# FINDING OF NO SIGNIFICANT IMPACT

for the

Windy Fire Emergency Stabilization and Salvage Sale Projects
Cold Springs – Parker Forest Management Area
Tule River Indian Reservation
Tulare County, California
February 2023

**AGENCY:** Bureau of Indian Affairs, Central California Agency

**ACTIONS:** Finding of No Significant Impact

#### **SUMMARY**

The Windy Fire was started by a lightning strike on the Tule Indian Reservation on September 9, 2021. The fire spread onto adjacent federal lands, ultimately burning 97,528 of Tribal, Forest Service, BLM, and private lands. Approximately 19,461 acres of trust lands located on the Tule River Indian Reservation (TRIR) burned at varying intensities. The fire burned through much of the higher-elevation mixed conifer stands and sequoia groves on the TRIR. Prior to the Windy Fire, the TRIR forest had experienced high levels of forest insect activity that coincided with severe drought conditions in central California. Beginning in 2013 conifer tree mortality began to rise. Tree mortality intensified during the next several years, continuing through 2021. Over the past decade the southern Sierra Nevada region has had the highest tree mortality rate in the state.

As a result of these events, the Tule River Tribal Council (TRTC) desires to mitigate identified land management, public safety, and forest health concerns by implementing a series of projects located within the east portion of the Windy Fire and on adjoining forest lands affected by the drought. The proposed activities are planned entirely on Tribal trust lands administered by the TRTC through the Tribal Natural Resources Department, with oversight provided by the Bureau of Indian Affairs (BIA). There are no Indian allotments or land assignments included in the project area. These are intended to be multi-year projects proposed for implementation beginning in 2023 and continuing for more than ten years.

This report, titled *Environmental Assessment Report for the Windy Fire Emergency Stabilization and Salvage Sale Projects* (referred to as the Windy Fire EA), analyzes the potential effects of implementing proposed activities on the biological, physical, cultural, and socioeconomic resources of the TRIR. The intent of this report is to explore options for mitigating identified concerns and to comply with the requirements of the National Environmental Policy Act.

The assessment area for the Proposed Action, also referred to as the project area, is shown on the Project Map (page 7). The assessment boundary is intended to encompass severely burned forest lands in need of immediate treatment while including adjoining roadside areas where salvage of drought-killed hazard trees is needed to safely access the project area.

Resource management objectives for the area are identified in several management plans approved by the Tule River Tribal Council and Bureau of Indian Affairs. Relevant plans include:

- Integrated Resource Management Plan, Tule River Indian Reservation, 2014.
- Forest Management Plan for the Period: 1999 2008, Tule River Indian Reservation, 1998, (extended to present).
- Tule River Indian Reservation Wildland Fire Management Plan, 2013.

Community scoping announcements pertaining to proposed forest management activities in the project area are included in Appendix 9.15 - Public Scoping Notices. These notices were posted at different times throughout the Tule River community at public locations such as the Administration Building, Natural Resources Office, Environmental Department & Forestry Office, and published within the community newsletter. Since the notices were prefire, there have been post-fire discussions between the Tule River Tribal Council and resources staff regarding the need to promptly implement the proposed

#### PURPOSE AND NEED FOR ACTION

The 2021 wildfire and previous drought events have resulted in deteriorated resource conditions and increased safety hazards within the assessment area. Adverse effects to Tribal resources have occurred and additional impacts are anticipated. Dead and dying trees located along existing forest roads pose a safety hazard to forest recreationists, emergency personnel and Tribal staff. Reforestation of burned areas is a forest management priority. The Tule River Tribal Council wishes to salvage a portion of the commercial timber burned in the fire and/or killed as a result of the drought and forest insect infestations.

The Tribal Natural Resources Department has identified activities recommended for implementation in response to site conditions and to concerns expressed by the TRTC and Tribal community. Proposed activities were developed from field reconnaissance conducted in October 2021 through November 2022. Specific rehabilitation treatments within the burn area were initially identified by an on-site Interagency Burned Area Emergency Response Team as the Windy Fire neared full containment in October of 2021. The BAER Team recommendations were presented in the report titled 2021 Windy Fire Burned Area Emergency Response Plan, October 2021. Additional reconnaissance within the project area occurred in November of 2022.

The purpose and need for action is to mitigate impacts and hazards resulting from the prolonged drought and the 2021 Windy Fire. The Proposed Action identifies activities for implementation that are compatible with the Tribe's desired future forest conditions identified in the 2014 Integrated Resource Management Plan.

The Tule River IRMP identifies the following desired future conditions for forest lands that comprise the assessment area:

- 1) A healthy and vigorously growing forest that is accessible to the Tribal community.
- 2) A forest capable of resisting internal and external threats.
- 3) A forest containing multiple sizes of native trees, plentiful with giant sequoia wherever suited.
- 4) A forest that provides clean water, diverse wildlife habitat, cultural and recreational opportunities, and a sustainable supply of forest products.

#### 4.0 ALTERNATIVES CONSIDERED

Four alternatives were considered to address identified resource concerns. These alternatives are presented below.

#### Alternative 1 - No Action

This alternative would result in a minimum level of restoration and forest health treatments over the next several years. Management practices in the assessment area would be limited to activities such as seasonal road maintenance and repair, hazard tree removal at selected locations (recreation sites, road side), vegetative fuels reduction along roads, and fire suppression. These activities would occur on an as-needed basis. Ground disturbing activities such as mechanical fuels treatment, prescribe burning, slope stabilization, timber salvage, and reforestation on a landscape level would not occur in the near-term. Resource management activities outlined in the Proposed Action would either be delayed or cancelled. Treatments identified in this report might be considered in again in several years.

#### Alternative 2 – Treat Area with Prior Archaeological Review (Proposed Action)

Under this alternative, restoration and forest health treatments would be implemented on a portion of trust lands that burned as well as adjoining roadside areas where salvage of drought-killed hazard trees is needed to safely access the project area. The project would be limited to areas that for which a cultural resources survey has been completed within the past fifteen years.

