

Land Use Plan for Counselor Chapter

Final Report

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Architectural Research Consultants, Incorporated

in association with

Counselor Comprehensive Land Use Planning Committee

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1.0 Purpose of Chapter Planning Initiative

The purpose of the Counselor Land Use Plan for Housing is to provide guidance for housing development.

This section explores:

- *The purpose of the chapter planning initiative*
- *The Local Governance Act*
- *NAHASDA*
- *The chapter planning process.*

The plan is an initiative of the Local Governance Act and was funded by a grant from NAHASDA.

The Local Governance Act (LGA) grants Chapters authority over local issues relating to economic development, taxation and revenue generation, infrastructure development, and land use planning.

The purpose of the Land Use Plan for Housing is to provide a guide for future housing and other development in the Counselor Chapter. This document will provide long-range guidance to the Counselor Chapter through the identification of the most suitable sites for housing development, as well as sites for other community needs. The recommendations provided in this document are based on a careful assessment of the housing, community development and facility needs of the Chapter, an assessment of infrastructure needs and capabilities and the suitability of the sites for development. It is intended to function as a working resource for the Chapter Land Use Planning Committee in their efforts to plan effectively and appropriately for the future. While future development of housing and commercial activities should comply with the recommendations of the plan, the nature of this document is one of flexibility and adaptability to local and regional changes.

The development of the Counselor Chapter Land Use Plan for Housing is driven by the 1996 Native American Housing Authority Self-Determination Act (NAHASDA) legislation, which has provided the funding for this plan for housing, and by the Local Governance Act, which sets forth a process by which, through the development of a land use plan, local chapters are given authority to administer their land.

1.1 Local Governance Act

The 1998 Navajo Nation Local Governance Act (LGA) grants chapters authority over local issues relating to economic development, taxation and revenue generation, infrastructure development, and land use planning. By assisting chapters to become self-governing entities, the LGA creates opportunities for the improvement of the chapter members' quality of life by:

- developing opportunities for economic development
- conservation of natural resources and preservation of Navajo heritage and culture
- ensuring government accountability
- creating an atmosphere of experimentation and learning

- developing experienced, professional administrators.

The LGA requires that Chapters adopt the "Five Management System" of public administration, and develop a comprehensive, community-based land use plan.

The LGA sets forth a process by which local chapters are granted power over local issues. As part of this process, chapters must adopt a *Five Management System* which sets up policies and procedures for chapter administration of 1) personnel, 2) property, 3) procurement, 4) accounting, and 5) record keeping.

Chapters must also develop and adopt a comprehensive, community-based land use plan which provides local chapters the tools to administer their land on a local level. This comprehensive plan, according to the LGA, section 2004 (B), is based on "the guiding principles and vision as articulated by the community; along with information revealed in inventories and assessments of the natural, cultural, human resources, and community infrastructure." The LGA also states that such a plan shall include "a land use plan which projects future community needs, shown by location and extent, areas to be used for residential, commercial, industrial and public purposes." While the main intention of this plan is to develop a land use plan specific to housing, the information presented in this plan will also provide technical and informational support to the Counselor Chapter in the development of their comprehensive land use plan.

1.2 NAHASDA

NAHASDA has provided funding to the Navajo Nation for the development of Chapter land use plans for housing. It is the intent of NAHASDA to support Indian self-determination and tribal self-governance through development of housing.

The Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA) provided the funding for this planning effort. NAHASDA has provided \$86 million to the Navajo Nation for the first year and \$88 million in the second year for the purpose of planning for housing. Funding for a third year of chapter plans is in place.

NAHASDA reorganized the system of federal housing assistance for Native Americans. It replaced several housing assistance programs with one block grant program that recognizes the right of Indian self-determination and tribal self-governance. The guiding principals of NAHASDA state that public housing programs modeled for urban America

should not be forced on Native America, and that local communities should be financially assisted in developing private housing and capital opportunities, so that they may have the flexibility to devise local solutions for local problems.

There are four phases involved in this chapter planning process:

- *Community Participation Plan*
- *Community Assessment*
- *Suitability Analysis*
- *Infrastructure Analysis*
- *Land Use Plan*

While the focus of this plan is on housing, the plan also identifies and addresses community issues that affect housing development, such as economic development and community service needs.

