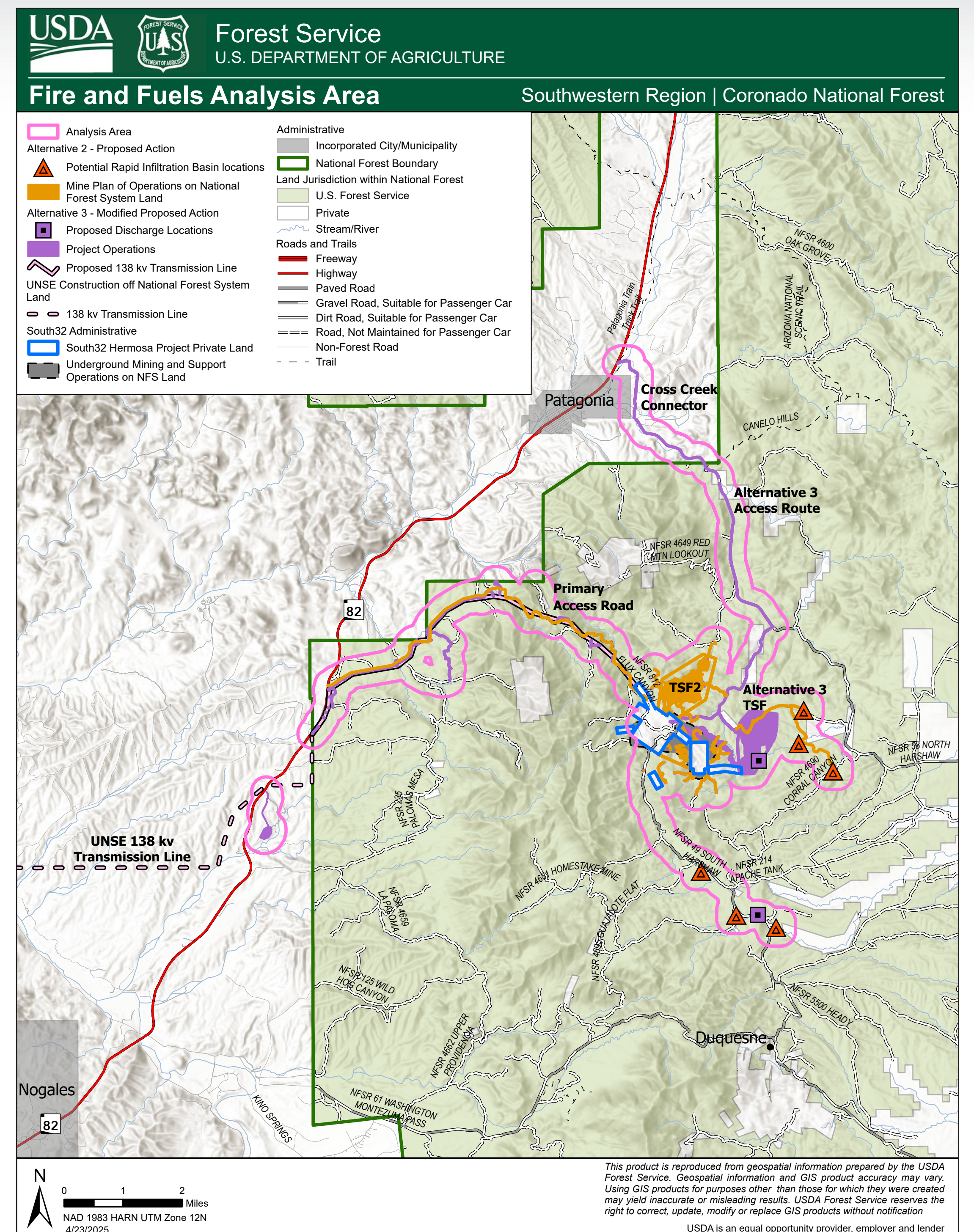


Fire and Fuels

The Coronado National Forest is characterized by diverse vegetation types that are highly susceptible to wildfire. The variability in fire behavior is largely influenced by the presence of fine fuels (e.g., grasses and shrubs), wind speed, topography, slope, high temperatures, and frequent thunderstorms during the late spring through summer months.

