

TULE RIVER INDIAN RESERVATION  
PLANNING PROGRAM  
FOR THE MASTER PLAN

JUNE 2015

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FOR THE MASTER PLAN**

ADMINISTRATIVE DRAFT

JUNE 2015



Prepared for the  
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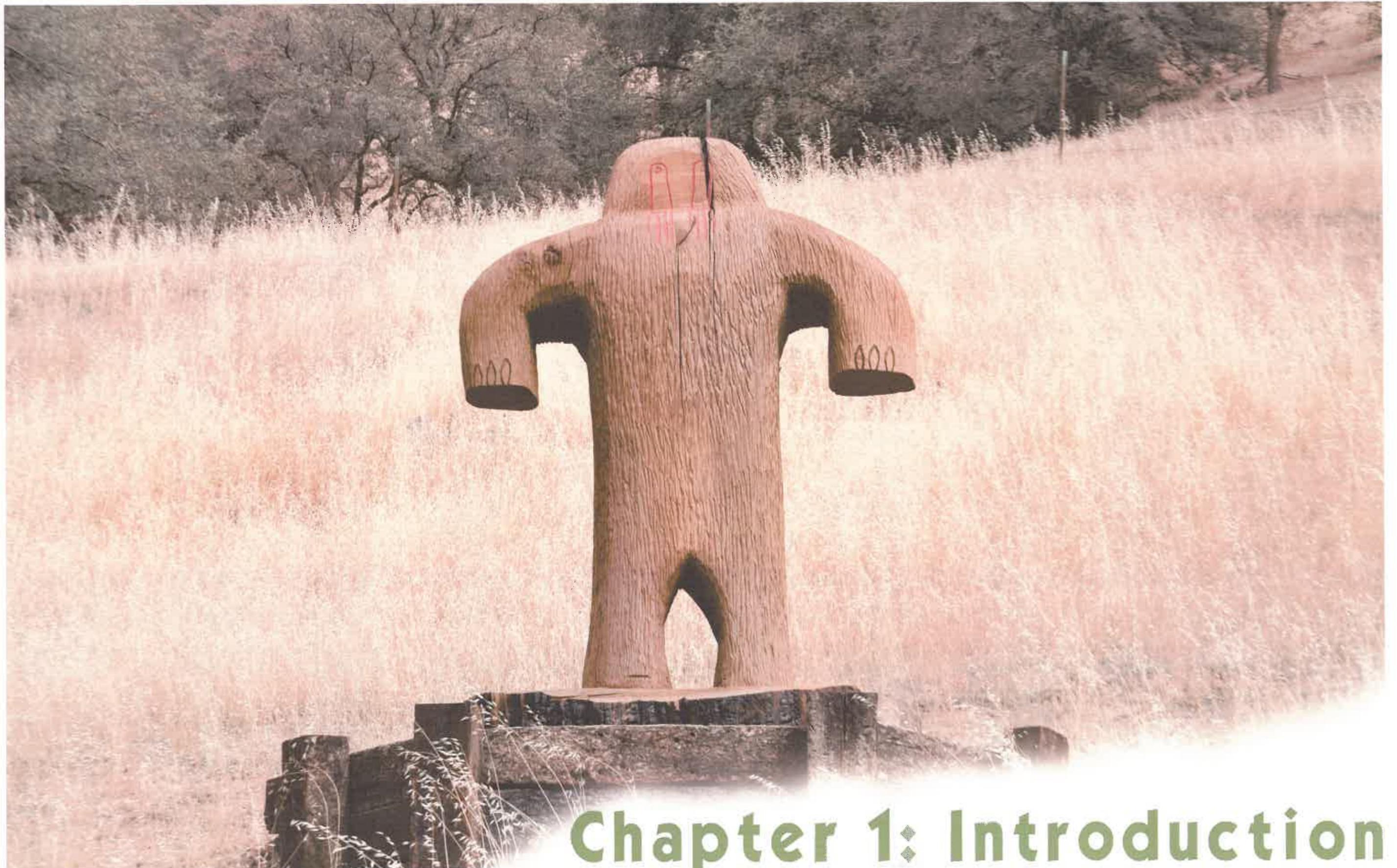


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# Chapter 1: Introduction



# TULE RIVER INDIAN RESERVATION MASTER PLANNING PROGRAM

## Chapter 1: Introduction

The Tule River Indian Tribe has embarked on a mission to improve the quality of life of Tribal members. Through the initiation of a Master Plan, tribal leaders have worked with their community to create objectives in several key areas to continue to lift their members from poverty and sustain their way of life for generations to come. This Master

Planning Program is a living document which reflects the Tule River Indian Tribe's desire to plan for progress while preserving the past.

The Master Plan is centered on several critical planning principals, including;

- The stewardship of natural resources
- The establishment of quality housing for Tribal members
- The conservation of water resources
- Making decisions considering the impacts to three future generations

### Tribal Planning Program Vision Statement

*"Consider future generations when planning for the needs, wants, and desires of the tribal community. Sustainably develop future social and economic opportunities while preserving the cultural traditions of the past."*

By relying on these planning principals, common Tribal interests are combined to move the community forward in a balanced and organized manner. Reacting to planning challenges on an issue by issue basis can lead to an unbalanced society- one problem is solved at the expense of another. This Master Plan creates a balanced approach to growth, and is a touchstone for future development for the Tribe.

### 1.1 Tule River Indian Tribe

Current Tule River Reservation boundaries are the result of a series of Federal and State actions aimed at establishing sovereign land assignments for Native American populations. Today, the Tule River Reservation covers over 55,000 acres and includes portions of the southeast San Joaquin Valley and the Sierra Nevada mountains. The Reservation is approximately 20 miles east of Porterville, in the County of Tulare, California's top agricultural production center. Covering almost 85 square miles of largely undeveloped land, the Reservation is home to a diverse collection of flora and fauna, including the southernmost stands of Giant Sequoia trees.

The population on the Reservation is growing, and is currently home to 1,600 tribal members and relatives. It is estimated that an additional 3,000 tribal members are living in the vicinity of the Reservation within Tulare, Kings, Fresno, and Kern Counties.





## 1.2 Planning Context

So why plan? The simple answer is planning assists in creating communities that offer quality choices for where and how people live. Planning is composed of both a process and a technical evaluation. It represents timeless visions leading to specific achievements. Planning is best served with community discussions, dialog and debate which results in better solutions and designs. And in the best sense, planning allocates scarce resources and encourages economic growth while balancing environment concerns.

Planning as practiced is an evolving concept. As such, it passes through eras and follows trends, which directly mirror culture and society. Garden city, modernism, new towns, new urbanism, smart growth, and sustainable development are all examples of these trends and each has a place in today's planning perspective. Of particular focus for this effort is the concept of sustainable development, which is the philosophy of designing the built environment and services to comply with the principles of social, economic, and ecological sustainability. In the San Joaquin Valley, this has been further refined by the San Joaquin Valley Blueprint project. The Blueprint Project began in 2006 and resulted in a set of principles to assist in the development of future plans and programs.

The 12 Smart Growth Principles from the Blueprint Project represent the core values of the San Joaquin Valley and were intended to reflect a regional perspective. The Smart Growth Principles establish a benchmark for Blueprint related decision-making and provide guidance for achieving the adopted San Joaquin Valley Blueprint. The adopted 12 Smart Growth Principles are:

1. Create a range of housing opportunities and choices
2. Create walkable neighborhoods
3. Encourage community and stakeholder collaboration
4. Foster distinctive, attractive communities with a strong sense of place
5. Make development decisions predictable, fair, and cost-effective
6. Mix land uses
7. Preserve open space, farmland, natural beauty, and critical environmental areas
8. Provide a variety of transportation choices
9. Strengthen and direct development towards existing communities
10. Take advantage of compact building design
11. Enhance the economic vitality of the region
12. Support actions that encourage environmental resource management

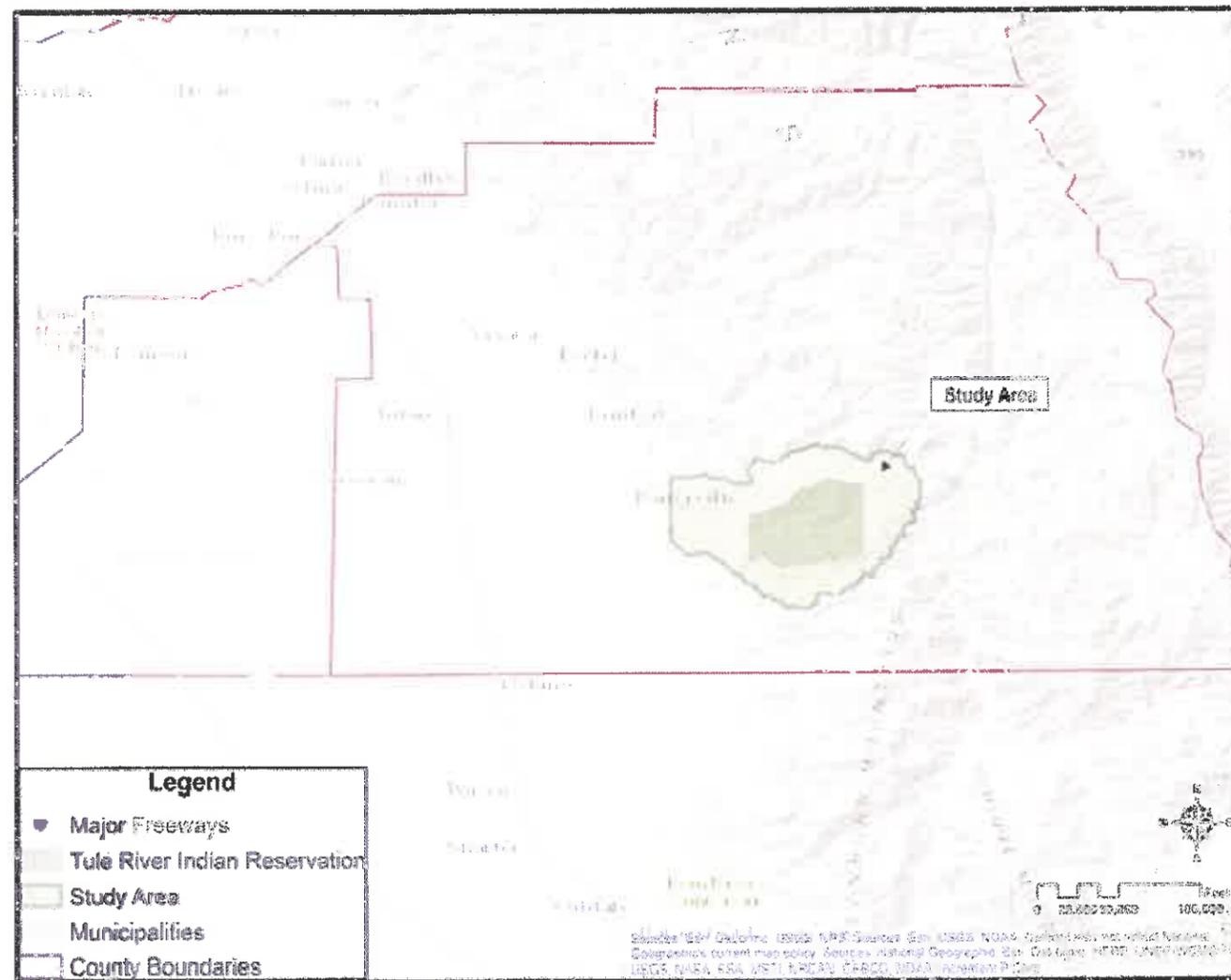


Figure 1-1 Vicinity Map



Interestingly, these principles while relatively new to the planning field in California represent the basic principles of Tule River Tribal philosophy for generations. While specific to a modern city or county, they are very reflective of the Tule River Tribe's relationship with their natural surroundings and many of the Tribe's goals for the future.

The Tribe's historic relationship with the land, flora and fauna is unique in that it represents the perspective sought by cities and counties throughout the country. The Tule River Indians have maintained this "sustainable" interface with the land and its resources. Also, given the nature of Tule River Reservation's formation, its membership includes bands of Indians that occupied a large portion of California. As such, their relationship extends far beyond the Reservation boundaries. In the modern sense they are seen by many public agencies and private groups as the stewards of Indian history and culture for portions of Fresno, Kings, Tulare and Kern counties.

Given that history, unique perspective and perpetual stewardship, a study area was established beyond the legal boundaries of the Reservation. The study area reflects some of the historic tribal territory and includes influence areas surrounding the Reservation. The study area also includes off-Reservation property owned by the Tribe which will be maintained or developed in the future. The study area was developed to establish a sphere of influence which reflects the Tribe's commitment to the stewardship of both cultural and natural resources for future generations. The Study area encompasses approximately 204,400 acres. The Study area is bordered by Sequoia National Forest to the east, Giant Sequoia National Monument to the north, the City of Porterville to the west and Deer Creek to the south. The boundaries also reflect the interdependence between forest lands to the north and east and the Reservation. The study area will allow for additional economic development opportunities to be fully integrated with the Tribe's future planning efforts.

#### Tribal Planning

A Master Plan is an evolving, long-term planning document. The plan establishes the framework and key elements for the development of a community that reflects a clear vision created and adopted in an open process. This Master Plan holds additional significance as the Tule River Indian Tribe is a Sovereign Nation, responsible for determining its own future and the welfare of its members.

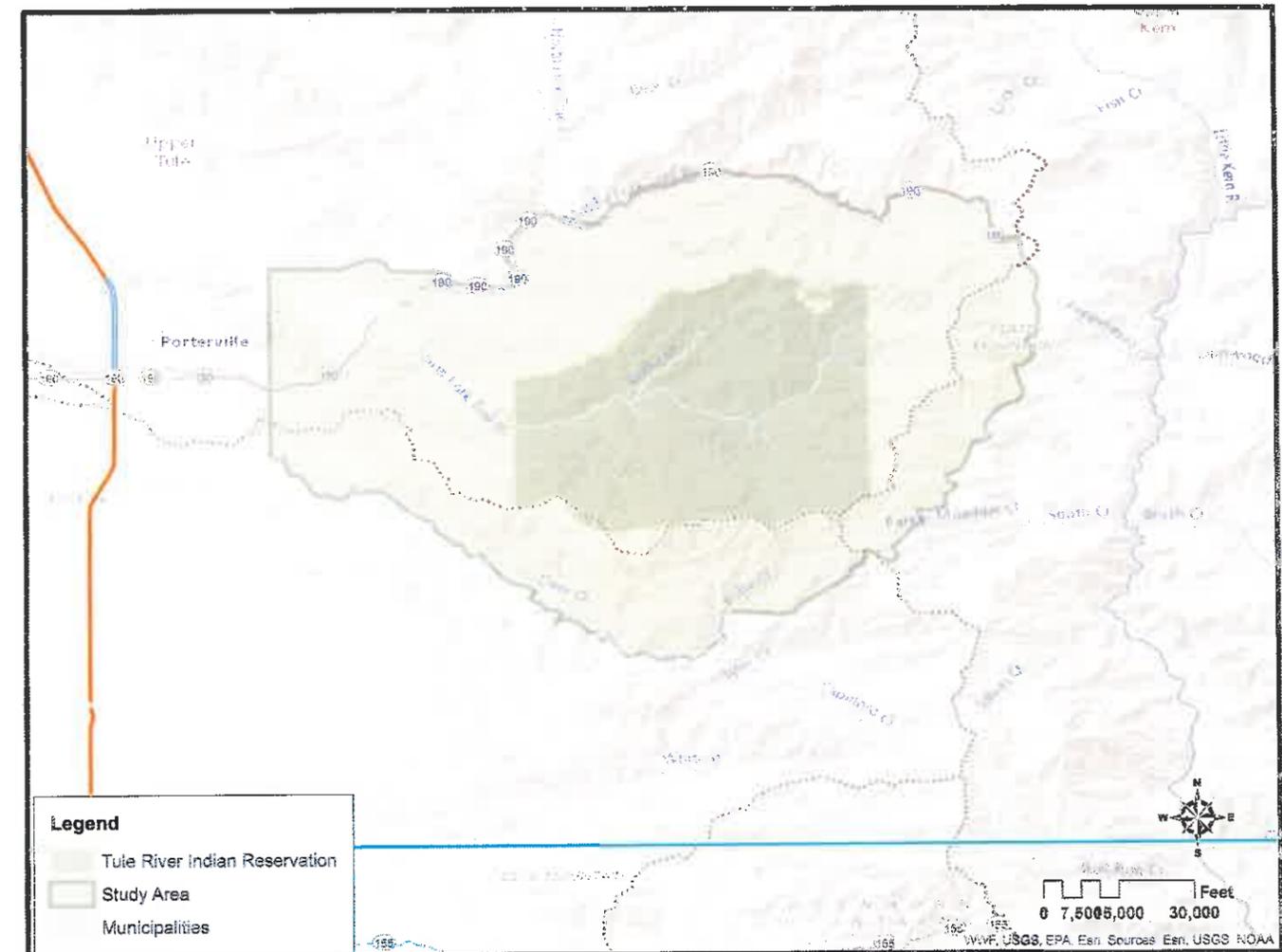


Figure 1-2 Study Area



As a Sovereign Nation, the Tule River Indian Tribe is not governed like a typical community. The Reservation is an area where tribal sovereignty applies and state power is limited. Day to day actions are governed by regulations enacted by the Tribal Council.

The Tribe also owns property that is not a part of the designated Reservation. Some of this land owned by the Tribe is in "trust". Tribal trust land is held communally by the tribe and is managed by the tribal government. The U.S. Government holds the legal title, and the tribe holds the beneficial interest. The last type of ownership is property owned by the Tribe but not in trust. Here property would be regulated like property held by a private citizen, and is subject to federal, state, and local laws that govern activities and development.

The Tule River Indian Tribe holds a variety of property under different ownership scenarios, and hopes to bring their land all into "trust" ownership status. However until that time, specific properties would be governed in different ways, which will require a coordinated and comprehensive approach to development.

#### *Regional and Statewide Planning*

As a significant land owner in the southern San Joaquin Valley, as well as having a cultural interest in land distant from the Reservation, the Tule River Tribe is a key stakeholder in regional and statewide planning efforts. Relationships between tribal leaders, regional planners, and state agencies are critical for exchanging information about the needs of the Tribe and upcoming tribal or government projects. Communication regarding regional improvements on transportation, commercial development and natural resource conservation can coordinate efforts and funding to maximize the efficiency of projects and meet the needs of as many people as possible. Consultation with County or State government may also be appropriate to determine potential impacts of a Tribal development project on adjacent properties or the region as a whole. Depending on the ownership classification of a specific property, the Tribe may need to involve local and state decision makers in development opportunities.

#### *National Planning*

The Tribe's relationship with federal agencies makes coordination between tribal planning programs and federal oversight critical. Direct relationships with the Bureau of Indian Affairs, surrounding land owners including the U.S. Forest Service and the Bureau of Land Management, and other federal agencies play important roles in the management of land and water resources, funding of tribal programs, and the transfer of land into tribal trust.

#### *Master Planning Program*

This document represents the first Master Plan document for the Tule River Indian Tribe and as such, a number of considerations were integrated into the planning process. A few of these considerations include history of the land, history of the Tribe, and the significance and influence of this reservation's planning efforts on the local and regional scale. This scale is kept in consideration in terms of biological and natural preservation as well as planned development and economic growth.

While the day to day operations of public works, housing, tribal gaming, public safety, forestry, and environmental departments are already in place, there is a growing need to identify current conditions and common challenges that face Tribal members. The intent of this document is to serve as a definitive guide for future decision making. The Master Plan will ensure that despite inevitable changes in leadership over time, critical Tribal decisions are made in a consistent manner. This document will provide the framework for the development of the Tribe's future to ensure that the best and highest use of resources is accomplished. Its purpose is to reflect a clear vision of the community by synthesizing Tule River Indian Tribe culture and the communities' aspirations while also understanding community specific factors that need be effectively managed.





This Master Planning Program document differs from traditional Master Plan documents. This Tule River Reservation Master Planning Program document is the first step in a larger master planning effort to address all aspects of Reservation life, including land use, natural resources, cultural resources, transportation, economic development and housing. This Planning Program document focuses on four elements, an existing conditions report, specific plans for key development areas, a comprehensive housing plan and a transport plan. These four elements address the Tribes' greatest needs at this time. Additional chapters will be added in the future, which will include a comprehensive Land Use Plan, Transport Plan, Natural and Cultural Resources Management Plan, and Implementation Plan.

### 1.3 Methodology

A variety of key sources of information and technologies were used as a basis for this Master Planning Program, including community outreach, meetings with Tribal members and Tribal Departments, site surveys, and geographic information systems. Initial processes conducted in order to complete this Master Planning Program are as follows:



#### *Geographic Information Systems (GIS)*

A Geographic information system, or GIS, is a computerized data management system designed to capture, store, manipulate, analyze, manage and present numerous kinds of spatial or geographical data. For this study, GIS was used to create a detailed inventory and to collect environmental, demographic, civil infrastructure and spatial information for the Study area, as seen in Figure 1-2. GIS is an advantageous tool for understanding baseline conditions, environmental resources, potential restrictions and areas of potential development within the Study area. The GIS program has been coordinated with Tribe's Department of Environmental Resources and C2 Consult Corp.

#### *Community Surveys*

Surveys allow for meaningful community participation in the planning process. In January of 2014, the Tule River Indian Tribe's Planning and Community Development Department distributed a 14-question survey to enrolled Tribe members. This survey discussed future development projects, problems faced by the community and areas for improvement. A second survey was conducted to create a land use inventory for all tribal lands on the Reservation.

#### **1.3.1 Planning Program Elements**

This Master Planning Program document includes the following elements:

#### *Existing Conditions*

Existing conditions assessments seek to create a shared understanding of past growth and change, and also identify potential drivers for future growth in order to confirm areas for more focused planning. The Existing Conditions chapter will include both quantitative and qualitative information. Data supporting this chapter was found from a variety of sources, including the U.S. Census, County of Tulare, the U.S. Geological Survey, along with other state and federal databases. Existing cultural and historical areas of significance for the Tule River Indian Tribe represent qualitative data, deriving primarily from information shared by the Tribal Council and other Tribal leaders.



### *Goals and Policies*

Working closely with the Tribal Council, this element addresses current areas of importance for the Tule River Indian Tribe. Today, the Tribe faces population growth, an aging on-reservation population, and deteriorating infrastructure. These are areas of improvement addressed by the Goals and Policies Element of the document, as well as potential economic development strategies. Policies for strategic future growth will be discussed in this section.

### *Housing Plan*

Currently, the most pressing issue facing the Tribe is a lack of affordable housing for enrolled members of the Tribe. This element of the report identifies the current housing situation on the Reservation, explores opportunities for new housing, identifies constraints and growing needs, and ultimately provides a construction plan for new and replacement units.

### *Specific Plans*

Specific Plans function as a versatile tool for implementing Master Plans without substantial legal challenge to the nature of their use. They systematically implement the Master Plan for all or part of the area under its scope. The Specific Plan element in this document will identify priorities for development, discussing location, land use and implementation processes. More information can be found below regarding the details on the Specific Plans.

### *Transport Plan*

The Transport Plan was developed to address the need for the maintenance of existing roads within the Reservation and the expansion of the road network to serve future development of the Tribe. The Transport Plan includes an inventory of the existing Reservation road system, including road names, classifications, estimated daily volumes, pavement surface and condition, and comments on its functionality. A capacity analysis for future development was also prepared.

A second access road has been identified as a significant long term need for the Reservation. The Transport Plan includes a proposal for this critical roadway. Currently, traffic is funneled onto Reservation Road. An alternative access route was evaluated as part of this effort which addresses capacity and safety considerations. Several alignments were developed and evaluated for constructability and environmental concerns. A preferred option was selected and a plan was designed to show its general location. Future sections of the Transport Plan will include a comprehensive road plan, transit plan, a pedestrian/bike plan, and other multi-modal trail plans.

### *Action Items*

This chapter includes a summary of action items required to be addressed by the Tribal Council and members. It serves as a launching point for further action, to address critical issues identified in this Master Planning Program, as well as items that require further analysis to be included as new chapters in the overall planning program.

### **1.3.2 Specific Plans**

The Specific Plans serve as a tool to develop unique development scenarios for key locations on the Reservation. The Specific Plans are supported by the overall vision and objectives for the Tribe, but provide additional detail as to how the tribal vision and objectives are taken from a planning document to a physical site. The specific plans in this Master Planning Program allow for effective implementation of the Tribe's long-term vision focus on the Tribe's most pressing issues: housing and economic development.

The Tule River Indian Tribe Specific Plans focus on three planning areas: (1) the Village Core, (2) McCarthy Ranch, and (3) Eagle Feather. Each specific plan addresses the key opportunities for the site, such as housing, commercial development, or tourism, and is framed around the critical issues for the location, including water, slope, and access.



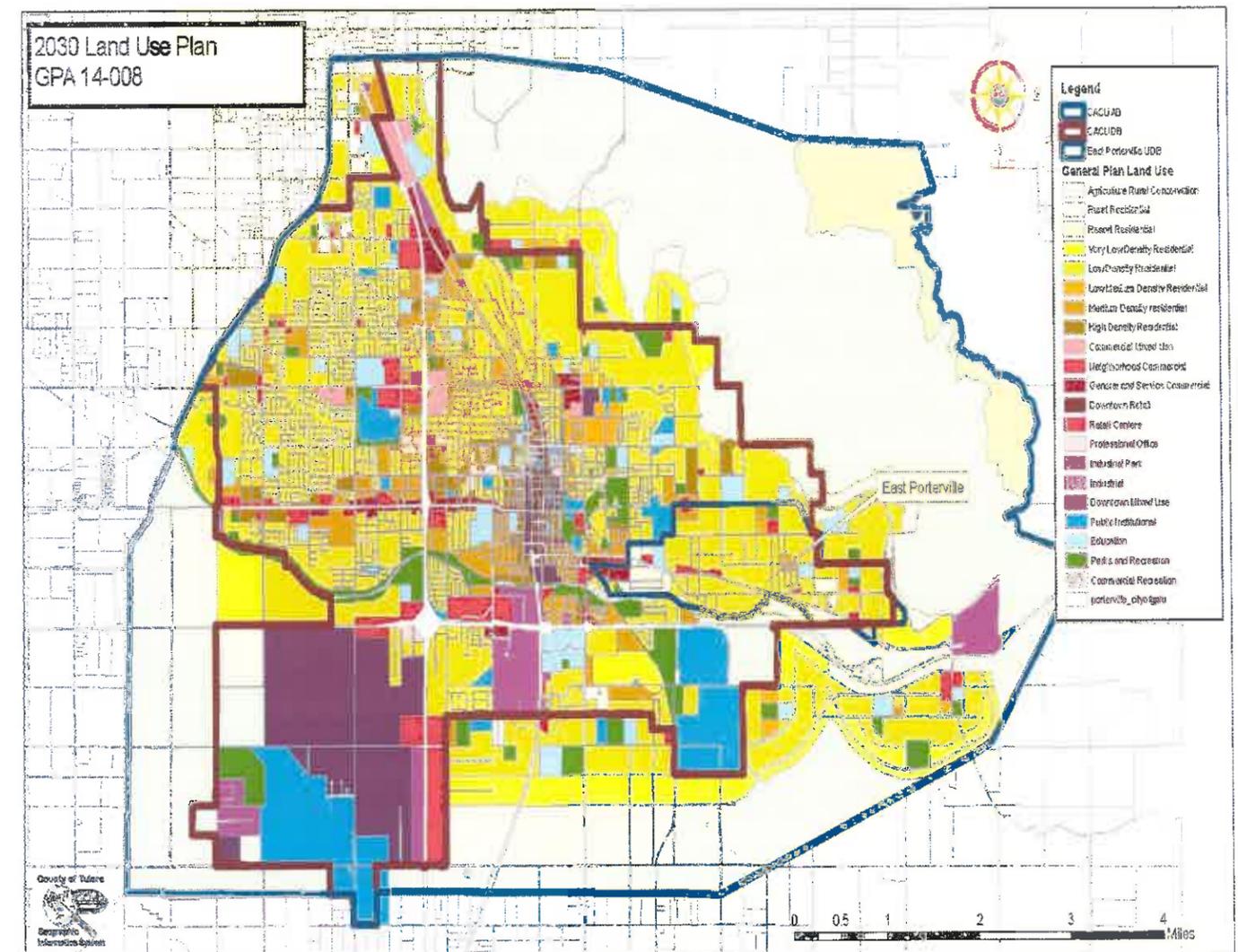
### 1.3.3 Future Planning Efforts

This initial Master Planning program will be limited in scope and effort. Future efforts anticipated include the further development of the master plan to include a land use plan for the study area. As part of this future effort coordination will need to be made with the County of Tulare. In February of 2015, the County approved the Porterville Area Community Plan. This document was prepared in response to the City of Porterville's law suit over the County General Plan. The Area Community Plan integrated the County's vision of the area with the current City General Plan. As depicted on the map, the plan covers not only property owned by the Tule River Tribe, but includes a substantial amount of area within the Master Plan Study area. The future work effort will need to focus on integrating the Area Community Plan with the Tribe's visions for their property and the overall study area. It is the Tribe's intent to complete the Land Use Plan soon after the Master Plan is adopted. The Tribe's Master Land Use Plan will provide vision and guidance to the Tribe on future development efforts, respond to federal guidance regarding historic tribal lands, and the Tribe's goal of expanding the Reservation boundaries.

Likewise, the Tribe intends to prepare a Master Transport Plan as a companion document to the Land Use Plan. The Transport Plan will focus on development of the road system within the Reservation, long term maintenance of the system, expansion of the transit program and the construction of an alternative access road into the Reservation.

In order to achieve the plans and programs outlined in the Land Use and Transport Plans, the Tribe intends to prepare an Implementation Plan. The Implementation Plan will provide short term and long term strategies and actions to be taken by the Tribe. Emphasis will be placed on short term land use, housing and transport actions to be taken to implement the Plans' goals and objectives.

Finally, the Tribe also is looking to prepare a Funding Plan to support the Implementation Plan. The funding program will review know funding sources and programs, develop cost estimates for each of the major components and prepared an implementation funding plan.





## 1.4 Tule River Indian Tribe History

The history of the Tule River Indian Tribe is long and complex, involving a mix of dialect groups, government influence, and early settlers. The original inhabitants of the San Joaquin Valley were the Yokut-speaking tribes composed of about 50 dialect groups occupying the territory along the rivers and creeks flowing from the Sierras and around the Tulare Lake. This historic area occupies portions or all of Tulare, Fresno, Kings and Kern counties.

Two pivotal events, the discovery of gold in 1848 in Coloma, and the statehood of California in 1850, led to an increase in settlers and prospectors heading west and occupying the Central Valley, or Yokut lands. While Spanish and Mexican explorers had traveled throughout California for a century and a half prior to the 1850's, the Indians of the foothills of the Sierras were relatively well protected due to their inland location. Due to the remoteness and inaccessibility of the region, the Yokuts were spared intensive contact from settlers until the 1820s when Mexican settlers began to invade the area. Following the discovery of gold in California in 1848, white settlers flooded the San Joaquin Valley.

In 1851, the federal government sent representatives to negotiate treaties with the Native American tribes in California. Tribal leaders representing four Yokuts societies - Chunut, Wowol, Koyeti, and Yowlumne - agreed to the terms of the treaty. On May 13, 1851, a treaty of peace and friendship was made and entered into at Camp Belt located on the King's River. According to this signatory document, the proposed "Tulare Lake Reservation" was situated on the lands of Chunut and Wowol, between Tulare and Buena Vista Lakes. A second reservation, the proposed "Tule Reservation", extended from the Tule River south to Paint Creek, and was located on Koyeti and Yowlumne lands. Congress failed to ratify the treaties of 1851 because local settlers felt that the new reservations would be located on prime farming land. The treaties were never ratified and the reservations never established. With the treaties rejected, Indian title to the land was left unresolved. A series of executive orders and congressional acts led to the creation of small, scattered reservations for Indians in Southern and Northern California.

In 1853 Congress created a working farm next to an Army fort in the southern San Joaquin Valley. The Tejon Reservation, also known as Sebastian Reserve, was based on the mission system and used Native Americans as a labor source. The inhabitants of the Tejon Reservation were mainly Yowlumne, a Yokuts tribe, and Kitanemuk, a Shoshonean people, who were local to the territory.