1.3 Chapter Planning Process

There are five phases involved in the chapter land use planning process. (Exhibit 1).

The first phase is the development of a community participation plan. The community participation plan specifies the plan of operation, frequency and manner of committee meetings, and the methods to be used to educate and involve community members in the planning process.

The second phase is a community assessment. The community assessment examines individual chapter community needs such as housing, economic development and community facilities.

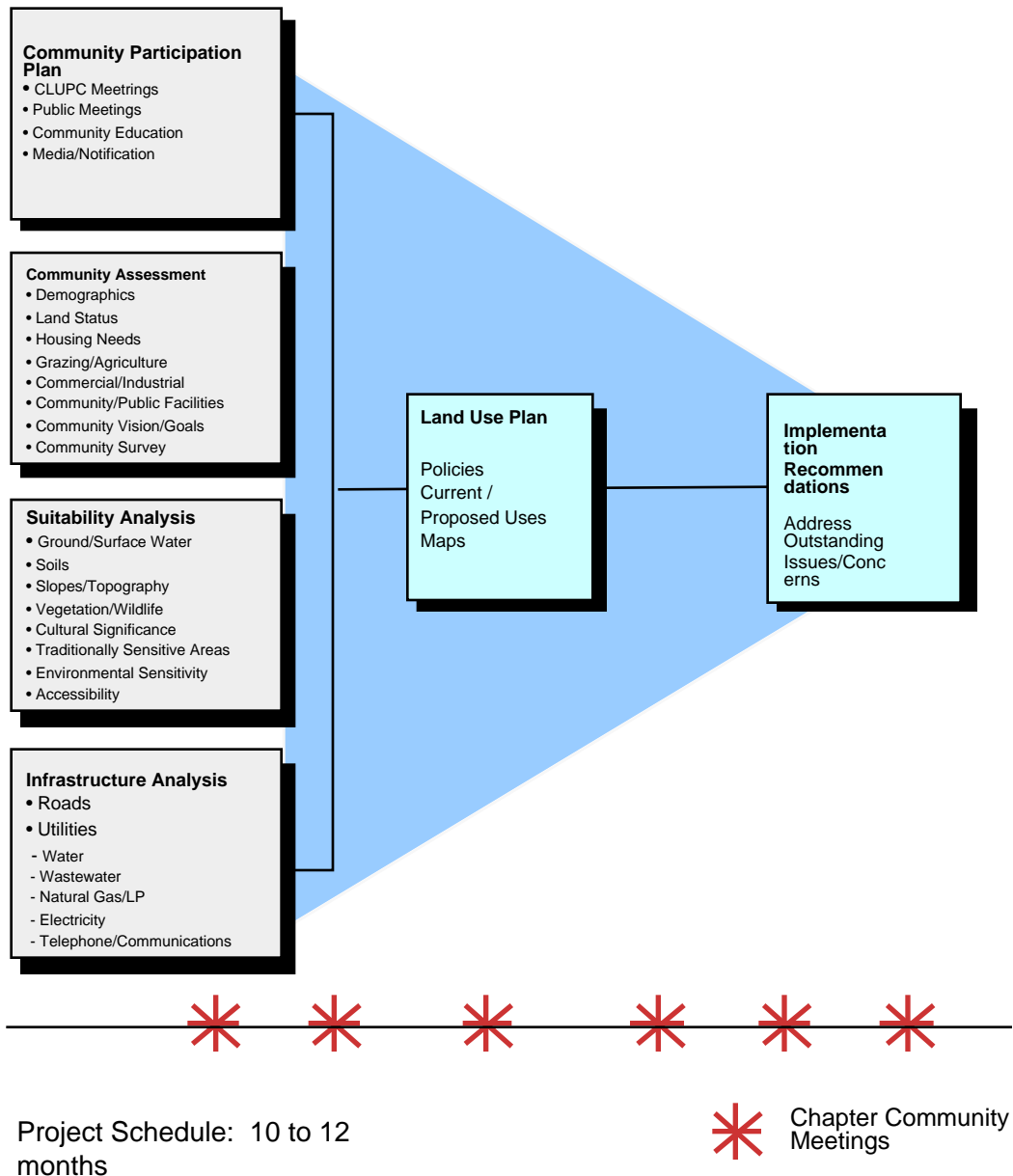
The third phase of the planning process is a suitability analysis of sites that are considered for housing. The suitability analysis examines the natural and cultural resources and environmental constraints affecting development, chapter-wide and on specific sites.