The analysis area encompasses approximately 2,539 acres. The entire analysis area, except for approximately 12 acres of roadside hazard tree removal, falls within the perimeter of the 2021 Windy Fire. Proposed treatments include burn area stabilization and rehabilitation, reforestation, fuels reduction, timber salvage, road maintenance and repair, hazard tree removal, and range improvements. These treatments are described further in Section D.

#### Alternative 3 – Treat Burned Area Only

Conducting restoration and forest health treatments only within the Windy Fire perimeter, and excluding areas outside the perimeter, was considered early in the planning process. This assessment area would encompass approximately 2,527 acres. Treatment prescriptions and locations would be identical to Alternative 2, except that the approximately 12 acres of BIA/CCA FONSI

roadside hazard tree treatments falling outside of the fire area would not be implemented. It was determined that leaving hazard trees along the primary access route to the project area would pose a safety risk; therefore, this alternative was rejected from further evaluation.

#### Alternative 4 – Treat Entire Burn Area South of Tule River

It was also proposed early on in the planning process to implement restoration and forest health treatments over the entire fire area lying south of the Tule River. This assessment area would encompass approximately 15,024 acres. Treatments would be similar to those conducted under Alternative 2, but would be implemented over a broader area. Due to the size of the analysis area and need for additional archaeological survey coverage, it was determined that time and cost constraints would make implementation of this alternative unlikely to occur within a reasonable timeframe. Therefore, this alternative was rejected from further evaluation.

#### 5.0 DESCRIPTION OF PROPOSED ACTION

Alternative 2 is the preferred alternative. This alternative will address resource issues on a portion of the burn area along with adjoining roadside areas where salvage of drought-killed hazard trees is needed to safely access the project area. The table below shows the breakdown of acres within the project area:

# Proposed Action Area Windy Fire Emergency Stabilization

Total Assessment Area	2,539 Acres
Within Fire Perimeter	2,527 Acres (> 99% of total area)
High Severity	117 Acres (5% of total area)
Moderate Severity	845 Acres (33% of total area)
Low Severity	1293 Acres (51% of total area)
Unburned/Low Severity	227 Acres (9% of total area)
Outside of Fire Perimeter	12 Acres (< 1% of total area)

Note: Severity refers to soil burn severity, measured using the Burned Area Reflection Classification (BARC) as described in the Windy Fire BAER Report (BIA, 2021).

The assessment area includes lands that are within the Tribe's commercial forestland base. All lands are in federal trust status and managed through the Tule River Tribe's Natural Resources Department. There are no allotments or land assignments within the assessment area.

Project activities are proposed within portions of Township 22 South, Range 30 East; Township 22 South, Range 31 East; and Township 23 South, Range 31 East, Mt. Diablo Base Meridian.

These lands are located on the USGS California Hot Springs and Solo Peak 7.5 minute quadrangles. Other maps that encompass the project area are the USDA Sequoia National Forest/Giant Sequoia National Monument Map, and USGS Three Rivers and Isabella Lake 30 X 60 minute quadrangles.

A variety of forest management activities are proposed. The most common activities will involve timber salvage, commercial thinning, fuels reduction, emergency stabilization, and planting. The timeline for implementation will involve multiple years. Treatments will have varying degrees of ground disturbance. The table below identifies the treatments and the estimated size or extent to which they will be implemented. Activities that are planned on a broader scale are discussed in more detail after the table.

# Proposed Action Activities Windy Fire Emergency Stabilization

Activity	Size
Boundary fence repair	6 miles
(repair of existing fence)	
Fuels reduction / Forest development	2,000 acres
(combination of manual and mechanical methods) (precommercial thinning, manual seedling release)	
Fuels reduction / Forest development (combination of manual and mechanical methods) (precommercial thinning, manual seedling release)	2,000 acres
Hazard tree	25 miles
mitigation	
(roadside removal of hazard trees, noncommercial)	
Reforestation	800 acres
(tree planting with hand tools)	
Road maintenance and repair	35 miles
Slash disposal	2,300 acres
(lop & scatter, chip, pile and burn)	

Soil stabilization (contour tree falling, installation of waterbreaks)	500 acres
Timber salvage (harvest of conifer trees for commercial purposes)	2,000 acres (9.8 million board feet)

Timber salvage will involve the use of ground-based equipment (rubber-tired skidder or dozer) for yarding. Due to financial constraints and lack of operators in the region, it is unlikely that aerial yarding (cable or helicopter) methods are feasible. Areas to be commercially logged have received at least two previous timber harvesting entries during the past sixty years. During these prior harvests, a network of access roads, skid trails, and log landing sites were developed. This infrastructure will be utilized for planned timber salvaging operations.

Commercial timber salvaging will be conducted in compliance with standard Bureau of Indian Affairs logging provisions and Tribal forest management guidelines. An estimated 13 million board feet has been lost within the analysis area due to drought, beetle kill, and fire. Approximately 75 percent, or 9.8 million board feet, are anticipated for salvage. Timber salvage activities are planned during a series of projects that will occur over several years.

Emergency stabilization measures will be implemented to mitigate downslope movement of soil, gullying, and watercourse protection. Burn areas lacking adequate surface vegetation (moderate to high burn severity) will be a priority. Emergency stabilization measures will be implemented in conjunction with timber salvage activities. These measures will be implemented either as part of timber salvage operations or following operations during reforestation and fuels reduction – forest development activities.

The areas proposed for treatment in the preceding table will overlap. For example, areas where timber salvage occurs will also receive soil stabilization measures, road maintenance, and reforestation. Areas where hazard tree mitigation is planned will also have road maintenance, slash disposal and soil stabilization activities.

#### 6.0 AFFECTED ENVIRONMENT

#### **6.12. Watershed Resources**

The assessment area lies within the South Fork Tule River watershed. Prominent watercourses that transect the area include Eagle Creek, Redwood Creek, and Bear Creek. The west boundary is situated at the upper reaches of Bond Creek subwatershed, and the northeast boundary is situated at the upper reaches of the Kessing Creek subwatershed. The South Fork Tule River is located approximately 0.4 miles to the northwest of the assessment area boundary, and flows in a southwesterly direction through the TRIR.