In 1858, a farm attached to the Tejon Agency was established on the site of a former Koyeti tribal village at the base of the foothills near the present town of Porterville. The farm was established on 1,280 acres on the South Fork of Tule River in sections 32, 33, 34, T. 21 S - R.28 E., later a portion of the site became the Alta Vista School. The farm became known as the Tule River Farm or later the Madden Farm. With the establishment of the farm the surrounding settlers expected the Indians to learn farming.

The Tule River Farm was very prosperous, and consistently produced the highest crop yields of the four reservations established in California during this period. But the Tule River Indians were concerned that their labor was being exploited.

The cause of the Indians' reticence stemmed from the fact that Thomas Madden, an Indian service employee from Tejon, had gained personal title to the Tule River Farm in 1860 using state school warrants. The federal government was consequently obliged to rent the Tule River Farm, paying Madden the exorbitant sum of \$1,000 per year. The Indians wisely suspected that any permanent improvements on the land might not be theirs to enjoy. The Government never purchased the Madden Farm and yet in 1863, it was given the status of a reservation. All the Indians formerly at the Tejon Reservation and at a reservation near Ft. Miller on the Kings River were moved there.





In the 1860s, settlers began to demand the relocation of the Tule River Farm to a more remote location. The idea of providing a secluded, permanent home separate from white settlers was supported by Bureau of Indian Affairs (BIA) agents. In 1864, Congress passed the "Four Reservations Act", which specifically stated that no more than four Indian reservations could be established within the State of California. This statutory limitation to four reservations within California was confirmed by the United States Supreme Court in the case of *Mattz b. Arnett*, 412 U.S. 481 (1973). The four reservations established by this Act were the Hoopa, Tule River, Round Valley and Mission Reservations.

Between 1873 and 1878, the Tule River Indian Reservation boundaries were redrawn three times through executive orders. The first Executive Order in 1873 by President Ulysses S. Grant, established the Tule River Indian Reservation at its current location. However, compared to the farm in Porterville, this location had significantly less land available for farming. This new reservation, about 48,000 acres in size, was extremely mountainous, and had no more than 200 acres of land suitable for farming. Many Indians protested the move, and ultimately 180 Indians were relocated to the barren new tribal land.

Federal BIA agents arrived from Washington to observe the agricultural challenges on the new reservation. To better support the Indians agriculturally, in 1873, President Grant issued a second executive order that aligned the Reservation between the Middle and North Forks of the Tule River, which provided additional land for farming. However, despite the new boundaries, within the new Reservation several properties were acquired and settled by non-Indian owners. Protests to this new Reservation were made, and in 1878 the boundaries were altered again. President Rutherford B. Hayes re-established the original reservation and returned to the public domain all the additional lands set aside by the previous Executive Order.





One positive of the new Reservation was a significant stand of timber, located in a four-mile strip along the eastern reservation boundary. In 1884, the federal government approved the transfer of the northeast corner of the Reservation to private ownership. In 1928, Congress approved this encroachment on Indian land by redrawing the boundaries of the reservation to exclude the disputed territory. Timber companies had already purchased the land from the original homesteaders, built a road, and had begun logging the area. Both the Superintendent of the Bureau of Indian Affairs

Sacramento Agency and the Tule River Indians were not made aware of the boundary change until February of 1929. A significant cultural and financial asset has been taken from the Tribe.

Under the New Deal administration of President Franklin D. Roosevelt, the Indian Reorganization Act of 1934 restored the authority of Indians to regulate themselves through a democratically elected tribal government, while the federal government continued to hold their lands in trust. Sometimes known as the Indian New Deal, the Act intended to provide ways for American Indians to re-establish sovereignty and self-government, to reduce the losses of reservation lands, and establish ways for Indians to build economic self-sufficiency.

In the 1950s, tribal authority was again threatened when Congress attempted to terminate the trust status of Indian lands and dissolve its other obligations to the Indians. Indian Termination was the policy of the United States from the mid-1940s to the mid-1960s. This was a national push for assimilation of Native populations to live "as Americans." Congress set about ending the special relationship between tribes and the federal government. Their intention was to grant Native Americans all the rights and privileges of citizenship, reduce Indians' dependence on bureaucracy, and to eliminate the expense of providing services for native peoples.

Public Law 280, passed in 1953, gave State governments the power to assume jurisdiction over Indian reservations, which had previously been excluded from their regulation. The main effect of Public Law 280 was to sever the relationship between the federal government and the Indian Tribes. However, in *Worcester v. Georgia* (1832), the Supreme Court had ruled that state laws cannot be enforced on Indian land. The relationship between the federal government and Native American tribes was re-instated, and while this preserved a type of sovereignty and independence for tribes on reservations, in other ways, it caused a greater dependency between the Tribe and government.

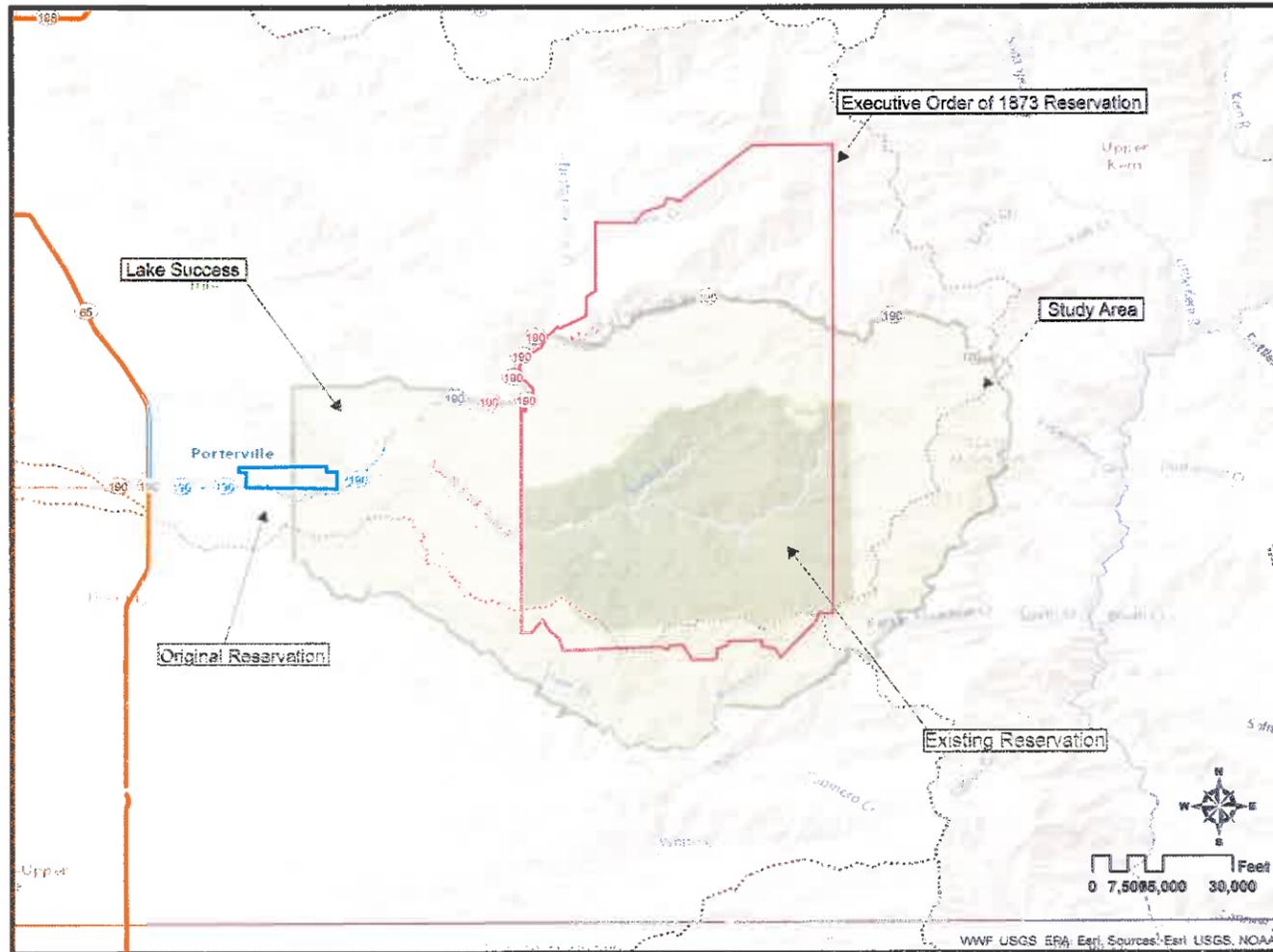


Figure 1-3 Existing Reservation Area



Without an autonomous and viable economic base and a well-functioning infrastructure, many Indian communities fell into disarray, as they became the most vulnerable sector of the American population by most measures. The Tule River Tribe escaped from poverty because of lumber industry jobs created by the Mt. Whitney Lumber Company, which provided jobs in logging and at the saw mill until 1973.

In 1979 the Tule River Tribal Council approached the federal government to regain the disputed timberland on the northeast corner of the reservation. Evidence of fraud and a cover-up were found in transfer-related documents in the National Archives and were submitted to Congress to support the tribe's claim. In 1980, President Jimmy Carter signed a law that returned the disputed northeast timberland to the Tule River Reservation. Tule River is the only reservation in the United States that has Sequoia trees on its land, and being included in the Reservation is important to the Tribe both culturally and financially.

Beginning in the 1990's the Tule River Tribe has expanded its economic base through the establishment of several businesses. In 1996, the Tule River Tribe opened a casino on the Reservation. Other commercial endeavors include a restaurant in Porterville, two gas station/convenience stores and an aircraft engine maintenance shop. These businesses create new jobs and generate income for the Tribe to use for housing, property acquisition, and other tribal programs.

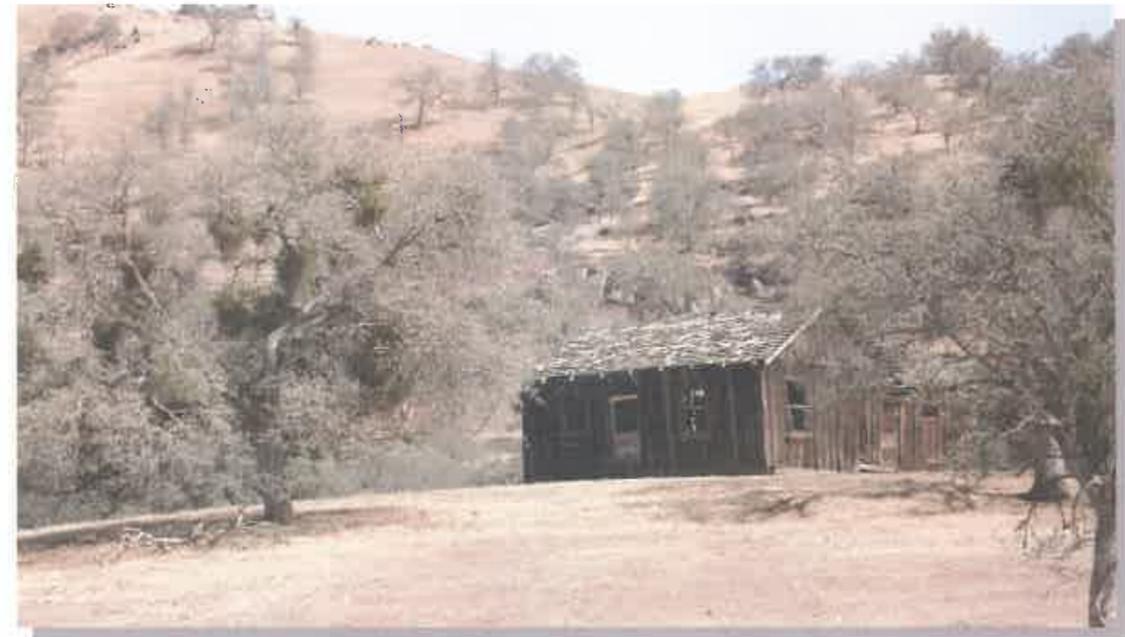
## 1.5 Key Challenges

### *Maintaining Tribal direction/consistent vision/communication*

Tribal leadership is essential for implementing goals and policies developed to improve life on the Reservation. Because tribal council elections are held every two years, there exists the possibility that work initiated under the previous tribal council will be abandoned or changed based on the vision of the new council. This change in direction of tribal leadership can delay the implementation of programs designed to improve housing, health, and welfare of tribal members.

### *Lack of housing on the reservation*

The population on the Reservation has increased over recent years and there is an ever increasing demand for housing by tribal members who desire to move to the Reservation. In addition, the housing stock on the Reservation is deteriorating as many of the homes are reaching the end of their life span. Units are deteriorating faster than anticipated due to the high persons per household ratio on the Reservation. Combined with limited funding sources to construct new units, there is an intense demand for housing on the Reservation.





#### *Casino location*

The current location of the casino, while provides adequate parking and space for special events, also results in challenges for the Tribe. The current location requires employees and visitor to travel on Reservation Road, which has significant design issues, including sharp turns, limited sight distance, and narrow road widths. The location also requires visitors to travel through the Reservation to reach the casino. Visitor access to the Reservation can result in increased crime along with other health and safety issues. While access to the Reservation is open to the public, limiting visitor access would likely reduce crime and other disturbances, thereby improving life on the Reservation.

#### *Socio-economic conditions-increase opportunities for education, jobs*

The current economic conditions on the Reservation are not favorable for many tribe members. A key challenge of the Tribe is to assist members by providing job and education opportunities. Improving member quality of life is directly linked to improving tribal member's financial and educational status.

#### *Economic Development*

Over the years, the Tribe has engaged in several economic development opportunities, including the casino, several gas stations, and food service. In order to continue the success of these ventures and create new sources of revenue for the Tribe, additional economic development should be pursued. This may include expanding/relocating existing businesses or the building of new revenue opportunities.

#### *Water availability*

As the drought continues to plague California and the West, limited water supply creates a roadblock for future residential and commercial development. Lack of water also creates challenges for on-going operations, as lack of groundwater threatens the continued use of existing wells. In addition to the current drought situation, finalizing the Water Settlement with the Federal Government and implementing the strategies to increase water supply from that settlement.





#### *Cultural and natural resource protection*

Providing new housing, improving transportation and roadways, and creating new sources of economic development are critical to improving tribal life. However, protecting key natural resources and cultural sites is paramount and shapes the future development of the Tribe. Future development must respect the sensitivity of these resources to ensure they are protected for future generations.

#### *Improving health, safety, and welfare of tribal members*

The biggest challenge facing the Tribe is how to improve the health, safety and welfare of tribal members. Challenges of health have been the focus of the Tribal Health Department for years and improvements are continually being made. Safety within the Reservation is an ongoing concern and has taken on additional importance with recent incursions by outsiders into the High Sierra back country. The overall welfare of the Tribe has improved over time with the enhancement of economic development.

#### *The Reservation Boundaries*

Where is the Reservation? This question has been asked for over 140 years. While it is a simple question and in this day and age, seems easy to answer. Yet, to this day, the specific boundaries of the Reservation are not clear. Despite repeated efforts to petition the U.S. government for a proper survey, no official boundary survey has been completed. Early records show that the Tribe requested surveys in 1904, 1910, 1911, 1912, 1915, and 1930 and in recent years have attempted to locate the boundaries themselves. Much of the issue rests on the original 1870's designations and subsequent surveys of surrounding properties. Because of the unique character of tribal lands, trust lands and resulting responsibilities, the ultimate answer of this basic question is becoming more critical.





## **Chapter 2: Existing Conditions**



## Chapter 2: Existing Conditions

Existing conditions assessments create a common understanding of historical patterns of development on the Reservation, and identifies potential drivers for future growth, which confirms areas where focused planning is needed. The existing conditions element of the Tule River Indian Tribe Master Planning Program document will focus on several distinct components:

- tribal socio-economic profile
- community surveys
- geographic information systems/mapping
- water conditions
- economic development

Following a presentation of the existing social, economic, and environmental conditions on the site, this chapter will conclude with a look at the water supply/demand for the area.

### 2.1 Tribal Socio-economic Profile

The socio-economic profile of the Tule River Indian Tribe describes various population characteristics, which help illustrate the existing economic and social relationships on the Reservation. This ultimately helps to understand the future needs of the tribe. Four distinct variables represent the larger socio-economic profile of the Tribe. This section will focus on: (1) general population characteristics, (2) employment, (3) education and (4) a commuter status. Both 2010 U.S. Census data and 2009-2013 American Community Survey 5-Year Estimates Study data have been collected as a framework for analysis. Data included in this section identifies community characteristics from year 2009 to 2013.

Population Demographics	
Total Reservation Population	1,414
Male	665
Female	749
Age 18 and under	578
Age 18 and over	836

#### Population

Population is a primary indicator of how the development of growth and services should be managed. According to the 2009-2013 American Community Survey (ACS) 5-Year Estimates survey, the total population living on the Reservation is 1,414. The gender ratio is 53% female to 47% male, resulting in 749 females and 665 males. The average age on the Reservation is 24.3 years old.

#### Household Type

The 2010 Census identified 476 total housing units on the Tule River Indian Reservation. In 2010, 279 of the housing units were owner-occupied (59%), while renters occupied 197 units or 41% of total housing stock. Most residents live in two-person households. Together, 1-person households and 3-person households comprised 18% of the available housing stock. Overall, 56% of the housing units are occupied by households with 3-or less persons. The average household size is 3.72 persons. Therefore, a significant number of residents are living in households with three or more people. This is a result of several factors unique to the Reservation. Culturally, the Reservation supports a number of multi-generation housing units consistent with the Tribal history of mixing young and old. The shortage of housing within the Reservation is also a factor as many Tribal members live together due to lack of housing options. These household types portray a unique occupancy trend specific to the Reservation.





Table 2-2 Household (%)	TRIT	Tulare Co	Difference
Family Households	82.5%	78.3%	4.2%
Married Couple Family	31.7%	43%	-11.3%
Non-Family Household	17.5%	21.7%	-4.2%
<b>Relationship in Household (%)</b>			
Householder	26.9%	29.9%	-3%
Spouse	6.2%	16%	-9.8%
Other Relatives	24.6%	10.4%	14.2%
<b>Marital Status (%)</b>			
Males Never Married	58.6%	37.7%	20.9%
Females Never Married	49.1%	30.2%	18.9%

When the Reservation housing type data is compared to housing data from Tulare County differences appear regarding family structure and occupancy trends. As depicted in Table 2-2, housing size and type was very similar between Tulare County and Tule River Indian Tribe, but the relationships shared between these occupants differed greatly. Data shows indicators of multi-generational occupancy on the Reservation. Similarly, Tule River Indian households are nearly 10% less likely to have married-couple family households than similar

households in Tulare County.

**Employment**

According to the ACS Survey estimates, there are 914 Tribe members over the age of 16. Of these 914 members, 561 or 61.4% are in the labor force. Of those in the labor force, 49.2% are employed. The unemployment rate for the Tribe is 12 percent, which is lower than the 14.5% unemployment rate in Tulare County.

The majority of employees living on the Reservation are employed in a private business. Approximately 44% are employed by a government agency, and 1.8% are self-employed. Table 2-3 portrays the occupation profile for the Tribe by industrial sector.

Table 2-3 Employment by Sector	
Sector	Percent
Agriculture, Forestry, Hunting, Fishing, Mining	22.2%
Construction	2.0%
Manufacturing	5.6%
Wholesale trade	0.0%
Retail trade	0.9%
Transportation, warehousing, utilities	0.4%
Professional, scientific, management/ administrative series	11.6%
Edu. services, health and social assistance	9.6%
Arts, entertainment, recreation, accommodation	20.0%
Other	0.4%
Public Administration	27.1%

While unemployment rates are lower for the Tribe than Tulare County as a whole, the median household income for Tribal members is slightly lower. Tulare County's median household income was \$43,046, while the Tribe's median household income was \$41,875.

**Commuter Information**

Access to transportation is not a limiting factor on the reservation. The data shows that of 412 workers age 16 and over, 99 percent use cars, trucks or vans as a means of transportation to the jobsite. Of that 99 percent, 94.4% of workers drove alone and 4.6% of individuals carpoled.

This illustrates that the motor vehicle is the primary mode of transportation. This dependence on the automobile also could be a result of lack of public transportation options, or that the public transit available does not

meet the needs of employees. Data also shows that each working individual on the Reservation has access to a car. According to the data, 45.4% of individuals had access to 3 or more available cars, while 35.9% had access to 2 cars and 18.7% had access to one vehicle. While nearly all of the working population relies on personal transportation, most individuals work close to their home. Specifically, 37.9% of individuals work less than 10 minutes away, 11.2% of individuals work 15-19 minutes away from home.



**Education**

The educational attainment data from the Census showed that of the population 25 years and over, 72.3% of these individuals graduated from high school and/or attended college. In addition, 6.5% of the Tribe's population obtained a bachelor's degree or higher. The data shows that in comparison to the County as a whole, the Tule River Indian Tribe had very dissimilar education attainment levels. The Table shows that both populations have a small percentage of individuals with college degrees, 6.5% for the Tribe vs. 13.3% for the County as a whole. The Tribe did have a very high percentage of members who had some college experience even with no degree attained.

Table 2-4 Education Attainment		
Level of education	TRIT	Tulare Co
Population 25 years and over	689	254,408
Less than 9th grade	5.1%	20.5%
9th to 12th grade, no diploma	22.6%	11.5%
High school graduate (includes equivalency)	30.6%	24.0%
Some college, no degree	32.7%	22.9%
Associates Degree	2.5%	7.8%
Bachelor's Degree	5.5%	8.8%
Graduate or professional degree	1.0%	4.5%

**2.2 Community Survey**

Community surveys are a key tool in the planning process to help determine what elements of development are desired by the community. Survey research is an excellent way to gather information from respondents in order to understand and/or predict some aspect of behavior of the population of interest. In January of 2014, the Tule River Indian Tribe's Planning and Community Development Department issued a survey that gathered Tribal member feedback on possible development strategies. Below is a list of selected questions asked by the Tribe dealing with planning and growth and the top two answers for each question.

Question 1: What do you believe to be the most important things to consider when talking about community development?

- Housing
- Water/Natural Resources/Land

Question 2: Keeping in mind future planning and development on the Reservation and tribal lands, where should the developing focus be?

- Housing
- Developing purchased lands/off Reservation housing

Question 3: Should there be continued growth and development on the Reservation? Or should development be concentrated off the Reservation?

- Off the Reservation/Purchased lands
- Both

Question 4: Considering the lack of land assignments and water on the Reservation how do you feel about off Reservation housing?

- Build homes on parcels purchased by the Tribe
- Off {Reservation housing} only if members get voting rights

Question 5: What would you like to see built on the Reservation or tribal lands with an Indian Community Development Block Grant? What type of facility? Or no facility?

- Elders facility
- Educational Facility Expansion
- Veterans Building

Question 6: In your opinion what should be done with tribal lands and properties off the Reservation such as:

- Hyder: Housing, Ball Fields
- Pearson/Diaz: Housing, Recreational Facilities
- Springville Drive: Housing, Ball Fields
- Highway 190: Housing, Economic Development/Business
- Lowe: Housing, Ball Fields

Additionally, 45 respondents were asked about moving Eagle Mountain Casino off the reservation. Twenty-seven of the respondents said the casino should be moved. Suggested alternative uses for the site included school, a senior home, a hospital or health care clinic, and group/youth home.



### 2.3 Geographic Information System

A geographic information system (GIS) is a system used to describe and characterize the earth and other geographies for the purpose of visualizing and analyzing spatially referenced information. This work is primarily performed using two dimensional maps. GIS maps portray logical categories of geographic information as map layers. They provide an effective metaphor for modeling and organizing geographic information as a series of thematic layers.

The objective of the Tule River Indian Tribe geographic information system is to provide essential information pertaining to Tribe resources and needs. In conjunction with voiced needs of the Tribe and a suitability analysis, the maps included in this Chapter display characteristics of the local ecosystem as well existing infrastructure. Data in these maps are used to formulate the planning goals, objectives and development strategies identified in later chapters of this report. Aside from mapping natural resources and geographies, data visualizations also include information regarding historical significance and socio-economic data. More detailed descriptions of data sets will be included in the descriptions of each map.





### Tribal Property

The Tule River Indian Reservation comprises approximately 55,000 acres. In addition, the Tule River Indian Tribe owns and maintains approximately 2,300 acres on four separate parcels, off the official Reservation. Additional property owned by the Tribe outside the Study Area includes property at the Porterville Airport, the Oakpit Restaurant in Porterville and a mini mart/gas station located at the intersection of State Route 41 and State Route 33.

Factors which influenced the development of the Study Area are population growth projections, potential economic development scenarios and historical tribal lands. The population of the Tribe and Reservation is expected to grow significantly over the next several generations with an average annual growth rate of 3%. In addition to the natural organic growth within the Reservation, the Tule River Indian Tribe is composed of a number of members who live off the Reservation. Many of these members reside off-Reservation by choice, but a number—some estimates are as high as 3,000—of members live off-Reservation due to the lack of housing. As population and economic development needs grow, it is necessary to explore all possible development scenarios, including assessments off-reservation.

Figure 2-1 shows Tribe owned land to support possible development strategies. Bureau of Land Management owned parcels were also included in the Study Area as talks between the Tribe and the Bureau have occurred regarding possible release of ownership on designated parcels into the possession of the Tribe.

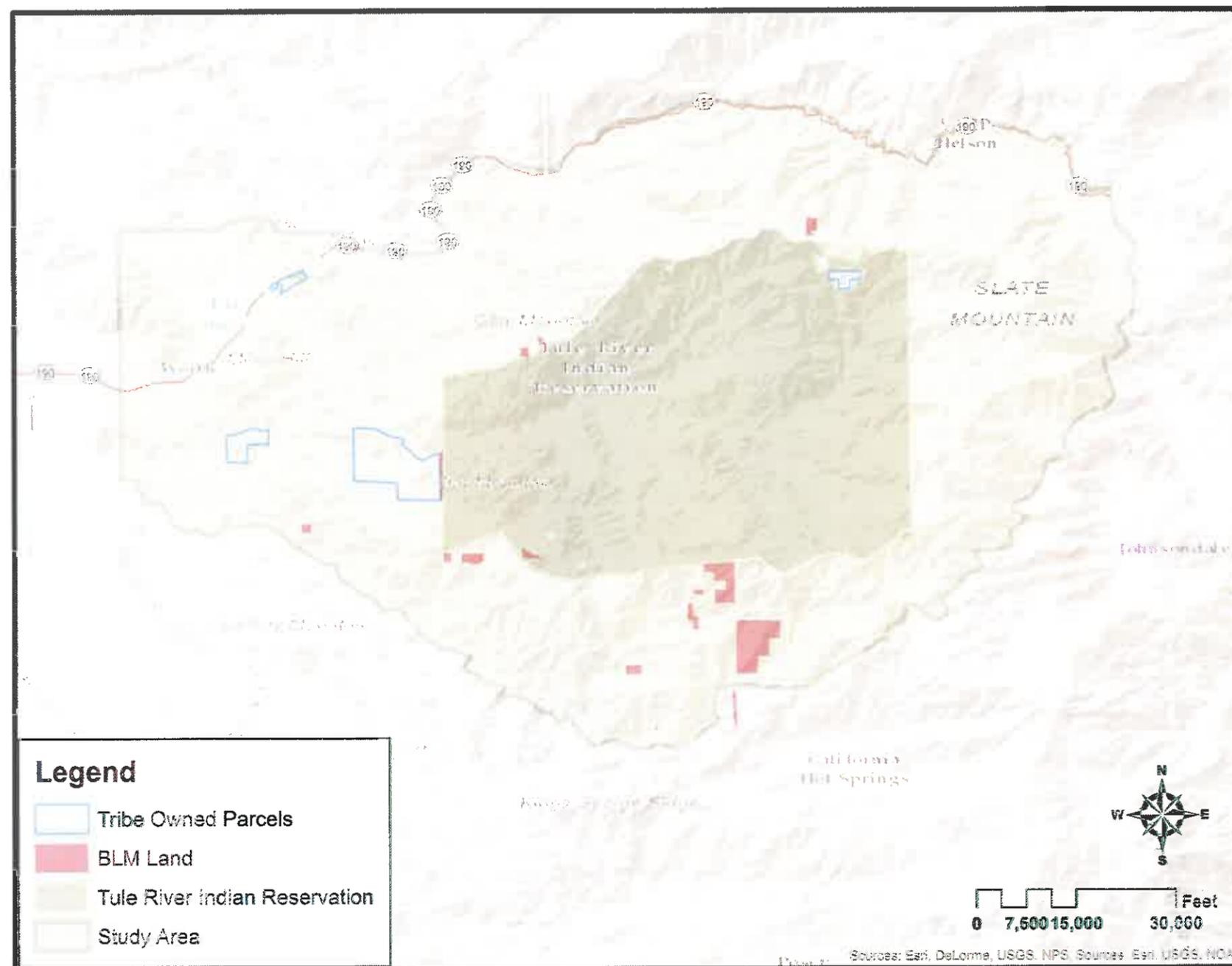


Figure 2-1. Tribal Lands and Property



### Topography

Topography is an important factor to consider when developing an area. When the Reservation boundaries were originally drawn in 1873, the land was described by a surveyor as being extremely mountainous with no more than about 200 acres capable of irrigation in small, isolated patches. Limited areas of flat land are located within the Reservation boundary, with more flat topography found in the larger Study Area.

Elevations within the Study Area range from approximately 200 feet in the western portions to over 2,000 feet in the eastern sections. The Study area includes Lake Success, the Middle and South Forks of the Tule River, portions of Deer Creek and several small ponds and lakes. The Sequoia National Forest and National Monument are located in the eastern and northeastern sections of the Study Area.

The western portion of the area is generally foothills with gently sloping terrain, while the eastern portion is mountainous.

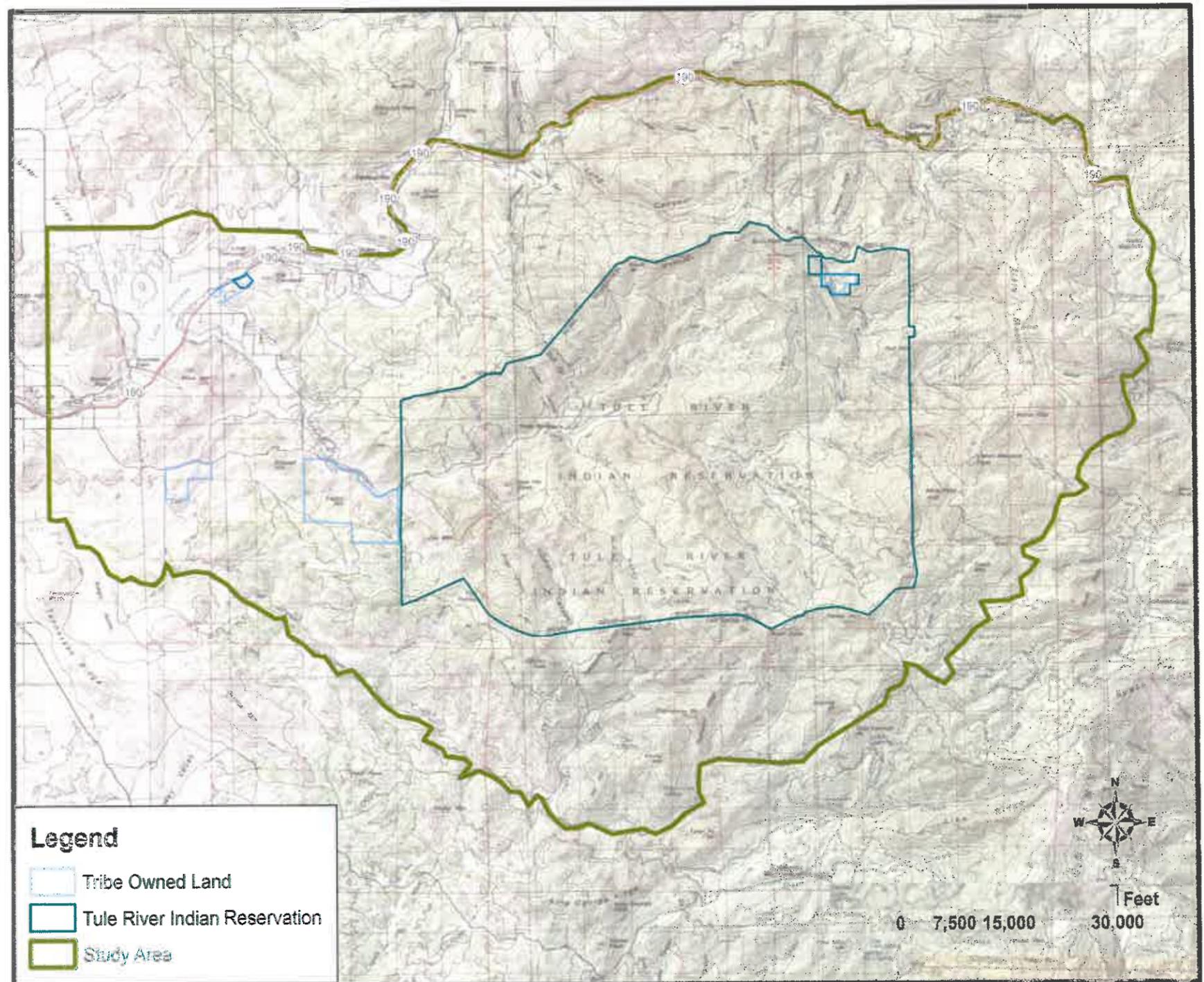


Figure 2-2. Topography



**Soil Types**

Understanding the geologic profile of a of an area helps to identify safe areas for development. If a project is located on an unstable geologic unit or would become unstable as a result of the project, it could lead to loss, injury and or death.