The fourth phase is an infrastructure analysis. The infrastructure analysis considers roads and utilities needed for development to occur.

The final product is a Land Use Plan that identifies the most suitable housing development sites, as well as sites for other community needs. It also includes policies and maps. Appendices of useful information are included at the end of the document.

Exhibit 1 below summarizes the planning process.

Land Use Planning Process for Individual Chapters



B. Community Assessment

The Community Assessment section addresses the following topics:

- *Chapter Background*
- *Socio-economic Trends*
- *Housing Needs*
- *Land Status*
- *Grazing Uses*
- *Commercial/Industrial Uses*
- *Community Facilities.*

1.0 Chapter Background

1.1 History

Counselor Chapter is located in northwest New Mexico, partly in Sandoval County and partly in San Juan County. It is also located in the northeastern part of the Navajo Nation Eastern Agency (see Exhibit 2). The chapter house is located on U.S. 550, but the community is actually south of the highway. Counselor Chapter became certified in 1974.

Many stories are told about the history of the Counselor area. Stories are told about two mesas, Arrowhead Mesa and Devil Mesa, which are known for the great massacres and battles that are said to have taken place there during the 1800s. It is told that women and children fled to Arrowhead Mesa where they would be safe from the enemy, who's arrows could not reach the mesa's top. Devil Mesa is known for the tragic stories of women and children being thrown from the cliff or being starved to death by the cavalries. Today, there is evidence of archeological sites, along with old stone watchtowers located within the mesas rims.

The Counselor Chapter was named after Jim Counselor, a Kentucky trader who sold pelts and later opened a trading post in the community. Jim Counselor's trading post was successful in part because of the accounts he acquired from Sam Lybrook, brother of Will Lybrook. Will Lybrook established a home and then a business in an area just a few miles southwest of Counselor, which now has his name. After Will Lybrook died, his brother moved into the house, but sold the trading post accounts to Mr. Counselor. Jim Counselor and his wife Ann ran the trading post until the 1950s, when they sold the business to Leonard Taft and moved to Albuquerque. Taft later sold the trading post to Harold McDonald.

In the early years of the trading post, community members would bring items such as rugs, sheep skins, lambs, piñons, and wool and trade them for store credit or cash. The railroad also hired workers through the trader and then paid them by giving them credit at the trading post. In those days, going to the trading post was not an everyday

