



Wildfire Mitigation Plan

Grassy Mountain Mine

Calico Resources Inc.

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Executive Summary

Calico Resources USA Corp. (Calico), a wholly owned subsidiary of Paramount Gold Nevada Corp. (Paramount), is the proponent on record for permitting and operating the Grassy Mountain Mine (Project). The Project is located near the western edge of the Snake River Plain in eastern Oregon.

The Project boundary area is subject to federal and state permitting processes and is comprised of patented and unpatented lode and mill site claims, as well as a 25-mile access road. The U.S. Bureau of Land Management (BLM) Vale District Office administers the access road and surface management. The BLM is the primary managing surface agency within and adjacent to the Project boundary, but other federal, state, and local land use authorizations and permits conditions may apply.

The purpose of the Wildfire Mitigation Plan (WMP) is to identify actions that Project environmental staff can take to mitigate the risk of wildfire to operations, use and occupancy, and the environment within the Project area. This includes access roads, pipelines, extractive equipment, water management systems, processing facilities and any other property within the operating area as identified in the Plan of Operations and the Consolidated Permit Application.

The WMP does not require Calico to respond to fires within or outside the Project area, but it prescribes how Calico can mitigate wildland fire risk within the Project area. This includes supporting BLM efforts to both reduce fire shed risk and their response to active wildland fires on public lands. Some of Calico's actions to mitigate wildland fire risk go hand in hand with efforts to reduce infestations in the *Noxious Weed Monitoring and Control Plan* (Calico, 2024). Note that the terms fuels, vegetation, and weeds are used interchangeably throughout this WMP.

This WMP meets performance standard 43 Code of Federal Regulations (CFR) 3809.420(10), which states, "*The operation shall comply with all applicable Federal and state fire laws and regulations and shall take all reasonable measures to prevent and suppress fires in the area of operations*" and Section 512 of Federal Land Policy and Management Act.



Table of Contents

Executive Summary	ii
Acronyms and Abbreviations	iv
1.0 Climate and Fire Regime	1
1.1 Climate	1
1.2 Fire Regime.....	1
2.0 Wildland Fire Risk Reduction	2
2.1 Fuels Management	2
2.1.1 General	2
2.1.2 Roads.....	2
2.1.3 Mine Facilities	3
2.1.4 Utility Lines.....	3
2.1.5 Wildlife.....	4
3.0 Wildfire Standard Operational Procedures.....	4
3.1 Mobile Equipment	4
3.1.1 Off-Highway Vehicles.....	4
3.1.2 Standard Vehicles and Trailers	4
3.1.3 Heavy Equipment.....	5
3.2 Mine Staff and Signage	5
4.0 References	1

Tables

Table 1: Fuel Vegetation Type	1
Table 2: Vegetation Condition Type	1
Table 3: Fuels Treatment Area and Treatment	3

Attachments

Attachment A: Mitigation Figures



Acronyms and Abbreviations

°F	degrees Fahrenheit
amsl	above mean sea level
BLM	United States Bureau of Land Management
ft	feet
GSG	Greater Sage Grouse
ROW	Right of Way
TWRSF	Tailing Waste Rock Storage Facility
VCC	Vegetation Condition Class
WMP	Wildfire Mitigation Plan
Paramount	Paramount Gold Nevada Corp.
Project	Grassy Mountain Mine



1.0 Climate and Fire Regime

1.1 Climate

The Project is located in the plateau region of eastern Oregon and the climate can be described as semi-arid, continental interior type, with average annual precipitation of about 10 inches, roughly half of which falls as snow between the months of November and March. Local weather data indicate a mean annual temperature of 52 degrees Fahrenheit (°F) with daily temperatures ranging from an extreme low of -20°F to extreme highs of 100°F or higher (Adrian Brown, 1992). Figure 1 shows the general site location and is provided in Attachment A (Landfire, 2022).

The terrain is primarily open steppe with mesa, broad valleys, and gently rolling hills to steeper uplands. The elevation can range from 3,300 to 4,300 feet above mean sea level (ft amsl). The vegetation consists of sagebrush, weeds, and desert grasses tolerant of semi-arid conditions (SPF, 2021). The general surrounding landscape has been impacted by grazing, fire, and range seeding programs (EM Strategies Inc., 2018).

1.2 Fire Regime

Table 1 shows the different fuel types that are found in the Project area. The fuel heights range from 0.7 to 3.5 ft. Although all six fuel types are found within the Project area, Intermountain Basins Big Sagebrush Steppe is the primary fuel type. Figure 2 shows the spatial extent of these fuel types in and around the Project boundary and is provided in Attachment A (Landfire, 2022).

Table 1: Fuel Vegetation Type

Land Fire 2022 Existing Fuel Type	
1	Great Basin & Intermountain Introduced Annual and Biennial Forbland
2	Intermountain Basins Big Sagebrush Steppe
3	Columbia Plateau Steppe and Grassland
4	Columbia Basin Foothill and Canyon Dry Grassland
5	Great Basin & Intermountain introduced Annual Grassland
6	Great Basin & Intermountain Ruderal Shrubland

In Table 2, the Vegetation Condition Class (VCC) compares current vegetation conditions against predicted reference vegetation conditions. This is presented as a percentage of departure from reference conditions. The Project site is mostly II.A, although II.B and III.A are also present and represent a significant smaller scale. Figure 3 shows the spatial extent of these vegetation types in and around the Project boundary and is provided in Attachment A (Landfire, 2022).