The soil composition on the Reservation are primarily Alfisols, with soils of the Mollisols taxonomy to the eastern boundary. Alfisols are found throughout the United States, making up about 13.9 percent of surface area. Alfisols form in semiarid to humid areas, typically under hardwood forest cover. They are fine textured soils with a clay-enriched subsoil with relatively high native fertility and warmer temperature regimes. Alfisols develop under several drainage conditions ranging from steep slopes to poorly drained foot slopes and level plains. The combination of generally favorable climate and high native fertility allows Alfisols to be very productive soils for both agricultural and silvicultural use.

Mollisols also form in semiarid to semi humid areas. At surface level, Mollisols are rich in calcium, magnesium and organic matter and most often dark in color with a soft texture. They are naturally highly productive soils and can be found under grassland cover, most often found in mid-latitudes of North America.

The McCarthy Ranch Specific Planning Area's soil composition is primarily Alfisols with Inceptisols in the southwestern corner of the planning area. Inceptisols are found on steep slopes and young geomorphic surfaces.

Eagle Feather's soil composition is entirely made of Alfisols. As discussed above, this is a highly productive soil for both agricultural and silvicultural use.

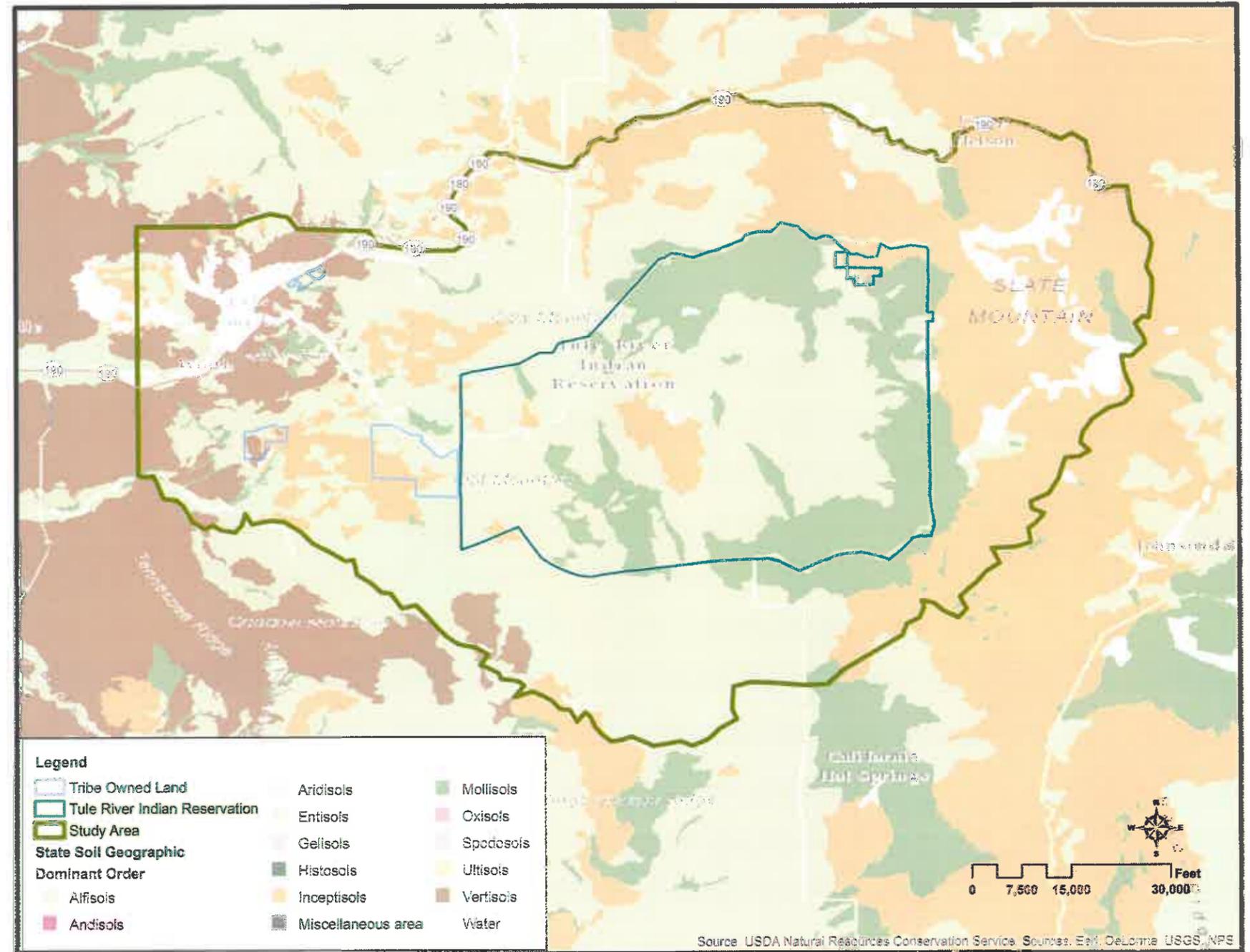


Figure 2-3. Soil Types



**Geologic and Mineral Resources**

Figure 2-4 shows geologic and mineral resources in the Study Area. The map shows locations of mineral occurrences, past and present mineral producing sites, prospecting sites, and mineral processing plants. The map categorizes occurrences by resource type.

A geological unit is a volume of rock of identifiable origin and age range that is defined by the distinctive and dominant, easily mapped and recognizable petrographic, lithologic or paleontologic features (facies) that characterize it.

Geologic and mineral resource information is provided in order to identify known valuable mineral resources that may be available to the Tribe or may challenge development opportunities. Metallic resources are minerals which can be melted into new products, such as iron, copper, or bauxite. Non-metallic resources, such as coal, salt, clay, or marble are noncombustible solid rocks or minerals used in industry and construction.

According to USGS data, common chemical and sedimentary rock limestone has been discovered on the Reservation. Tungsten, a metallic rock, has also been discovered on the Reservation, along with gold.

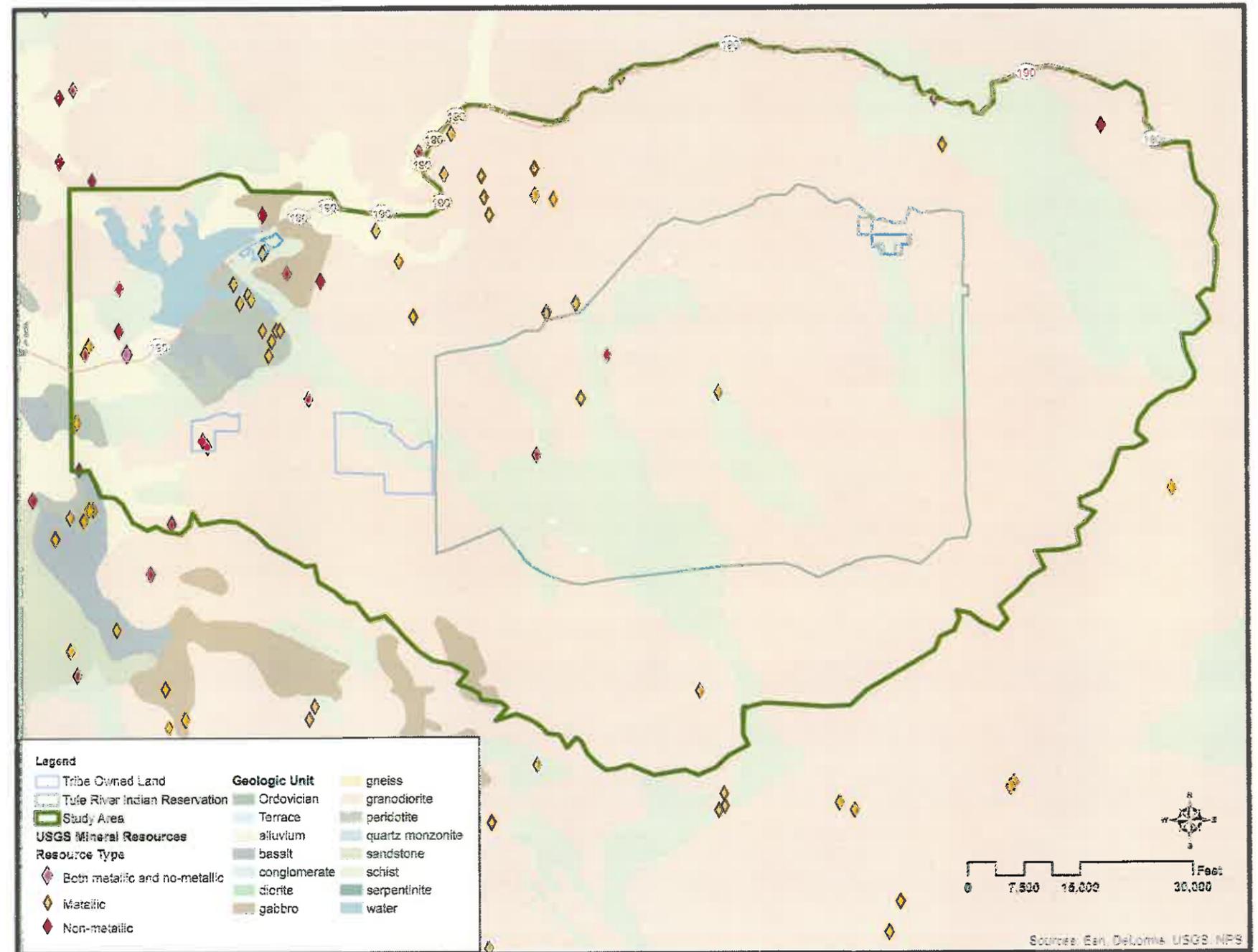


Figure 2-4. Geologic and Mineral Resources



### Water Resources

The Tribe relies on water sources in the South Tule River Basin to meet demands of the 55,000 acre Reservation. Both surface and groundwater resources are currently used to meet water demands. Current water resources available to the Tribe are not adequate to meet existing or future Tribal needs.

Figure 2-5 describes the known existing water features within the Study Area including streams, existing reservoirs, and jurisdictional dams. While the Reservation relies solely on the South Fork Tule River watershed, the Study Area also encompasses the Middle Fork of the Tule River watershed as well.

The Tribe's existing water infrastructure system consists of 22 wells, several large water storage tanks with an aging (50+ years) distribution system of 4-inch diameter cement asbestos pipes.

In November of 2007, the Tule River Tribe Reserved Water Rights Settlement Agreement was signed after nine years of negotiations. The settlement established the Tribe's total federally reserved water right of 5,828 acre feet per year (afy). The settlement permits the Tribe to construct an on-Reservation reservoir not to exceed 5,000 afy.

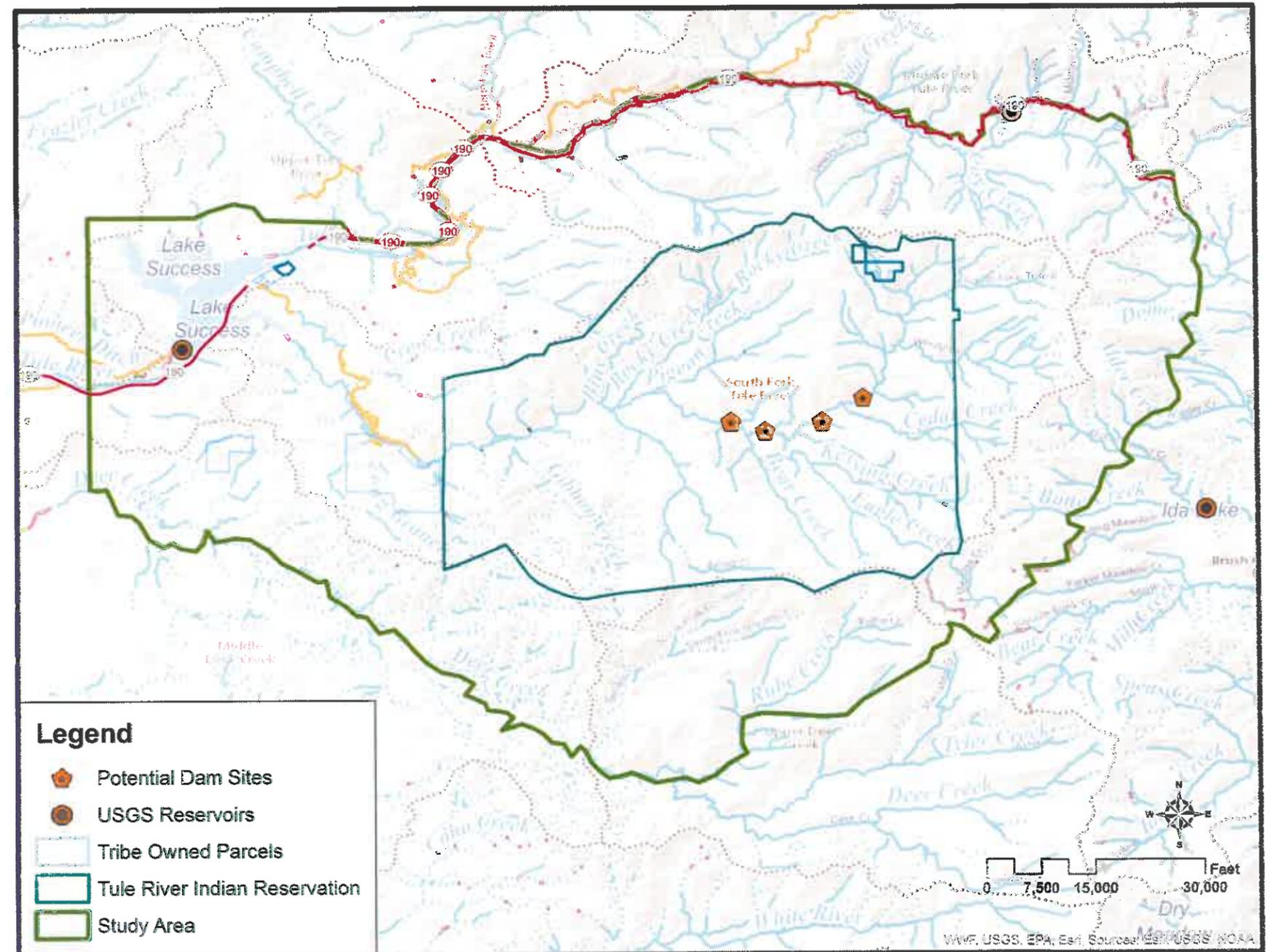


Figure 2-5. Water Resources



**Agricultural Use**

Figure 2-6 identifies existing crop land in the Study Area. Agricultural data is not available for land within the Reservation or land under USFS jurisdiction.

The western portion of the Study Area is primarily grazing land mixed with citrus crops and herb crops. The eastern portion of the study area is encompassed by the U.S. Forest Service property. On the Reservation, many areas outside of the Village and smaller land assignments are used for cattle grazing. Row crops or other agricultural commodities are not grown on the Reservation.

Timber resources are found both on the Reservation and in the Study Area. Historically the Tribe has utilized timber resources for commercial endeavors.

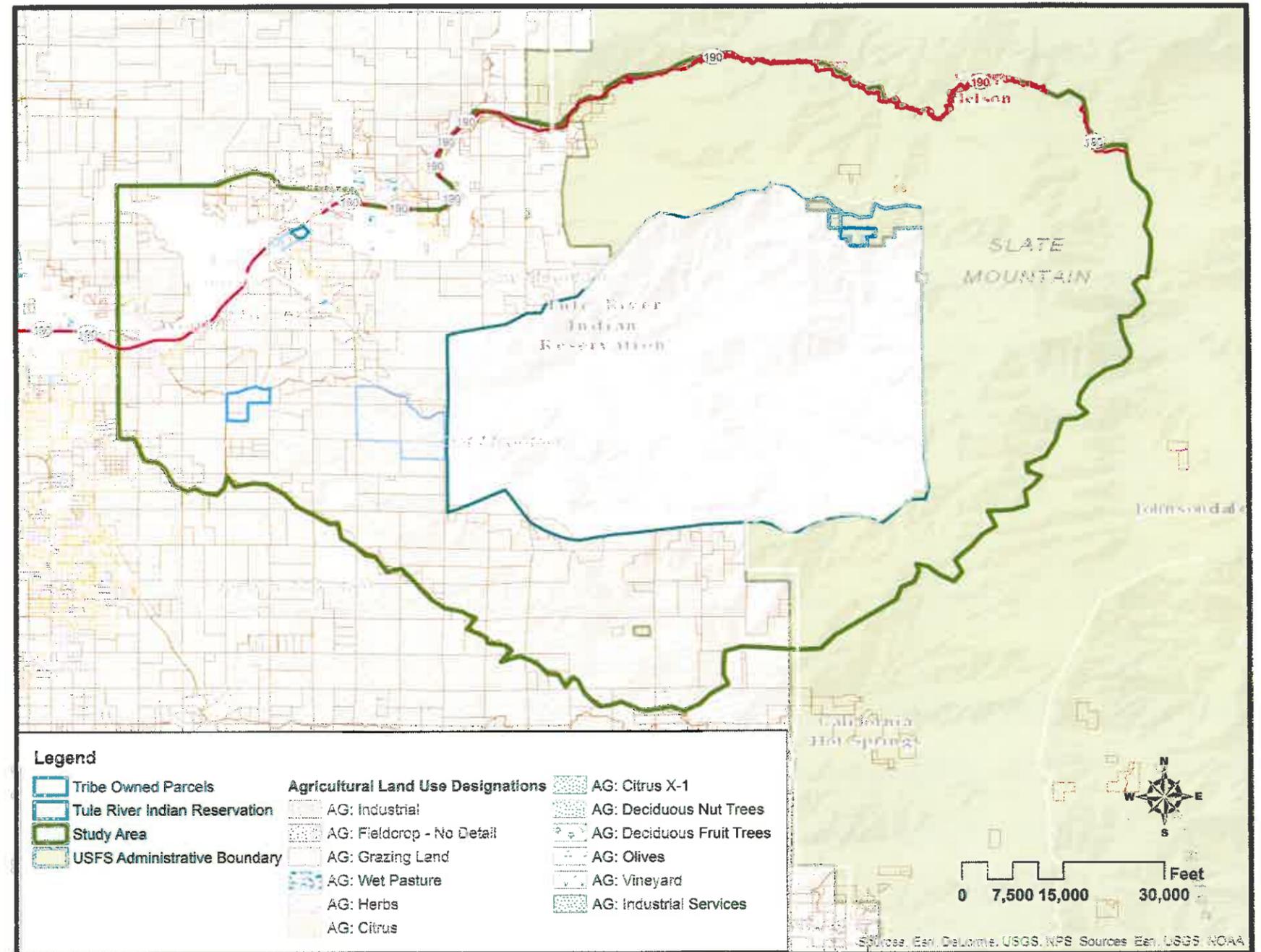


Figure 2-6. Agricultural Use



**Farmland**

The California Department of Conservation rates agricultural land according to soil quality and irrigation status. The highest quality land is designated as Prime Farmland. Other designations include Farmland of Local Importance, Confined Animal Agriculture, Rural/Residential, and Urban and Built up Land.

The Williamson Act is a contractual non-development agreement for farmland and open space pursuant to the California Land Conservation Act of 1965. Parcels in the Study Area under the Williamson Act have been identified on Figure 2-7.

The majority of the Reservation has been designated by the California Department of Conservation as "Natural Vegetation Non-Agricultural". All Tribal owned land off the Reservation is designated as Grazing Land, with the exception of Eagle Feather and the Saw Mill Tract. The property at Eagle Feather is designated as Prime Farmland. The Saw Mill Tract falls within the jurisdiction of USFS Administrative Boundaries and has no State designation.

Property in the western portion of the Study Area is designated as grazing land based on its soil composition. The eastern portion of the study area is under jurisdiction of the US Forest Service agricultural uses are neglected by the Federal Government. This includes grazing contracts and timber removal programs.

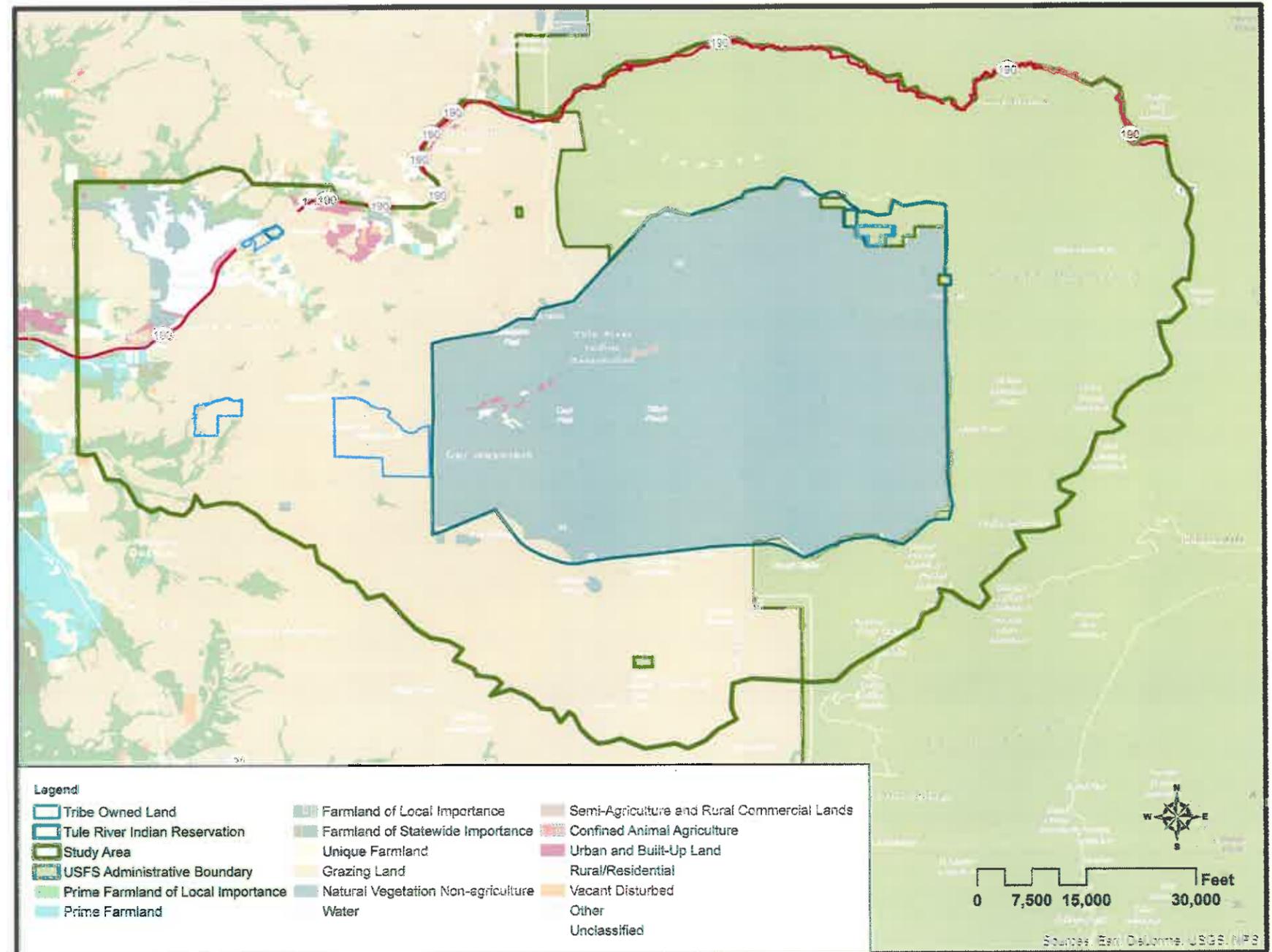


Figure 2-7. Farmland



### Existing Land Use Inventory

Figure 2-8 identifies existing land uses within the project's study area. The western portion of the Study Area is dominated by agricultural uses, primarily cattle grazing. Surrounding Lake Success, there are areas of residential land uses and public utility facilities. The eastern portion of the Study Area is primarily U.S. Forest Service property. Timber resources are located in the eastern portion of the Study Area under both Tribe and other private ownership. Along Highway 190 a variety of land uses including residential, commercial, and industrial are found in the communities of Springville and Camp Nelson.

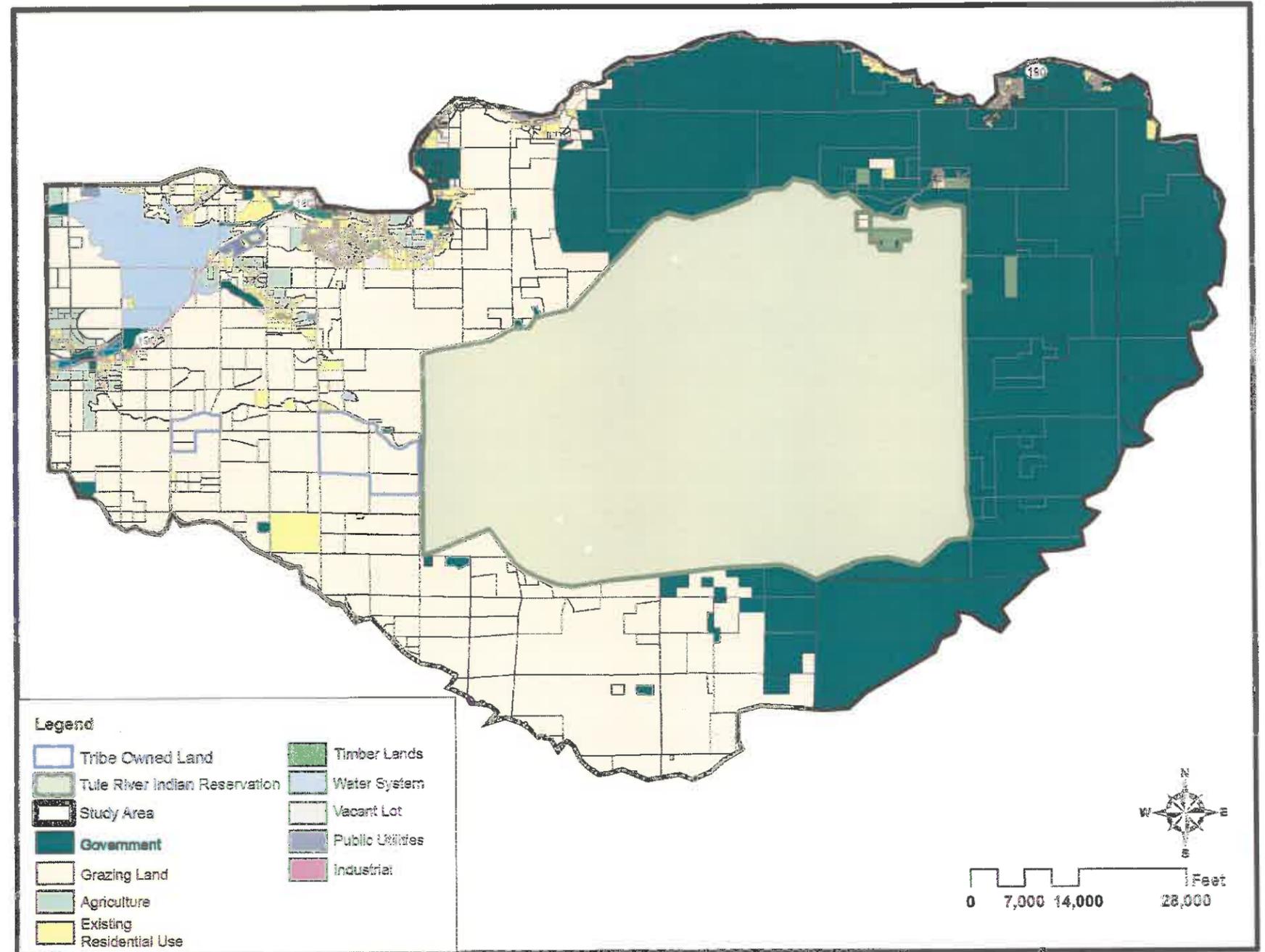


Figure 2-8. Existing Land Uses



### Existing Roads

Figure 2-9 shows roads that are located within the Study Area. Roads within the Reservation boundary are owned and maintained by the Tribe. Roads outside the Reservation boundary are maintained by the County, CalTrans or the USFS depending on location. For security reasons, the road system depicted in this map is limited to main roads and emergency access routes.

Regionally, the Study Area is served by SR 99, SR65 and State Highway 190. The Reservation is accessed by BIA 264, Reservation Road and Success Valley Road. The road system will be described in detail in Chapter 5 of this report.

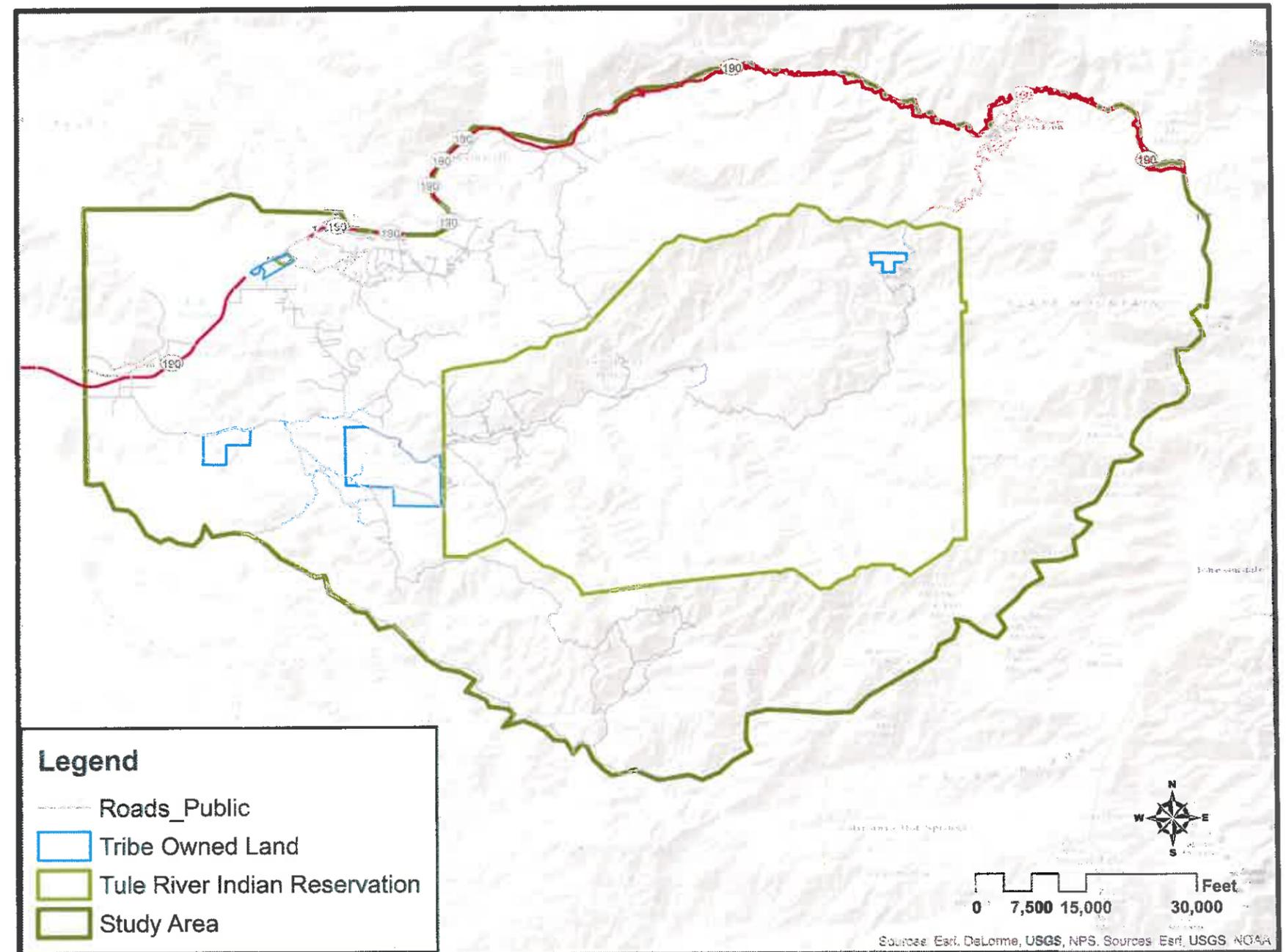


Figure 2-9- Existing Roads



### Existing Transit System

The Reservation is currently served by Porterville Transit's Route 9. This is a fixed route service that provides transportation from Porterville to the reservation, including Eagle Mountain Casino. Route 9 runs from 6:00am to 8:00 pm daily. Figure 2-10 illustrates the Route 9 bus line and stops.