Elevation ranges from 4,210 feet at the north boundary to 7,643 feet atop Parker Peak at the south boundary. Topography varies from gentle (less than 20% gradient) to steep (greater than 60%).

Precipitation averages 30 to 40 inches per year, mostly occurring between November and April. Snow is common above 5,000 feet elevation and typically accumulates during the winter months at 6,000 feet and above, particularly in shaded locales. Surface runoff is channeled south and west via a network of intermittent and perennial watercourses that eventually become tributary to the South Fork.

Soils include the Crouch, Holland, and Sheephead types. The Crouch and Holland soils occupy the majority of the area. These two soils underlie the most productive conifer sites. The Sheephead soils are found at lower elevation sites that support oak woodland and chaparral. Rock outcrops and boulders are common through the area.

The following table displays general characteristics of soils found within the analysis area:

## **Proposed Action Area Soils**

Soil Name	_	e Depth n.)	Erosion Hazard	Surface Texture	Permeability	Runoff
	Surface	Subsoil				
Crouch	22	48	High	Sandy Loam	Mod. Rapid	Rapid
Holland	19	61	High	Loam to Sandy Loam	Mod. Slow	Rapid
Sheephead	11	7	High to Very High	Sandy Loam	Mod. Rapid	Rapid

The Windy Fire burned the soil surface at varying intensities. A Soil Burn Severity Map was developed for the burn area. Most of the high soil burn severity areas are in the mixed conifer forest within the Windy Fire EA project area. A Windy Fire Soil Burn Severity Map is included in the Appendix.

Ground reconnaissance of the assessment area revealed that the Soil Burn Severity Map underestimated fire effects on vegetation. Many areas that were mapped as "unburned" or "low" soil severity actually had moderate to high overstory vegetation mortality.

## 6.13. Vegetation and Forest Health

A mixed conifer forest typical of the western slopes of the Sierra Nevada Mountains is the predominant vegetation community. Typical coniferous species include incense cedar, ponderosa pine, sugar pine, and white fir. Giant sequoia mixes with the other conifers on approximately 20 percent of the Windy Fire assessment area. Jeffrey pine is found at the higher elevations along the south boundary. Common hardwoods found in the understory include California black oak, interior live oak, and dogwood. A variety of woody shrubs and forbs are found on the forest floor. Other plant communities found in smaller aggregates include black oak woodland, chaparral, conifer plantation, riparian woodland, and montane meadow.

Vegetation mortality due to the Windy Fire was moderate to severe across much of the assessment area. Some of the most extensive areas of vegetation mortality for the entire burn are located within the proposed project area.

Outside the burn but within the assessment area, conifer mortality is high due to prolonged drought conditions. Tree mortality rates began to rise in 2013 as drought conditions and subsequent forest insect activity steadily increased during the next 9 years. Bark beetle populations reached epidemic levels by 2015 and beetle activity remained active into early fall of 2021. Additional tree mortality occurred in 2021 as a result of the Windy Fire.

#### 6.14. Socioeconomic Values

The project area is seasonally utilized by TRIR community members for a variety of purposes, including dispersed recreation and personal use forest products (fuelwood, posts, poles, Christmas trees). The project area is in the TRIR summer livestock range.

The North Cold Springs and Parker Peak giant sequoia groves are enjoyed for recreation by community members, and several recreational cabins are located at Redwood Corral within the Parker Peak sequoia grove. These areas generally burned at low to moderate intensity; however, several "specimen" giant sequoia trees were lost in the fire along with numerous young-growth sequoias.

Periodic commercial timber harvests have been implemented in the area for over fifty years. In addition to meeting a variety of long-term forest management objectives, contract sales of timber provide supplemental revenue for Tribal operations, education, economic development, community improvements, and forest management related activities. The Tribe operates a small logging crew through the Natural Resources Department.

Tribal forestry related employment opportunities include seasonal positions on forest development and fuels management crews, wildland fire management, and the logging crew.

#### 6.15. Cultural Resources

The assessment area has been surveyed for cultural resources. Survey results are documented in reports on file at the Tribe's Environmental Protection Office. Copies of survey reports are also stored at the BIA Pacific Regional Office and the Southern San Joaquin Valley Information Center. There are recorded archaeological sites located within the project boundary. Survey reports and site records are held confidential by the Tule River Tribe.

# 6.16. Roads and Community Safety

Existing roads provide access to the project. No new road construction will be required. Several existing temporary spur roads that are currently closed will need to be reopened to implement project activities (salvage logging, fuels reduction, reforestation).

The project area is accessed from the north, via Reservation forest roads and BIA Route 70 through the TRIR community. The BIA Route 70 road segment extends from the west TRIR entrance to Cholollo Campground. Both BIA Route 70 and the Reservation forest roads have been used for forest and fire management access, including log hauling, for many years.

There are numerous roadside hazard trees located along the main access routes as well as secondary roads within the conifer forest. Dead and dying trees pose a safety hazard to community members, Tribal staff and emergency personnel travelling into the south portion of the TRIR.

## 6.17. Air Resources

The San Joaquin Valley Air Basin influences air quality within the assessment area. The basin is located approximately ten miles to the west, within the bottomlands of the San Joaquin Valley. Major urban centers within the air basin are Bakersfield, Visalia, Fresno, Modesto, and Stockton. The TRIR lies within the eastern portion of the San Joaquin Valley Air Pollution Control District (Air District).

The primary sources of air pollution include vehicle emissions, industrial sources, business and residential development, and burning. Pollutants are transported into the basin from urban and agricultural areas located to the west of the TRIR. Prevailing winds are from west to east in the basin. Inversion layers are common throughout the year. Weather patterns in the air basin can carry pollutants from the San Joaquin Valley and deposit them in the southern Sierra Nevada foothills and mountains.