In recent years, most wildfires in the Patagonia Mountains have been attributed to human activities rather than natural causes (e.g., lightning). Current climatic trends are expected to exacerbate fire weather conditions in the southwestern United States, with increased temperatures, decreased annual precipitation, and decreased snowmelt.



Environmental Consequences

The following presents a comparison of effects between alternatives:

Alternative 1 – No Action

- Direct disturbance, which reduces available fuels in the short term but increases potential for colonization by fine fuels in the long term, constrained to private lands, although indirect effects may be broader.
- Shorter duration of fire risk than under Alternatives 2 and 3.
- No significant changes to current level of fire risk.

Alternative 2 – Proposed Action

- Area of direct and indirect disturbance, which reduces available fuels in the short term but increases potential for colonization by fine fuels in the long term, greater than Alternative 1 due to additional Project components on National Forest System land.
- Use of Primary Access Road would lead to ignition risks in new area but reduce ignition risk along access roads currently used.

Alternative 3 – Modified Proposed Action

- Area of direct and indirect disturbance, which reduces available fuels in the short term but increases potential for colonization by fine fuels in the long term, greater than Alternatives 1 and 2 due to footprint of Alternative 3 TSF and transmission line.
- Longer use of NFSRs 58 and 49 would result in longer duration of ignition risks along those routes.
- Construction, operation, and maintenance of the 138-kilovolt transmission line would introduce a new source of ignition risk.

Notes: NFSR = National Forest System Road; TSF = tailings storage facility



Public Health and Safety

The Project would create heavy truck traffic as well as commuter traffic, which creates a public health and safety concern by increasing the likelihood of vehicular accidents. Heavy truck traffic can also damage roads and drainage infrastructure. Construction and operations also have the potential to increase risk to the public from wildfires and the transportation of hazardous materials, and the influx of mine workers could increase the burden on emergency response providers.

Environmental Consequences

Under all alternatives:

- Potential impacts from increased traffic, from hazardous materials transportation, and to emergency response times would last the duration of production (50 years for Alternative 1 and 70 years for Alternatives 2 and 3).
- Security measures would be implemented to protect workers, property, and the public, including fencing and signage.
- Measures would be implemented to reduce wildfire risk.
- Measures would be implemented to address traffic in the area, including bussing for employees and contractors and the use of a remote operating facility (Centro).
- Increased risk of explosion, fire, or accident from transportation of hazardous materials.

The following presents a comparison of effects between alternatives:

Alternative 1 – No Action

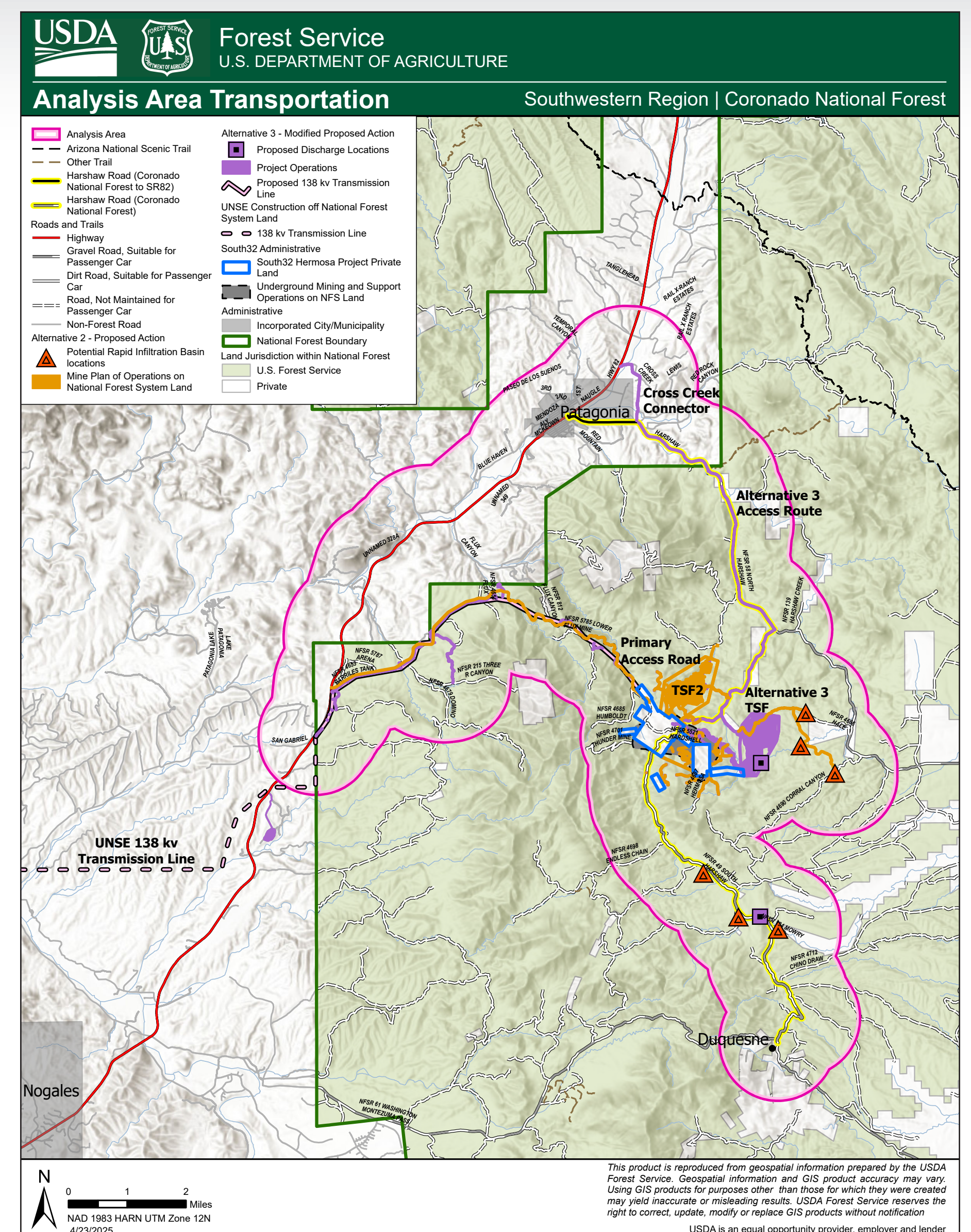
- Increased risk to safety from mining truck traffic and increased traffic volumes in area.
- Potential impacts to emergency response time from increased traffic.
- Ongoing risk of wildfire due to mining activities on private land.

Alternative 2 – Proposed Action

- Mining truck traffic and traffic volumes higher than Alternative 1.
- Highest traffic volumes and most potential to impact emergency response time.
- Increased risk of wildfire compared to Alternative 1 due to increase in activities for a longer duration and over a larger area.