Table 2: Vegetation Condition Type

Vegetation Condition	Description
II.A	Moderate to Low, Vegetation Departure 34% – 50%
II.B	Moderate to High, Vegetation Departure 51% – 66%
III.A	High, Vegetation 67% – 83%



2.0 Wildland Fire Risk Reduction

2.1 Fuels Management

Calico is committed to ensuring that the Project collaborates with BLM and other agencies to implement best fuel management practices, including but not limited to, supporting fuel inventory surveys, noxious weed treatments, and prescribed burn activity within and around the Project area. Calico's approach to mitigate wildland fire risk within the Project area will be to reduce the likelihood of wildland fire by having an adaptive management style and proactive fuels monitoring and reductions strategy. The *Noxious Weed Monitoring and Control Plan* (Calico, 2024) includes specific actions to taken to reduce the spread of noxious vegetation.

2.1.1 General

BLM is required to inspect the Project four times annually in accordance with 43 CFR 3809.600(b) to ensure the Project is operating within the parameters of the Plan of Operations. As part of this inspection process, Project environmental staff will provide BLM with the locations of increased fuel encroachment and density annually within the Project area; specifically, berms, utility lines, tailing waste rock storage facilities (TWRSFs), process facilities, laydown yards, reclaimed areas, stormwater diversions, and growth media stockpiles. The access road will be inspected bi-annually. In all actions described in the WMP, the Project will ensure protection of the two BLM Sensitive and Oregon State Endangered plant species within the Permit Area – Mulford's milkvetch (*Astragalus mulfordiae*) and Cronquist's stickseed (*Hackelia cronquistii*) – by following the protocol described in Section 4.3.5 of the *Noxious Weed Monitoring and Control Plan* (Calico, 2024).

2.1.2 Roads

The Project will maintain the access road in a manner that reduces the likelihood of roadside fuels ignition. The road will be inspected bi-annually for seasonal fuels encroachment and to monitor the effectiveness of the annual fuels reductions. No vegetation will be allowed to grow from the road's center line through the length of the shoulder, which totals 12 ft. Due to the amount of traffic, little to no vegetation is anticipated to establish within that travel section of the road. The road's shoulders are anticipated to have seasonally present but non-establishing vegetation.

As needed, the shoulders will be treated with herbicide and mechanical methods to maintain the no-vegetation criteria. If vegetation becomes persistent after the first two years of construction activity, the Project will coordinate with BLM to apply a pre-emergent in autumn or spring of every year until vegetation persistence has subsided.

The ditches located on either side of the access road will be spot-treated annually with herbicide targeting noxious weed infestation so as to maintain native vegetation establishment and soil stability. The preventative barrier is 2 ft wide and located adjacent to the far side of the ditch boundary. It is managed to ensure the success of native vegetation while reducing the infestation of noxious weeds.

The barrier will be monitored bi-annually in coordination with noxious weed surveys and actions taken to reduce noxious weeds detailed in the treatment plans. The preventative barrier may need to extend greater than 2 ft to effectively reduce the spread of noxious weed encroachment. Treatment frequency and method is described in the the Project's *Noxious Weed Monitoring and Control Plan* (Calico, 2024).



Figure 4, provided in Attachment A, shows the approximate dimensions of roadside fuels reduction strategy. The Project will provide BLM with an annual report documenting measures taken to reduce wildfire risk within the Project area, as well as a proposed list of actions to be taken in the following year to increase the effectiveness of the WMP. Table 3 breaks down how fuels management will be approached on the road with respect to native and noxious weeds.

Table 3: Fuels Treatment Area and Treatment

Mitigation Area	Total Width (30 ft)	Vegetation Criteria	Treatment
Vehicle Travel Area	20 ft	None	Annual herbicide and mechanical
Shoulder	4 ft	None	Annual herbicide and mechanical
Ditch	2 ft	Native	Annual Herbicide
Preventive Barrier	4 ft	Native	Noxious Weed Treatment Schedule & Herbicide

2.1.3 Mine Facilities

The Project will ensure that no fuels are in direct contact with a facility to minimize ignition risk. Without unnecessarily damaging the immediate native vegetation surrounding the facilities and at the request of BLM, Project staff may expand the fuel break around certain facilities to reduce the risk of facility ignition from adjacent vegetation.

Under no circumstance will any vegetative fuels be allowed within secondary containment or within 25 ft of said facility for any gasoline and diesel hydrocarbons or any chemical storage facility located within the Project area.

Project environmental staff will inspect all Mine facilities monthly between bi-annually for fuel encroachment. If encroachment is present, the Project staff will remove via herbicide mechanical means, as described in the *Noxious Weed Monitoring and Control Plan* (Calico, 2024).