Air quality standards are set by the Environmental Protection Agency. The Air District currently does not meet federal standards (non-attainment) for ozone and particulate matter. Both ozone and particulate matter (fine and coarse particles) can adversely affect human health. Ozone can also affect forest ecosystems and individual conifer trees, particularly ponderosa and Jeffrey pine.

Smoke is a contributor to ozone and particulate levels, and can impair visibility. Communities that are located within five miles of the central portion of the assessment area are shown on the following table:
BIA/CCA FONSI

## **Communities in Proposed Action Area Vicinity**

Community	Distance (air miles)	Direction
Tule River Tribe	6	Northwest
Roger's Camp	8	North
Camp Nelson	10	North

# **6.18. Sensitive Species**

A review of current U.S. Fish and Wildlife species lists and a search of the California Natural Diversity Data Base (Hot Springs and Solo Peak 7.5 minute quadrangles) was conducted for the Windy Fire assessment area. Based on these lists, the desired habitat for each species, and information derived from Tribal files and other sources, several ESA-listed species and/or suitable habitat could occur within the project area or general vicinity. These species and their federal status are listed below:

## **Proposed Action Federally Protected Species**

Species	Federal Protection/Status
California condor (Gymnogyps californianus)	ESA/Endangered
California red-legged frog (Rana draytonii)	ESA/Threatened
Fisher (Pekania pennant)	ESA/Endangered
Mountain yellow-legged frog (Rana muscosa)	ESA/Endangered
Southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> )	ESA/Endangered
Springville clarkia (Clarkia springvillensis)	ESA/Threatened
Bald eagle (Haliaeetus leucocephalus)	Bald and Golden Eagle Protection Act
Golden Eagle (Aquila chrysaetos)	Bald and Golden Eagle Protection Act

Information on known protected species occurrences, ranges, and desired habitats for each listed species follows:

## California condor, Gymnogyps californianus

The project lies within the historic range of the California condor. Condors were reintroduced into the wild in 1992 on the Los Padres National Forest. Since their release, condors have infrequently visited the Reservation along with nearby federal and private lands. These visits have been temporary, lasting less than two days. Condors no longer reside in the Tulare County region. There is critical habitat designated by the U.S. Fish and Wildlife Service approximately twelve air miles to the northwest from the project boundary.

## California red-legged frog (Rana draytonii)

The historic range of this species includes the Sierra Nevada foothills of Tulare County. The upper extent of their range is approximately 5,200 feet elevation. Preferred habitat is along watercourses and ponds with shoreline vegetation. The closest known population is in the central Sierra Nevada region. The species has not been documented in the Tulare County foothills. The lowest elevations of the Windy Fire assessment approach 4,200 feet elevation.

## Fisher (Pekania pennant)

The southern Sierra Nevada distinct population segment of fisher was federally listed as Endangered in 2020. Fishers are known to occur in the assessment area and adjoining lands.

Fishers prefer dense conifer forests with multiple canopy layers, large diameter trees (conifers and hardwoods), and trees with cavities. Snags and large down woody material are also desired. Forests containing these structural characteristics generally provide potential den and rest sites as well as preferred prey species. These desired habitat characteristics are found across portions of the project area and on surrounding forest lands. Fishers will roam over a large home territory.

#### Mountain yellow-legged frog (*Rana muscosa*) - Northern DPS

This species is associated with montane and subalpine riparian habitats. The historical range is Fresno County south to the Kern River drainage. The TRIR is at the southern portion of its historic range. The species prefers mountain lakes, ponds, streams and wet meadows above 6,000 feet elevation. The closest known population is in the Golden Trout Wilderness in Sequoia National Park, to the north. The project area encompasses a seasonally wet meadow that contains suitable habitat.

#### Southwestern willow flycatcher (*Empidonax traillii extimus*)

This species nests and forages near riparian vegetation. Preferred habitat includes dense pockets of vegetation dominated by native broadleaf trees and shrubs, interspersed with small openings and water. The species is not documented on the TRIR or adjacent lands.

The nearest known breeding population is approximately eight miles southeasterly from the TRIR, along the South Fork of the Kern River.

## Springville clarkia (Clarkia springvillensis)

This species is found at two locations in the lower foothills outside of the assessment area. The assessment area is higher than the elevational range for this species.

## Bald eagle (Haliaeetus leucocephalus)

Bald eagles are a winter migrant to lower elevation sites near Lake Success, located six air miles to the west, and Lake Isabella, eight air miles to the southeast. Wintering bald eagles will arrive to these lakes in the fall and leave in early spring. There are no known breeding sites in the vicinity. The assessment area does not have any large water bodies suitable for bald eagle nesting or foraging.

### Golden Eagle (Aquila chrysaetos)

This species does not have a federal listing but is protected under the Bald and Golden Eagle Protection Act (1940). Golden eagles are uncommon in Tulare County, but have been seen on occasion in the TRIR foothill areas to the north of the assessment area boundary. This species nests on cliffs and large trees in the Sierra Nevada foothills and mountains. Golden eagles feed on rabbits, ground squirrels, other small to medium sized mammals, and carrion.

#### 6.19. Fire Protection

Wildfire suppression is provided by the Tule River Tribal Wildland Fire Department. The wildland fire station is located approximately 8 air miles northwest from the project area, within the Tule River Tribal community. The station is fully staffed from April through November each fire season. Response time from the Tribe's fire station to the center of the assessment area is approximately one hour.

The Tribe works collaboratively with federal, state, and county fire agencies, and maintains mutual aid agreements with the U.S Forest Service, Sequoia National Forest (federal) and the California Department of Forestry and Fire Protection (CAL FIRE, state). These agencies maintain fire stations in the general vicinity of the TRIR. The Sequoia National Forest (SNF) and CAL FIRE each staff wildland fire stations in Porterville and Springville. The Tulare County Fire Department staffs fire stations in Camp Nelson and Springville. Response times for these agencies to the TRIR project area varies from 1.5 to 2 hours.