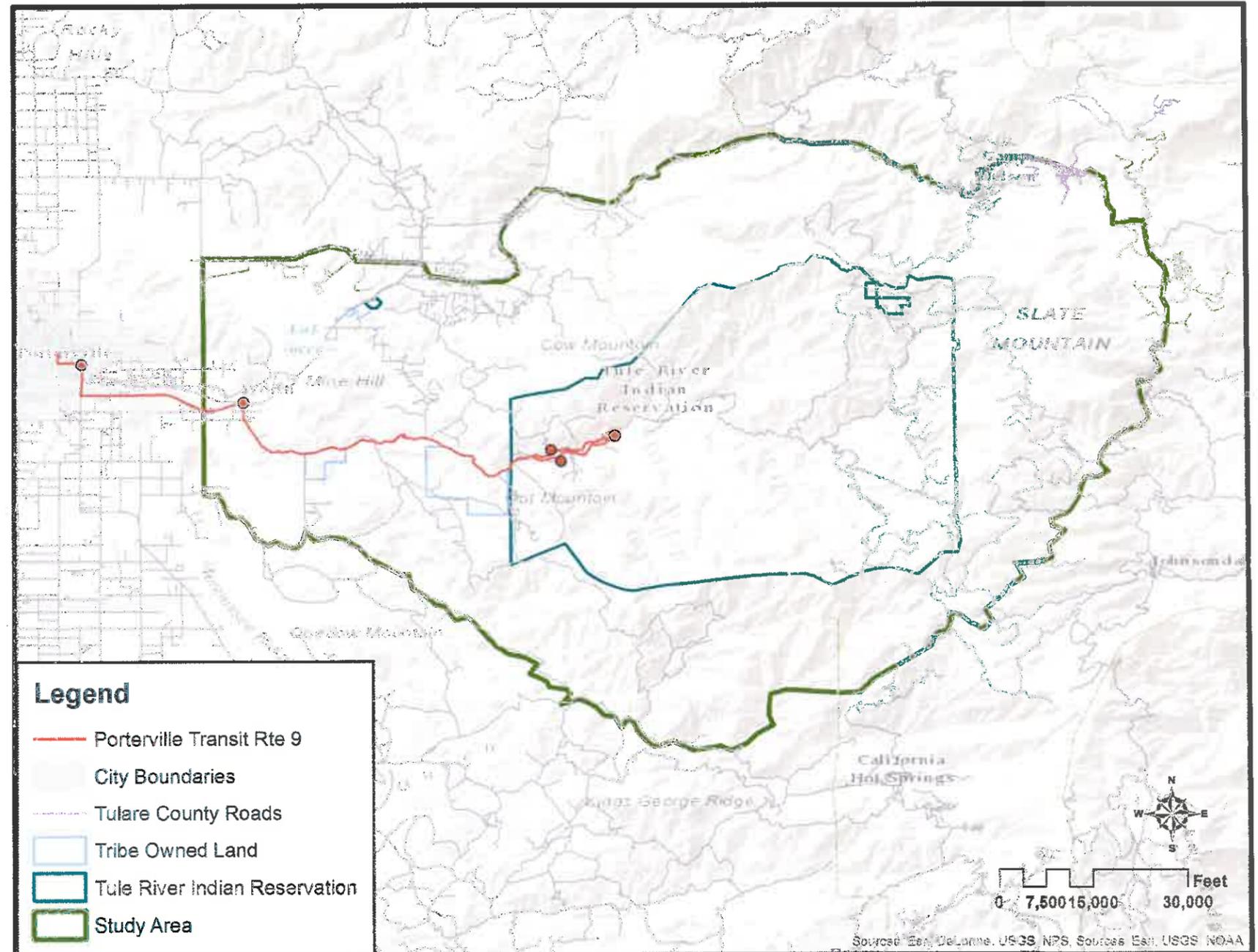


Figure 2-10. Existing Transit System



## 2.4 Water Resources

The Tule River Indian Tribe relies on water resources in the South Tule River Basin to meet water demands on the 55,000-acre Reservation. Both surface and groundwater resources are used to meet water demands; however, the Tribe is only using a small portion of the available surface water supply to which the Tribe is entitled. Groundwater supply available to the Tribe are limited and do not always meet quality standards for domestic use. The Tribe's water treatment plant has the ability to provide 501,700 gallons per day (562 acre feet per year) at maximum production. Historically, inadequate water supplies have resulted in reduced opportunities for economic development to occur on the Reservation and may prevent off-Reservation Tribal members from relocating to the Reservation.

### *Settlement Agreement*

In 2007, the Tule River Tribe Reserved Water Rights Settlement Agreement was signed after nine years of negotiations. The settlement established the Tribe's total water right to be 5,828 acre feet of water per year. The settlement permits the Tribe to construct a water storage project not to exceed a capacity of 5,000 acre feet per year. The agreement is between the Tule River Tribe, the Tule River Association, and the South Tule Independent Ditch Company.

The agreement will provide stable water flows to residents on the Reservation and to agricultural interests downstream.

### *Water Settlement Technical Report*

In conjunction with the water settlement, a comprehensive technical report was completed in 2013. The purpose of the study was to describe the future water needs on the Reservation, based on a 100-year population projection, evaluate potential dam and reservoir sites, develop cost estimates for the alternatives and recommend a preferred location.



## Future (2112) Water Demand

Several components were evaluated to determine the projected water demand for the Reservation. These include domestic, commercial, industrial, and agricultural (including irrigation and livestock).

### *Domestic Water Demands*

In summary, the total projected year 2112 combined indoor and outdoor domestic water needs of the Tule River Reservation are approximately 1,302 acre-feet per year (about 0.66 acre-feet per year per household).

### *Commercial Water Use*

In 2112, the total projected combined indoor and outdoor domestic water needs of the Tule River Reservation are approximately 0.66 acre-feet per year per household. Assuming, that the Reservation's future commercial water needs equal 30-percent of its domestic needs, for about 391 acre-feet per year.

### *Industrial Water Use*

The Tribe has on-Reservation mining development opportunities that will require the consumptive use of water once operational. The Tribe has designated approximately 405 acres of the Reservation land for mining and processing of the minerals limestone and dolomite and has an interest in developing a sand and gravel operation. There is no direct basis available to reasonably estimate the amount of water that may be required by the Tribe for its potential future mining activities on the Reservation due to a lack of information on the probable intensity of this mining and the amount of water required per unit of production or acre excavated. This noted, according to the USGS, water use for mining in California in 2005 was approximately 14.9-percent the amount of water used for domestic purposes (USGS, 2009). Applying this percentage to the projected year 2112 potential annual domestic water needs on the Reservation of 1,302 acre-feet per year, the projected potential future industrial (mining)-related water needs of about 194 acre-feet per year.



**Agricultural Water Demand**

The Tribe has thousands of acres of land and timber resources which presents a significant economic opportunity. In the past, the development of the Tribe's natural resources, particularly its arable land base, has been largely constrained by a lack of a significant and reliable developed water supply. The projected agricultural water needs of the Tule River Indian Reservation will be about 5,146 acre-feet per year and were developed as follows.

- **Irrigation Water Demand**

The Tribe has designated approximately 1,257 acres of the Reservation for irrigated agriculture. The Tribe has identified a number of crops it may produce on its agricultural lands in the future including alfalfa hay, apples, olives, pistachios, grapes and Christmas trees. All these crops, except Christmas trees, are grown in large quantities in the region and have highly developed local marketing outlets. For the purposes of this study, it is assumed that 50 percent of the Reservation lands proposed for agriculture will be planted in field crops and the other 50 percent in permanent crops. This cropping pattern is representative of what is done County-wide.

The total annual diversion requirements for each of the representative crops were determined by NRCE as reported in a separate memorandum. The weighted average diversion requirement for the cropping pattern described above is 48.9 inches (4.08 acre-feet per acre). Multiplying this diversion requirement by the 1,257 acres of designated irrigated agriculture on the Reservation yields a total annual diversion requirement at full production of about 5,129 acre-feet per year of water.

- **Livestock Water Demand**

Livestock is a major sector of the Tulare County agricultural economy and an important activity on the Reservation. According to the Tribe, there are approximately 1,000 head of cattle on the Reservation. These 1,000 cattle fully utilize the capacity of Reservation lands designed for grazing.

It is anticipated that the quantity of range land on the Reservation will not change in the future, and therefore, the number of cattle on the Reservation in the year 2112 will remain at 1,000 head. Typically one animal unit requires between 10 and 15 gallons of water per day depending on conditions (U.S. Department of Agriculture, 1983). Assuming an average water requirement for cattle at the upper end of this range, the total annual water needs of range cattle on the Reservation is estimated at approximately 17 acre-feet per year.

**Total 2112 Reservation Water Demand**

Given these assessments, the total future consumptive water need of the Reservation is estimated at 7,103 acre-feet per year as shown in Table 2-5. Projected water quantities are based on reasonable projections of future potential Reservation population growth and economic development. Of this total, it is estimated 1,957 acre-feet per year would be allocated for domestic, commercial, municipal and industrial uses and 5,146 acre-feet per year would be allocated for irrigation.

**Existing Water Supply and Infrastructure**

The Tule River Reservation water system relies upon a series of wells, springs, and the South Fork Tule River surface water, all of which is treated to meet potable water standards. The Tribe's documented water usage is constrained by the availability of water supplies and the water distribution system and, therefore, is not representative of the actual demands for water.

Water Need	Projected Water Need (acre-feet per year)
Domestic	1,302
Commercial	391
Municipal	70
Industrial	194
Agricultural	5,146
<b>Total</b>	<b>7,103</b>



Natural springs are evident throughout the Reservation and these are being used for a combination of agricultural irrigation and drinking water augmentation. Several of these springs show high levels of carbon dioxide and are therefore restricted to only agricultural usage. Water wells are located throughout the Reservation, but are generally concentrated in the Reservation's Lower Valley where they support the treated surface water serving the community. Less than a quarter of wells that have been drilled on the Reservation are operational due to either a lack of production or water quality concerns. Well yields tend to be modest, with most producing less than 30 gallons per minute (gpm).

#### *Water Quality*

Water quality within the South Fork Tule River watershed is generally good although the river water does at times exceed federal Safe Drinking Water Act (SDWA) standards for certain constituents and the groundwater at certain locations is unsuitable for potable use. Water quality exceedances in the South Fork Tule River are generally from turbidity and bacteria. These exceedances are believed to result from nonpoint sources, primarily livestock grazing, with other likely contributors being construction earthwork activities, erosion and sedimentation from unpaved roads, septic tanks located near the river in areas of thin soils and/or shallow groundwater, and activities associated with road maintenance.

#### *Groundwater Supply*

Groundwater occurs in the shallow alluvial deposits along the main stem of the South Fork Tule River and in the cracks and fractures of the granite bedrock underlying the Reservation. Of the twenty-two (22) wells inventoried on the Reservation, only five are operational at this time. Well yield is influenced by proximity to fractures and fissures in the local granite bedrock, but can be affected by the presence of underground limestone and marble.

Although groundwater availability on the Reservation is not adequate for large-scale agriculture potential, groundwater yields may be adequate to meet a portion of future domestic water demand.

The quality of water in local wells is an issue. Approximately 30-percent of the 280 septic systems on the Reservation are approaching a state of failure with a few already discharging to the surface. Most of the existing water wells either lack an annular seal or have one that is not sufficiently deep to protect the well. Wells are located in areas close to grazing lands, near buildings and areas of human activity, or close to septic systems. Most of the wells are old, have a variety of pumps and piping, and are maintained only when problems occur.

#### *Water Treatment System*

River water is delivered through a ten inch pipe at a location upstream from the water treatment plant. The Tribe's water treatment plant was upgraded in 2005 to increase its capacity from 150 gpm to approximately 300 to 350 gpm. The projected maximum day demand for the Reservation is approximately 1,050 gpm. The Tribe's water treatment plant currently has the capacity for 501,700 gallons per day (562 acre-feet per year) at maximum production. This limit along with the unreliable water supply constrains current water usage and future development on the Reservation. The Tribe typically tries to run the treatment plant at maximum capacity and uses water wells to help make up any shortfalls.





### Water Storage and Distribution System

The overall water system is not considered to be adequate to meet current Tribal needs. Water cannot be delivered to all homes on a year-round basis. Some homes do not have water in the early summer months because of inadequate supply and distribution system capacity issues. Water shortages are becoming increasingly common as more and more tribal members move back to the Reservation into new homes.

The Tribe's Public Works Department has issued water conservation notices for the last five years, requesting that Tribal members use water sparingly and report leaks to prevent shortages to the domestic water supply. Despite these notices and efforts by tribal members, households still continue to run out of water every year. Outages vary from one day to one week. There is no "gray water" system presently on the Reservation, although discussions aimed at developing one have begun.

The water storage system consists of a series of tanks ranging in size from 3,000 gallons to 200,000 gallons. The tanks do not function as a coordinated storage system and have design challenges. Plans are underway to add a new 400,000 gallon tank which will be interconnected with two existing smaller tanks. The new tank would serve the Justice Center, and has capacity to serve limited future development. The water storage system is not regularly monitored for water in storage or for structural conditions. The storage capacity is not adequate to meet peak use domestic consumption and fire flow demands. Even with direct pumping, water is not available for a major structure fire. Grass fires are common during the summer, and often require the use of potable resources for suppression activities. The distribution system consists of ±50-year-old, 4-inch-diameter asbestos cement pipe and includes 6- and 8-inch diameter pipes of varying ages. Some pipes have deteriorating seals, cracked or eroded sections and poorly constructed connections.

The system is monitored visually for signs of leakage. House connections are generally 1-inch-diameter, although more than one home may be served by a single connection. A 2-inch diameter connection system was found to be serving at least five homes. Individual houses are not metered, and are not routinely inspected for leaking pipes or fixtures. A significant amount of water may be lost due to system leakage; however, the absence of metering makes it difficult to estimate the exact quantity.

The storage capacity is not adequate to meet peak use domestic consumption and fire flow demands. Even with direct pumping, insufficient water is available for a major structure fire. Grass fires are routine during the summer, but often require the use of potable resources.

### Identification of Alternatives

In accordance with the express provisions of the Settlement Agreement and the long-term needs for water supply on the Reservation, the only viable project alternative for water supply is a reservoir located on the Reservation. Based on the water demands identified, it was determined that a dam and reservoir on the South Fork Tule River within the Reservation should be constructed to provide 5,000 acre feet of storage capacity. Depending on its location along the river, a reservoir of this size would provide somewhat varying amounts of firm yield to meet future water demands on the Reservation.

Seven (7) potential dam and reservoir sites were originally identified, (from downstream to upstream):

- *Painted Rock*
- *Lower Bear Creek*
- *Upper Bear Creek*
- *Lower Cedar Creek*
- *Original Cedar Creek*
- *Upper Cedar Creek*
- *Cholollo*

The Tule Tribal Council elected to discard the Painted Rock and Cholollo sites due to negative impacts to social, cultural, and archaeological resources. The Original Cedar Creek site was replaced by the Lower Cedar Creek site due to a narrower valley section which would reduce construction costs. Key features of this water supply plan are:



- A new raw water supply pipeline to transport water from the new reservoir to the water treatment plant and to supply irrigation water. This pipeline would generally be located along the existing main road from the town center to the Cholollo Campground.
- The existing water treatment plant would be expanded or a new facility would be constructed to meet additional demands for potable water.
- The existing treated water distribution system would be improved to address identified deficiencies in the water system, and the existing system would be expanded to serve the proposed future development. This would include:
  - The replacement all of the 4-inch water mains in the entire water distribution system with either 8-inch or 6-inch pipelines
  - Four smaller tanks to be replaced by a single 300,000 gallon tank
  - The installation of pressure reducing stations downstream of the proposed 300,000 gallon tank
  - The replacement of a booster pump

The storage tanks would be constructed at locations with sufficient elevation to allow for gravity flow to the new housing areas. Tank sizes would accommodate operational storage, emergency storage, and fire suppression storage. Operation storage was estimated at 25 percent of the maximum day demand. Emergency storage was estimated at the average day demand. Storage for fire suppression was estimated at a flow rate of 750 gpm for 2 hour duration.

#### *Dam and Reservoir Site Locations*

The four potential dam sites have been identified for their relation to the confluence with one of two South Fork Tule River tributaries: either Bear Creek or Cedar Creek. Cedar Creek joins the South Fork Tule River approximately 2.3 river miles upstream of the Bear Creek confluence. The Lower Bear Creek and Upper Bear Creek dam sites are located 0.5 river miles downstream and 0.25 river miles upstream of the Bear Creek confluence, respectively. The Lower Cedar Creek and Upper Cedar Creek dam sites are 0.15 river miles downstream and 0.25 river miles upstream of the Cedar Creek confluence.

#### *Water Treatment*

The plant was expanded to increase its capacity from 150 gpm to approximately 300 to 350 gpm. The projected maximum day demand for the Reservation is approximately 1,050 gpm. Therefore, further expansion of the water treatment plant is required to treat an additional 700 gpm. Based on communication with Tribal personnel, a new treatment facility would be constructed in the vicinity of the existing facilities in order to accommodate the additional demand.

#### *Water Distribution*

A 2004 IHS study addressed deficiencies in the existing tribal water system (Indian Health Service, 2004). The existing water system comprises pipelines of mainly 4-inch and 6-inch diameters, two large storage tanks with a capacity of 200,000 gallons each, and 7 smaller storage tanks ranging in size from 3,000 to 40,000 gallons, with a combined capacity of 153,000 gallons. The IHS report recommended the following improvements:

- The replacement all of the 4-inch water mains in the entire water distribution system with either 8-inch or 6-inch pipelines;
- Four smaller tanks to be replaced by a single 300,000 gallon tank;
- The installation of pressure reducing stations downstream of the proposed 300,000 gallon tank; and
- The replacement of a booster pump.

A funding request for the construction of these facilities is still pending based on information provided by the Tule River Tribe. No further improvements beyond the IHS recommendations are believed to be required to provide reliable service to the current service area.

Expansion of the water distribution system is required to serve the proposed future housing areas on the Reservation. New water transmission pipelines would connect to the existing distribution system and convey water to new storage tanks. New pipeline distribution systems would then deliver water from the storage tanks to the housing areas.



**Hydroelectric Generation Potential**

While this study does not currently include provisions for hydroelectric generation, the height of the dam and the elevation drop from the proposed reservoir sites to the water treatment plant presents at least two potential alternatives for hydroelectric generation facilities. The Tribe could choose to evaluate either or both of the following options since the two systems could operate independently from each other. Installing both systems in parallel could provide the Tribe with nearly 1.0 megawatt (MW) of clean, renewable energy. However at a minimum, each option would require its own powerhouse, substation, and transmission facilities, and therefore the upfront and long-term costs would need to be carefully evaluated and weighed against the immediate and long-term benefits before any decisions are finalized.

**Cost and Implementation Summary**

In addition to the dam and reservoir, the project would include a raw water conveyance pipeline from the reservoir to a new or expanded water treatment plant, which is also part of the project. Distribution system improvements are also planned to be implemented as part of the project. Construction of the dam and raw water pipeline would require improvements to the main road existing through the Reservation, as well as new access roads.

**Preferred Location**

The preferred location identified in the Settlement Technical Report as the Lower Bear Creek site on the South Fork of the Tule River, downstream from its confluence with Bear Creek. Additional discussions have been underway since the issuance of that report regarding siting and configuration. In early 2015, the Lower Cedar Creek site was under consideration due to its lower cost. Additional options under discussion include a series of small dams along the Tule River. This option is similar to a series of flood control dams that were constructed along the river years ago. Another option under discussion is to create storage or use existing storage on off-Reservation property. Whichever option/alternative is selected the development of water storage, capacity and distribution is extremely critical to the future health and economic development of the Tribe.

**Table 2-6  
 Summary of Dam Project Costs**

Item	Lower Bear Creek Dam	Upper Bear Creek Dam	Lower Cedar Creek Dam	Upper Cedar Creek Dam
<b>Itemized Construction Costs (ICC)</b>				
Dam and Reservoir	\$59,469,000	\$62,483,000	\$73,391,000	\$67,908,000
Road Improvements	\$11,048,000	\$11,048,000	\$14,093,000	\$14,093,000
Raw Water Pipeline	\$3,111,000	\$3,111,000	\$4,908,000	\$4,908,000
Water Treatment Plant Expansion	\$1,890,000	\$1,890,000	\$1,890,000	\$1,890,000
Water Distribution System	\$8,320,000	\$8,320,000	\$8,320,000	\$8,320,000
<b>Itemized Construction Cost Subtotal (ICCS)</b>	<b>\$83,838,000</b>	<b>\$86,852,000</b>	<b>\$97,119,000</b>	<b>\$97,119,000</b>
<b>Design Contingency</b>				
Dam and Reservoir (20% to 22%)	\$11,893,800	\$12,496,600	\$17,026,020	\$14,939,760
Road Improvements (20% to 22%)	\$2,209,600	\$2,209,600	\$3,100,460	\$3,100,460
Raw Water Pipeline (25%)	\$777,750	\$777,750	\$1,227,000	\$1,227,000
Water Treatment Plant Expansion (30%)	\$567,000	\$567,000	\$567,000	\$567,000
Water Distribution System (30%)	\$2,496,000	\$2,496,000	\$2,496,000	\$2,496,000
<b>Base Construction Subtotal (BCS)</b>	<b>\$101,782,150</b>	<b>\$105,398,950</b>	<b>\$131,018,480</b>	<b>\$119,449,220</b>
Mobilization, Bonds, Insurance (9% BCS)	\$9,160,394	\$9,485,906	\$11,791,663	\$10,750,460
Construction Contingency (15% BCS)	\$15,267,323	\$15,809,843	\$19,652,772	\$17,917,383
<b>Direct Construction Subtotal (DCS)</b>	<b>\$126,209,866</b>	<b>\$130,694,698</b>	<b>\$162,462,915</b>	<b>\$148,117,033</b>
Design Engineering (8% DCS)	\$10,096,789	\$10,455,576	\$12,997,033	\$11,849,363
Construction Admini & Engineering (8% DCS)	\$10,096,789	\$10,755,579	\$12,997,033	\$11,849,363
Legal, Permitting, Mitigation (10% DCS)	\$12,620,987	\$13,069,470	\$16,246,292	\$14,811,703
<b>Total Opinion of Probable Project Cost (OPPC)</b>	<b>\$159,024,431</b>	<b>\$164,675,319</b>	<b>\$204,703,273</b>	<b>\$186,627,461</b>

Note 1: ICC= Itemized Construction Cost for individual project features.  
 Note 2: ICCS = Itemized Construction Costs Subtotal, sum of all 5 project features.  
 Note 3: BCS = Base Construction Subtotal, sum of ICCS and design contingency.  
 Note 4: DCS = Direct Construction Subtotal, sum of BCS, mobilization, bond, insurance, construction contingency  
 Note 5: The cost estimates in this report are considered to be Class 4 estimates per the Association for the Advancement of Cost Engineering (AACE) International Cost Estimate Classification System.



## 2.5 Economic Development

The Tribe strived to develop a broad based economy. This effort is in response to the need to provide additional revenues to the Tribe and its members. With the closure of the saw mill in the late 1970's, the Tribe has expanded its economic base through the acquisition or development of several businesses. The benefits businesses include not only revenue to the Tribe, but employment opportunities for the Tribal members.

Given the needs for housing and infrastructure improvements, the growth of the Tribe's economic activities must be supported by the Master Plan. The land plans designate areas that can be used to expand existing economic activity or provide for new economic opportunities. Below is a summary of the various economic activities owned and/or operated by the tribe:

### Cattle ranching

The Tribe has a long history of cattle operations within the Reservation. This industry is anticipated to be a continuing part of the Tribe's economic activity into the future. With the purchase of additional off-Reservation properties, additional opportunities for grazing will be available in the future.

### Tule River Tribe Enterprises

The Tule River Economic Development Corporation helps the Tribe diversify its revenue potential as well as employment opportunities for members of the Tribe. Working by its mission of "Jobs & Revenues," Tule River EDC is setting the standard for economic development among Indian tribes across the nation.

### Eagle Mountain Casino

Eagle Mountain Casino is owned and operated by the Tule River Indian Tribe, located on the Tule River Indian Reservation. Since 1996, the casino has grown to include two restaurants, a food court, nearly 1400 slots, 11 table games including 3 poker tables, a gift shop and an Entertainment Center.



Eagle Mountain Casino is the only full service casino in Tulare County offering gaming 24 hours a day. The Casino has been a key component for economic development for the Tribe for nearly 20 years.

### Tule River Aero Industries

Tule River Aero Industries is a 20,000 square foot facility that is an FAA major engine and airframe repair station located in Porterville. Along with a full line aircraft sales department, TRAI is a unique blend of entrepreneurship, aviation, public and private cooperation with Native American culture. The Aero-Industries' team includes FAA certified IA and A & P mechanics, to ensure that all work not only reflects the lower costs of Central California, but is also in high quality. TRAI offers annual inspections, 100-hour inspections, avionics services and custom modifications. Additionally, Tule River Aero Industries specializes as the production facility for the Riley Skyrocket and the Riley Super Skyrocket conversions for Super Skyrocket, LLC of Carlsbad, CA. This creates an aircraft that is suitable for a multitude of uses and needs, from personal transportation, to corporate shuttles, to air support and overview applications.

### Trading Posts

The Tribe owns and operates two commercial facilities off the Reservation. Both are called Eagle Feather Trading Post, with the first located on State Highway 190 just west of Springville and the second located on State Highway 41, southwest of Kettleman City. Both developments include fueling facilities, food services and groceries. The Trading Posts support RV and traveler services as well.



### Oak Pit Steakhouse

The Tribe purchased the Oak Pit Steakhouse in 2013. This fine dining restaurant has been a main stay in Porterville for over 50 years.



## **Chapter 3: Goals and Objectives**



## Chapter 3: Vision, Goals and Objectives

### Vision Statement

The Tule River Indian Tribe is guided by a truly unique principle. The concept centers on the idea that the decisions made today should consider the needs of Tribal members three generations in the future. By taking this long range view of the decision making process, the implementation of planning, economic and transportation policies becomes a lifelong process and maintains itself sustainably over time. This overarching principle has been translated into the vision statement for this Master Planning Program.

### Guiding Principles

During the preparation of the Master Planning Program five key principles emerged. Planning principles are used to establish overarching direction or themes to assist in the selection of courses of action. The following planning principles guide the development of the comprehensive physical master plan and set a tone for future physical development. These represent the Tribe's aspirations for the Planning Program and guide the adoption of plans and programs:

### Tribal Planning Program Vision Statement

*"Consider future generations when planning for the needs, wants, and desires of the tribal community. Sustainably develop future social and economic opportunities while preserving the cultural traditions of the past."*

- Decisions are made for Tribal members three generations from today
- Stewardship of natural resources is critical to the future
- Establish of quality housing for Tribal members
- Water is key to future economic and social development
- Activity venues should be located off-Reservation to minimize impacts

### Planning Goals

Planning, like any endeavor, is based on the idea of accomplishment. In order to achieve an outcome, it is important to set goals and objectives to direct action. Goals tell you where you want to go, while objectives tell you exactly how to get there. Goals and objectives are critical because goals without objectives can never be accomplished, and objectives without goals will never get the desired results. The two are separate but interrelated; therefore the definition of each concept is helpful to minimize confusion.

- **Goals** are long-term aims and timeless. Goals for the Tribe are identified in the colored boxes below.
- **Objectives** are concrete attainments that can be achieved by following a certain number of steps. Objectives are clearly outlined with timelines, budgets, and tasks and can be measured, and are listed below each goal.

To assist in the development of the Tule River Reservation Master Planning Program, a series of goals and objectives have been prepared. These reflect the Tribes vision for the future and are organized by topic. Each has a series of supporting objectives to assist in their achievement.



### Economic Development Objectives

- Develop a broad based Tribal economy focusing on the following industries:
  - Gaming
  - Tourism
  - Agriculture
  - Power Generation
  - Commercial/Retail Development
  - Aircraft Maintenance

**Economic Development Goal:**  
**Create sustainable economic opportunities for the Tribe and its members.**

- Encourage tribe-member owned businesses.
- Develop a skilled workforce through education and training.
- Provide infrastructure to support and expand development.
- Redevelop existing structures on the Reservation for commercial uses.
- Promote commercial development on Tribal property located off the Reservation.
- Develop alternative energy sources (hydro, wind and solar) to achieve power self-sufficiency and to provide for off-Reservation sale of excess power

### Land Use Objectives:

- Relocate the Eagle Mountain Casino to Eagle Feather to maximize its economic benefits.
- Adaptively reuse the existing Casino facilities for Tribal Government, health services and Tribe focused retail uses.
- Minimize the cost of development by locating new construction in areas of adequate infrastructure.

### **Land Use Goal:**

**Promote a comprehensive land use plan that maintains tribal integrity and maximizes cultural values.**

- Prevent the placement of housing in areas that endanger residents.
- Create open space and recreational areas within housing developments.
- Promote land uses that diversify the economic sector.
- Provide public safety infrastructure (fire stations, police stations, etc.) in areas of high population on the Reservation.
- Develop neighborhood commercial services near residential areas.
- Adaptively reuse the existing Governmental and Health facilities for expanded educational services.

### Infrastructure Objectives:

- Provide and maintain adequate water and sewer capacity for current and future residents.
- Maintain an inventory of existing infrastructure improvements to allow for efficient maintenance and capacity analysis.
- Continually maintain existing water and sewer systems.

### **Infrastructure Goal**

**Provide and maintain adequate water, sewer, electrical, and road systems.**



- Develop additional infrastructure to meet future development needs prior to demand.
- Promote development in areas of existing water, sewer, and power availability.
- Adopt water, power, and sewer system improvements plans to serve anticipated development.
- Encourage the retirement of septic systems and wells when public sewer and water service is available to new areas.
- Provide utilities in a safe, cost efficient and environmentally sound manner to protect public health and environmental quality.
- Encourage the design, location, construction, operation, and relocation of utility systems in a cost efficient manner.
- Facilitate the proper care and maintenance of septic systems.
- Promote water conservation measures through water recycling and groundwater replenishment.
- Ensure adequate water pressure to meet fire protection standards.
- Develop alternative power generation facilities in the following potential locations:
  - *small scale solar farms at Cow Mountain, Hyder Ranch, McCarthy Ranch and Eagle Feather*
  - *hydro-electric plant as part of the Deer Creek Dam project*
  - *larger solar farms to provide for the sale of power to the grid*
- Promote paved streets, sidewalks, community water and sewer, storm water management systems, and transportation corridor connectivity for all major subdivisions and subdivisions of land into lots less than one-half acre in size.
- Develop water storage facilities as outlined in the Settlement Agreement with the US Government.