2.1.4 Utility Lines

The existing 25-mile utility line carrying electrical power to the Mine will be upgraded by Idaho Power. In addition, Idaho Power will be responsible maintaining any additional power lines on the opposing side of the road in compliance with other federal, state, and local right of way (ROW) regulations. Project staff will inspect the surface within the proximity of the utility lines annually to document fuels load and presence of noxious weeds that could exacerbate the likelihood of fire ignition and severity. If present, noxious weeds found under the utility lines will be treated as determined by the *Noxious Weed Monitoring and Control Plan* (Calico, 2024).

This WMP should not be interpreted to replace or diminish Idaho Power's vegetation and wildfire mitigation plan if applicable to the Project or any future agreement between Calico and Idaho Power regarding vegetation management in the utility corridor. If requested, the Project will provide Idaho Power a copy of all fuels reductions activity completed annually.



2.1.5 Wildlife

A natural fire regime plays an important role in creating suitable habitat for the greater sage grouse's (GSG) adult and nest survival (Tyrrell et al., 2023). As part of Calico's priority to environmental stewardship, the Project intends to collaborate with BLM to ensure a natural fire regime for GSG populations in the Project area. This priority is consistent with the protection of wildlife habitat areas described in Section 4.3.4 of the *Noxious Weed Monitoring and Control Plan* (Calico, 2024).

3.0 Wildfire Standard Operational Procedures

The Project will update its WMP annually, as needed, and submit to BLM for review. This resubmission will include a list of wildland fire outbreaks that occurred within the Project area and an assessment of the effectiveness of fuels reduction within the Project area. Project environmental staff will coordinate with BLM on implementing any updated mitigation measures. Figure 5 shows approximate locations of wildfire suppression difficulty relative to Project boundary. The majority of the Project is located in a greater than (>) 40 difficulty index (USDA, 2022). This figure is provided in Attachment A (Landfire, 2022).

3.1 Mobile Equipment

Mobile equipment is defined as any wheeled, tracked, or ancillary piece of equipment being used within or around fuels. Mobile equipment will be confined to existing roadways and not permitted to conduct cross-country travel, except for in cases of emergency or for approved safety and maintenance activities (e.g., fence maintenance or noxious weed control), to reduce the potential of new weed establishment and possibility of ignition from equipment. The wildfire risk reduction actions taken below can include, but not be limited to, welders, pumps, compressors, torches, and portable generators.

3.1.1 Off-Highway Vehicles

Under no circumstances will any Utility Task Vehicle or All-Terrain Vehicle be used on site that does not have spark arrestors installed. The Project's staff will ensure that all contractors and Mine off-highway vehicles will be kept clean from vegetative buildup in the chassis or engine compartments that pose an elevated risk of ignition. Off-highway vehicles will be required to carry a fire extinguisher, which can be used to quickly put out fire and are subject to additional seasonal off-highway travel requirements designated by BLM.

3.1.2 Standard Vehicles and Trailers

To reduce the persistence of invasive grasses and other noxious weeds that elevate fire severity, Project staff will ensure vehicles turning onto the Mine access road be cleaned and free of any flammable vegetation in and around the engine block and exhaust systems.

All Mine staff and contractors are required to inspect trailers daily prior to entering the site. As part of this inspection, all chains must be the appropriate length so as to not have a high likelihood of contacting the road and sparking. Trailers headed onto the site must also be inspected prior to arrival for any loose items that may dislodge and cause a spark. All Mine staff and contractor vehicles shall be equipped with a fire extinguisher capable of dousing an engine fire.



3.1.3 Heavy Equipment

During construction and operation, all heavy equipment will be prepared with fire extinguishers. Project staff will ensure that all equipment maintenance, specifically cooling systems, are conducted as required by the individual manufacturer.

3.2 Mine Staff and Signage

The Project will implement controls to ensure that all Project staff are trained in fire extinguishers every two years. Project staff and contractors are prohibited from smoking in vehicles along Mine access roads and may only smoke in designated areas away from fuel sources. Each designated area will be equipped with a fire extinguisher in the event of fuels ignition.

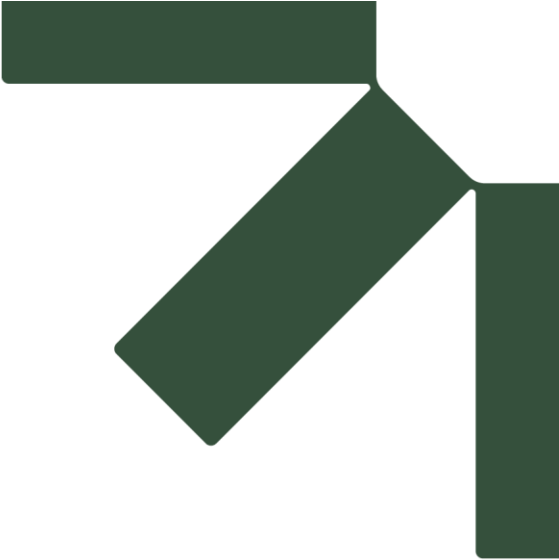
The access road leading into the Mine will have at least two signs warning of wildland fire danger and requesting all users of the road to report wildland fires to 911.