During fire season, the Sequoia National Forest and CAL FIRE jointly maintain an air attack base at Porterville Airport and the U.S. Forest Service staffs a seasonal heliport at the Peppermint Work Center. These locations have provided convenient aerial fire suppression services to the TRIR for many years.

Prior to the Windy Fire, detection capabilities were enhanced by seasonal staffing of the SNF Mule Peak lookout. The lookout oversaw the TRIR and adjoining lands from a strategic location on Mule Peak, located 0.5 air mile from the east Reservation boundary and approximately 3 air miles northeast of the assessment area. The Mule Peak lookout was consumed by the Windy Fire, and it is unknown at this point if the Sequoia National Forest will rebuild a lookout in the same location.

## 7.0 ENVIRONMENTAL CONSEQUENCES

This section provides an analysis of the environmental effects of implementing the two alternatives (Alternatives 1 and 2) that were carried forward from Section 4.0 - Alternatives Considered. The section is organized by each of the resource values identified in Section 6.0 - Affected Environment. The effects identified can be beneficial, adverse, or neutral, and are summarized in Section 7.21 - Summary of Mitigated Environmental Effects.

## 7.12. Watershed Resources

Alternative 1 – No Action: This alternative could adversely affect watercourses and soils. Moderate to severely burned areas could be subject to increased soil erosion if little or no stabilization or other protective measures are implemented. Surface runoff from burned slopes leading to watercourses could impact water quality. The potential effects are unknown.

Alternative 2 – Proposed Action: This alternative will result in the implementation of stabilization activities designed to reduce surface soil erosion and protect watercourses within burn areas. Selected sites having moderate to severe soil burn severity will receive emergency stabilization activities beginning in 2023.

Projects involving the use of heavy equipment and removal of vegetation have the potential to affect soil and water resources. The following measures will be implemented to minimize potential adverse impacts from project activities on these resources:

- a) Watercourse protection measures will be incorporated into each project. These standards have been adopted in the Tribe's IRMP and FMP. In addition, the BIA Pacific Region Logging Practices, BIA Timber Sale Contract Standard Provisions, and site-specific measures will be incorporated into each commercial timber salvage project.
- b) Mechanical equipment will not operate on slopes exceeding 40 percent gradient, except where access is provided by existing skid trails that display minimal surface erosion.
- c) Existing skid trails and log landings will be utilized when feasible. New skid trail and landing construction will be subject to prior approval by the Forest-Officer-In-Charge.
- d) Timber operations during the winter period (November 15<sup>th</sup> to April 1<sup>st</sup>) will comply with BIA Winter Operations guidelines outlined in the Pacific Region Logging Practices.
- e) Reforestation activities that involve mechanical site preparation will comply with the standards in the Tribe's FMP.
- f) Waterbreaks will be installed on roads, skid trails and landings utilized during timber salvage and fuels reduction activities involving the use of heavy equipment and trucks. BIA

- Pacific Region Logging Practices standards for erosion control will be applied for timber harvesting projects.
- g) New forest road construction is not proposed. Segments of existing closed roads will be reopened and utilized.

## 7.13. Vegetation and Forest Health

Alternative 1 – No Action: Except along established roads, little vegetation manipulation and tree removal will occur. Timber salvage projects will not be implemented. Tree mortality and fuels reduction concerns will not be addressed. Reforestation activities will be limited due to the numbers of safety hazard trees distributed across the assessment area. This alternative does not meet the desired conditions identified in the TRIR IRMP.

Alternative 2 – Proposed Action: A series of timber salvage, fuels reduction, reforestation and forest development projects will be implemented over multiple years. Approximately 9.8 million board feet of conifer sawtimber may be commercially harvested across an estimated 2,000 acres of forest. Fuels reduction and/or forest development activities will be planned on 2,300 acres. Protective measures introduced under Watershed Resources and Cultural Resources will apply.

#### 7.14. Socioeconomic Values

Alternative 1 – No Action: Community concerns regarding giant sequoia enhancement and timber salvage will not be addressed under the no action alternative. No timber revenue will be generated. Seasonal employment for Tribal members will be limited as forest management related project activities targeted for the burn and drought mortality areas will not occur. Portions of the assessment area will remain open for the gathering of personal use forest products and hunting. Some areas would likely be closed due to safety concerns.

Alternative 2 – Proposed Action: Access and safety for community members visiting the project area will improve (see Roads and Community Safety) as proposed treatments are completed. Giant sequoia groves will receive fuels reduction and reforestation treatments. Employment opportunities for Tribal members will be provided to implement fuels reduction, precommercial thinning, and reforestation activities. Depending on funding levels, an estimated 10 to 15 seasonal jobs will be filled.

Timber revenue will be generated from the commercial sale of timber. The amount of revenue is unknown, as the quality and extent of decay in dead trees will not be known until the time of harvest. A Tribal logging crew, providing 3 to 5 seasonal jobs, will be employed as part of the timber salvage effort.

#### 7.15. Cultural Resources

Alternative 1 – No Action: This alternative will have little direct effect on cultural resources. Ground disturbing activities such as road maintenance and fuels reduction will be

limited to narrow zones along existing roads. The broader scale ground disturbing activities proposed in alternative 2 will not occur under this alternative.

With no action, surface vegetative fuels will continue to accumulate and thereby contribute to future high fire intensity and spread. Large high-intensity wildfires and fire suppression activities can be detrimental to cultural resources.

Alternative 2 – Proposed Action: Ground disturbing activities such as operation of heavy equipment, tree falling, pile burning, and manual fuels treatment can adversely affect cultural resources. Fuels reduction can also have a beneficial long-term effect on cultural resources protection.