Resource Management Objectives:

- Promote the legacy of land stewardship on tribal lands.
- Protect areas with significant cultural and natural resources.
- Develop a recycling program and hazardous material collection program.
- Preserve and protect Reservation groundwater supplies.
- Ensure standards for design and location of on-site septic systems and individual wells.
- Encourage the use of low impact development methods.
- Promote water conservation measures.
- Establish environmental protection measures that preserve and enhance streams, lakes, wetlands, water quality, groundwater supplies and stream flow.
- Use geotechnical reports to ensure safe construction for developments proposed on slopes greater than 15 percent.
- Restrict housing development on soils incapable of supporting septic systems if connections to public sewer are not available.
- Protect the natural habitats on the Reservation.

Resource Management

**Protect and manage natural resources to maximize the health of the environment on all Tribal lands.**



Transportation Objectives:

- Maintain and expand the Reservation road system.
- Improve Reservation Road both on and off the Reservation
- Promote the use of trails for transportation and recreational needs.
- Expand the transit opportunities on the Reservation and connections to off-Reservation locations.
- Construct a secondary emergency access road to the Reservation

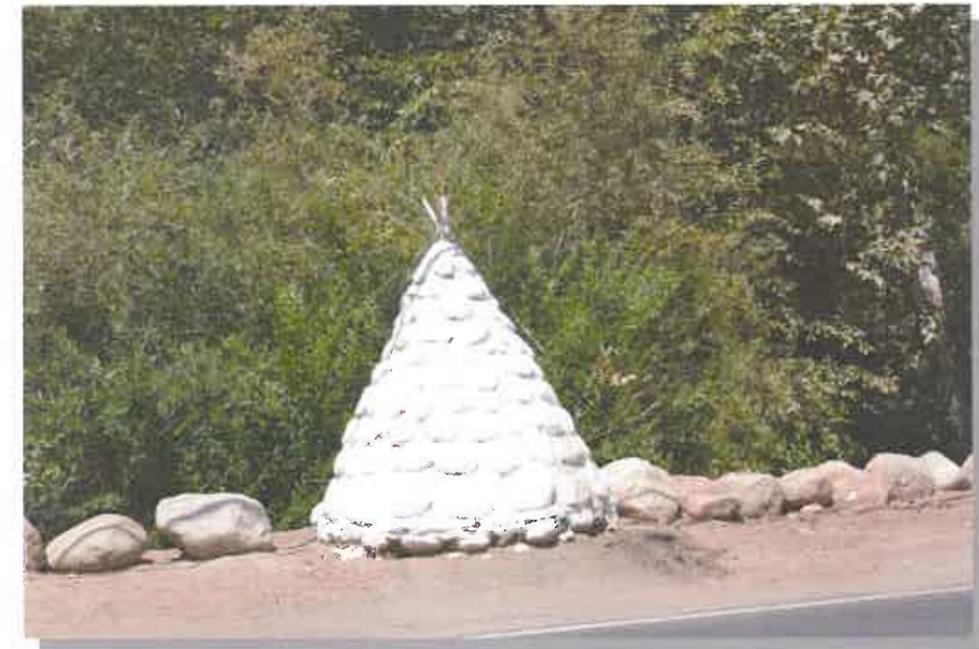
**Transportation Goal:**  
**Promote the maintenance and expansion of transportation choices.**

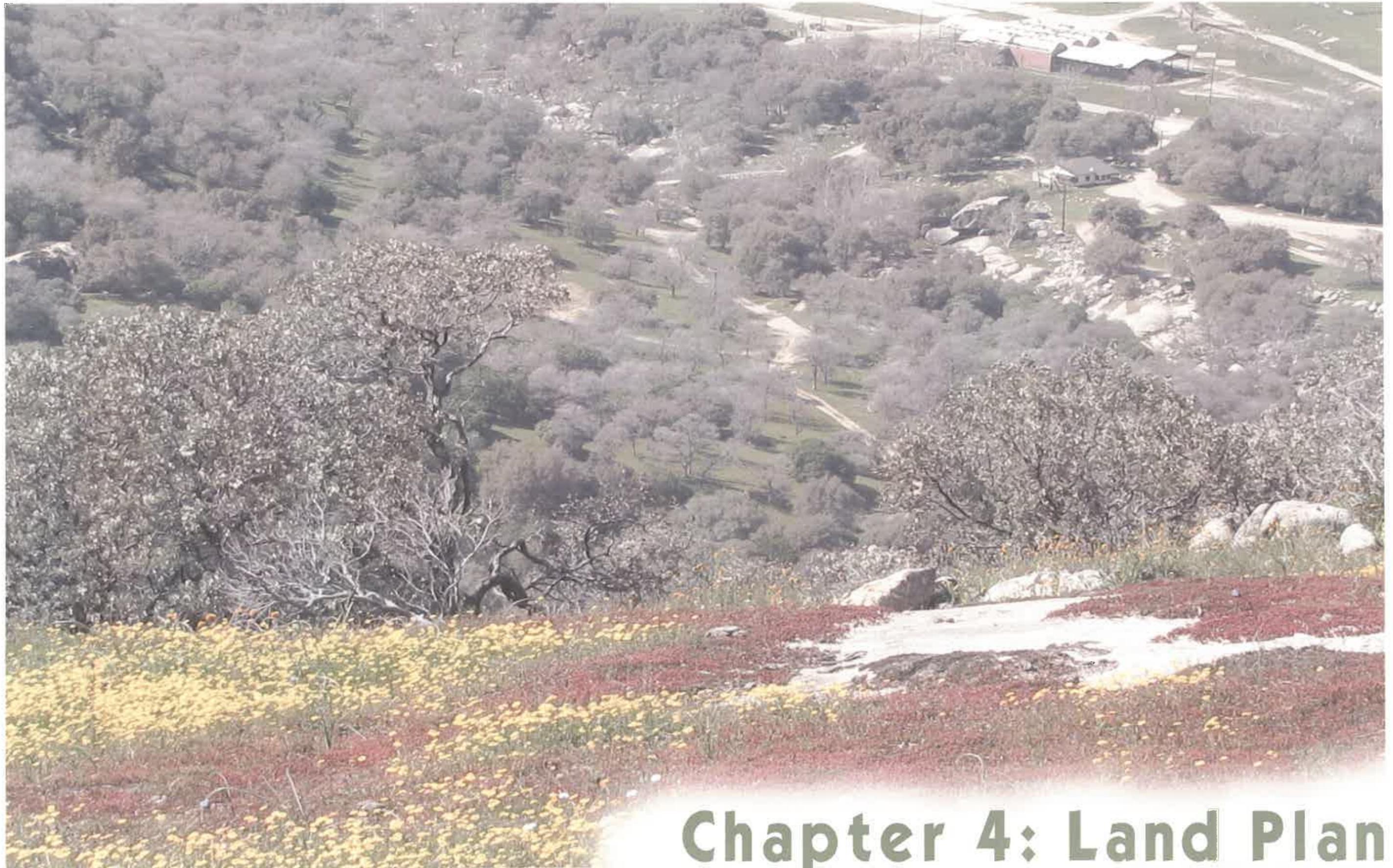
Housing Objectives:

- Promote housing opportunities on and off the Reservation.
- Use all funding sources to meet the housing needs of current and future Tribal members.
- Ensure there is an adequate capacity of land to provide for Tribal housing.
- Encourage higher residential densities where feasible to preserve rural and resource areas.
- Provide adequate infrastructure for Tribal housing.
- Encourage housing developments that include housing, commercial and recreational opportunity.
- Encourage a variety of housing types, building layout and design, and living arrangements to provide high quality housing with varying levels of affordability for Tribal members.
- Locate future housing development near existing residences to make efficient use of existing infrastructure investments, including redevelopment when appropriate.

**Housing Goal:**  
**Preserve the Reservation as the permanent homeland for all tribal members and provide appropriate housing to meet all tribal needs.**

- Promote high density residential development in or near areas with water and sewer service to lower the cost of housing and construction.
- Balance the needs for housing choices with the environmental constraints present on the Reservation.





## Chapter 4: Land Plan



## Chapter 4: Land Planning Program

### 4.1 Land Plan

A land plan is critical to linking Tribal planning goals and objectives to physical development projects. The land plan ensures that decisions regarding development projects are made in a manner consistent with fundamental planning documents adopted by the Tribe. The land plan will be a blueprint for the physical development of the Reservation and the surrounding area. The overall land plan has not yet been completed, as the Tribe determined that resources should be allocated to meeting the crucial housing shortage; specific planning was a more appropriate first step in the Planning Program. The Tribe intends to complete the overall Land Plan when additional funding resources are available.

The Tule River Master Program includes an overall land plan for the entire Study Area, as well as specific plans for three geographical areas. The Land Plan allows the Tribe to identify appropriate land uses for areas currently in the Reservation, as well as areas that may come into the Reservation in the future. It also assists the Tribe in evaluating actions on non-Tribal land that the Tribe has a cultural interest in for historical reasons. These actions could be executed by private land owners, or public agencies such as the USFS or BLM.

The information presented in the GIS maps in Chapter 2 will be in the Land Plan used to determine appropriate land uses, such as areas appropriate for rural residential development, grazing, or forestry practices. Further GIS mapping will be needed to identify additional opportunities and constraints, such as natural resources, infrastructure, and cultural resources.

### 4.2 Natural Resources Plan

The Natural Resources Plan will be developed to identify important natural resources in the Study Area when additional funding resources are available. It will include flora and fauna, as well as water resources, vegetation communities, and unique geological resources. The Natural Resources Plan will also address air quality issues, preservation of oak trees and water quality. In addition, critical wild land fire areas can be identified and measures to minimize fire threats will be formulated.

A resources map will be created using GIS which will inform future land planning decisions. Mapping will be used to identify areas for conservation, and areas available for development. The Tribe has an active forestry program, which can be integrated into the GIS database and tracked for future growth opportunities.

### 4.3 Housing Plan

For a number of years, there is an increasing desire for members to live on the Reservation. There are many benefits to members who live on the Reservation, including social services, economic opportunities, and cultural traditions. Currently, there is not enough housing on the Reservation to meet the needs of tribal members. It is expected that the population of the Tribe will increase and the needs of these new members must also be met. This Housing Plan will evaluate the current housing situation on the Reservation, explore opportunities for new housing units, identify constraints to the growing need, and ultimately provide a plan for the construction of new and replacement units.

#### Tribal Housing Mission Statement

*"To provide affordable housing, for enrolled members of the Tule River Reservation, pursuant to the Tule River Tribal Constitution."*



### *Tribal Housing Administration*

One of the sources of housing on the Reservation is the TRIT Housing Authority. The Housing Authority runs the Tribally-administered housing program that provides public housing to enrolled tribe members. The Housing Authority also administers the federal Home and Urban Development (HUD) program, which funds grants for housing construction.

A major component to housing on the Reservation is land assignments. Currently, prior to being eligible for a tribal housing program or HUD assistance, the enrolled tribal member must have a valid land assignment, granted from the Tribal Council through the Land Management Department. Historically, this process has been lengthy and assignments have been limited by the space available within the Reservation. With the addition of property outside the Reservation boundaries, more land is available for assignment.

### *Bureau of Indian Affairs/Housing and Urban Development Programs*

The **Housing Improvement Program (HIP)** is a home repair, renovation and replacement grant program administered by the Bureau of Indian Affairs (BIA) and federally-recognized Indian tribes for American Indians and Alaska Native individuals and families who have no immediate resource for standard housing. The HIP was established under the Snyder Act of 1921 as one of several BIA programs authorized by Congress for the benefit of Indian people. Funding is available for use in providing program services to Indian applicants who meet the eligibility criteria.

To be eligible for HIP assistance, an individual or family must be members in a federally recognized American Indian tribe; live in an approved tribal service area; have an income that does not exceed 125% of the U.S. Department of Health and Human Services Poverty Guidelines; have present housing that is substandard, as defined by the regulations; have no other resource for housing assistance; have not received assistance after October 1, 1986 for repairs and renovation, replacement or housing, or down payment assistance; and have not acquired their current housing through a federally sponsored housing program.

The Housing Improvement Program serves American Indians who have substandard housing or no housing at all and have no immediate source of housing assistance. HIP is a secondary, safety-net housing program that seeks to eliminate substandard housing and homelessness in Indian communities by helping those in need of obtaining a decent, safe and sanitary housing for themselves and their families. It is the BIA's policy that every American Indian and Alaska Native family should have the opportunity for a decent home and suitable living environment.

The Housing and Urban Development's **Office of Native American Programs (ONAP)** administers housing and community development programs that benefit American Indian tribal governments and tribal members. ONAP's mission is to:

- Increase the supply of safe, decent, and affordable housing available to Native American families.
- Strengthen communities by improving living conditions and creating economic opportunities for tribes and Indian housing residents; and
- Ensure fiscal integrity in the operation of the programs it administers.

The **Indian Housing Block Grant Program (IHBG)** is a formula grant that provides a range of affordable housing programs on Reservations and in Indian areas. The block grant approach to housing for Native Americans was enabled by the Native American Housing Assistance and Self Determination Act of 1996 (NAHASDA). Eligible IHBG recipients are Federally recognized Indian tribes or their tribally designated housing entity (TDHE), and a limited number of state recognized tribes funded under the Indian Housing Program authorized by the United States Housing Act of 1937 (USHA).





With the enactment of NAHASDA, Indian tribes are no longer eligible for assistance under the USHA. An eligible recipient must submit to HUD an Indian Housing Plan (IHP) each year to receive funding. At the end of each year, recipients must submit an Annual Performance Report to HUD reporting on their progress in meeting the goals and objectives included in their IHP. Eligible activities include housing development, assistance to housing developed under the Indian Housing Program, housing services to eligible families and individuals, crime prevention and safety programs, and model activities that provide creative approaches to solving affordable housing problems.

The **Section 184 Indian Home Loan Guarantee Program** is a home mortgage program specifically designed for American Indian or Tribally Designated Housing Entities. Section 184 loans can be used both on and off native lands for new construction, rehabilitation, purchase of an existing home, or refinancing. Because much of the tribal land is held in trust by the Federal Government, Native American homeownership has historically been an underserved market. Working with an expanding network of private sector and tribal partners, the Section 184 Program endeavors to increase access to capital for Native Americans and provide private funding opportunities for tribal housing agencies with the Section 184 Program. To help increase access to financing, the Office of Loan Guarantee within HUD's Office of Native American Programs, guarantees the Section 184 home mortgage loans made to Native borrowers. By guaranteeing these loans 100%, it encourages lenders to serve the Native American Communities. This program increases the marketability and value of the Native assets and strengthens the financial standing of Native communities. As of 2014, the Section 184 program has guaranteed over 24,000 loans (almost \$4 billion dollars in guaranteed funds) to individuals, Tribes, and TDHEs.

The **Indian Community Development Block Grant (ICDBG)** program provides eligible grantees with direct grants for use in developing viable Indian and Alaska Native communities, including decent housing, a suitable living environment, and economic opportunities, primarily for low and moderate income persons. Eligible applicants for assistance include any Indian tribe, band, group, or nation which has established a relationship to the Federal government as defined in the program regulations. In certain instances, tribal organizations themselves may be eligible to apply. The ICDBG program can provide funding for recipients in the following categories:

- Housing rehabilitation, land acquisition to support new housing construction, and under limited circumstances, new housing construction.
- Infrastructure construction, e.g., roads, water and sewer facilities; and, single or multipurpose community buildings.
- Variety of commercial, industrial, agricultural projects which may be recipient owned and operated, or which may be owned and/or operated by a third party.

The **Title VI Tribal Housing Activities Loan Guarantee Program** assists Indian Housing Block Grant (IHBG) recipients who want to finance eligible affordable housing activities, but are unable to secure financing without the assistance of a federal guarantee. (A federal guarantee is a pledge by the U.S. Government to repay all or a portion of the unpaid principal balance and accrued interest for an obligation by a borrower to a lender after a default under the terms of the repayment agreement.) The borrower leverages IHBG funds to finance affordable housing activities by pledging future grant funds as security for repayment of the guarantee obligation. A private lender or investor provides the financing and HUD provides the guarantee to the lender or investor. The borrower repays the obligation; however, HUD repays the obligation if a default is declared and they will seek reimbursement from the borrower's future IHBG grant funds.

Eligible borrowers include:

- A federally recognized tribe who receives IHBG funds
- A TDHE authorized by a tribe to receive IHBG funds and is authorized to make obligations and pledge IHBG funds as security for those obligations

Eligible lenders include:

- FHA approved lender
- VA lender
- Approved by the Department of Agriculture
- Supervised, approved, regulated, or insured by any agency of the United States or
- Any other lender approved by the Secretary



Eligible affordable housing activities under Section 202 of NAHASDA include:

- Indian Housing Assistance
- Housing Development
- Housing Services
- Housing Management Services
- Crime Prevention and Safety Activities
- Model Activities (with HUD approval)

**Housing Needs Assessment Survey**

Tribal members were surveyed in the spring of 2014 on a variety of development issues. The survey showed that housing was the number one concern of participants. The majority of the respondents felt that housing should be the primary development focus for the Tribe. Respondents identified the need for both on and off Reservation housing, and felt that homes should be built on land owned by the Tribe. Ideally, these properties would be converted to Trust ownership so the homeowners could take advantage of tribal membership benefits.

**Housing Profile**

The following housing profile illustrates the current condition and status of the housing stock within the Reservation. The information was developed from the United States Census Bureau American Fact Finder program.

	Existing Units	Percentage
Total Housing Units	430	100%
Occupied units	378	87.9%
Owner occupied units	251	66.4%
Renter occupied	127	33.6%
Vacant units	52	12.1%

The total number of housing units within the Reservation is 430 units, of which 378 are occupied. Of the units occupied, two thirds are occupied by owners. Twelve percent of the units are vacant. This is slightly higher than the Tulare County vacancy rate of 7.9%

	Existing Units	Percentage
<b>Total Housing Units</b>	<b>430</b>	<b>100%</b>
Built in 2010 or later	10	2.3%
Built in 2000 to 2009	124	28.8%
Built in 1990 to 1999	49	11.4%
Built in 1980 to 1989	59	13.7%
Built in 1970 to 1979	76	17.7%
Built in 1960 to 1969	45	10.5%
Built in 1950 to 1959	13	3.0%
Built in 1940 to 1949	20	4.7%
Built in 1939 or earlier	34	7.9%

Table 4-2 shows the age profile of the housing stock within the Reservation. Just over 15% of the housing is over 55 years old while in Tulare County 22% of the housing stock was built before 1960. Some of the older housing will need to be refurbished or replaced over the next 20 years.

Mobile homes and detached single family homes are the dominant housing units on the Reservation. Mobile homes have historically been used to provide affordable housing to tribal members. By way of comparison, Tulare County has about 7% of its housing provided by mobile homes. The Reservation has very few (12 units) of multi-family homes.

	Units	Percentage
Detached	257	59.8%
Attached	4	0.9%
Multi-unit	12	2.8%
Mobile home	155	36.0%
Recreational vehicle	2	0.5%

	Units	Percentage
No bedroom	8	1.9%
1 bedroom	16	3.7%
2 bedrooms	65	15.1%
3 bedrooms	236	54.9%
4 bedrooms	91	21.2%
5 bedrooms or more	14	3.3%

The majority of homes on the Reservation have three bedrooms. The Reservation has slightly higher percentages of 3, 4 and 5 or more bedrooms than Tulare County as a whole. This would also support the higher numbers for persons per household discussed in Table 4-4.



The tenure data in Table 4-5 for residents of the Reservation suggests long durations for occupancy. Over 35% of the residents have lived in their current home since 1990. This may represent a cultural tradition of the tribe members.

	Units	Percentage
Moved in 2010 or later	31	8.2%
Moved in 2000 to 2009	212	56.1%
Moved in 1990 to 1999	58	15.3%
Moved in 1980 to 1989	38	10.1%
Moved in 1970 to 1979	17	4.5%
Moved in 1969 or earlier	22	5.8%

On the reservation there are relatively high household sizes for both owner and non-owner occupied housing. This is nearly one person per unit larger than Tulare County, and suggests larger families, multi-generational and more unrelated occupants per household within the Reservation.

*Housing Needs Assessment*

Given the age, size requirements and demand for additional housing within the Reservation or on Tribal owned land, the housing needs assessment was prepared to address three key challenges. The first is the need to replace a portion of the existing housing stock. An inventory of housing conditions has not been completed at the time. But given that 52 units are currently vacant, those 67 units were built prior to 1960, and that the current housing stock has a high percentage of mobile (manufactured) homes, it can be assumed that for the purposes of this Housing Plan, a minimum of 15% of the existing housing stock will need to be replaced. The actual number may be larger given the number of vacant units and the number of mobile homes within the Reservation, but it is deemed to be reasonable for estimating housing needs.

	Persons per unit
Average Size of All Occupied Units	3.72
Average Size of Owner-Occupied Unit	3.86
Average Size of Renter-Occupied Unit	3.43

The second challenge is the organic demand for housing that is expected to grow due to the increase in Reservation population. Assuming an annual growth rate of 3% Reservation population will increase by approximately 1,300 persons over the next 20 years. The final challenge is associated with the number of tribal members who currently live off-Reservation. Many desire to return to the Reservation, but cannot due to the lack of housing. This additional demand for housing is estimated to be 300 persons over the next 20 years.

*Future Population Projections*

The population of the Tribe and Reservation is expected to grow significantly over the next several generations. Below is an estimate of population growth, assuming a 3% annual increase. Given the age profile of the Tribal population and the high number of young adults the growth rate may be higher in the early years of the plan. The Reservation's ability to accommodate these individual and families is limited by the availability of housing. Population growth on the actual Reservation may or may not correspond to the growth of the Tribe, as the Reservation is expected to grow in size through the purchase and transfer of non-Reservation lands in to Tribal Ownership.

2010 Population	1,357
Organic Growth (@3%)	1,303
Returning Tribal Members	750
<b>Total 2030 Population</b>	<b>3,410</b>

In addition to the natural organic growth within the Reservation, the Tule River Indian Tribe is composed of a number of members who live off the Reservation. Many of these members reside off-Reservation by choice, but others, some estimates are as high as 4,000, live off-Reservation due to the lack of housing on the Reservation.

**Tribal Housing Challenges**

1. Replacement Housing
2. Organic Growth in Population
3. Returning Tribal Members



These Tribal members could place an additional demand for residency should housing be made available. For the purposes of planning for the future, a segment of these members are included in the table below to provide a framework for land planning and housing. The estimate shown below “with Returning Members” is based on providing opportunities for a portion of this external group to return to the Reservation. The estimate assumes 19% of this external population would return to the Reservation if housing was available and that assumption translates into an additional 750 Tribal members returning over the life of this plan.

The additional population shown above can be translated into housing demand. By using the average number of persons per household, the projected number of new homes can be estimated. Reflecting the Tribal members desire to reduce the persons per household currently seen as a result of the restricted number of available houses, a 10% decompression rate was used to reduce the future persons per household to 3.37 persons per unit.

The population increase assumes 750 tribal members currently living off-Reservation will move to housing created on the Reservation, or Tribal owned property off the Reservation. The estimated number of new housing units is determined by dividing the projected population increase by the estimated revised average household size, which results in the need for 610 new housing units.

The total number of housing units needed, can be estimated by adding the needed replacement housing with the projected new housing. Total housing unit needs would be defined by the replacement units (82) plus the new units associated with population increases (610), which results in the need for nearly 700 new units over the next 20 years. To meet this need, approximately 35 units will need to be constructed annually to meet this demand.

Last year, the Tule River Housing Authority constructed 11 homes and the HUD-based Tribal Housing program constructed two homes for a total of 13. The housing program outlined above will necessitate an annual construction rate of nearly double the rate from last year.

### *New Housing Profile*

Within the Tribe there is great interest in providing a variety of housing choices for the tribal members. Based on the 2010 Census data, approximately 80 percent of the housing units were considered to be for families.

While the need for traditional single family homes is strong, there is also a need to provide smaller homes or apartments for the other 20 percent of the population. This will require a unique blend of single-family and multi-family housing. In addition, product types will need to be varied to provide for various life-cycle styles. These typically reflect the family and non-family needs of the individual. Families with children typically need or want additional space (both structure and yard), while single individuals want more convenience (less space to maintain). The following discusses the various housing products anticipated to be provided in the future.

Single family units are currently the largest housing type on the Reservation and that is expected to continue into the future. However, a more balanced approach is suggested for new housing. This strategy is based on the desire to develop more housing within the Reservation, additional units for senior and singles and a wider variety of housing types to meet life-cycle and life style choices.

Single family units are projected to comprise approximately 60% of the new housing constructed over the next 20 years. A portion of those will be replacement units for existing housing. New single family homes are proposed on both small and large lots, both within the Reservation as well as on Tribal owned land outside the Reservation. Multi-family units will be introduced as a new housing product to assist in meeting the target number of overall units and as a way to address life-cycle choices.





Approximately 21 single family and 14 multi-family units will need to be constructed on an annual basis to meet the projected demand for housing. In order to maximize the investment in infrastructure and minimize the fixed costs per unit, it is suggested that 10 to 25 single family homes be constructed together. For multi-family products, 10 to 20 unit complexes provide for economies in design, infrastructure and construction.

Type	Percentage	Units	Units per year target
Single family	60%	415	21
Multi-family	40%	277	14
<b>Totals</b>	<b>100%</b>	<b>692</b>	<b>35</b>

The desire to provide senior housing units within the existing Reservation has been identified over the past several years. With the aging of the tribal population, life-cycle requirements suggest the need for convenient, well deigned senior housing near social and commercial services. Approximately 8% of the Reservation population is over 62 years of age, and many of those members desire and would benefit from this housing product.

Currently, 22% of the Tribal Members are between the ages of 20 to 34 and would occupy housing that is not a traditional single family home. Many are pre-family and desire more convenient and affordable housing products. Some are returning to the Reservation after college or off-Reservation employment. This group is currently limited to the type of housing options available and could benefit from smaller single family homes on smaller lots and townhome rentals.

Family housing units will continue to be in demand, yet the product type will need to be expanded to meet the needs of current and future families. As stated earlier, the Reservation has a high number of persons per household, which reflects the multi-generational aspect of Tribal culture. In the future, this will continue to be part of the housing profile and should be considered when planning new housing products. There is also a need for smaller units for young families. Future housing products should include smaller-houses on smaller lots, moderate sized houses on 1-acre lots, and larger units 5 and 10 acre lots.

The Table 4-9 allocates these various housing types for the new construction. The 82 replacement units are intended to update the existing housing stock. It is projected that 369 new single family units would be constructed over the next 20 years, while 242 multi-family housing units would be built.

Type	Percentage	Units
Single family		
<i>Replacement</i>	11.8%	82
<i>New</i>	53.3%	369
Multi-family		
<i>Senior</i>	3.7%	26
<i>Young adult</i>	8.5%	59
<i>Family</i>	22.7%	157
<b>Totals</b>	<b>100%</b>	<b>692</b>

*Housing Constraints*

A number of challenges face the Tule River Tribe when developing additional housing. Some are unique to the Tribe, but many are related to the area, the backlog of needs, construction challenges and the need to establish a master housing program to direct efforts and resources. The following summarizes the challenges which impede the development the Reservation housing stock:

- Availability of water sources to meet residential and other development needs, including the identification and development of new water sources.
- Maintaining the traditional character of the Reservation while improving existing homes and developing new housing units.
- Cost effectiveness of constructing infrastructure.
- Lack of housing that meets the various family structures of Tribal members.
- Economic hardships of tribal members and limitations of financial assistance programs.
- Environmental and cultural constraints, such as topography.
- Lack of availability of land assignments.
- Affordability of construction and rents.
- Regulatory constraints.





*Housing Opportunities*

With over 55,000 acres on the Reservation, and additional property owned by the Tribe off the Reservation, it could be assumed that there is an abundance of land available for development. Many factors are typical of all residential development, while several are unique to the Tribe and the Reservation. The following lists these key factors:

- Financial Resources
- Infrastructure
  - Water
  - Sewer
  - Power
  - Roads
- Topography
- Timing/Demand

*Spatial Assignment*

The location of future housing areas will be determined by a number of key factors. However the rugged topography limits the number of sites feasible for home construction. For, of the 1,786 acres within McCarthy Ranch, approximately 736 acres are available for development due to steep slopes and inaccessible areas. Criteria established to determine the location of future housing include physical constraints and social/community values. Along with the limitations created by topography and infrastructure the following criteria should be considered when locating new homes:

- Strengthening of the core part of the Reservation
- Development of a Village
- Segregation of land uses
  - Residential in Village or on tribal owned lands not in Trust
  - Economic development outside the Reservation to preserve the cultural integrity and protect environment
- Desire of mix of housing types: single family large parcel, single family medium parcel, single family smaller parcels, multi-family (townhouses, senior and family products)
- Movement of some special events off Reservation to accommodate larger events and minimize impacts to Reservation & environment
- Development of highway commercial development at Eagle Feather

	Percentage	Units	Acres	Estimated Population
Cow Mountain	29%	200	1,500	675
Hyder Ranch	29%	200	215	675
McCarthy Ranch	35%	243	736	815
BIA Road 240	2%	14	70	47
Reservation	5%	35	175	116
<b>Totals</b>	<b>100%</b>	<b>692</b>		<b>2,328</b>

The following describes the areas targeted for housing development.

- Cow Mountain  
 Cow Mountain is an area north of the core portion of the Reservation where land assignments have recently been granted. This area is a focus for housing development because of its proximity to tribal services, and there is enough vacant space available for immediate housing development. Other areas in the Reservation near Tribal services exist have already been allocated into land assignments, and cannot accommodate large numbers of residential units. The Cow Mountain area, while currently lacking adequate infrastructure, can quickly be prepared for residential units.
- The Village  
 The Village is defined as the core portion of the Reservation. Existing Land assignments dominate the Village; however, there is opportunity for senior housing in the southern portion of this area. Tribal services are located in the Village and expanding water and sewer service to meet senior housing needs can be accomplished with limited challenges. By taking advantage existing infrastructure, new housing in the Village would increase activity in a core portion of the Reservation and strengthen community values among the tribal members.



- Hyder Ranch

Hyder Ranch is a planned development currently undergoing review and approval with the County of Tulare. The 215 acre site is located at the southeast corner of Reservation Road and Road 296 (Deer Creek Road) west of the Reservation. The project includes 200 detached single family units on ½ acre lots on land owned by the Tribe, but located off the Reservation. Phase I is limited to no more than ten homes, Phase II to an additional fifteen homes, and the third and final phase resulting in the built-out of the full project. The project also includes baseball diamonds that will be used for tournament play. As part of this Master Plan, the addition of a 20 acre solar farm is proposed to provide power for the homes and ball fields.

- McCarthy Ranch

McCarthy Ranch is located along Reservation Road outside of the Reservation boundary. It represents a number of properties acquired by the Tribe over the past several years. Lying generally west of the Reservation entrance and south of Reservation Road, a total of 4 parcels making up 1,783 acres are included in this specific plan area.

McCarthy Ranch is envisioned as a residential and recreational area, which will provide for Tribal members housing and recreational needs. McCarthy Ranch is proposed to include 150 single family homes with supporting recreation space and neighborhood parks. The master development concept would take advantage of the existing natural features, existing buildings and water reservoir. Details regarding the land uses and spatial layout of McCarthy Ranch are provided in the specific plan described later in section 4.4.

- BIA Road 240

The BIA Road 240 area has long had housing development. Additional locations have been identified, but limitations of the electrical, water and sewer systems in this area has limited the expansion of housing. Home sites are available along BIA 240, but the cost of updating infrastructure will continue to be a challenge. It is anticipated that only 14 additional homes on 5 acre parcels will be developed in the future. These will mainly be contiguous to existing home sites to minimize infrastructure expansion costs. This area is within the McCarthy Ranch Specific Plan discussed in section 4.4.

The balance of the additional housing units will be spread within the Reservation Area. Approximately 35 additional units are planned to be built where electric, water and septic infrastructure is available. These will be constructed on larger parcels (5 to 10 acres).

The following table summarizes the planned allocation of new housing by sub-area.





#### 4.4 Specific Plans

The Tribe has identified three geographic areas to focus time and funding to foster development of residential and commercial development opportunities. The Specific Plans address issues raised by community members, the Planning and Development Department and the Tribal Council. Planning programs will be identified for each specific plan area, as well as how each specific plan program is consistent with the goals identified in Chapter 3. Land use diagrams are presented to show where specific land uses are proposed, and in undeveloped areas, roadways will be identified to show new access. Future analyses regarding infrastructure, groundwater availability, and market demand will help decision makers determine the phasing of each specific plan in the future.