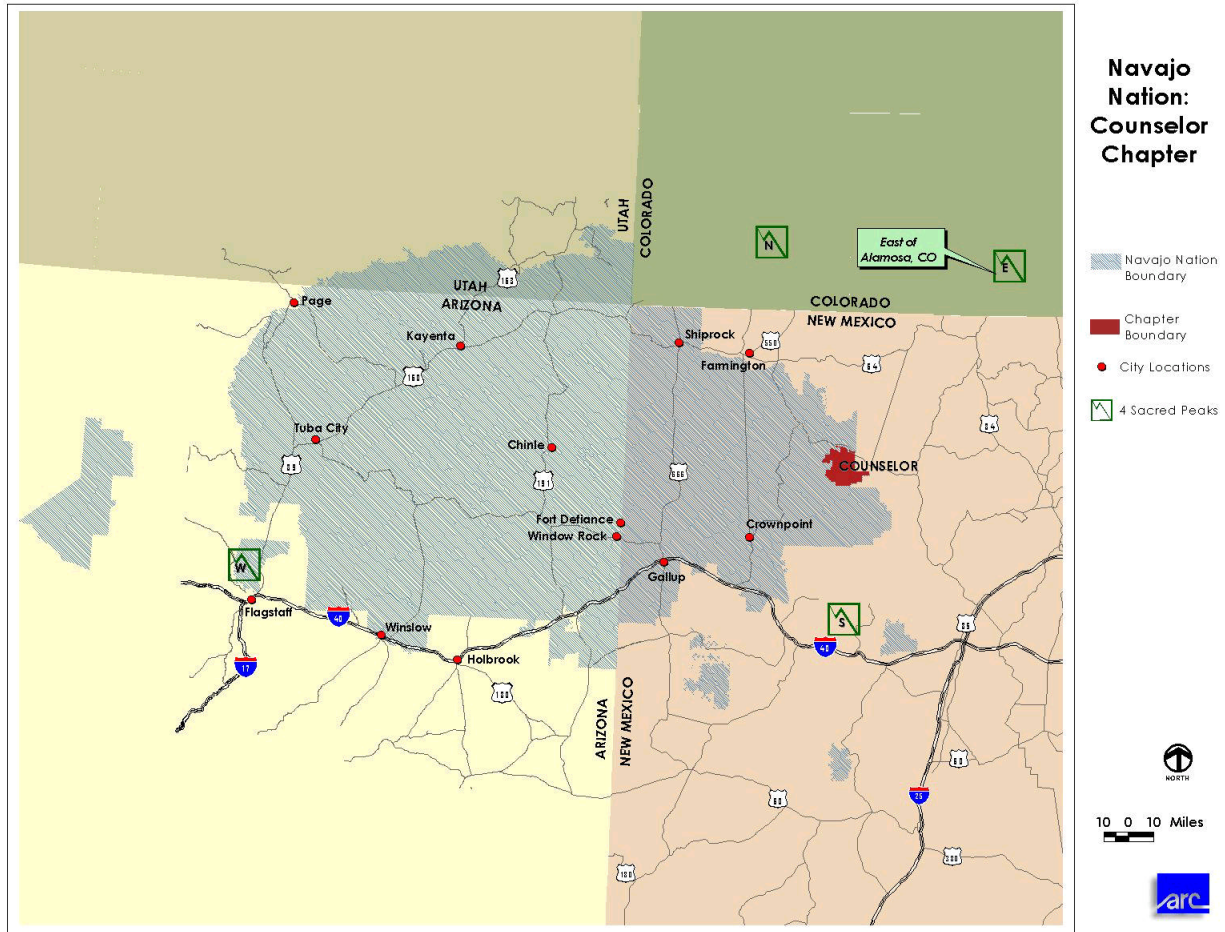


Exhibit 2. Navajo Nation

occurrence. It could take up to two and one-half days to get to the trading post when traveling by wagon on an unpaved, bumpy road. Many people also relied on their livestock and vegetable gardens for food, so there wasn't a need to go shopping daily or even weekly.

The community wanted to become part of a chapter and in the 1960s, many members began attending the Pueblo Pintado Chapter Meetings. While the Pueblo Pintado Chapter invited the Counselor community to join them and participate with their community, they were never fully accepted. They then tried to participate with the Nageezi Chapter, only to be in the same situation. It was then that the community decided to pursue its own certification. People began meeting at the first chapter house, located near Twin Pines. Then they planned to move to a second site, but that was never accomplished. The chapter began construction on a third site while the chapter certification was still in progress. The first building within the chapter compound was finished in 1973 and the chapter became certified in 1974. That first building is no longer the chapter house, but is being renovated for the Senior Center.

In the 1940s, a Brethren Christ Mission was established in Ginbi't'o, a community about 25 miles from Counselor. At that time, the Mission had a hospital, school, church and air strip. This was where many community members went for medical care. Many children at that time were born at the Mission. The clinic closed its doors in 1978 and shortly afterward, that the school closed as well. Today, the Mission still includes a church building. In 1947, a second mission school was established, the Grace Christian Indian School, in the Counselor Chapter. The school had dorms until 1994 and, finally, closed in August 2001.

There were a few other options for the children of the Counselor Chapter, a BIA school in Crownpoint and a second school in Ignacio, Colorado. During that time period, all children spoke Navajo fluently. It wasn't until the Pueblo Pintado Boarding School opened its doors that English began to replace Navajo as the primary language. Today, about 1 in 4 children speak Navajo fluently.

Lybrook Elementary School, opened in the 1980s, is also a school that the children of Counselor attend. The school originated due to the building of a company town, which consisted of a gas plant and two mobile home parks. There are no longer residents living on the mobile home sites, but the school still operates, as well as the gas plant.