The following measures will be implemented prior to initiating ground disturbing activities:

- a) The Tribal Environmental Protection Department and BIA Pacific Regional Office will be consulted regarding known cultural resources in the project area.
- b) Archaeological site boundaries will be flagged prior to commencement of project activities, in coordination with archaeological monitors from the Tribal Environmental Protection Department.
- c) Ground disturbing activities will not occur within site boundaries. Known sites will be protected by avoidance. Tribal archaeological monitors will be on-site during grounddisturbing activities as needed for site protection.
- d) If any sites are discovered while projects are ongoing, activities will cease within 100 feet of the discovered site and the Tribe's Environmental Department will be notified.
- e) Known sites located within the assessment area will be field visited by an archaeologist and re-recorded prior to commencement of proposed activities. Site records will be submitted to the BIA Pacific Regional Archaeologist.

With the implementation of the above protection measures, no effect on historic properties will occur under the proposed action.

# 7.16. Roads and Community Safety

Alternative 1 – No Action: Under this alternative, the removal of hazard trees will likely be limited to selected roadside locations within the burn area. The timing and extent of tree removal will depend on post-fire rehabilitation funding received by the Tribe. Salvage logging within the Alternative 2 assessment area and roadside hazard tree felling outside the east portion of the burn, where drought mortality trees are common, will not occur.

Forest road improvements such as grading, installation of water drainage features, and slope stabilization will be limited to burn areas only.

Community safety concerns will not be adequately addressed under Alternative 1. Although some hazard trees will be removed, a comprehensive effort to mitigate safety hazards from dead and dying trees in the northeast corner of the TRIR will either be delayed or cancelled. As trees decay over time the likelihood of falling or breaking along the bole increases. Road closures may occur as hazard tree conditions change.

Alternative 2 – Proposed Action: Roadside hazard trees will be identified and removed along approximately 35 miles of forest roads. Forest roads will be periodically maintained and repaired as needed.

The operation of equipment, falling of trees, and truck traffic can present safety hazards for forest users. The following measures will apply while project activities are active:

- a) Road closures will be enforced when tree felling and skidding activities are active along forest roads.
- b) These closures will be temporary so as not to obstruct access for emergency services.
- c) Truck warning signs will be posted along routes used by log trucks and other heavy equipment.
- d) Log trucks will be limited to a 20 miles per hour (mph) speed limit on TRIR unsurfaced roads and 25 mph on surfaced roads.
- e) Dust abatement measures will be required for log truck routes and active log landings.
- f) Log hauling on weekends and official TRIR holidays may be restricted, per the discretion of the TRTC.

#### 7.17. Air Resources

Alternative 1 - No Action: Planned smoke emissions will either not occur or be at a minimal level as no pile burning is proposed. Dust from community use (dispersed recreation) and management use (fire patrols, forest management, law enforcement) of unsurfaced forest roads will continue at low levels. Potential adverse effects from large wildfire occurrence will increase as vegetative fuels reduction efforts will not be implemented.

Alternative 2 – Proposed Action: Pile and broadcast burning activities that generate smoke will occur under this alternative. Heavy equipment will utilize unsurfaced roads during proposed timber harvesting activities. As a result, short term emissions from smoke and dust will be generated while these types of projects are active.

The following measures will be implemented during activities proposed in Alternative 2 to reduce effects on air quality:

- a) Prescribe burn projects will be planned and implemented under a burn plan approved by the BIA Pacific Regional Office. The burn plan will outline site specific measures for smoke management.
- b) Planned burning will occur on 'burn days' as authorized by the San Joaquin Valley Air Pollution Control District.
- c) Dust abatement on unsurfaced roads will be applied while timber harvesting operations are active. This is a standard requirement on Tribal projects, particularly during the drier summer months.

## 7.18. Sensitive Species

## Cultural plants and wildlife

Alternative 1 – No Action: Due to the minimal level of management, this alternative will have no adverse or beneficial effects on culturally important plant and animal species. Tree and shrub removal will be confined to areas near roads and recreation sites. Wildlife habitat conditions will not change.

Alternative 2 – Proposed Action: Proposed activities have the potential to affect cultural plants, animals, and fish. Designed treatments that involve vegetation manipulation can negatively or positively affect cultural species. The following anticipated effects and mitigation measures are discussed for each species:

#### Giant sequoia

Protecting and enhancing giant sequoia is a forest management priority. The Tribe's Forest Management Plan (FMP) outlines specific management objectives and practices for giant sequoia growing sites. Proposed Alternative treatments such as fuels reduction, forest development, and timber salvage will be designed to enhance giant sequoia management pursuant to FMP objectives.

Specific treatments to be applied that will protect and perpetuate giant sequoia include reducing ladder fuels, removing dead and dying mixed conifers, creating openings for giant sequoia natural seedling establishment, artificial reforestation, prescribe burning, and precommercial thinning of whitewood species to release giant sequoia saplings. Conditions for giant sequoia establishment and growth is expected to improve after these treatments are completed.

#### California black oak

This tree is used by the community for acorn gathering and firewood, and is an important wildlife tree. Black oak is not proposed for removal in fuels reduction or timber harvesting activities. These trees will remain as an important component of the mixed conifer and woodland forest types.

#### Willow

Willows are not planned for removal during any of the proposed activities under this alternative. Willow trees and shrubs are found along watercourses and wet areas, and will be protected during timber harvests and fuels reduction treatments by standard TRIR and BIA riparian protection measures that are incorporated into project guidelines.

#### Manzanita

Manzanita wood is an important fuel for ceremonial use. It is a common surface plant within the assessment area. Manzanita will be selectively removed during fuels reduction

activities at locations where it has become overly dense and poses a fire hazard. Manzanita wood from bushes that are removed in proximity to roads will be left on-site, rather than chipped or burned, and therefore made available for community members. This practice has been followed on previous fuels projects with positive community reaction.

#### Fisher

Fishers are known to inhabit the TRIR, including portions of the project area. No den sites have been confirmed. The Windy Fire burned through suitable fisher habitat. Some habitat was in high burn severity areas. Proposed projects that involve timber salvaging and associated vegetation manipulation will include fisher habitat retention or enhancement measures into field guidelines. These measures will include retention of trees with suitable denning cavities, adequate numbers of snags, protection of riparian corridors, and retention of large woody debris.

