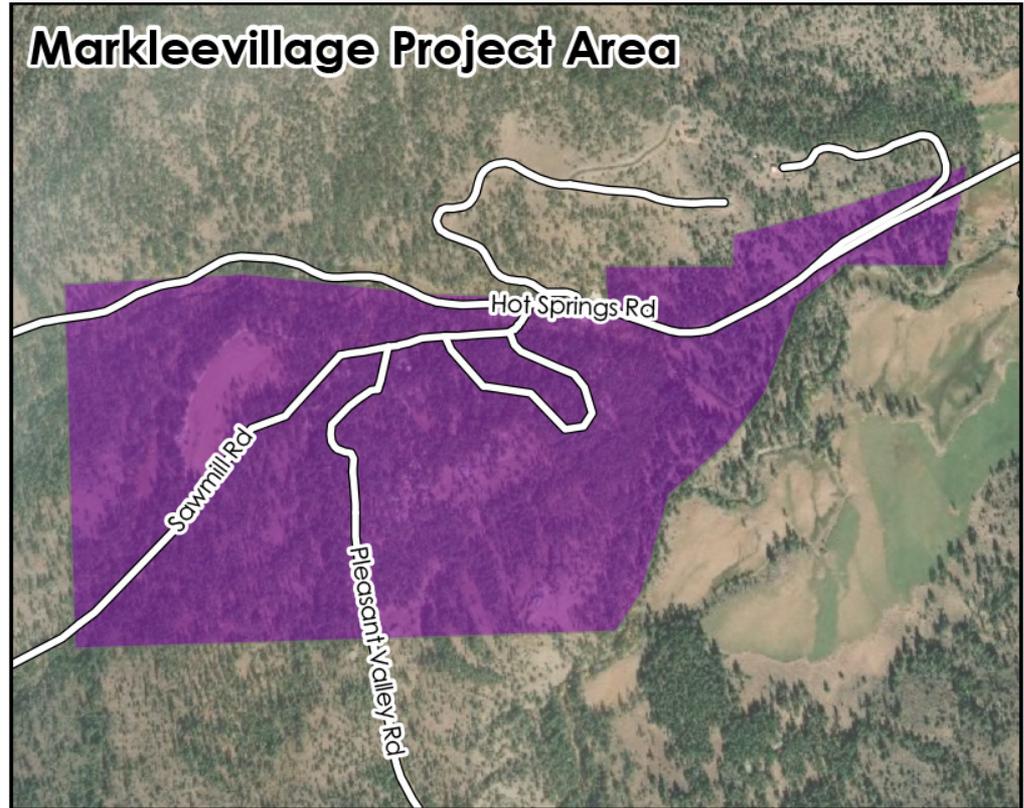
Size: 300 acres

Goal: WUI protection
Evacuation corridor
projection

Land Ownership: Private

CWPP: Markleeville Priority
1, 3, and 4

**Highest risk in Alpine
County**



Priority Projects

Manzanita

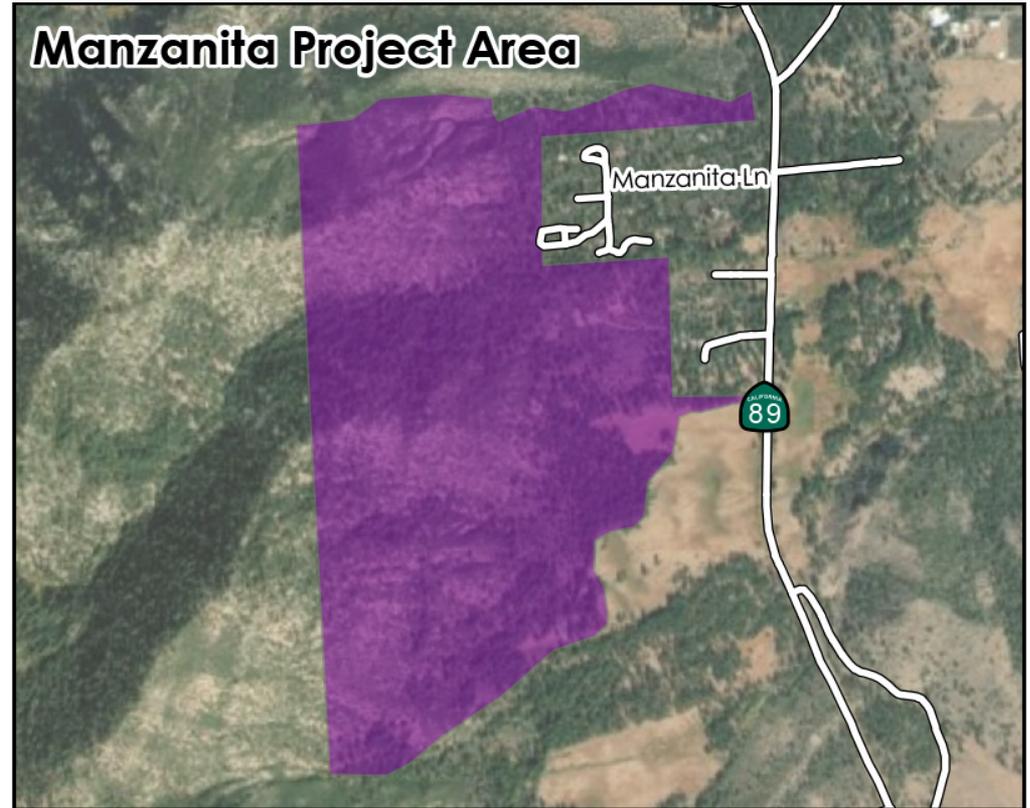
Size: 430 acres

Goal: WUI protection

Land Ownership: Private

CWPP: Woodfords\Upper
Manzanita Priority 1

**Protection of Manzanita
Community**



Priority Projects

Bear Valley

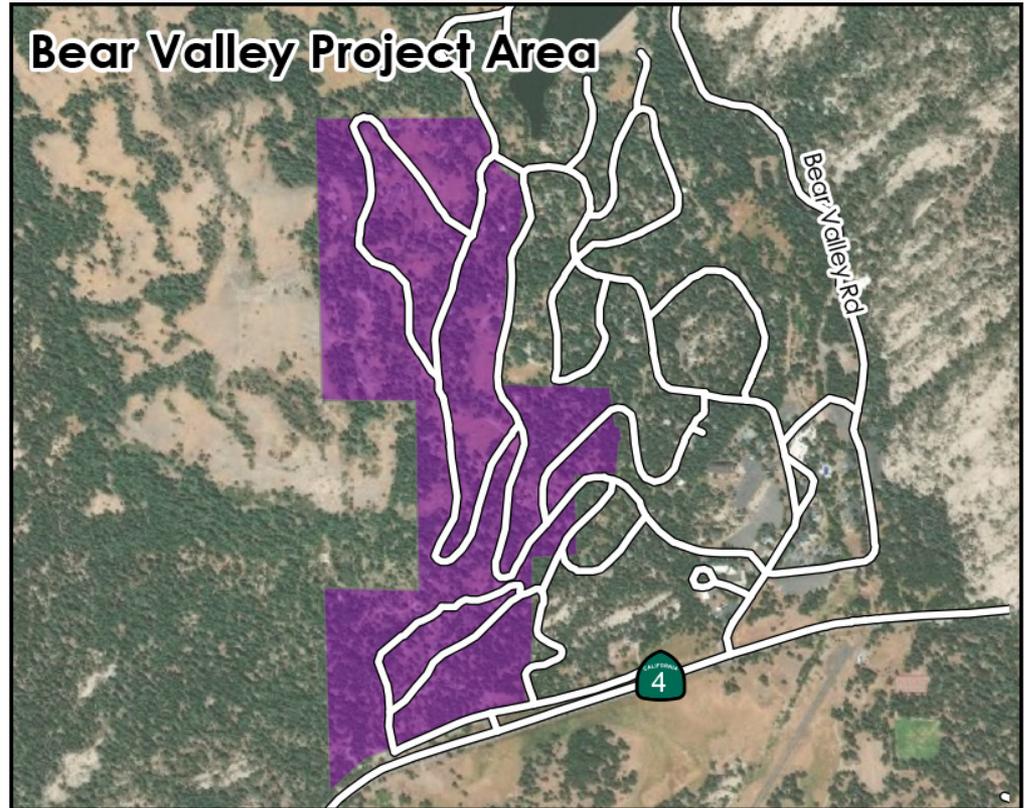
Size: 130 acres

Goal: WUI protection
Defensible space

Land ownership: Private

CWPP: Bear Valley Priority
1, 2, 3

**Community protection
building on USFS, County,
and resident work**





04 Next Steps

Project Definition

For each project area:

- Define fuel treatment methods and locations
 - Mechanical
 - Hand tools
 - Prescribed burn/Pile burn
- Landowners will be consulted regarding treatment methods



Environmental Review

- Tribe outreach and consultation
- Biological and cultural resource surveys
- Impact Analysis
- Publish draft environmental document

Schedule