Alternative 3 – Modified Proposed Action

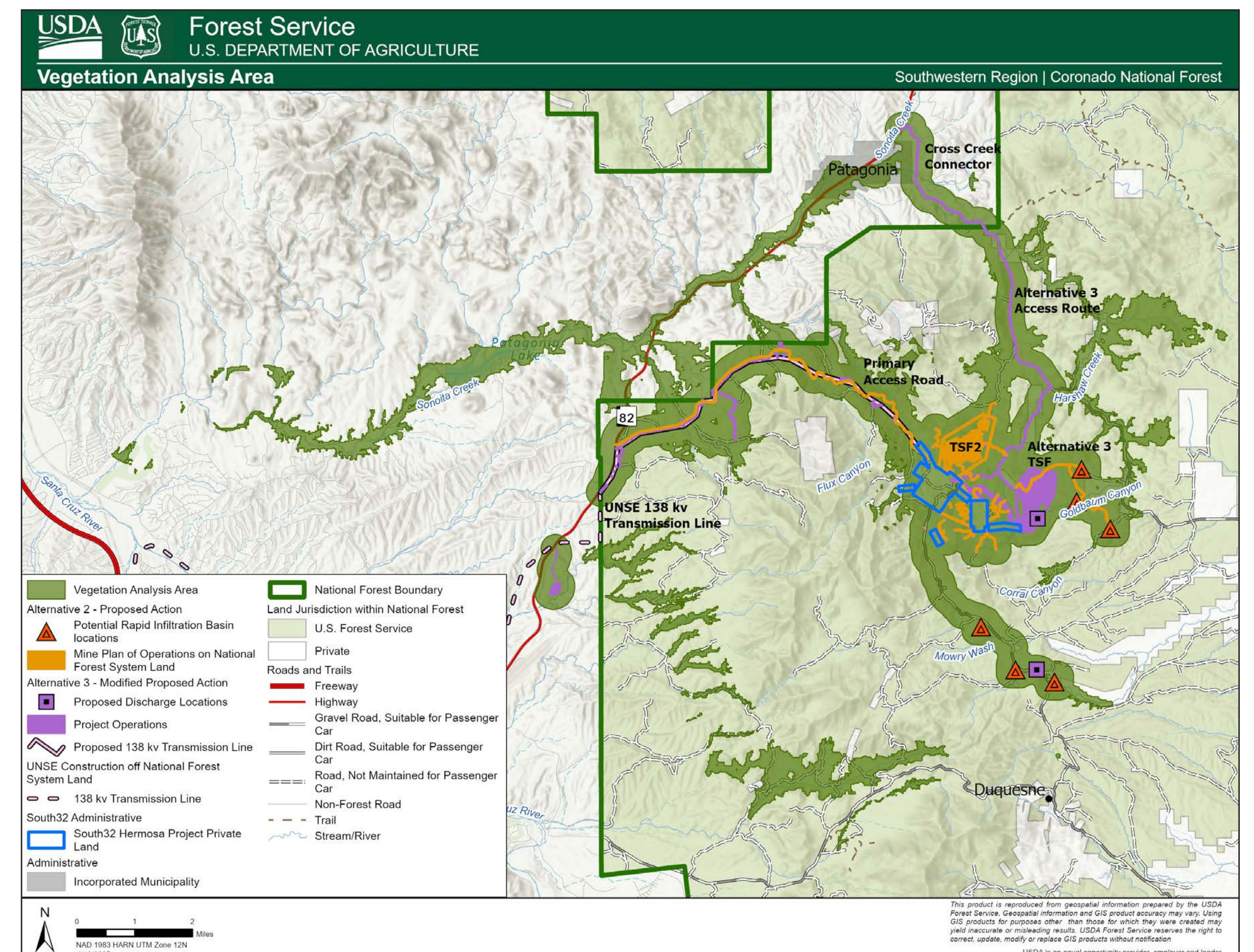
- Mining truck traffic and traffic volumes would be higher than Alternative 1 but less than Alternative 2.
- Potential for impacts to emergency response time would be greater than Alternative 1 but less than Alternative 2.
- Risk of wildlife is similar to Alternative 2 but in different areas (tailings storage facility and transmission line right-of-way).



Vegetation

Vegetation communities in the northern Patagonia Mountains are unique and diverse. This is due to the complex topography, geology, and hydrology of the Madrean Archipelago, also referred to as “sky islands” - isolated high-elevation areas surrounded by low-elevation deserts.

- Madrean pine-oak and evergreen oak woodlands are common at higher elevations in the Project area, and scrub or semi-desert grasslands are common at lower elevations.
- Arid vegetation communities like the ones in the project area can be highly sensitive to disturbance and often slow to recover if impacted.
- The Hermosa Critical Minerals Project has the potential to change vegetation communities.



Environmental Consequences

The following effects to vegetation could occur under all alternatives:

- Potential for colonization by noxious weeds and nonnative invasive plant species during the construction and operation phases.
- Changes to vegetation from groundwater drawdown and discharge of pumped and treated groundwater.
- Vegetation removal through ground disturbing activities as well as dust, noise, light, and vibration impacts.

The following presents a comparison of effects between alternatives:

Alternative 1 – No Action

- 37 acres of vegetation removal on private land during the construction phase.
- Fugitive dust from Project during construction and along roads during construction and operation.

Alternative 2 – Proposed Action

- 449 acres of vegetation removal (443 acres on NFS land and 6 acres on private land).
- Fugitive dust from Project during construction, during tailings management, and along roads during construction and operation.

Alternative 3 – Modified Proposed Action

- 497 acres of vegetation removal (449 acres on NFS land and 48 acres on private land).
- Fugitive dust from Project during construction of mine facilities and of 138-kV transmission line, during tailings management, and along roads during construction and operation.

Note: NFS = National Forest System