4.0 References

- Adrian Brown Consultants, Inc. 1992. Water Resources Technical Memorandum for Atlas Precious Metals Inc., Grassy Mountain Project Environmental Impact Statement.
- Calico Resources USA Corp. (Calico). 2024. Grassy Mountain Mine Project, Noxious Weed Monitoring and Control Plan. February.
- EM Strategies Inc. 2018. Terrestrial Vegetation Baseline Data Report. Revised October.
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- SPF Water Engineering, LLC. 2021, Grassy Mountain Gold Project Groundwater Vol. I, Groundwater Baseline Report. December 8.
- Tyrrell, E.A., P.S. Coates, B.G. Prochazka, B.E. Brussee, S.P. Espinosa, and J.M. Hull. 2023. Wildfire immediately reduces nest and adult survival of greater sage-grouse. Sci Rep 13, 10970. July 6. <https://doi.org/10.1038/s41598-023-32937-2>
- United States Department of Agriculture (USDA). 2022. US Forest Service – Wildfire Suppression Difficulty Index 97th Percentile.





Attachment A: Mitigation Figures

Wildfire Mitigation Plan

Grassy Mountain Mine

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PROJECT LOCATION MAP

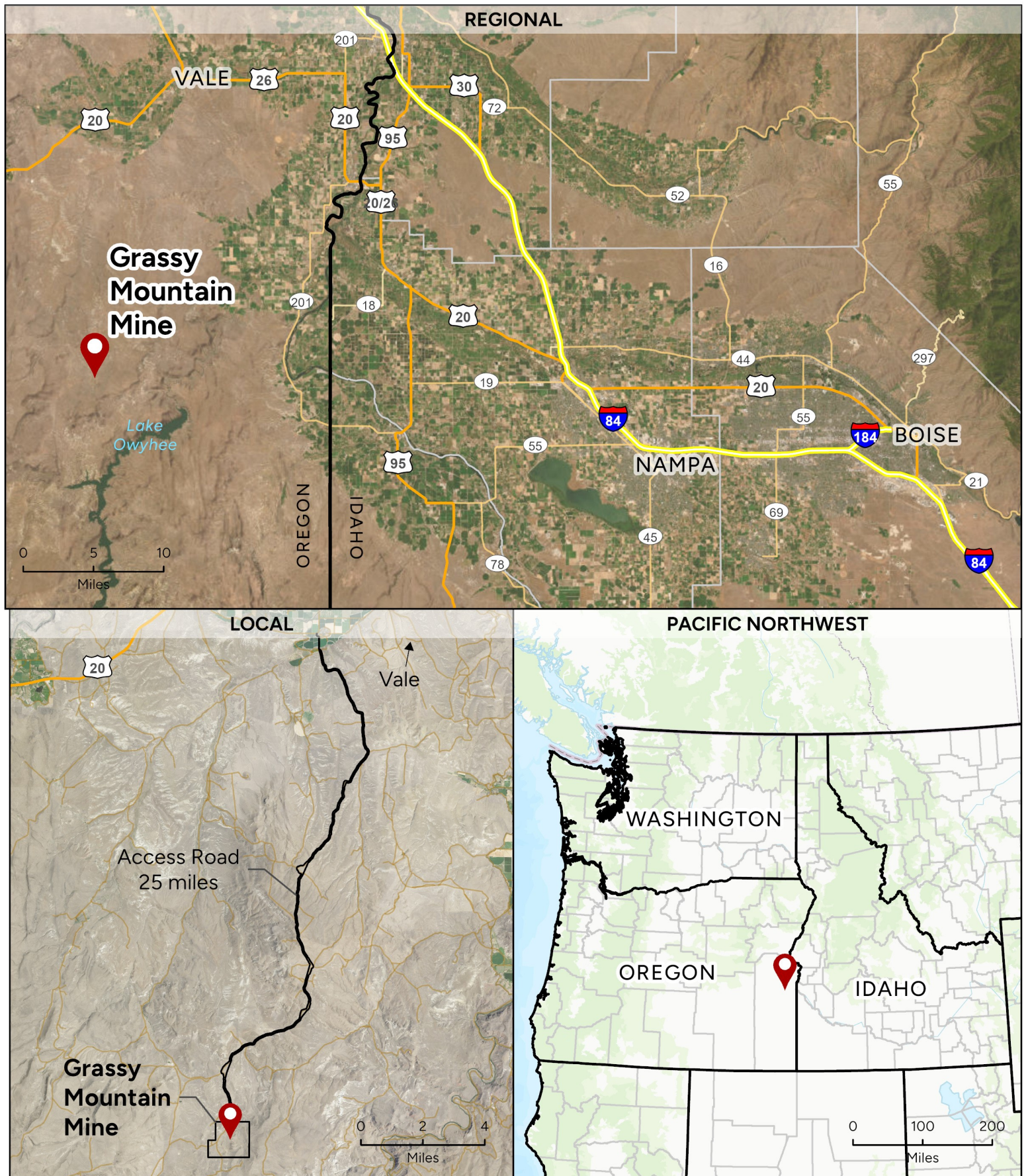


FIGURE 1

CALICO RESOURCES INC.
WILDFIRE MITIGATION PLAN



FUEL VEGETATION TYPE

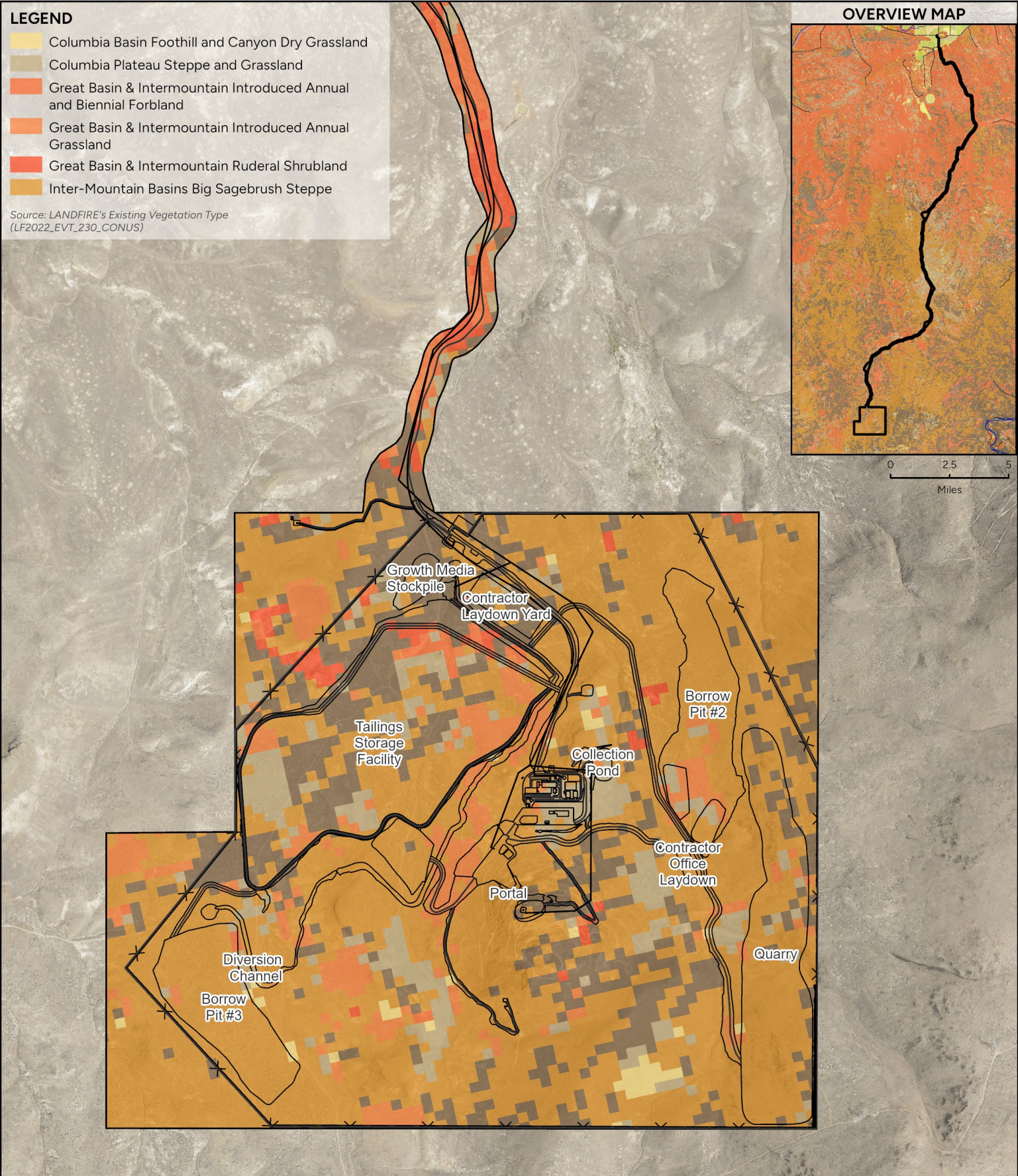
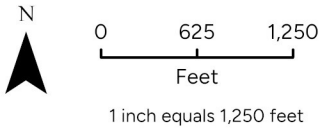