Over the years, some of the vegetation and wildlife has disappeared. In the 1960s, the BLM reintroduced antelope to the area, but within 15 years they had disappeared again. Today, there is some discussion that the antelope may be reintroduced again. The BLM also used tractors and chains to clear some of the juniper and sage covered areas to try to improve the rangeland.

Farming and raising of livestock was the livelihood of many families. More families lived on their allotments. In the 1930s and 1940s, the Navajo Tribe issued a team of mules, a wagon, and a plow to all heads of household. Many people raised livestock in extremely large numbers. Overgrazing began to occur and livestock reduction was introduced. A terrible snow storm hit the area in 1932, with drifts as high as junipers. Many residents lost most or all of their sheep herds. The event ended large-scale sheep grazing in the chapter.

Many of the main roads that exist today were wagon trails and sheep trails of the past. By the 1960s, the county and state began to grade and pave roads for bus routes, etc. Early on, the main road through Counselor was dirt and went to the south of the present highway, through Venado Ranch and past the original Counselor store. In 1945, the main road was named after the late Governor Dempsey. It was then converted by Brown's Construction Company into State Route 44 and most recently to U.S. 550.

Public Participation

In addition to monthly CLUP Committee meetings, six community meetings on the land use plan were held:

1. January 18, 2001
2. June 18, 2001
3. July 16, 2001
4. August 22, 2001
5. September 20, 2001
6. December 20, 2001

A resolution adopting the chapter's Public Participation Plan is provided in the Appendix.

In addition, interviews with several community service providers were conducted. A service provider community meeting was also held in September.

1.2 Community Issues

Community issues were identified through a number of ways:

- Community Survey
- CLUP Committee Meetings
- Community Meetings, including a "Visioning" meeting
- Service Provider Interviews.

The results of the community survey and “Visioning” meeting are presented here.

Community Survey

A community survey was conducted in the chapter during the summer of 2001. One hundred ninety household surveys were completed for Counselor Chapter, representing 429 community residents. The results (Exhibits 3-13) are as follows:

Ages

Counselor has a relatively young population. Forty-two percent of those surveyed have a family member aged 19 and under. Eleven percent are aged 65 and older.

Education

Most householders (51.1%) report having attended school, including high school. Some 20.5% have a high school diploma or GED and 3.7% have attended some college. About 2.7% have either a trade school certificate or associates degree. Twenty-two percent did not respond.

Income

About 75% of households earn under \$20,000 and half of households under \$15,000 annually. About 12% of those surveyed did not respond to the question.

Employment

Thirty-one percent of households report having at least one person employed, while 22.1% reported being unemployed. About 5% of householders say they are retired and 1.1% are self-employed. About 40% did not respond. Most people said they work in Farmington (8.4%) or Bloomfield/Other (14.2%). Six percent work in Cuba, 4.2% in the chapter, and 3.2% in Albuquerque. About 63% did not respond.

Type of Housing

Most housing in the chapter is frame construction (63%), mobile homes (16%), followed by hogans (12%).

Exhibit 3. Employment Status

Are you employed/In what community are you employed?

Employment Status

Employed	Unemployed	Self-employed	Retired	N.A.
31.1%	22.1%	1.1%	5.3%	40.5%

Where employed?

Farmington	Bloomfield/ Other	Cuba	Albuquerque	Chapter	N.A.
8.4%	14.2%	6.3%	3.2%	4.2%	62.6%

Exhibit 4. Income

What is your total household income?

\$0 - \$15K	\$15K - \$20K	\$20K-\$25K
50.5%	25.3%	7.9%

\$25K - \$30K	\$30K - \$40K	\$40K+	N.A.
1.6%	2.1%	.5%	12.1%

Exhibit 5. Education

How much education has this person completed?