Step	Timing
Second Public Workshop	April 2020
Finalize WRMP	Spring 2020
Conduct Environmental Studies and Review	Spring – Fall 2020
Draft Initial Study/Mitigated Negative Declaration	Winter 2021
Third Public Workshop	Winter 2021
Final Initial Study/Mitigated Negative Declaration	Spring 2021

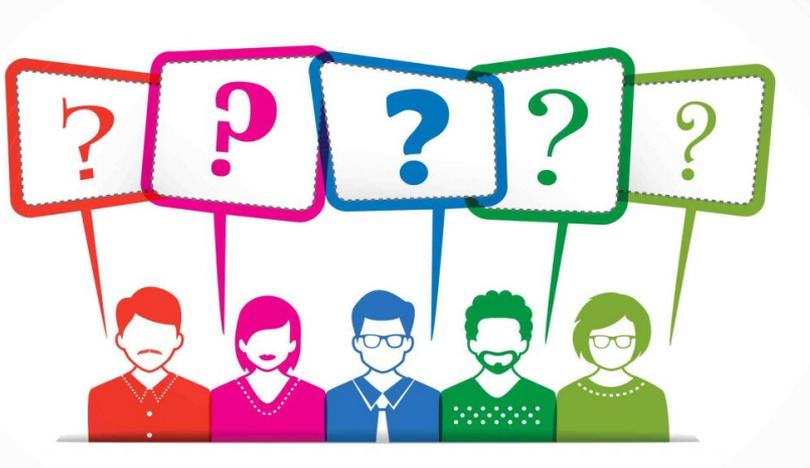
Project website: <http://www.alpinecountyca.gov/index.aspx?NID=504>

Direct email questions to Zach Wood, Alpine County Planner: zwood@alpinecountyca.gov



05 Question & Answer

Questions?



Project website:

<http://www.alpinecountyca.gov/index.aspx?NID=504>

Direct questions to Zach Wood, Alpine
County Planner:

(530) 721-5003

zwood@alpinecountyca.gov

Three methods for asking a question:

1. Type your question into the chat box.
2. Type your name into the chat box and we will call on you.
3. If calling in by phone, please type the last four digits of your phone number into the chat box and the host will unmute your audio to allow you to ask a question.

Additional questions or comments can be provided to Zach Wood (contact to left).