FIGURE 2

CALICO RESOURCES INC.
WILDFIRE MITIGATION PLAN



VEGETATION CONDITION CLASS

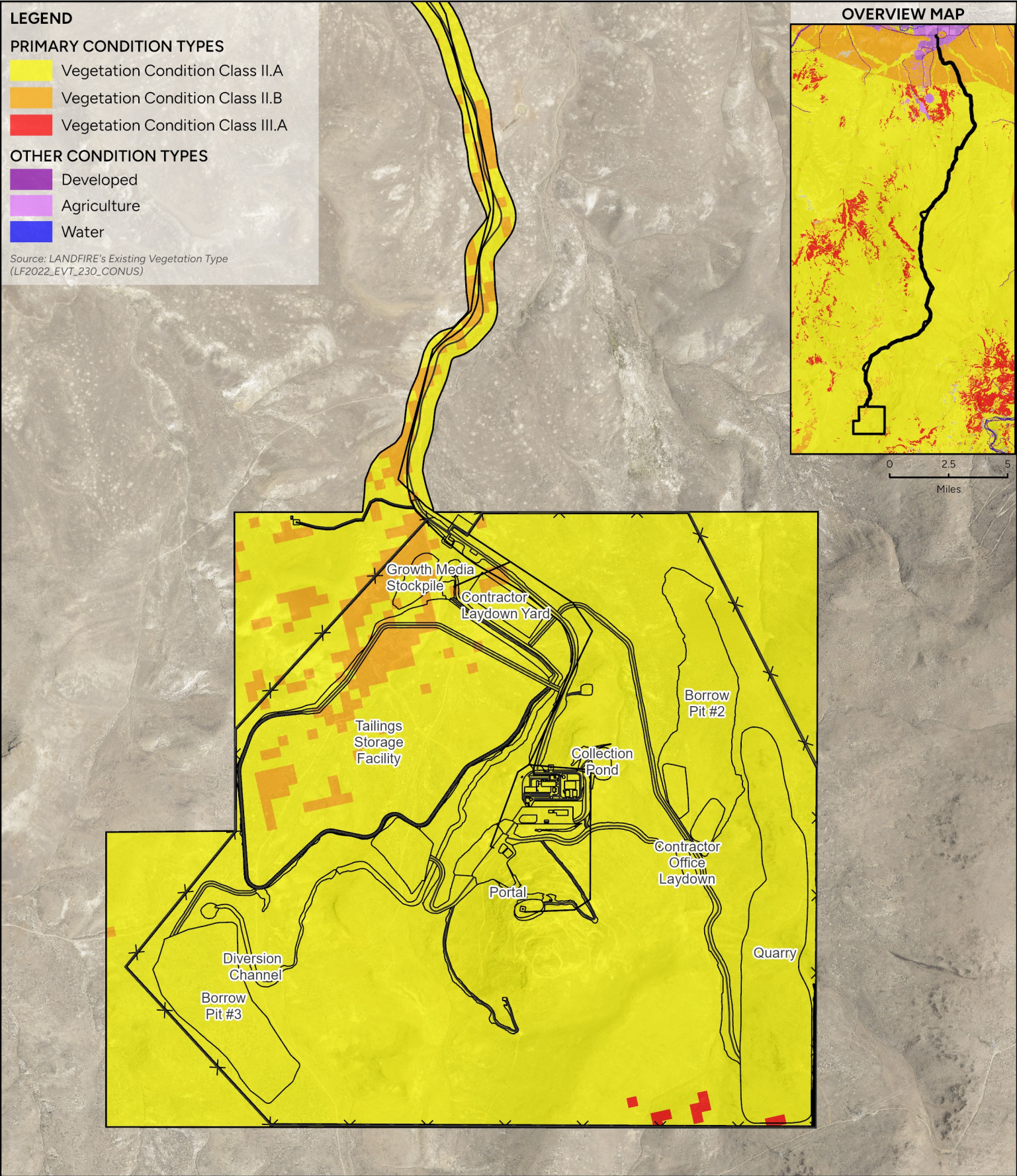
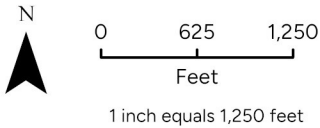