Some School	Attended High School	HS Diploma or GED	Some College
35.8%	15.3%	20.5%	3.7%

Certificate	Associates	Bachelors	Masters	N.A.
1.1%	1.6%	0%	.5%	21.6%

Exhibit 6. Housing Type

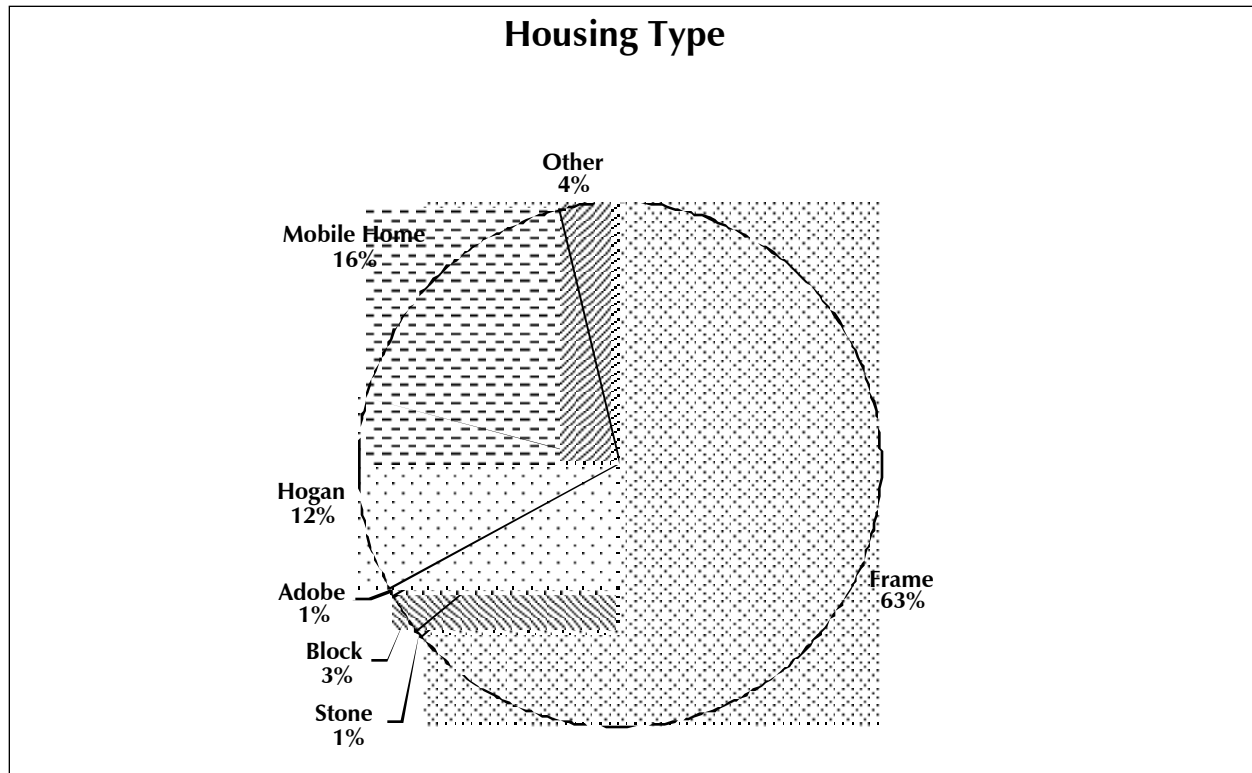
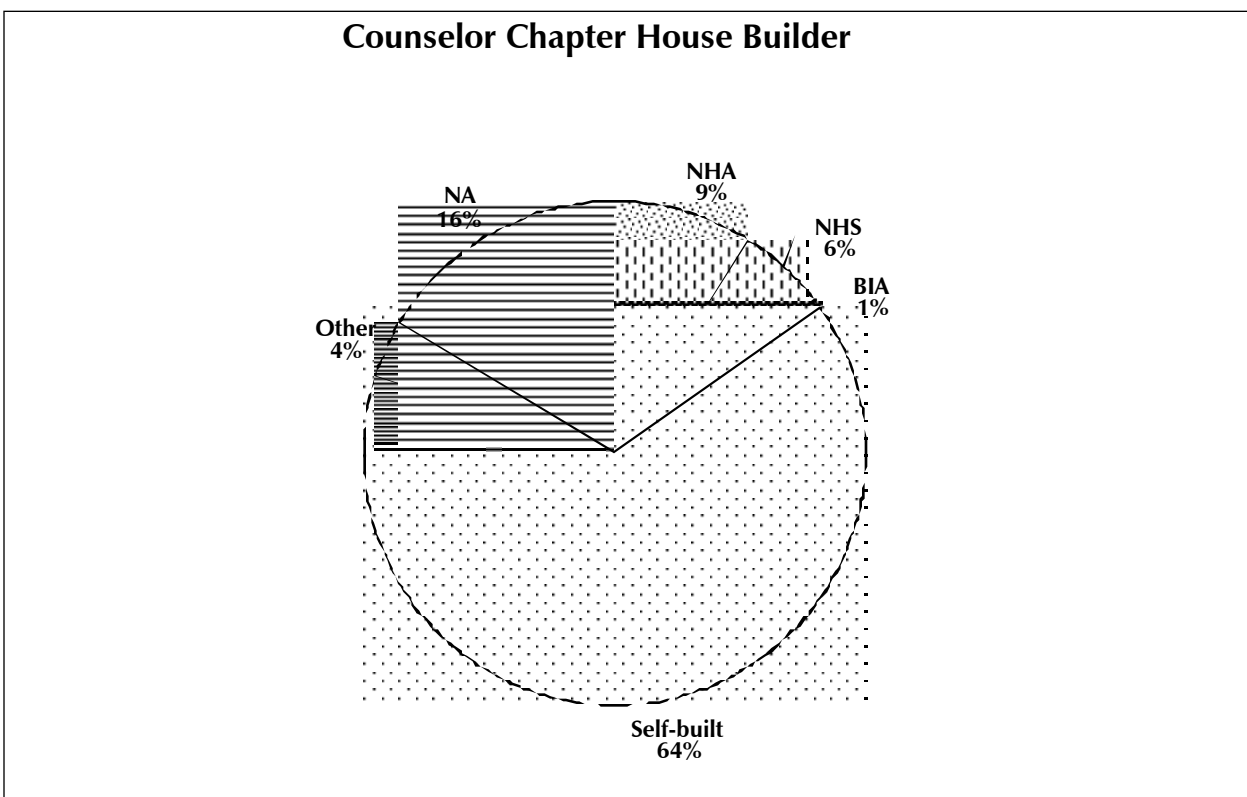