#### The Village

The Village core area is a natural location for focused planning efforts, due to its high concentration of education, recreation and economic services and its proximity to many tribal administrative services. Much of the land within the Village Specific Plan has already been assigned to tribal members for housing; therefore the key aspect of the Village Specific Plan is the reuse of existing Tribal-owned buildings. Plans for this area include the relocation of the casino to Eagle Feather, the relocation of tribal administrative services from 340 N Reservation Road to the Casino building, and the expansion of educational opportunities into vacated space. This plan will also incorporate a community park and a multi-modal trail along the Tule River.

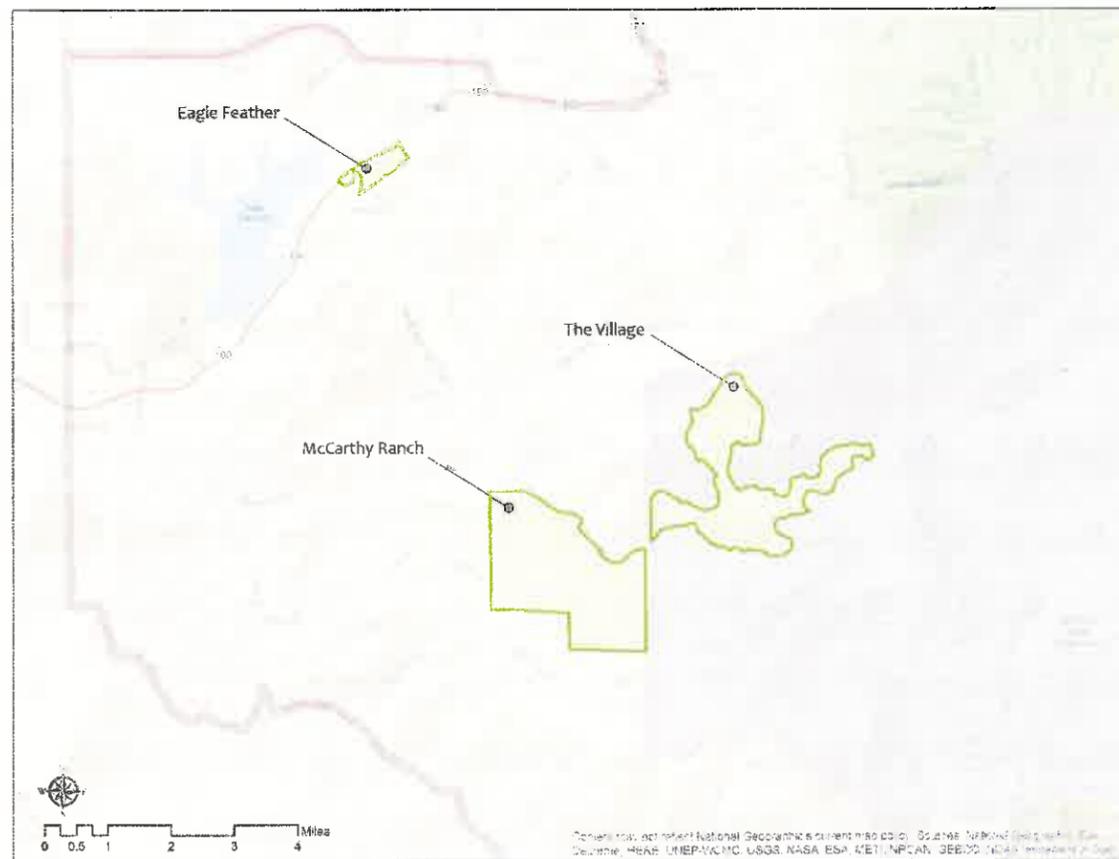


Figure 4-1. Specific Plan Areas

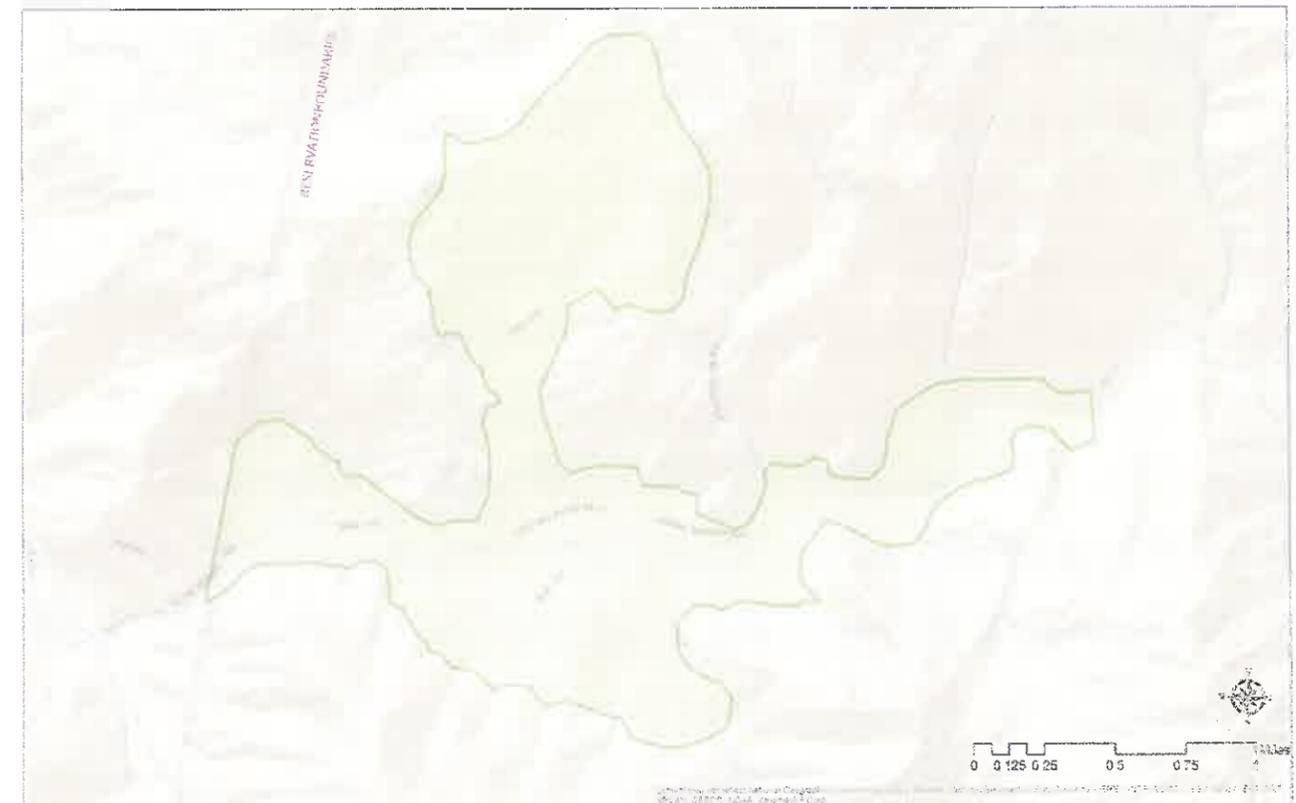


Figure 4-2. Village Specific Plan



### McCarthy Ranch

McCarthy Ranch has been identified as a specific plan area due to its proximity to Reservation amenities, access to Reservation Road, generally flat topography, and availability of land. The McCarthy Ranch Specific Plan area is a union of three properties owned by the Tribe: (1) McCarthy Ranch, (2) Pierson/Diaz Property, and (3) Lowe/McDarmont Parcel. The McCarthy Ranch Specific Plan area encompasses 1,782 acres, with approximately 736 acres suitable for development.

This specific plan area will focus on providing housing for the Tribe. A variety of housing types are needed for members, including senior, single family, and multi-family products, and the McCarthy Ranch area would allow for the creation of new neighborhoods where a variety of housing types could be constructed. McCarthy Ranch has the acreage to construct the necessary infrastructure to serve the new units, as well as provide recreational opportunities such as community parks and trails. A mixed use commercial area is proposed along the northern boundary of the specific planning area where the existing rodeo grounds and ranch house is located.

The primary goal of the McCarthy Ranch Specific Plan will be to develop housing for the Tule River Indian Tribe. The Tribe is facing a significant housing shortage and is projecting to construct XX units over the next 20 years in various locations on and off the Reservation. Given the size and location of McCarthy Ranch, a large number of the needed units will be developed within this specific plan area. While a mix of unit types is proposed, the primary development planned is for quarter (1/4) acre and half (1/2) acre lots. In addition to housing, water and sewer systems will be developed, along with parks, roads, and trails. McCarthy Ranch is also home to resources culturally important to the Tribe, and the preservation of these resources will be incorporated into future development plans.

The Tule River Indian Tribe has been working to improve the existing arena and rodeo grounds at McCarthy Ranch adjacent to Reservation Road. In conjunction with this developing event center, as a small commercial center is proposed for this location. With the development of housing and the rodeo grounds, a fire station/public safety sub-station is also proposed in this location.

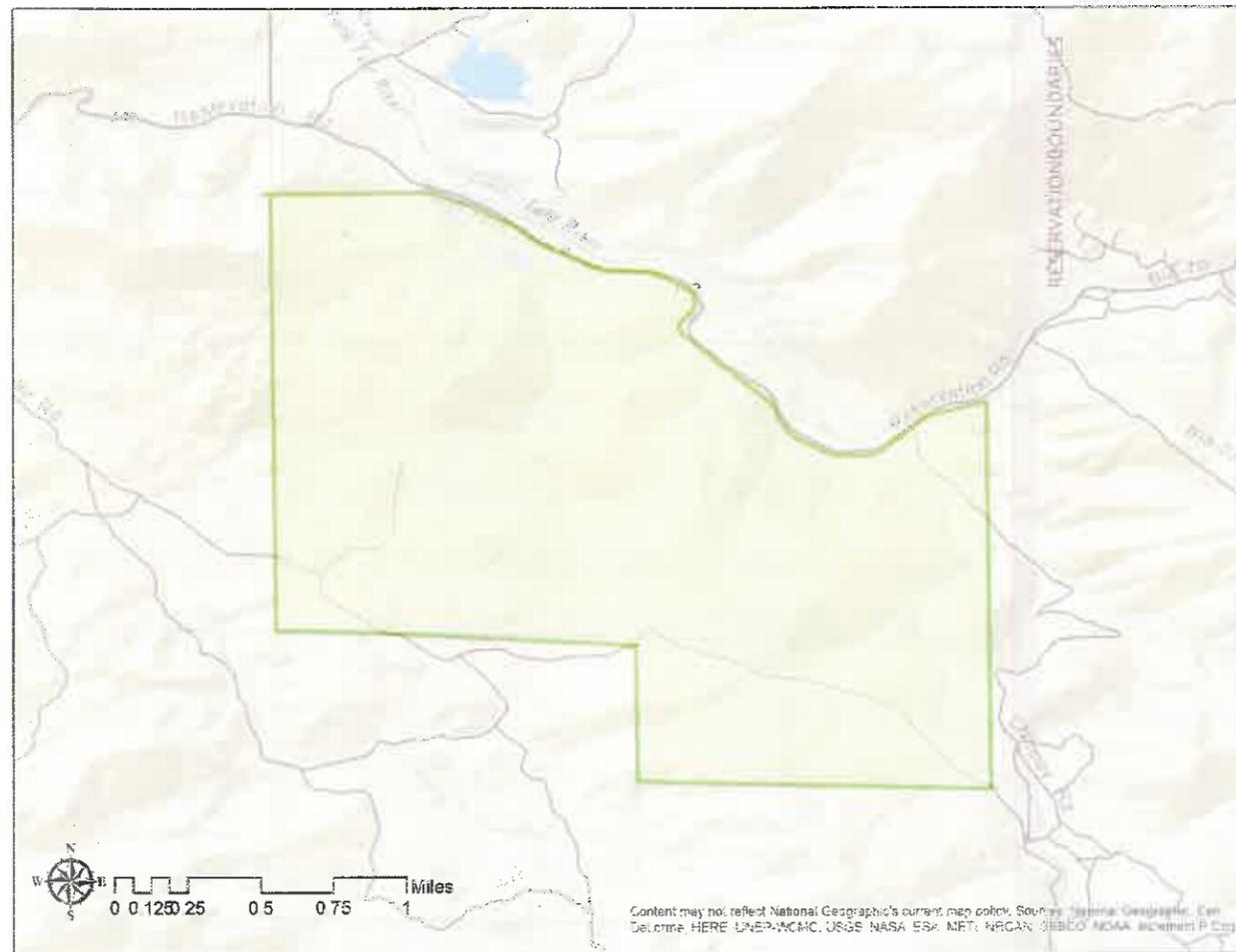


Figure 4-3. McCarthy Ranch Specific Plan



*McCarthy Ranch, Tule River Area, Calif.*



### Eagle Feather

Eagle Feather is a commercial center owned by the Tule River Indian Tribe west of Springville on Highway 190, approximately 6.5 miles northwest from the core of the Reservation. A portion of the 134 acre site is developed with a gas station and mini-mart, as well as a tribal administration building and bus maintenance center. The Eagle Feather Specific Plan will encourage expanding commercial development opportunities at this location, including the relocating the Eagle Feather Casino to this site. Additional land uses include a hotel/casino complex that will house restaurants, parking, shops, and highway commercial uses.

The Eagle Feather Specific Plan will focus on promoting economic growth for the Tule River Indian Tribe. In spite of accessibility challenges, the Eagle Mountain Casino currently boasts profits of over \$80 million dollars annually. By relocating the casino to Eagle Feather, revenues are expected to double, which will create tremendous opportunities for other Tribal programs to expand and continue to enrich the lives of the Tribal community.

The Tribe completed an economic study of the Casino and as part of that process, evaluated the potential for relocation to an off-Reservation location. That study led to the proposal for the relocation of the Casino to the Eagle Feather Trading Post located on SR 190 near Springville. The economic benefits associated with the relocation would be significant. In addition, the opportunity to re-use the existing Casino facility for other Tribal uses, would greatly enhance the core part of the Reservation.

### Land Use Designations

The development of a community plan begins with the designation of land uses. The organization of land uses creates efficient land development and allocation of scarce resources (i.e. infrastructure, financial investment, etc). This process of organization limits land use conflicts safe guards natural resources, and provides for a systematic the assignment of land and construction of infrastructure.



Figure 4-4. Eagle Feather Specific Plan



The Tribe has established a series of general land use designations which will be used to describe the land use concepts within the Study Area and the individual Specific Plans. The land uses selected for this Master Plan reflect the vision, goals, and objectives the Tribe has established for the future community, as outlined in Chapter 3 of this report. The following describes the eight land uses.

**Single Family Residential**

Single family detached housing at an average density of between 0.20 and 4.0 units per acre.

**Multi-Family Residential**

Multi-family housing is higher-density housing at an average of 4.0 or more units per acre. The Plan envisions townhomes, apartments and senior product types for the multi-family housing areas.

**Commercial**

Commercial areas will be developed for retail sales, services and hotel/motels. These businesses are predominantly privately owned (either by the Tribe or other private owner) and operated for profit (for example, restaurants and grocery stores). Included are private institutional uses (senior homes in which medical or surgical services are not a main function of the institution), but not hospitals. This also includes tourist related uses including casinos, hotels, gas stations and recreation/amusement activities.

**Tribal Government**

Tribal governmental uses include governmental centers, health centers, fire and police facilities, public works facilities, water and sewer treatment facilities, water storage facilities, schools, landfills and cemeteries. This land use also includes solar farms, transit and park and ride facilities.

**Mixed Use**

Mixed use areas include a variety of neighborhood uses, including commercial development, recreational opportunities, tribal government uses, and other institutional land uses. Small lot single family residential and medium density residential uses are also appropriate in these areas. Critical to the success of a mixed use center is the compatibility of the planned uses, including identifying potential conflicts such as noise, traffic, and parking.

**Neighborhood Park**

Neighborhood parks serve the local population and are generally within walking distance of a core residential area. Neighborhood parks may include play equipment, picnic facilities, benches, walkways, landscaped areas and multi-use open grass areas. These parks are generally between 1-5 acres in size.

**Community Park**

A community park serves a larger regional area than a neighborhood park and is central to multiple residential areas. Many visitors drive rather than walk to a community park. While parks include many amenities also available in a neighborhood park, they typically include basketball and tennis courts, soccer and baseball fields, community gardens, trails, and natural areas. Ponds or lakes are often incorporated, either for recreation, or to serve as detention basins for runoff, or for joint uses.

**Open Space**

This category allows large public parks and recreation areas such as public and private golf courses, trails and easements, drainage ways and detention basins, and any other public usage on permanent open land. Open space will be used for natural hazard protection and natural and scenic resource preservation. Agriculture is permitted within these areas.





#### 4.5 Village Specific Plan

The Village Specific Plan is focused on the core of the Reservation, where most of the existing tribal services are located, along with a concentration of residential housing. This specific plan area will continue to serve as the center for educational services, tribal administrative services, and commercial opportunities. Significant changes to residential development will be located in the northern portion of the Specific Plan area, in the Cow Mountain vicinity. Because much of the land within the Village Specific Plan has already been assigned to tribal members for housing, a key aspect of the specific plan is the reuse of existing Tribal-owned buildings. The primary objectives of the Village Specific Plan are:

- Relocate Eagle Mountain Casino
- Provide additional housing
- Expand education system
- Create economic opportunities

A critical component to the Village Specific Plan includes the relocation of existing land uses in the area. The Eagle Mountain Casino, currently located in the eastern area of the Specific Plan area, is proposed to be moved off the Reservation to the Eagle Feather Specific Plan area. The casino will be re-developed for various uses, including commercial uses, institutional, and recreational land uses. Specifically, potential uses include a grocery store, a drug store, the relocated health clinic, and the relocated Tribal Administrative Offices currently located at 340 N Reservation Road.

Once the casino is relocated and tribal administrative offices move to the vacant casino building, space is opened up in the Village core to enhance educational opportunities on the Reservation. The Tribe takes great pride on providing on-Reservation educational opportunities for tribal youth. As new housing is constructed and the population on the Reservation grows, there will be a strong demand for additional educational opportunities to continue to meet the needs of the growing tribe. The existing Towanits Indian Education Center, located at 310 N Reservation Road, can be expanded to the south and take advantage of the existing playing fields and river access on the south side of N Reservation Road.

The existing building that serves as the Health Center can also be re-developed in a way to serve the youth and community of the Reservation. The Health Center would convert to a Village Recreation Center, which would include access to fitness equipment, recreation programs, and a swimming pool. By adding this amenity in the Village core area, students and other community members can access this resource in concert with the educational programs.

Other components of the Village Specific Plan are oriented towards the Tribal Elders. The Plan anticipates the construction of Elder housing to allow elders to remain on the Reservation in a supported or assisted living situation rather than having to move to Porterville. A senior center is also proposed to serve the Elder population.

Since the core area of the Village Specific Plan area is developed with existing tribal buildings and residential land assignments, new housing cannot be accommodated in the N Reservation Road and S Rodeo Drive corridors. The Tribe has begun to grant residential land assignments in the Cow Mountain area.





The Village Specific Plan expands on this trend and proposes approximately 200 single family homes and several neighborhood parks on Cow Mountain. This residential development at Cow Mountain is in an area that can be developed most quickly. Other areas such as McCarthy Ranch are able to provide the quantity of units needed, but development on that property will require several years of preparation, as there is limited infrastructure in those areas.

With the expansion of existing infrastructure, Cow Mountain can be expanded to accommodate additional housing units. Existing homes in the area are served by on-site septic systems and wells. Additional roads, power, water, and sewer will be required to support the expanded residential development. An infrastructure plan is necessary to plan the timing and financing of utility and road construction.

In addition to the neighborhood parks at Cow Mountain and the new recreation center, a multi-modal trail is proposed along the South Fork of the Tule River. This will be preserved as Open Space, with passive recreational uses to include fishing, walking, horseback riding, and bike riding. The Open Space land use designation is intended to acknowledge the importance of the Tule River as a natural resource, as well as allow the continued use of the river as a recreation site and transportation corridor.

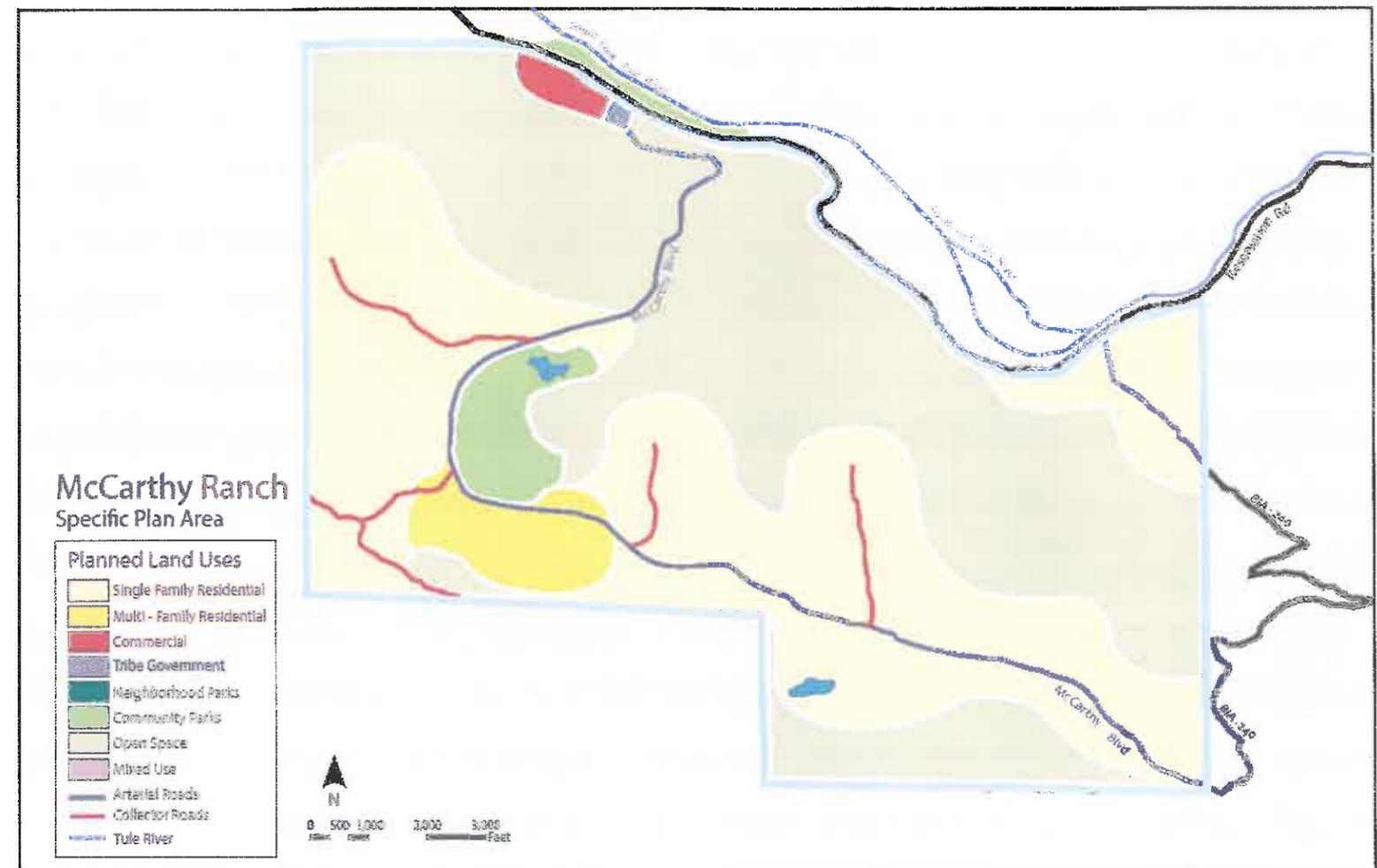
#### 4.6 McCarthy Specific Plan

In response to the long-term need for housing McCarthy Ranch has been identified as a Specific Plan Area. McCarthy Ranch is an ideal location for residential development due to its proximity to Reservation amenities, access to Reservation Road, generally flat topography, and availability of land. The McCarthy Ranch Specific Plan Area is a union of three properties owned by the Tribe: (1) McCarthy Ranch, (2) Pierson/Diaz Property, and (3) Lowe/McDarmont Parcel. The primary objectives of the McCarthy Ranch Specific Plan are:

- Provide single family and multi-family housing
- Create neighborhood commercial center
- Expand rodeo arena
- Construct recreational facilities

The McCarthy Ranch Specific Plan encompasses 1,782 acres with approximately 736 acres suitable for developable. The plan area is divided into “upper” and “lower” areas. In lower McCarthy Ranch, the property is currently developed with ranch houses, an arena, and other storage buildings. Upper McCarthy Ranch is undeveloped, and generally used for cattle grazing. The lower area will be expanded into a commercial center, and the upper area will be developed with residential development.

Housing will dominate the majority of development in the McCarthy Ranch Specific Plan. McCarthy Ranch has the acreage to construct the necessary infrastructure to serve the new units, as well as provide recreational opportunities. There are several housing types proposed in multiple locations within McCarthy Ranch.





The existing residential development along BIA 240 is proposed to be expanded to the south to accommodate an additional 14 homes on large lots, approximately 2-5 acres in size. The remainder of upper McCarthy Ranch would be developed with ¼ to ½ acre lot sizes, and would include both single family and multi-family units. The following is a breakdown of the proposed units at McCarthy Ranch:

- BIA 240
  - 14 Single Family Units on 51 Acres
- Upper McCarthy
  - 243 Single Family Units on 519 acres
  - 242 Multi-Family Residential Units on 37 acres

A community park is proposed for the upper McCarthy Ranch area, which would include ball fields, tennis courts, basketball courts, trails, a lake, and cultural interpretive exhibits that protect significant resources in the area. Several neighborhood parks will be constructed in the residential neighborhoods to serve local residents.

A mixed use commercial project is proposed along the northern boundary of this lower McCarthy Ranch. This area contains the historic McCarthy Ranch house and barn, and is proposed to include a rodeo arena, caretaker's house, and several storage buildings. The Tribe has been hosting events including rodeos and pow wows at the lower McCarthy Ranch area for several years. Lower McCarthy Ranch will be expanded to include the following:

- commercial retail center
- gas station/mini mart
- fire station
- community park
- rodeo event center
- community stables

Improving services at this location will serve special services at events as well as future McCarthy Ranch residents. A community stable is also proposed at the event center. It is envisioned to serve future residents of McCarthy Ranch or other Reservation residents that are unable to keep horses on their property due to size or location.

Water and sewer systems will be developed at McCarthy Ranch to serve the proposed uses. The existing ranch complex at McCarthy Ranch has access to well water and an on-site waste water disposal system. Additional development at lower McCarthy Ranch, along with areas in upper McCarthy Ranch will require a phased approach to infrastructure development. An infrastructure plan will determine how to schedule the development of utilities in the upper and lower McCarthy Ranch areas.

While the current Housing Plan calls for approximately 257 single family homes and 242 multi-family homes in McCarthy Ranch, the capacity of this Specific Plan is much greater. McCarthy Ranch has an estimated capacity of 2,400 single family homes and 450 multi-family homes. While this specific plan does not anticipate over the next 10 to 20 years, the potential for substantially more homes in McCarthy Ranch neighborhood is possible. Should the Tribe want to reserve this capacity, then infrastructure will need to be sized to accommodate full build-out.

#### 4.7 Eagle Feather Specific Plan

The Tule River Indian Tribe owns and operates an existing commercial center at Eagle Feather, located on State Highway 190, approximately 6.5 miles northwest from the Village core area. The Eagle Feather Specific Planning area is approximately 115 acres and is comprised of five separate parcels, some which are in and some that are out of trust status. A portion of the Specific Plan Area is developed with a gas station and mini mart, as well as a tribal administrative building and bus maintenance center. The primary objectives of the Eagle Feather Specific Plan are:

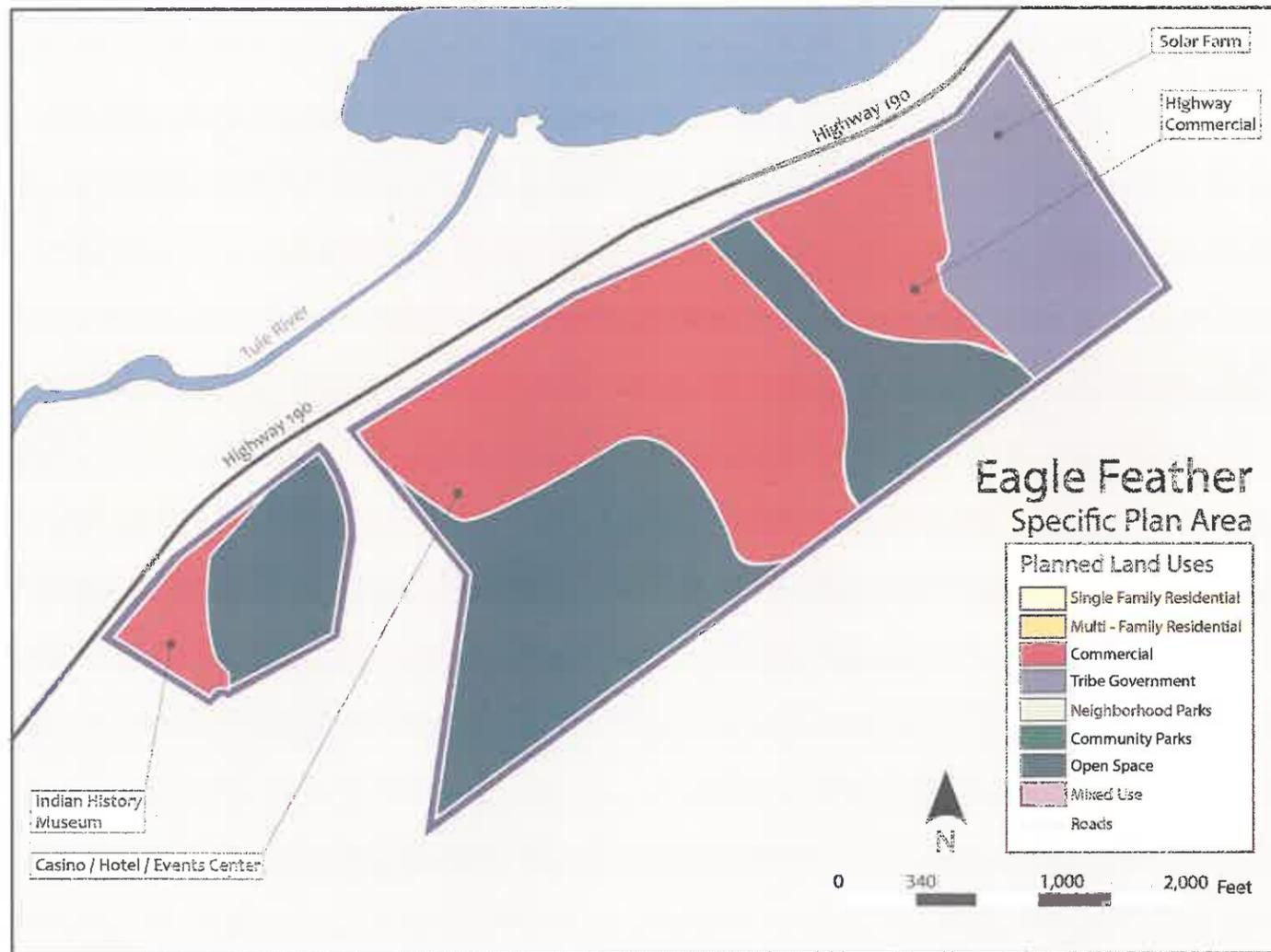
- Expand highway commercial development
- Relocate the Eagle Mountain Casino to the site
- Create a destination event oriented development

The accessibility of the Eagle Feather site allows the Tribe to capitalize on tourists and other travelers heading to the National Park and Forest to the east of the Reservation. This location and the previously completed investments on the site provide an opportunity to quickly develop additional highway commercial uses, relocate the Eagle Mountain Casino, add a hotel component and create a cultural museum. Similarly, the expansion of highway commercial uses at Eagle Feather would diversify the Tribe's economic profile and overall base.