FIGURE 3

CALICO RESOURCES INC.
WILDFIRE MITIGATION PLAN



ROADSIDE FUEL VEGETATION REDUCTION

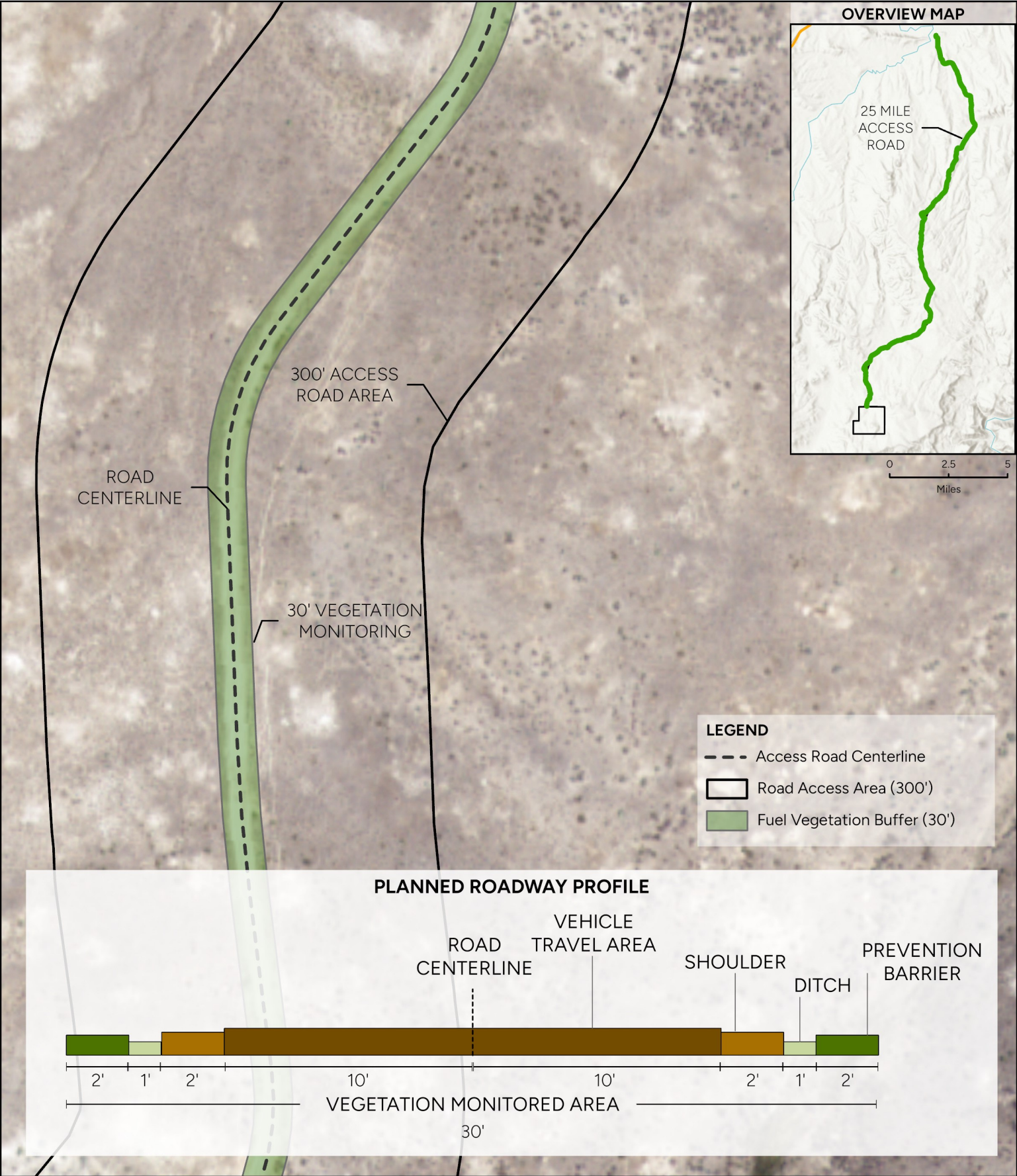
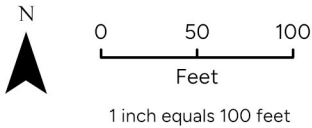