Exhibit 7. Housing Builder



Builder

The majority of houses are self-built (64%). Only 9% were built by NHA and 6% by NHS as scattered units. Sixteen percent did not respond.

Housing Conditions

For the condition of houses, 44.2% reported their foundations are in good condition, about 35% said their roofs and walls were in good condition, 16% said their wiring was good, 50% said their plumbing was in good condition, and 9.5% said their heating and cooling systems are in good condition. About 1-2% did not respond to questions regarding foundation, roof, and walls. Some 40 to 78%, however, did not respond to questions regarding electrical, plumbing, and heating/cooling, presumably because they do not have those amenities.

Utilities

Twelve percent of households said they have electricity service, 52.6% have water, and 56.3% have septic. None reported having natural gas or telephone service.

Sixty-four percent of respondents stated that they used wood as their primary heat source while 95% supplement other heat sources with wood. About 8% use electric, 11% use propane, and 4% use coal. About 12% of those surveyed did not respond.

While most (57%) households are on NTUA or Lybrook water systems, 34% still have to haul in domestic water. About 7% did not respond. Over half of households reported having complete plumbing fixtures, however, some of these are not connected to water lines.

Shopping and Services

Sixty-four percent of households buy groceries in Farmington, followed by 23.7% in Chapter/Other.

Sixty-two percent of those asked buy gas in the chapter, followed by 15.3% in Cuba. Some 16.8% of those asked did not respond.

Exhibit 8. Housing Condition

Reported Housing Condition: Surveyed Households				
	Good	Fair	Poor	N.A.
Overall Condition	28.9%	19.5%	15.3%	36.3%
Foundation	44.2%	28.9%	24.2%	2.6%
Roof	34.7%	31.6%	31.6%	2.1%
Walls	35.8%	32.6%	30.5%	1.1%
Electrical	16.8%	3.6%	9.4%	70.0%
Plumbing	50.0%	6.8%	3.7%	39.5%
Heating/Cooling	9.5%	4.7%	7.9%	77.9%