Further, the Tribe is interested in constructing a hotel and event center with the relocated casino to create a destination resort that celebrates the Sierras. Improving accessibility to Eagle Mountain Casino by relocating it to Eagle Feather will generate higher gaming revenues. Moreover, the existing Eagle Mountain Casino is host to many music and other entertainment events throughout the year, and attendance would be increased in a more central location with expanded capacity.

In addition to relocating Eagle Mountain Casino, the tourist destination development at Eagle Feather would include the construction of the San Joaquin Valley American Indian Museum. The museum celebrates the Tribe's rich history by engaging the community and travelers in the accurate exploration and preservation of the history, dialects, art and traditions of Yokut-speaking Tribes throughout California's Central Valley. Other areas within the Eagle Feather Specific Plan would be used to develop support services, such as RV facilities and water and sewer infrastructure. The existing bus maintenance facility would be relocated to the Public Works yard in the Village Specific Plan area. The bus maintenance facility would be re-purposed into a fire station. The following is a summary of the planned uses at Eagle Feather:



- Hotel/Events Center/Casino - 65 acres
- Fast Food Restaurants (2) - 3 acres
- San Joaquin Valley American Indian Museum - 7 acres
- Water and Sewer Treatment Facility - 5 acres
- Fire Station (adaptive reuse of existing bus maintenance facility)
- Open Space - 17 acres

There are several areas that should remain natural and in Open Space. An intermittent blue line stream, west of the existing bus maintenance facility, and its tributaries will be protected and construction setbacks would be implemented to maintain water quality.

#### 4.8 Utilities Plan

A common challenge to expanding housing and other development on the Reservation is the limitations in existing infrastructure, including water, sewer, and power. A Utility Master Plan needs to be developed to identify opportunities for infrastructure expansion, as well as the phasing of the infrastructure to ensure a financially efficient process. Opportunities to create Tribal-owned utility systems should be considered to promote economic development and support sustainable development principals embraced by the Tribe. The Utility Master Plan is a critical component to providing for new housing and other development in the Specific Plan areas, as well as in other areas of the Reservation.



### Water

Adequate water supply on the Reservation is a critical concern for the existing residents and a necessity when planning for additional housing units. Based on the water demand analysis in the *Water Settlement Technical Report* (see Chapter 2 for details) the Tribe needs to develop a water supply and distribution system to provide approximately 7,100 acre feet per year. Of this total, it is estimated 2,000 acre-feet per year would be allocated for domestic, commercial, municipal and industrial uses and 5,100 acre-feet per year would be allocated for irrigation. The ultimate construction of the water supplies, distribution and storage facilities as outlined in the Settlement Agreement is critical. Additional water lines will be developed for distribution of collected and treated water.

### Sewer

Properties within the Village Specific Plan are currently generally connected to a municipal type sewer system. Existing waste water is collected and throughout the Village, and transported to the treatment plant. The capacity of this system can accommodate the proposed land uses and relocations identified in the Village Specific Plan above.

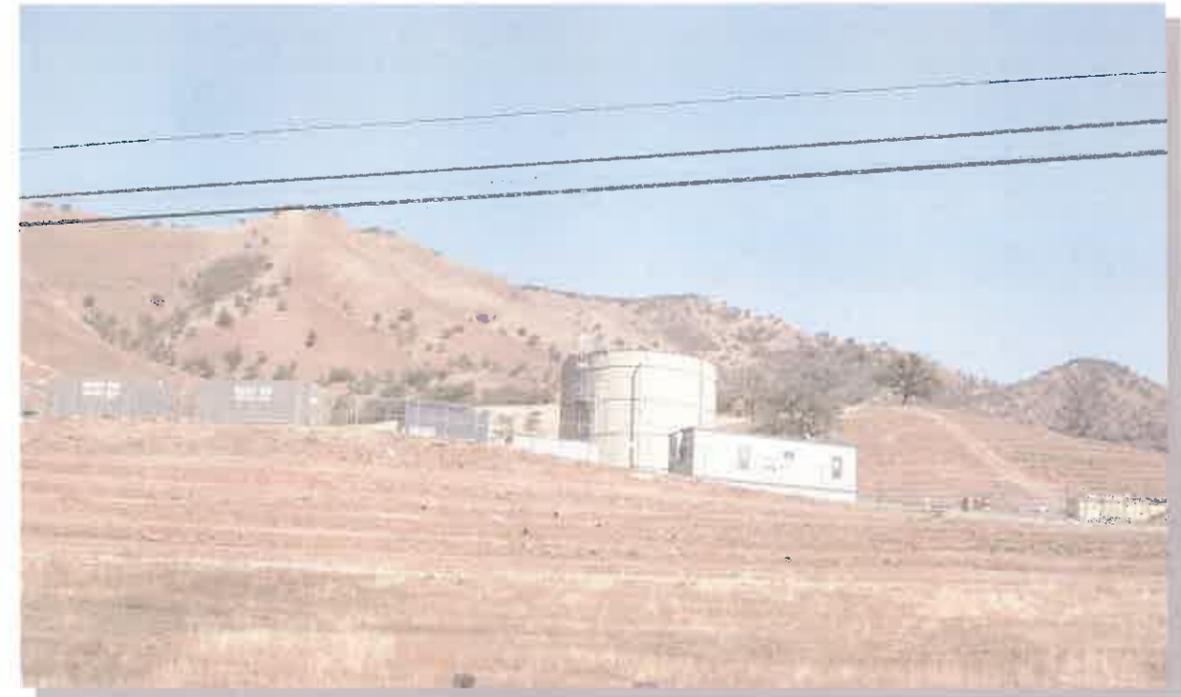
Existing residential units outside of the Village Specific Plan area, as well as some inside the Village planning boundary, rely on traditional septic systems for waste disposal.

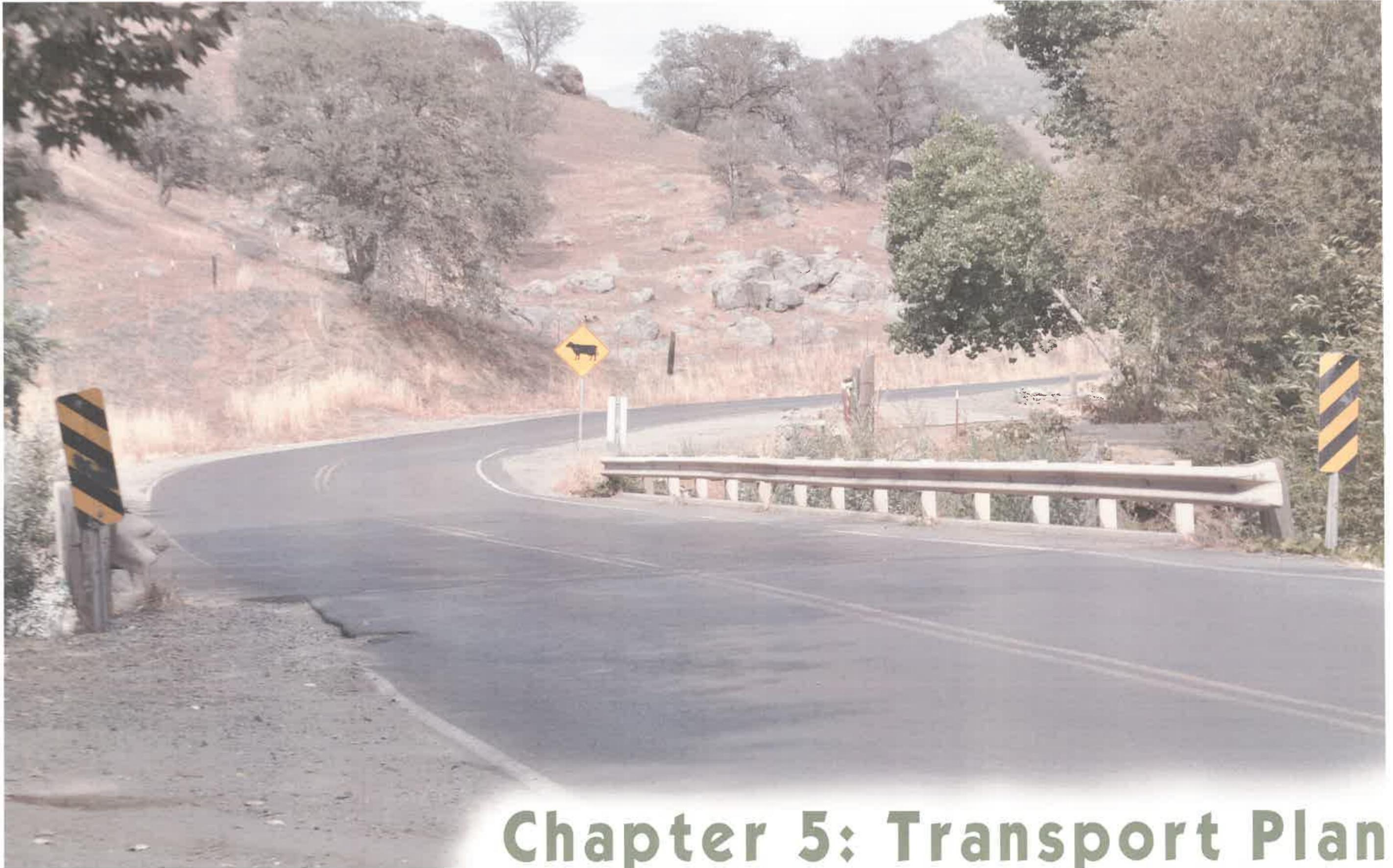
While this is an appropriate treatment method for rural residential development, as housing densities increase, specifically at Cow Mountain and McCarthy Ranch, it is likely that a sewer treatment plant, or package system, will more efficiently serve future development rather than septic systems. Further, the Tribe is concerned about septic failures and resulting impacts to groundwater. Planning for the construction and operation of central treatment plants is necessary to minimize development costs and reduce potential impacts to water quality. Furthermore, a number of existing septic systems are failing or are near failure and will need to be replaced or brought into the collective sewer treatment facility in the immediate future.

### Electric

Southern California Edison, the power provider to the Reservation, has indicated that they have limited capability to provide additional power for new development. Given the large amount of land available, to the Tribe, solar energy should be considered when planning infrastructure for future development. Each Specific Plan area has of topography suitable for solar farms. The exact locations will ultimately depend on detailed site surveys and other cultural or environmental constraints.

Solar power is intended to augment the current Southern California Edison system and also establish the Tribe as a power producer into the grid. This dual strategy will provide a secure power capability for the planned land uses and will provide the Tribe with additional revenues. Not only will solar energy ensure the potential for additional housing and commercial uses to be developed on the Reservation, it has the potential to be an economic development opportunity for the Tribe, Solar power will create construction and maintenance jobs, and promote the Tribe's commitment to sustainable development.





## Chapter 5: Transport Plan



## Chapter 5: Transport Plan

Traditional transportation planning aims to improve mobility for people, goods and services. The focus has historically been on vehicles but this approach has failed to adequately consider wider impacts to society. The underlying purpose of transportation is access; to work, education, goods, services, friends and family. Traditional approaches have emphasized approaches to increase access and enhance mobility through an efficient street and road system. The overall goal has been to reduce congestions through expansion of the road system with a direct result being impacts to the social, economic and environmental systems.

Many of these impacts are not consistent with the Tribe's vision of providing for future generations wellbeing. Sustainable transportation refers to transportation systems with low impacts to the environment. These programs include streets and roads, but also provides a balance of walking and cycling, transit, green vehicles and ridesharing. These modern systems approach the planning process as an integrated program of land use, transportation, energy and the environment. The development process includes an iterative balancing between these various elements with the resulting solutions more in balance. The process yields transportation systems which provide

social and economic connections, while weighing the environmental, social and economic costs that the transportation system pose. This process and the resulting transportation system is significantly more in-line with the Tribe's vision for the future and will provide the guidance for development of the Tule River Transport Plan.



Sustainability encompasses many of the tenets of smart growth, context sensitive design, and energy efficiency that are already integrated into the transportation engineering industry practices. Current practices are continually evolving and need to integrate policy, design, cost and benefits, as well as a more holistic perspective on public good.. Sustainable transportation has gained increasing relevance and importance over the past decade in California. A number of Sustainable Transportation Policies have been established as a part of many planning documents for the Region.

### 5.1 Complete Streets Act

The Complete Streets Act (Assembly Bill 1358) represents the State of California's mandate for planning and designing for sustainable transportation. The Act requires the following:

*"This bill requires, commencing January 1, 2011, that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. By requiring new duties of local officials, this bill would impose a state-mandated local program."*

While the multi-modal approach to the preparation of circulations elements has been part of California's general plan process for a number of years, the idea on including a complete streets component is new. This mandate suggests that the integration of all modes into the street system in a more comprehensive way, will increase the development of alternative modes and result in choices for the community in the future.

The California Department of Transportation has issued Deputy Directive 64, which states:

*"The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system."*



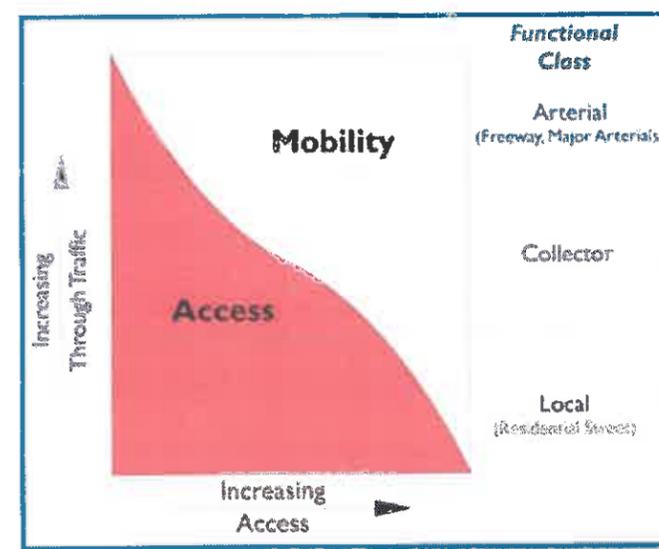
## 5.2 The San Joaquin Valley Blueprint

The San Joaquin Valley Blueprint is an ongoing collective effort by eight counties (including Tulare County) within the San Joaquin Valley to prepare a vision for the future development of the Valley which utilizes less land for development, offers more transportation options, and preserves natural resources. The following 12 policies are the Smart Growth Principles for the Blueprint:

1. Create a range of housing opportunities and choices
2. Create walkable neighborhoods
3. Encourage community and stakeholder collaboration
4. Foster distinctive, attractive communities with a strong sense of place
5. Make development decisions predictable, fair, and cost effective
6. Mix land uses
7. Preserve open space, farmland, natural beauty, and critical environmental areas
8. Provide a variety of transportation choices
9. Strengthen and direct development towards existing communities
10. Take advantage of compact building design
11. Enhance the economic vitality of the region
12. Support actions that encourage environmental resource management

## 5.3 Roads

Tule River Indian Reservation is accessed by Indian Reservation Drive, a rural two lane, generally east-west roadway that originates approximately six miles east at State Route 190. It connects to State Route 190 through a half-mile stretch of Road 284, a two lane rural roadway running north-south between the state highway and the western end of Indian Reservation Drive.

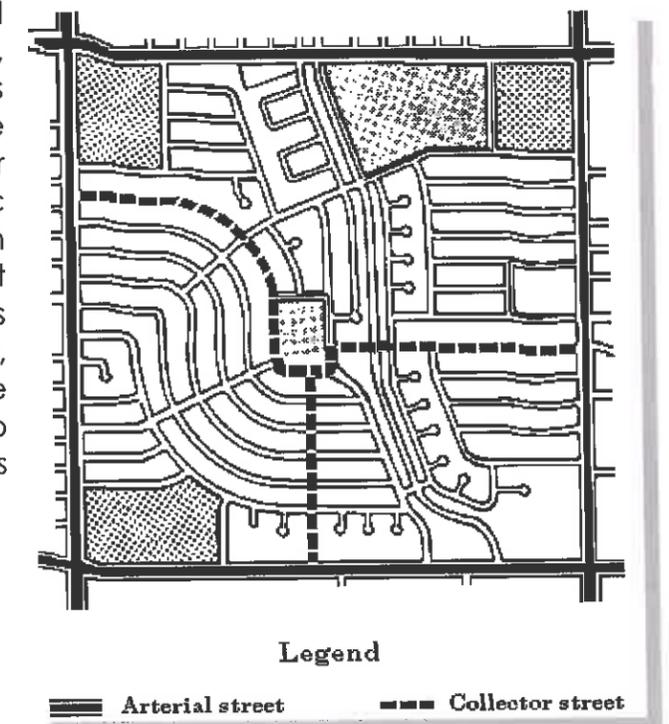


State Route 190 is a rural two lane highway that runs in an east-west direction and connects to State Highway 99 and the City of Porterville to the west and the unincorporated community of Springville to the east.

Upon entering the reservation, Indian Reservation Drive splits into North Reservation Road and South Reservation Road, which are located on the north and south sides of South Fork Tule River respectively. Both roadways are two lane rural roadways that run in an east-west direction, and are connected by a bridge just west of the Tribal Office Building. Approximately three miles into the Reservation, South Tule Reservation Road (BIA Road 211) ends at the location of Eagle Mountain Casino while North Reservation Road (BIA Road 70) continues further west into the mountains.

## 5.4 Roadway Classification

The classification of a roadway is intended to establish its function and role within the overall circulation system, or road network, which itself is designed to provide mobility (the ability to travel between desired locations) and land access (the ability to enter each desired location). Three broad categories of classification include Arterial, Collector, and Local. Depending on its classification a roadway may provide greater mobility, with generally higher speeds and fewer interruptions to traffic flow, arterials (or) greater access, with generally lower speeds and more frequent interruptions to traffic flow, local. Roadways are additionally classified as urban or rural, depending on the area in which they are located. A general rule of thumb is to consider areas with a population of less than 5,000 to be rural.





### Arterial

Arterials are intended for long distance travel across communities and between major developments, and carry high traffic volumes. They are designed to provide high mobility with limited access to and from the roadway in order to allow greater speeds with fewer interruptions to vehicles. Access is controlled by allowing limited or no driveway connections and typically using fewer, more widely spaced intersections. (Highways are also classified as arterials and represent the highest degree of mobility with the most limited access to and from the roadway.)

### Collector

Collectors are intended for medium distance travel within communities or between smaller developments not served by an arterial, and typically carry moderate amounts of traffic. Within a community, they provide a connection between local and arterial roads. Collectors are designed to provide a balance between mobility and access.

### Local

Local roads are intended for short distance travel within small subsets of a community rather than across or between communities, and typically carry small traffic volumes. They are designed to provide limited mobility but greater, easier access between the roadway and adjacent land. Local roads may have many driveways and typically use more frequently spaced intersections which allow easy access to adjacent land, but results in lower speeds and greater interruptions to traffic flow as vehicles enter and exit driveways or are forced stop at intersections.

These classifications establish a hierarchy for roadway development. While critical for urban settings they can play a key role in the development of rural or small communities by providing the proper balance of roadways and minimizing the over build of roadways.

### Tribe Master Plan Classification

For the purposes of this plan, five functional classifications will be used. The follow lists each type and provides an accompanying example.

- Freeway/Expressway – example: SR 190
- Principal Arterial – example; Road 296/Reservation Road (off-Reservation)
- Arterial – McCarthy Boulevard
- Collector – example: BIA 240
- Local – example:

### Level of Service Methodology

Level of service (LOS) is a measure of how easily vehicles can travel along a roadway, and represents the quality of service provided to drivers. LOS is separated into categories ranging from the best possible conditions with few vehicles on the road, little to no travel delay, and a comfortable driving experience, to the worst conditions with crowded roadways, extensive delay, and stop-and-go traffic. Each category is assigned a letter grade from A to F, with A representing the best conditions and F representing the worst.

As shown in the table the County established maximum daily two-way traffic volumes for each level of service. This table provides definitive traffic volume limits for specific levels of service. These maximum volumes represent the boundaries, or thresholds, between each LOS and were derived from the County of Tulare General Plan 2030 Update. It should be noted that any traffic volume below 4,200 represents LOS A, while any volume above 16,900 represents LOS F. These are generalized capacities and for the purposes of this study, will be applied on all roadway classifications due to their rural nature. Further refinement will be necessary in the future as the road system is more fully developed and the rural nature of the area begins to shift.



Level of Service	Condition	Description	Segment Volume at LOS
"A"	Free Flow	Traffic volume is low. Freedom of vehicles to maneuver and select desired speed is virtually unhindered.	--
"B"	Stable Operations	Traffic volume is moderately low. Freedom of vehicles to maneuver and select desired speed is slightly restricted.	4,200
"C"	Stable Operations	Traffic volume is moderate. Freedom of vehicles to maneuver and select desired speed is hindered by numerous adjacent vehicles.	13,800
"D"	Approaching Unstable	Traffic volume is high. Freedom of vehicles to maneuver and select desired speed is significantly hindered as a result of roadway becoming crowded.	16,400
"E"	Unstable Operations	Traffic volume is very high and near capacity of roadway. Freedom of vehicles to maneuver and select desired speeds is severely restricted. Characterized by slow but typically uniform travel speeds.	16,900
"F"	Forced Flow	Traffic volume is extreme and has reached or exceeded capacity of roadway. Stop and go traffic exists. Traffic flow is sporadic and very unstable.	--

Currently the Reservation does not have a level of service standard for its roadways. However, the County of Tulare has adopted level of service "D" for its standard on county roadway segments, while Caltrans has a level of service standard of "C/D" on state highway facilities. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine an appropriate LOS standard. If a state highway facility is found to operate below the appropriate LOS standard under existing conditions, then the existing measures of effectiveness should be maintained. For analysis purposes the Caltrans LOS C/D standard will apply to road segments on State Route 190, while the County of Tulare LOS D standard will apply to all other road segments.

**Level of Service Analysis**

Using daily traffic volumes collected within the Reservation in July and August of 2014, along with traffic volumes obtained from the County of Tulare and Caltrans, each roadway and its associated segments have been analyzed based on existing conditions. The respective level of service for each segment under existing conditions is shown below. Currently, all road segments operate above the appropriate level of service standards.

**Transit**

Three transit services currently operate to the Reservation and one on-Reservation service is in the implementation stage. The following describes each of these services.





**Table 5-2  
 Existing Roadway Segment Level of Service**

Road	Segment	Type	Daily Capacity	Weekday Volume	Level of Service
State Route 190	Road 265 to Indian Reservation Dr	Highway	16,900	11,200	C
	Indian Reservation Dr to Success Valley Dr	Highway	16,900	6,100	C
	Success Valley Dr to Road 320	Highway	16,900	6,000	C
	Road 320 to Springville	Highway	16,900	4,300	C
Reservation Drive	SR 190 to Road 296	Collector	16,900	3,400	B
	Road 296 to Reservation entrance	Collector	16,900	3,800	B
	Reservation Entrance to BIA 214	Collector	16,900	2,100	B
	BIA 241 to Bridge	Collector	16,900	1,300	B
Rodeo Drive	Bridge to Cow Mountain Rd	Collector	16,900	900	B
	N. Reservation Rd to bridge	Collector	16,900	1,900	B
Deer Creek Road	Bridge to Eagle Mountain Casino	Collector	16,900	2,300	B
Deer Creek Road	Road 296 to Holcomb	Local	16,900		
Road 296	Reservation Dr to Deer Creek Rd	Local	16,900		
Success Valley Drive	Reservation Rd to SR 190	Local	16,900		

**Porterville Transit**

The City of Porterville currently operates service to and from the Reservation six days per week. Route 9, a fixed route service, operates between 6am and 10pm on weekdays and from 8am to 6pm on both Saturday and Sunday. The Tribe contracts with the City to provide service to and from Porterville, the Park and Ride at SR190, the Reservation and the Casino for Tribal members and Casino guests.

The following table summarizes the ridership on Route 9 over the past year. From its beginning in 2013, this route service has proven to be one of the most efficient, effective and utilized bus services within Tulare County. The fare box ratio (that is the passenger fares divided by the cost of service), which is a typical measure of effectiveness, has consistently topped 30%, which is very high for an intercity service.



**School Bus Service**

The reservation community is typical of many rural areas in that significant numbers of students are bused daily to attend public schools. The nearest schools to the Reservation is located in Porterville, 20 miles due west. Tribal members travel to the schools in school buses operated by the School District

**Casino service**

The Casino currently operates 5 shuttle bus routes for visitors to Eagle Mountain Casino. Bus service is operated on selected days from Fresno, Bakersfield, Selma, Shafter Wasco, Delano, Lindsay, Exeter, Orosi and Visalia. Special tour packages are also available for large groups.

**Reservation Circulator**

The Tribe is in the process of implementing a shuttle circulator service within the Reservation that would coordinate with the proposed Porterville Transit Route 9. It is designed to operate during Porterville Transit hours of operation and will compliment Route 9 by reaching areas further into the Reservation. As planned, the Circulator would operate between the Old Sawmill site, the Government Center, the Reservation entrance and the Casino. The service is designed to provide door-to-door service and would also provide for transfers to Route 9.





**Bicycle**

Bicycle usage within the Reservation and within the Study Area is currently very low. Parts of the Reservation and the Study Area are relatively flat, but in many cases the roadways lack adequate shoulders for rural biking. The mountainous portions of the area make biking a challenge, yet provide access to attractive recreational areas. Currently, no bicycle facilities (bike routes, bike lanes or bike paths) currently existing within the Reservation or the Study Area.

The following discussion is taken from the Caltrans Design Manual and are derived from the California Streets and Highway Code (Section 890.4). It describes the types of bike facilities that are developed in California.

**Class I Bikeway (Bike Path)** Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.

**Class II Bikeway (Bike Lane)** Provides a striped lane for one-way bike travel on a street or highway.

**Class III Bikeway (Bike Route)** Provides for shared use with pedestrian or motor vehicle traffic.

The Tribe desires to increase the use of bicycles within the Reservations and to that goal wish to expand road shoulders on key Reservation roadways as well as the development of a mixed use trail along the Tule River.

**Pedestrian**

Pedestrian activity within the Reservation and the Study Area is limited. There are tremendous hiking opportunities within the eastern portions of the Reservation and Study Area. A trail system is available in the National Forest areas in the eastern portion of the Study Area.

As part of future housing development, the Tribe wishes in integrate pedestrian facilities than will be connected to the multi-purpose trail along the Tule River.

**Parking**

The Reservation contains five main parking facilities and one off-Reservation park and ride. The four Reservation facilities are located at the Tribal Government Center, the Health Center and three associated with the Eagle Feather Casino.

The Government Center is composed of limited off and on street parking surrounding the government center buildings. This area experiences high weekday parking demand associated with Tribal office business.

The Health Center has a number of parking stalls provided for staff and visitors and they appear adequate for the service demand at this location.

The Eagle Feather Casino has three parking facilities. The Main Lot is located at the Casino site and provides for visitors as well as limited bus parking. Overflow Lot "A" is located adjacent to the Casino parking lot and provides overflow parking for busy times of the year as well as for special events held at the Casino site. Overflow Lot "B" also provides for event parking where the Casino and Overflow Lot "A" are not adequate. Overflow Lot "B" is located on South Reservation Road near the Tule River Bridge. All total the Casino has approximately 900 parking stalls assigned.

The Tribe's park and ride lot is located at the intersection of SR 190 at Road 284. This facility provides for the remote parking of Casino employees, who are then shuttled to the Casino. This facility provides relief at the Casino parking lots from employee parking. The park and ride also provides for parking for Casino visitors, who are then shuttled to the Casino on either the Casino buses or on Porterville Transit (Route 9).

**Alternative Access Study**

The purpose of this document is to assess the proposed alternative access routes into the Tule River Reservation and present the recommended alternative. This assessment will cover the action plan of the recommended alternative and discuss the key issues involved with its construction. It will also discuss the proposed schedule and financial plan for this alternative.