#### Fish species (brown trout, rainbow trout)

Fish species and habitat will be protected by implementing riparian protection zones discussed under Watershed Resources. Streamside shade canopy will be maintained by limiting vegetation removal in these zones. Soil erosion will be minimized by limiting or prohibiting equipment operation within the riparian zone while maintaining a vegetative buffer.

#### Federally listed species

Alternative 1 – No Action: There are no anticipated effects on listed species under this alternative. Few vegetation treatments will occur and human activity in the area will be infrequent. Forest fuels will continue to accumulate and the potential for future wildfires to become larger in size and intensity is higher than under Alternative 2.

*Alternative 2 – Proposed Action:* 

#### California condor, Gymnogyps californianus

Giant sequoia trees are potential nesting and roosting sites for the California condor. There is one giant sequoia within the assessment area that is known to have been used as a California condor nest site in the past, with the last known use dating to the 1950's. The "specimen" giant sequoia trees and large old-growth conifers containing cavities suitable as nest sites are not proposed for removal. Condor movements are monitored by the U.S. Fish and Wildlife Service (USFWS). The Tule River Tribe is typically contacted when condors visit the TRIR vicinity. In addition, the Tribal Natural Resources Department will monitor the known nest tree, as well as other "specimen" giant sequoias in the assessment area, for California condor activity while project activities are ongoing. If California condors are determined to be in the TRIR vicinity while project activities are ongoing, recommended protective measures or actions will be requested from USFWS. Additional mitigation measures for the California condor are contained within the Programmatic Biological

Opinion on the Tule River Tribe Integrated Resource Management Plan. (USFWS 2021) No effect on California condors or their habitat is anticipated under Alternative 2.

## California red-legged frog (Rana draytonii)

Although there is no documentation for this species either within the TRIR or in the vicinity, there is potential habitat along a perennial watercourse located at the southeast portion of the project. Watercourse protection measures will be implemented for all project activities. These measures are outlined in the section under Watershed Resources. There will be no effect on the California red-legged frog under this alternative.

#### Fisher (*Pekania pennant*)

The assessment area contains high-quality suitable habitat for the fisher, and this species has been documented within the assessment area. Much of the assessment area burned with high overstory mortality and no longer meets the habitat criteria for the fisher; however, areas that burned with low-to-moderate vegetation effects are likely still providing habitat. Tribal Environmental Protection Department Staff will be conducting camera surveys for fishers within the assessment area, and will notify USFWS staff if fisher area detected. Additionally, all relevant Conservation Measures and Limited Operating Periods described in the Programmatic Biological Opinion (USFWS 2021) will be adhered to. As a result, the proposed action is a Tier 1 project under the Biological Opinion and no adverse effects to the fisher are anticipated.

#### Mountain yellow-legged frog (Rana muscosa) - Northern DPS

Potential habitat for this species exists along a perennial watercourse located at the southeast portion of the project. Since the species is highly aquatic, the standard watercourse protection measures to be implemented during project activities will protect potential habitat along perennial creeks, wet meadows, and other aquatic areas. These measures are discussed under watershed resources. There will be no effect on the mountain yellow-legged frog or suitable habitat for this species.

#### Southwestern willow flycatcher (*Empidonax traillii extimus*)

Potential habitat for this species will not be altered. Riparian vegetation is not proposed for modification under this alternative. Standard watercourse protection measures will be introduced for each proposed project activity. No effect on this species is anticipated.

#### Springville clarkia (*Clarkia springvillensis*)

The USFWS has issued a Programmatic Biological Opinion, which includes an analysis of the range of the Springville clarkia as well as potential effects of various management activities on this species. (USFWS 2021) Based on detailed surveys of the TRIR, it has been determined that the assessment area is above the elevational range for this species. As such, no effect on this species is anticipated.

#### Bald eagle (*Haliaeetus leucocephalus*)

Field activities under this alternative will occur from late spring to early fall, during the time of year when eagles have left for their summer grounds. Although conifer trees of all sizes will be selectively removed during project activities, adequate numbers of large diameter snags and green trees suitable for perch sites will be left standing and well distributed throughout the assessment area at the conclusion of the project. Bald eagle habitat will not be adversely affected under this alternative.

#### Golden Eagle (*Aquila chrysaetos*)

There are no historic golden eagle nest sites or suitable nesting cliffs known within the assessment area. The area has large conifer trees that are suitable for nest sites. Several drainages to the north and east contain rugged rock outcrops that could provide nesting habitat. Oak woodland, chaparral and grassland cover types located within 0.5 miles north of the assessment area boundary provide desirable foraging habitat.

Proposed activities will not result in loss of foraging area or nesting habitat. Prior to implementing the activities proposed under alternatives 2, treatment areas will be field surveyed for the presence of golden eagles and nest activity. There will be no effect on the golden eagle or associated habitat.

#### 7.19. Fire Protection

Alternative I – No Action: Potential delays for emergency equipment accessing the north side of the TRIR will increase as trees decay and fall onto forest roads. Emergency response times may also increase as roads are subject to less maintenance and repair.

Fire hazards will increase as fuels continue to accumulate with minimal fuels reduction occurring. Hazardous conditions for fire intensity, behavior, and spread will heighten. The potential for a crown fire will increase.

The risk of ignition will remain at historically low levels. Human activity will be limited to dispersed recreation and minimal management activities.

Alternative 2 – Proposed Action: Vegetative fuels will be reduced through implementation of a series of treatments. The numbers of standing dead and dying trees will be lowered along with surface woody fuels. The vertical and horizontal continuity of dense fuel accumulations will be broken, resulting in defensible fire suppression zones.

Human activity and the use of heavy equipment will increase during the summer months for several years. The risk of fire ignition will subsequently increase while project activities are ongoing. Road closures will occur for community safety considerations.