FIGURE 4

CALICO RESOURCES INC.
WILDFIRE MITIGATION PLAN



WILDFIRE SUPPRESSION DIFFICULTY

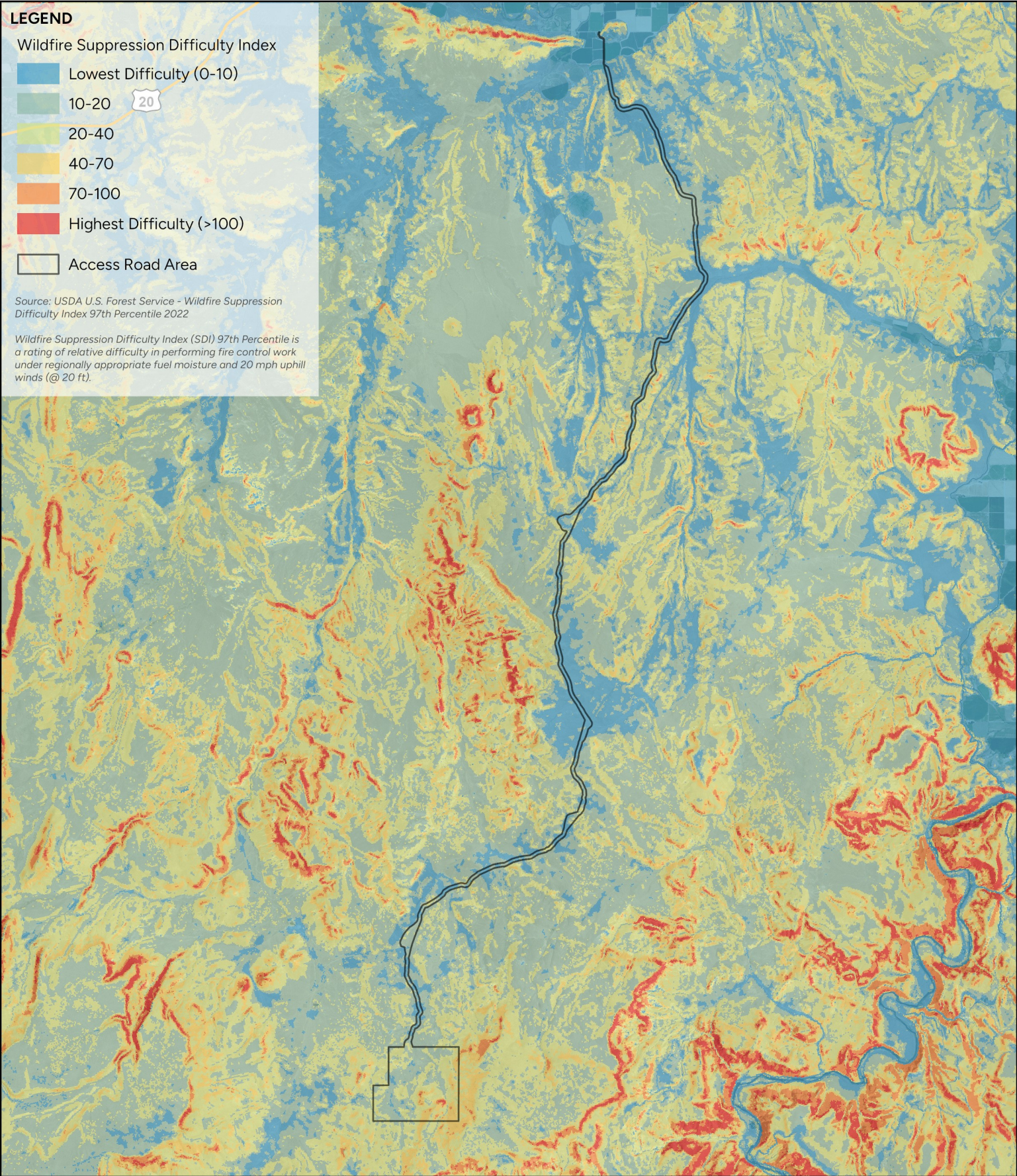
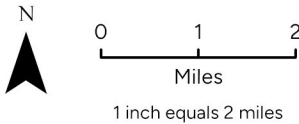
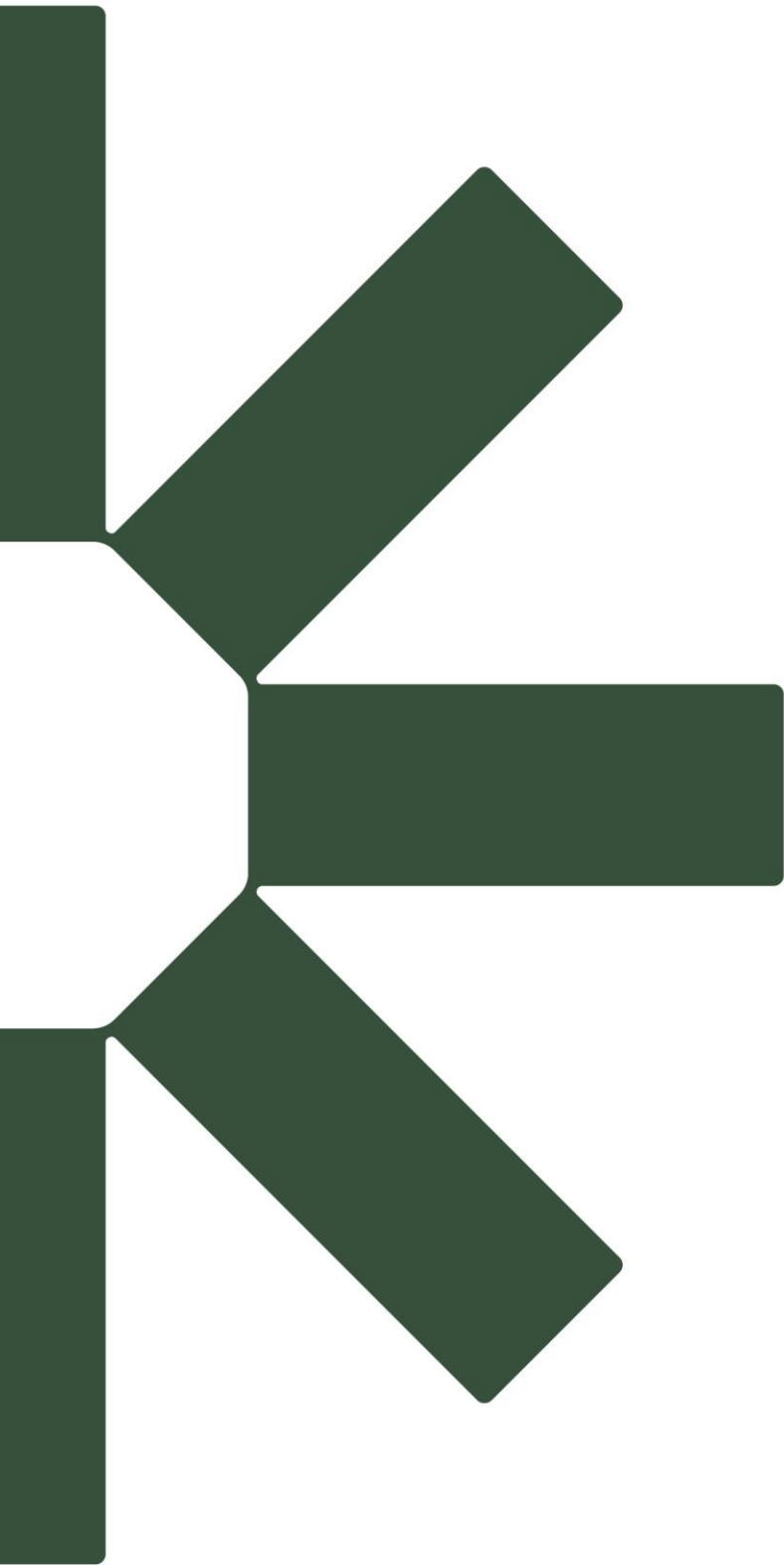


FIGURE 5

CALICO RESOURCES INC.
WILDFIRE MITIGATION PLAN





Making Sustainability Happen