Location	Number of Stalls
Government Center	65
Health Center	62
Casino Facility	
Casino	483
Overflow "A"	225
Overflow "B"	195
SR 190 Park and Ride	163

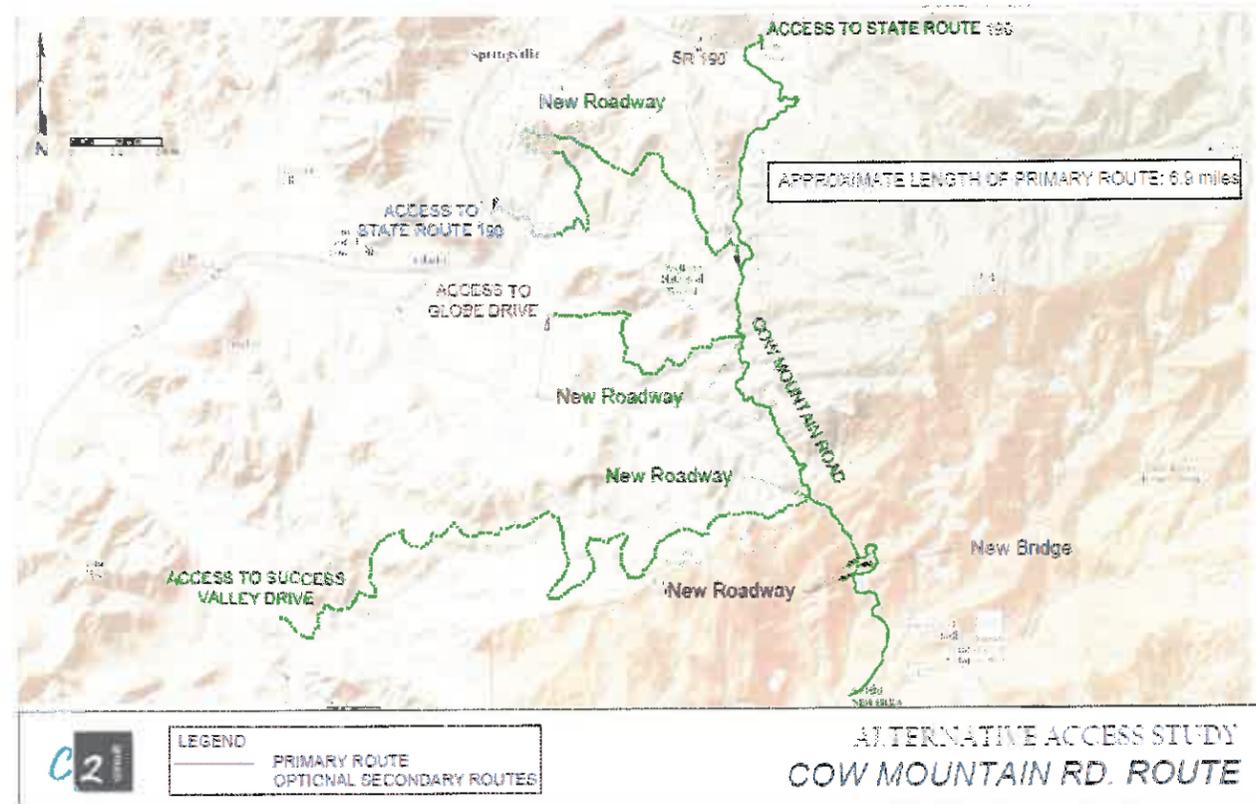


Figure 5-1 Cow Mountain Route

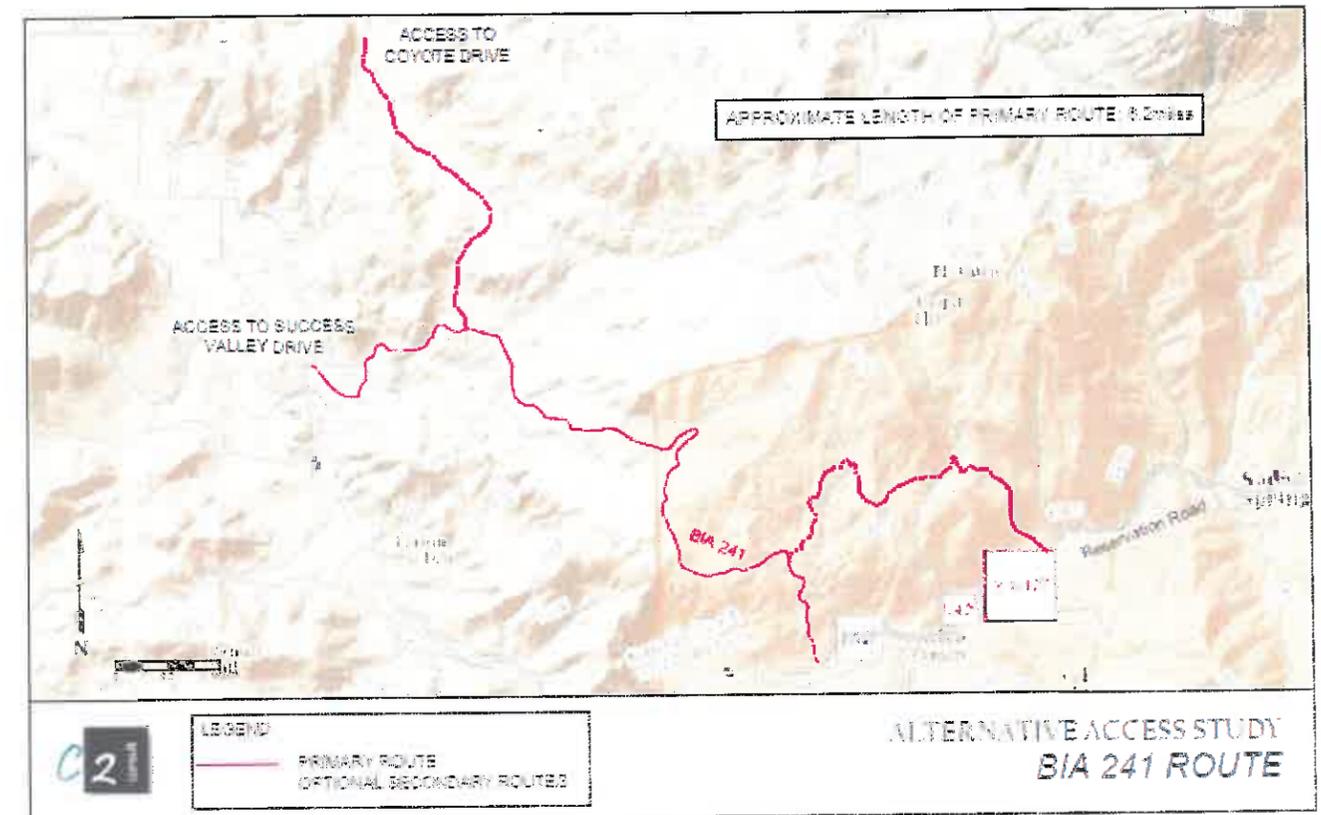


Figure 5-2 BIA 241 Route

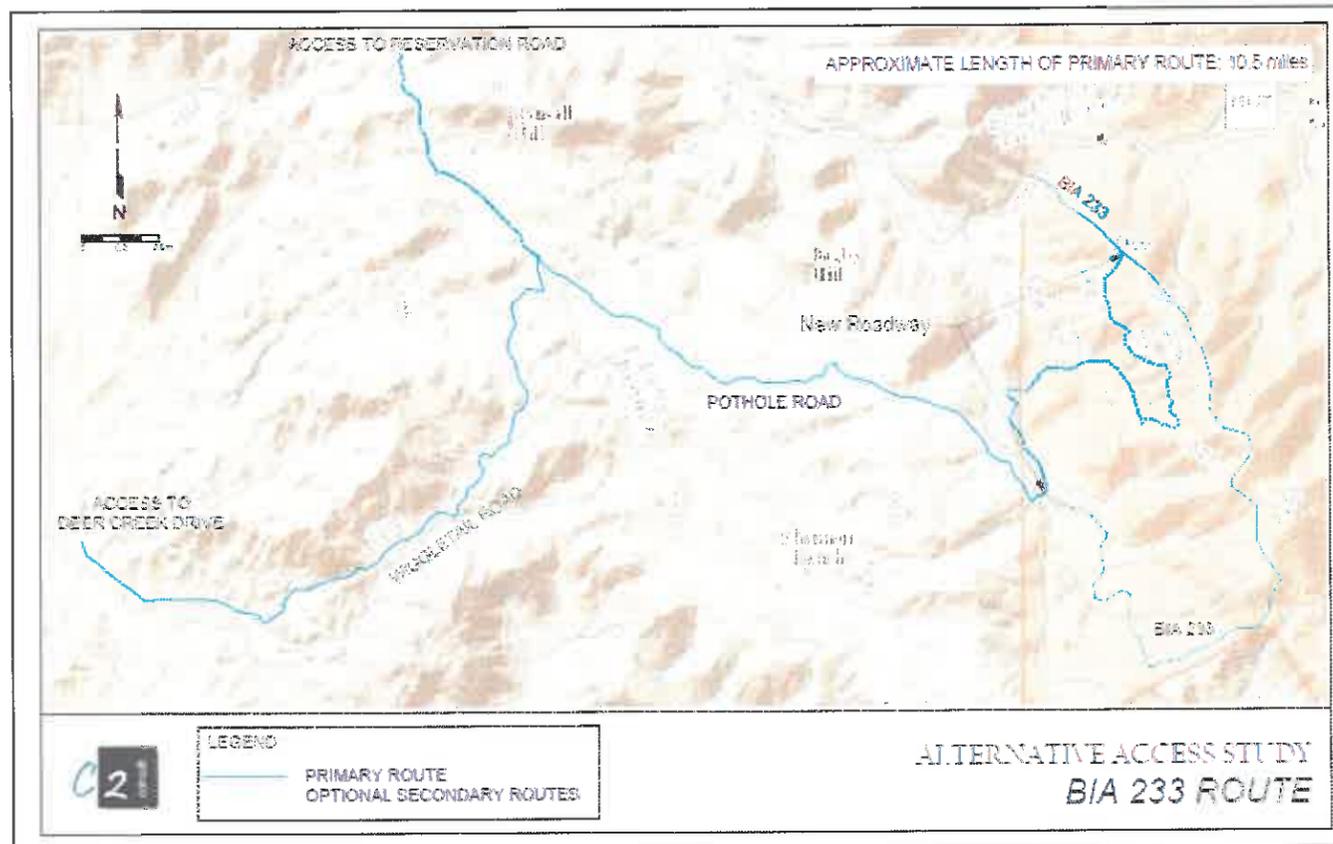
### Alternative Alignments

#### Cow Mountain

This alternative would expand Cow Mountain Road to allow access into the Tule River Reservation through its north-west boundary from State Road 190. The primary alternative route would be approximately 6.9 miles in length. Another option would be to connect Cow Mountain Road to Success Valley Drive, Globe Drive or another location on State Road 190 west of reservation boundary. There is also an option for a new bridge crossing Blue Creek within the reservation. An outline of this alternative can be seen below in Figure 5-1.

#### BIA 241

This alternative allows access into the Tule River Reservation through its western boundary by connecting BIA 241 to Success Valley Drive. The primary alternative route would connect to BIA 241 and continue south to Reservation Road as seen in Figure 5-2. This route would be approximately 6.2 miles in length. Another option would be to continue east and connect to Reservation Road further in the reservation. A secondary option would connect BIA 241 to Coyote Drive as seen below.



#### BIA 233/Pothole Road

This alternative would expand BIA 233 to allow access into the reservation through its western boundary from Deer Creek Drive. The primary alternative, as seen in Figure 5-3, would expand BIA 233 to Pothole Road which connects to Wiggletail Road and eventually leads to Deer Creek Drive. This alternative would be approximately 10.5 miles long. A secondary option would expand Pothole Road north to connect to Reservation Road.

Figure 5-3 BIA 233 Route



### Preferred Concept

After much consideration, the Tule River Reservation has decided that the BIA 241 Route alternative is the preferred concept. This option proposes to expand BIA 241 west to connect to Success Valley Drive. Out of the three alternatives proposed by C2, the BIA 241 Route is the most practical, easiest to implement and lowest cost. It is the shortest of the three alternatives and the proposed route would run through gentler terrain than if access was provided at the other locations.

The proposed expansion of BIA 241 would provide necessary additional access to the Tule River Reservation to account for a planned increase in housing within the reservation in the next decade. This route would also provide an essential all-weather emergency access route in which the transportation of people and materials can be utilized in the event of a flood or fire.

The challenges associated with this alternative include right-of-way acquisition, earthwork, and funding. Because the proposed expansion would extend beyond the reservation boundary, land will need to be purchased along the route to account for right-of-way construction. The earthwork costs required to cut and fill soil along the route will also be potentially expensive because of the mountainous nature of the proposed route. These two aspects will result in challenges in funding; however, these challenges also exist in the other alternatives mentioned above and are less prevalent in the preferred concept.

### Preliminary Design

Figure 5-4 displays the preliminary design for the preferred concept. The proposed alternative would extend from BIA 241 and curve north-west out of the reservation. As seen in the figure the route would have to run north-east back into the reservation to account for the existing topography before finally extending west to Success Valley Drive. A cross section of the road can be seen in Figure 5-5. The road would be composed of a 12 foot wide lane running in each direction and an 8 foot shoulder on each side that may also be used as a bike lane followed by a 6 inch AC Dike. The slope of the surrounding area varies throughout the length of the road. Figure 5-6 contains a graphical representation of the profile the entire length of the route as well as the areas that require cut and fill. The route will extend from BIA 241 at an approximate elevation of 1660 feet and will meet Success Valley Drive at an elevation of 770 feet. The dark blue represents the areas which are required to be cut in order to meet the proper grade of the route and light blue represents the areas that are required to be filled.

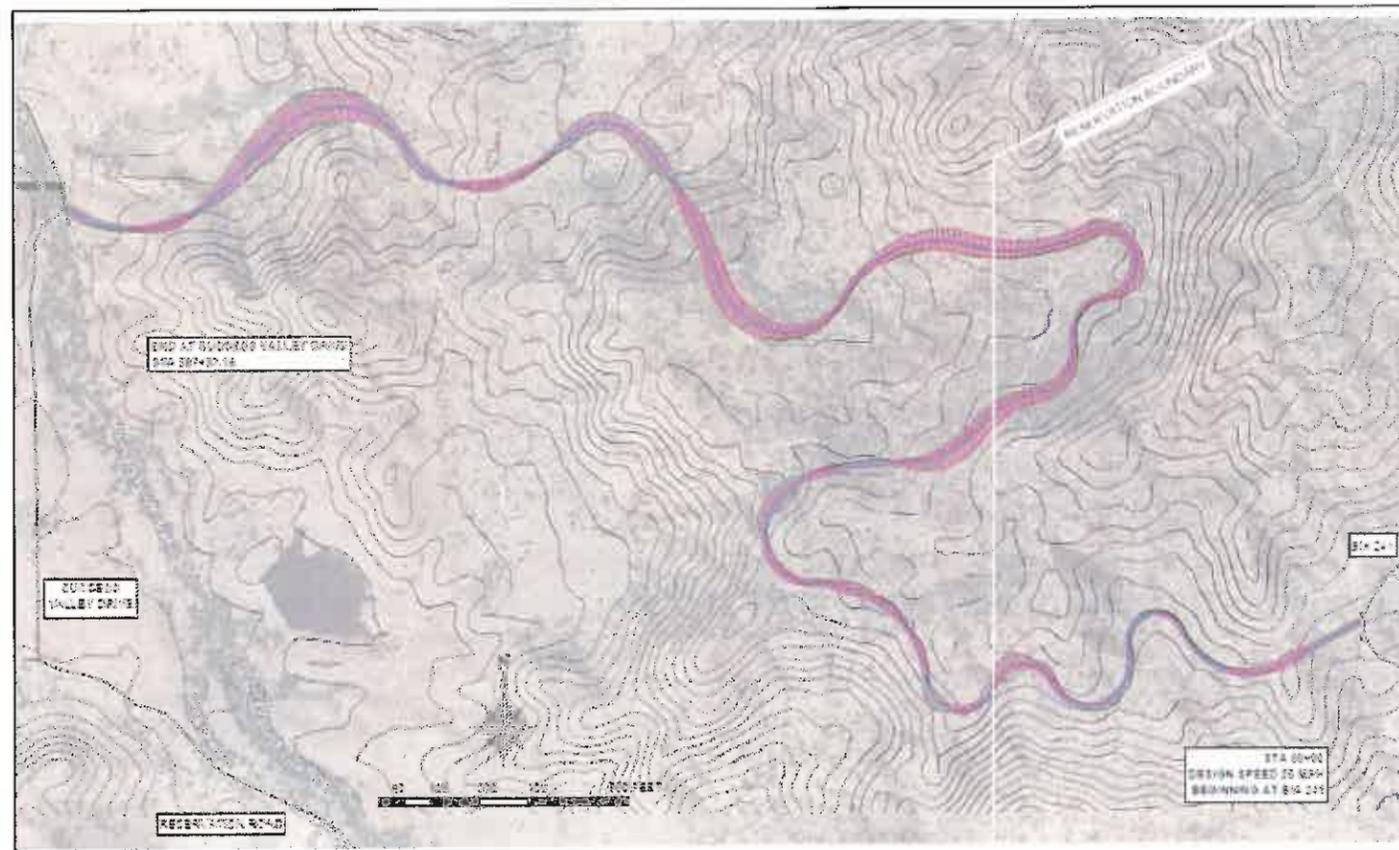


Figure 5-4 Access Road Concept Plan

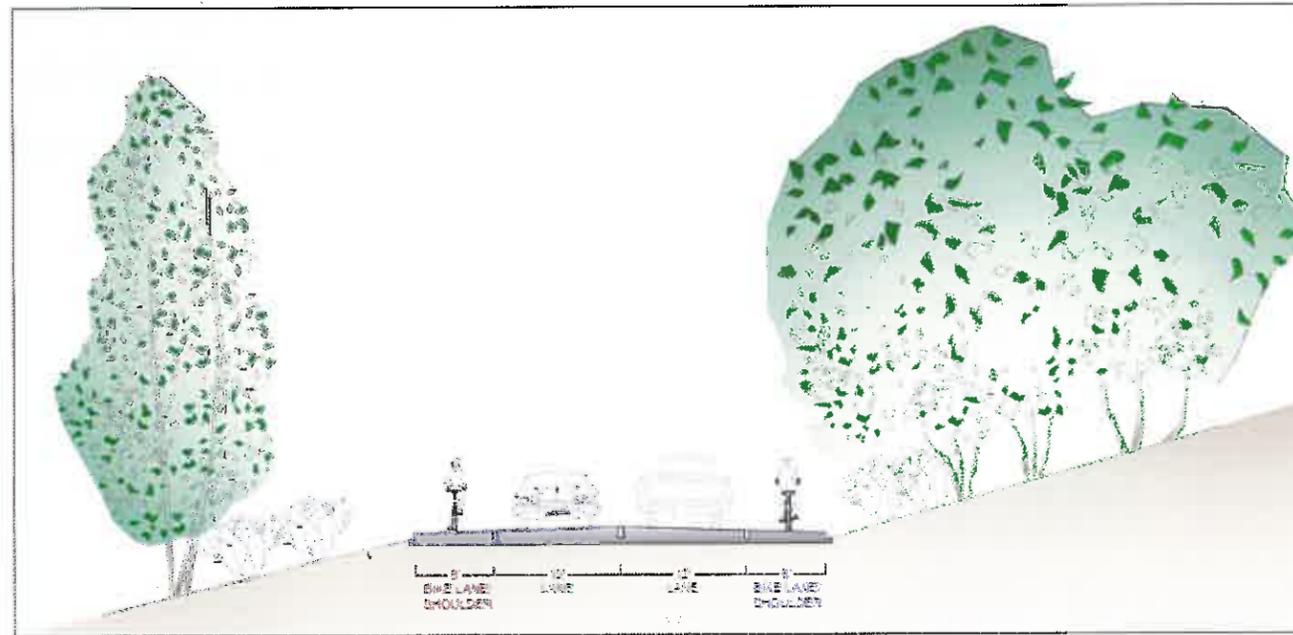


Figure 5-5 Access Road Cross Section

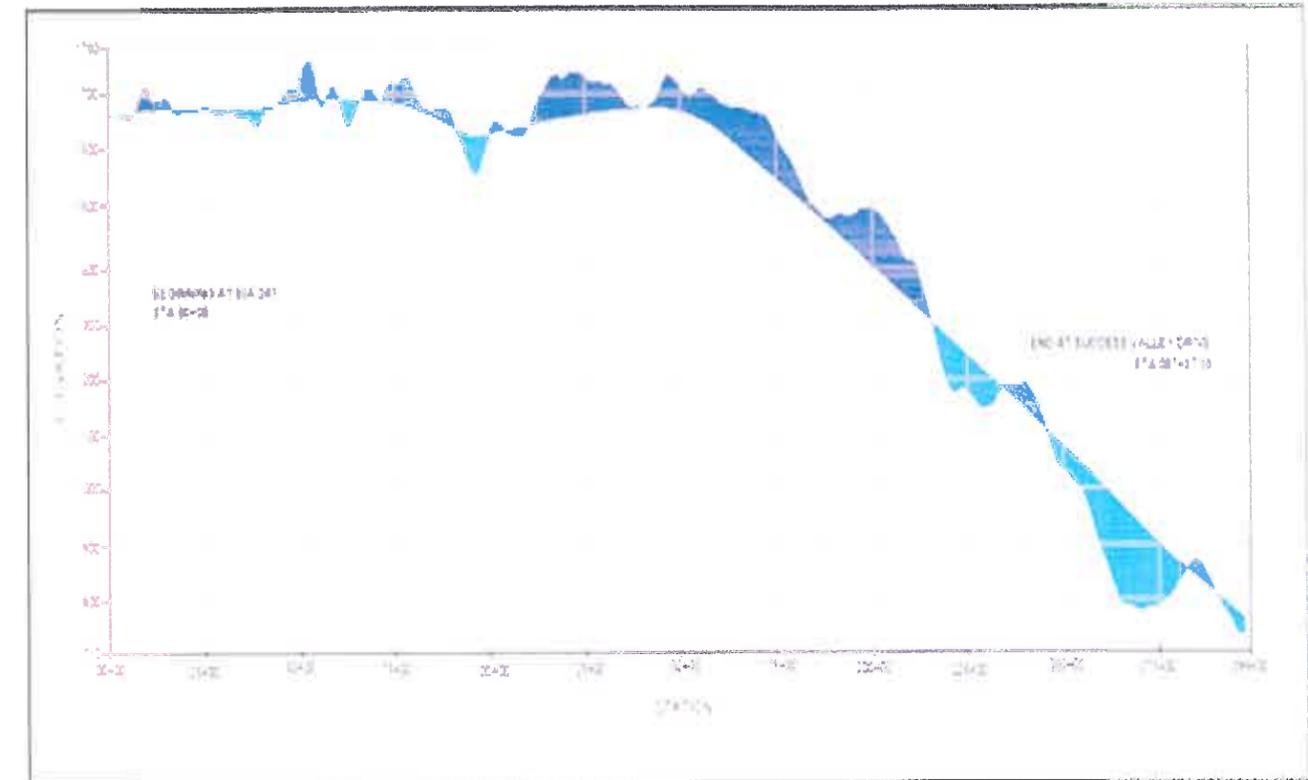


Figure 5-6 Access Road Profile Grades

#### Environmental Clearance

Given the potential for the use of federal funding and the substantial right-of-way and earthwork associated with the preferred alternative alignment, it is anticipated that a federal environmental impact statement will be needed for the project. This document will satisfy the needs of the federal funding agencies and can also provide documentation in response to the requirements of the California Environmental Quality Act. This report and its accompanying technical studies will be one of the very first requirements need to be completed for the development of the alternative access road.

#### Probable Cost

The following opinion of probable cost is an estimate of the financial requirements for a 2.3 mile alternative access route connecting Success Valley Drive and BIA Route 241 north of Reservation Road. This access route is planned to be composed of 12 inch Class 2 Aggregate Base (AB) and 6 inch Type "B" Asphalt Concrete (AC).

The mobilization cost represents the funding required to get the project started. This may include contractor fees, moving equipment to the project site, initial labor costs and pre-construction site preparation. Clearing and grubbing costs include the estimated fees involved in removing/relocating obstacles such as large vegetation from the proposed route prior to construction. Demolition costs involve the demolition and reconstruction of where the existing road meets the proposed route to introduce an intersection at each end. Traffic control costs involve what is needed to maneuver traffic around these proposed intersection construction areas. Earthwork (cut and fill) costs represent the funding estimated to be needed to remove and add soil from and to the proposed route to meet an appropriate slope and grade. This is an estimation based on a rate of \$1 per cubic yard of soil. There is also an expense to export excess soil from the access route construction site at a rate of \$5 per cubic yard.



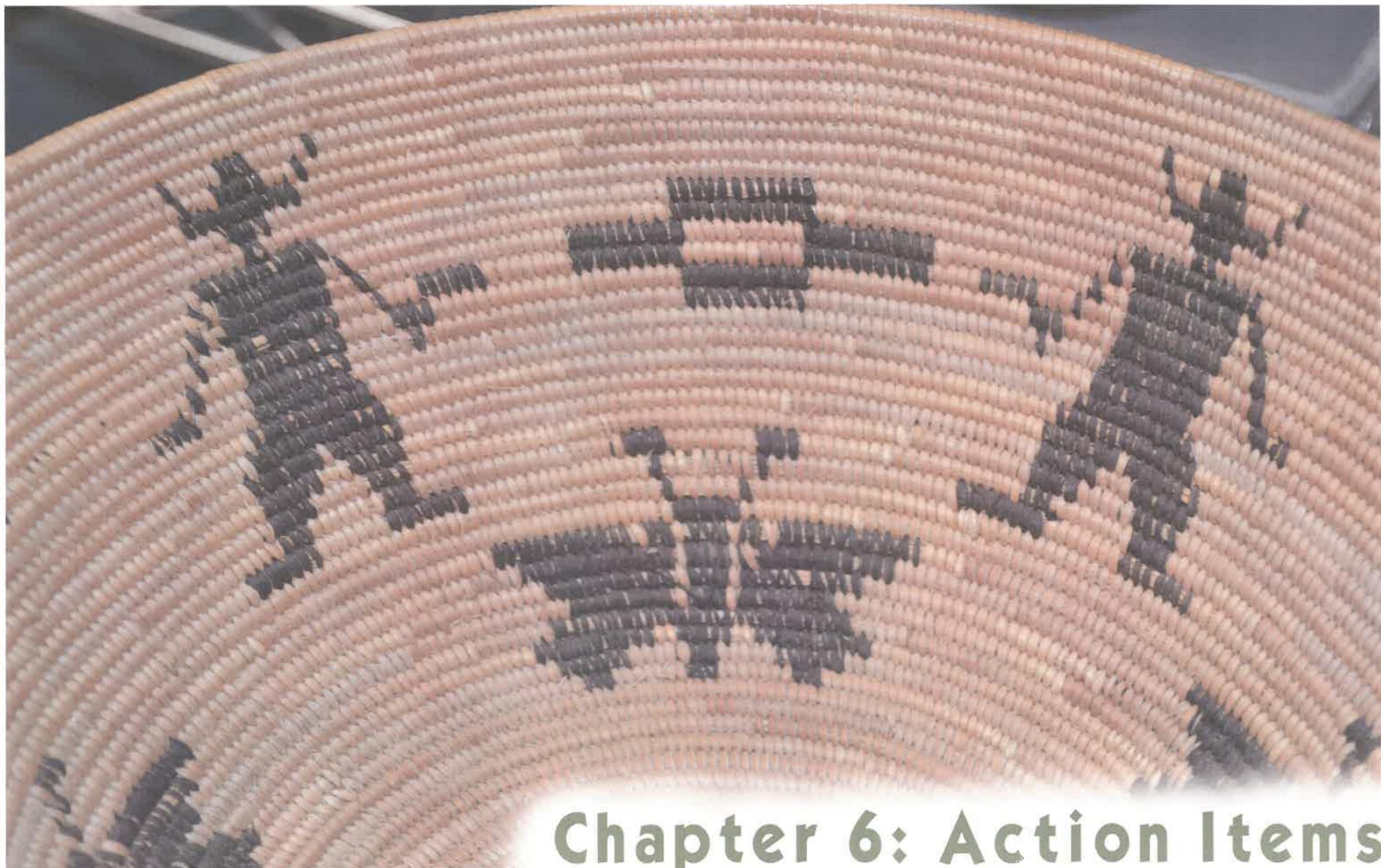
Center line and edge line striping and delineation costs represent what is required to adequately place the appropriate road markings throughout the entire length of the proposed route. These are estimated based off of a unit cost per linear foot of road. The length of edge line that is required is double that of the center line because it is required on both sides of the route. The cost to install center lines and edge lines are \$0.55 and \$0.57 per linear foot respectively. Sub-base preparation, asphalt concrete, and aggregate base costs involve the construction of the road itself. The sub-base preparation cost is based off a lump sum value estimated to cover the entire route. Asphalt concrete and aggregate base costs are based off 1.96 and 1.89 ton per cubic yard of mix required respectively. Quality tests for the asphalt concrete and aggregate base will need to be conducted prior to construction along with soil compaction tests throughout the path of the route.

AC Dike, drainage Inlet, culvert, and soil erosion control costs represent the fees necessary in controlling water drainage and protecting the road from natural processes. Culverts are planned to be laid underneath the proposed access route in addition to AC Dikes and drainage inlets along the length of the route allowing adequate control of storm water. AC Dike costs are based off double the length of the road to be installed on both sides of the route. Drainage inlet and culvert costs were estimated based on the cost of installing each unit. The road is estimated to require 24 units throughout the entire route. Soil erosion control involves addition techniques to protect the road from nature process such as storm water drainage and natural soil erosion. Electrical costs include any fees associated with setting up an electrical system throughout the road for lighting. This is estimated as a lump sum however the installation of each solar lighting pole is based on the price of installing each unit. Two units will be installed at the end of the proposed route.

In addition to construction costs, environmental review, design, engineering, and contingency costs are also represented in this cost estimate as percentages of the total construction costs. Because this alternative proposes to construct a roadway outside of the Tule River Reservation, additional permissions will need to be granted in order for construction to take place to connect BIA 241 to Success Valley Drive. The right of way acquisition costs include fees associated with obtaining the appropriate property rights in order to construct the proposed access route. Right of way engineering costs represent 7 percent of the total acquisition costs.

### Opinion of Probable Cost

<u>Construction Item Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1 Mobilization	1	L.S.	\$50,000	\$50,000
2 Clearing and Grubbing	1	L.S.	\$100,000	\$100,000
3 Demolition	1	L.S.	\$15,000	\$15,000
4 Earthwork: Cut	2,821,870	C.Y.	\$1.00	\$2,821,870
5 Earthwork: Fill	2,794,964	C.Y.	\$1.00	\$2,794,964
6 Export	26,906	C.Y.	\$5	\$134,531
7 Traffic Control	1	L.S.	\$5,000	\$5,000
8 Striping and Pavement Delineation (Center Lines)	12,221	L.F.	\$0.55	\$6,722
9 Striping and Pavement Delineation (Edge Lines)	24,442	L.F.	\$0.57	\$13,932
10 Sub-Base Preparation	1	L.S.	\$250,000	\$250,000
11 Type "B" Asphalt Concrete	17,743	TON	\$120.00	\$2,129,170
12 Class 2 Aggregate Base	17,109	TON	\$18.00	\$307,969
13 AC Dike	24,442	L.F.	\$10	\$244,420
14 Drainage Inlet	24	EA	\$2,500	\$60,000
15 Culverts	24	EA	\$1,000	\$24,000
16 Sampling and Testing (Compaction, AC, AB)	1	L.S.	\$25,000	\$25,000
17 Soil Erosion Control	1	L.S.	\$90,000	\$90,000
18 Survey Construction Staking	1	L.S.	\$50,000	\$50,000
19 Retaining Wall	1,000	L.F.	\$87	\$87,000
20 Street Lighting (Solar)	4	E.A.	\$15,000	\$60,000
<b>Subtotal Construction</b>				<b>\$9,269,576</b>
Environmental review (4%)				\$370,783
Design (8%)				\$741,566
Construction Engineering (7%)				\$648,870
Contingency (10%)				\$926,958
<b>Subtotal Road Construction &amp; Engineering</b>				<b>\$11,957,754</b>
<u>Right-of-way Item Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1 Property Acquisition (non-Reservation only)	3,271,268	S.F.	\$ 0.05	\$163,563
2 Right of Way Engineering (7%)				\$11,449
<b>Subtotal (Right of Way Acquisition)</b>				<b>\$175,013</b>
<b>TOTAL PROBABLE COST</b>				<b>\$12,132,767</b>



## Chapter 6: Action Items



## Chapter 6: Action Items

Follow up action items will need to be developed to further the initial efforts associated with this Master Plan. The action items list provides for the completion of the Master Plan, the preparation of specific plans and infrastructure master plans to support the short term goals associated with the Tribe's long term vision. These recommended action items will be the second step in the multi-year Master Plan Program.

The following outline summarizes the recommended action items to be completed. Following that listing is a phasing schedule to assist in the prioritization of planning efforts, funding emphasis and critical paths.

### Action Items

1. Prepare future components of:
  - a. Land Use Master Plan
  - b. Transport Master Plan
  - c. Cultural Resources Plan
  - d. Specific Plans -
    - i. McCarthy Ranch
    - ii. Eagle Feather
  - e. Coordinate with the County of Tulare
2. Prepare Infrastructure Master Plans for:
  - a. McCarthy Ranch
  - b. Eagle Feather
  - c. Cow Mountain
  - d. Components -
    - i. Water
    - ii. Sewer
    - iii. Power (solar, hydro and grid)
  - e. New Dam (or equivalent)
3. Continue development of Tribal GIS system
4. Implement On-Reservation Circulator Transit
5. Develop program for relocation of Eagle Mountain Casino
6. Develop Tribal Housing Program:

- a. Construction services
- b. Funding
- c. Land development

7. Prepare funding programs for:
  - a. Housing
    - i. Tribe
    - ii. Tribe/Private partnership
  - b. Water system expansion and maintenance
  - c. Sewer system expansion and maintenance
  - d. Power system expansion
  - e. Reservation Road improvements and maintenance
    - i. Off-Reservation
    - ii. On-Reservation
  - f. Alternative access road
    - i. Preliminary Alternative Access Design and Environmental
      1. Preliminary engineering (30% design phase)
      2. Preliminary right-of-way
      3. Environmental document (Environmental Impact Report/Environmental Impact Statement)

### Schedule

The following schedule provides a timeline for each of the key components of the action items. More detailed scheduling will be needed once commitments are made to initiate specific tasks and funding is made available.



Action Items	2015												2016												2017				
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May					
<b>Land Use Master Plan</b>	[Solid blue bar]																												
<b>Specific Plans</b>																													
<i>McCarthy Ranch</i>													[Solid blue bar]																
<i>Eagle Feather</i>	[Solid blue bar]												[Solid blue bar]																
<b>Transport Master Plan</b>													[Solid blue bar]																
<b>Prepare Infrastructure Master Plans</b>																													
<i>McCarthy Ranch</i>	[Solid blue bar]												[Solid blue bar]																
<i>Eagle Feather</i>	[Solid blue bar]												[Solid blue bar]																
<i>Cow Mountain</i>	[Solid blue bar]												[Solid blue bar]																
<i>New Dam (or) equivalent</i>	[Solid blue bar]												[Solid blue bar]																
<b>Alternative Access Design (30% design)</b>	[Solid blue bar]												[Solid blue bar]																
<b>On-Reservation Circulator Transit</b>	[Solid blue bar]																												
<b>Relocation of Eagle Mountain Casino</b>	[Hatched blue bar]												[Hatched blue bar]												[Hatched blue bar]				
<b>Tribal Housing Program</b>																													
<i>Construction services</i>	[Solid blue bar]												[Solid blue bar]																
<i>Land development</i>	[Solid blue bar]												[Solid blue bar]																
<i>Construction</i>	[Hatched blue bar]												[Hatched blue bar]												[Hatched blue bar]				
<b>Funding Program</b>																													
<i>Housing</i>	[Hatched blue bar]												[Hatched blue bar]												[Hatched blue bar]				
<i>Water system</i>	[Solid blue bar]												[Solid blue bar]																
<i>Sewer system</i>	[Solid blue bar]												[Solid blue bar]																
<i>Power system</i>	[Solid blue bar]												[Solid blue bar]																
<i>Road maintenance</i>	[Solid blue bar]												[Solid blue bar]																
<i>Road expansion</i>	[Solid blue bar]												[Solid blue bar]																
<i>Alternative access</i>	[Solid blue bar]												[Solid blue bar]																