The following measures will be incorporated into project guidelines to minimize ignition risk and maintain adequate fire protection:

- a) Fire tools and/or equipment will be kept on-site while operations are active during fire season.
- b) Accumulations of slash generated from tree falling will be treated by a combination of chipping, lopping and scattering along the ground surface, mechanical crushing, and/or piling for burning.
- c) Warming fires for project personnel are subject to approval by the Tribal Wildland Fire Department, and permitted only at designated locations.
- d) Road closures due to project activities will be temporary. Roads will not be blocked overnight or for extended time periods, and will be kept clear and passable for emergency personnel.
- e) The measures identified under Roads and Community Safety are applicable to fire protection.

## 7.20. Cumulative Effects

The cumulative effects area includes the headwaters of Eagle Creek, Redwood Creek, Bear Creek, Bond Creek, and Kessing Creek all of which are subwatersheds of the South Fork Tule River. These lands are under Tule River Tribal management. The ridgeline at the south TRIR boundary defines the southern extent of the South Fork Tule River watershed.

Ground disturbing projects known to have occurred within the past ten-year period, current projects, and projects planned in the foreseeable future are identified on the table below.

Projects Completed, Ongoing, and Planned in the Windy Fire EA Assessment Area Upper Northeast Portion of the South Fork Tule River Watershed 2021 – 2023

Year	Treatment	Project Status
2023+	Proposed Action	Planned
2021-2022	Emergency Hazard Tree Removal	Windy Fire Activity
2021-2022	Road Maintenance (Periodic)	Completed
2021-2022	Windy Fire Emergency Stabilization	Completed

None of the above projects involve new road construction. The existing road density in the assessment and cumulative effects area will not increase.

# 7.21. Summary of Mitigated Environmental Effects

The following table summarizes the mitigated effects of implementing each alternative on identified environmental components.

**Summary of Mitigated Environmental Effects of Proposed Action** 

M

0 = No effect; M = Mitigated no effect; + = Beneficial effect; - = Adverse effect

#### 8.0 CONSULTATION

**Cumulative Effects** 

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### 9.0 APPENDIX

## 9.12.Maps

#### 9.13. References

Tule River Indian Reservation. 1998. *Forest Management Plan*. On file at Tule River Natural Resources Department.

Tule River Indian Reservation. 2013. Cultural Resource Assessment of North Cold Spring-Parker Peak Forest Management Area, Tule River Indian Reservation. On file at Tule River Natural Resources Department.

Tule River Indian Reservation. 2014. Integrated Resource Management Plan. On file at Tule River Natural Resources Department.

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- National Wildfire Coordination Group. 2023. *InciWeb Windy Fire Incident Overview*. Available online: <a href="https://inciweb.nwcg.gov/incident-information/casqf-windy-fire">https://inciweb.nwcg.gov/incident-information/casqf-windy-fire</a>.
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- U.S. Department of Agriculture, Forest Service, Sequoia National Forest. 2012. *Giant Sequoia National Monument Management Plan Final Environmental Impact Statement, Volume 1.* Available online:

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- U.S. Department of Interior, Bureau of Indian Affairs, Central California Agency. 2021. Windy Fire Burned Area Emergency Response Plan. On file at Tule River Natural Resources Department.
- U.S. Department of Interior, Fish and Wildlife Service. 2022. *Programmatic Biological Opinion on the Tule River Tribe Integrated Resource Management Plan for the Endangered Southern Sierra Nevada Distinct Population Segment of the Fisher on the Tule River Indian Reservation, Tulare County, California*. On file at Tule River Natural Resources Department.

## 9.14.List of Acronyms

BAER – Burned Area Emergency Response

BARC – Burned Area Reflection Classification

BIA – Bureau of Indian Affairs

BLM – Bureau of Land Management

CAL FIRE – California Department of Forestry and Fire Protection

EA – Environmental Assessment

ESA – Endangered Species Act

FMP – Forest Management Plan

SNF – Sequoia National Forest

TRIR – Tule River Indian Reservation

USDA – United States Department of Agriculture

USFWS - United States Fish and Wildlife Service

USGS - United States Geologic Survey

## 9.15. Public Scoping Notices

#### **PUBLIC AVAILABILITY:**

A Notice of Availability for the EA and the unsigned FONSI has been provided to Tule River Reservation, agencies, organizations, and interested parties starting May 15 through June 14, 2023, for a period of 30 days. The FONSI will be made available for a 30-day public comment period during which time the contents of the EA and the FONSI can be commented upon. When 30-day period is completed the CCA Superintendent will sign and the FONSI will be completed.

#### **DETERMINATION:**

The Tule River Tribal Council (TRTC) desires to mitigate identified land management, public safety, and forest health concerns by implementing a series of projects located within the east portion of the Windy Fire and on adjoining forest lands affected by the drought. The proposed activities are planned entirely on Tribal trust lands administered by the TRTC through the Tribal Natural Resources Department, with oversight provided by the Bureau of Indian Affairs (BIA). There are no Indian allotments or land assignments included in the project area. These are intended to be multi-year projects proposed for implementation beginning in 2023 and continuing for more than ten years.

This report, titled *Environmental Assessment Report for the Windy Fire Emergency Stabilization and Salvage Sale Projects* (referred to as the Windy Fire EA), analyzes the potential effects of implementing proposed activities on the biological, physical, cultural, and socioeconomic resources of the TRIR. The intent of this report is to explore options for mitigating identified concerns and to comply with the requirements of the National Environmental Policy Act. This does not constitute a major federal action that would significantly affect the quality of the human environment. Therefore, in accordance with Section 102(2)(c) of the National Environmental Policy Act, 42 U.S.C § 4321 et seq., an Environmental Impact Statement is not required. This determination is supported by the findings described in this FONSI and the analysis contained in the entire administrative record. This fulfills the requirements of NEPA as set out in the Council on Environmental Quality Regulations for Implementing NEPA (40 C.F.R. 1500–1508), and the BIA NEPA Guidebook (59 IAM 3-H, August, 2012).

Approved:	Date:
Central California Agency, Superintendent	
Bureau of Indian Affairs, Pacific Region	
BIA/CCA FONSI	