Exhibit 9. Utilities

Counselor Utilities							
Heat	Electric	LP Gas	Natural Gas	Wood	Coal	Other	Wood Only
	15	21	2	180	7	1	122
	7.89%	11.05%	1.05%	94.74%	3.68%	0.53%	64.21%
Water	Water line	Private well	Cistern	Haul-in	Other	N.A.	
	108	0	0	64	4	14	
	56.84%	0.00%	0.00%	33.68%	2.11%	7.37%	
Plumbing	Kitchen	Pump	Bathroom	Privy	Other	Kitch/Bath	
	110	1	107	3	6	108	
	57.89%	0.53%	56.32%	1.58%	3.16%	56.84%	
Utilities	Electric	Water	Sewer/Septic	Gas	Phone	Solid Waste	Other
	23	100	107	0	0	0	5
	12.11%	52.63%	56.32%	0.00%	0.00%	0.00%	2.63%

Exhibit 10. Shopping/Services

Shopping/Services

Where does your family....

	Farmington	Crownpoint	Cuba	Albuquerque*	Chapter /Other
buy food?	63.7%	.5%	9.0%	10%	23.7%
buy gas?	6.3%	0%	15.3%	0%	61.6%
buy clothes?	66.3%	0%	2.1%	10%	7.9%
buy vehicles?	40.0%	0%	4.7%	8.4%	12.1%
get medical care?	10%	24.7%	44.7%	4.2%	65.8%

* Metro area includes Rio Rancho/Bernalillo

Exhibit 11. Chapter House

Use of Chapter House

Senior programs	Youth programs	Social Services	Chapter Meetings	Vote
21.58%	1.58%	0.53%	46.32%	79.47%
Social events	Other	How often? Daily	Weekly	Monthly
5.79%	3.68%	21.95%	19.51%	58.54%

About 66% of households buy clothing in Farmington, followed by 10% in Albuquerque. About 13% did not respond.

Forty percent of respondents purchase vehicles in Farmington followed by 12.1% in 'Other.' About 33% did not respond.

Sixty-six percent of those surveyed get medical care in the chapter or 'other,' followed by 24.7% in Crownpoint and 44.7% in Cuba.

Use of the Chapter House

Households said they use the chapter house mainly to vote (79.5%), attend chapter meetings (46.3%), and for senior services (21.6%). Most respondents said they visit the chapter house (58.5%) on a monthly basis.

Familiarity with LGA and Land Use Plan

Most households said they were not familiar with LGA (87.9%) nor with the land use planning process (78.9%).

Greatest Family Needs

Households said their greatest needs were for electricity (31.4%), water (18%), and hauling wood (13.4%) for heat.

Greatest Community Needs

Households said the greatest community needs were electricity (35.4%), water (14.6%), roads (18.9%), and new housing (12.1%).

Exhibit 12. Family Needs

Family Needs	Percentage
Electricity	31.44%
Water	18.04%
Hauling Wood	13.40%
Roads	5.67%
Transportation	5.67%
Housing Addition/Repairs	2.58%
New Housing	18.04%
Medical Care	1.03%
Phone	1.55%
LP/Natural Gas/Other Heat	1.55%
Employment	1.03%

Exhibit 13. Community Needs

Community Needs	Percentage
Electricity	35.44%
Water	14.56%
Hauling Wood	7.77%
Roads	18.93%
Transportation	0.00%
Housing Addition/Repairs	0.97%
New Housing	12.14%
Medical Care	0.00%
Phone	1.46%
LP/Natural Gas/Other Heat	1.46%
Employment	2.43%
Water for Livestock	1.94%
Emergency Response	1.94%
Trash	0.97%

'Visioning' Meetings were held in January and July 2001 where the questions were asked:

1. *What is unique about my community?*
2. *What do I want to preserve or maintain in my community?*
3. *What do I want to change or discourage?*
4. *What do I want my community to look like in 20 years?*

Visioning Meeting

Visioning Community Meetings were held in January and again with the youth in July, 2001. Visioning is a method for identifying community issues, needs, and goals for the future. At the meetings, the following questions were asked:

1. What is unique about my community?
 - The Chapter is under Section 3 Allotment
 - Section 3 Allotment allows for grazing of up to 100 free sheep units on BLM land
 - Each area has a unique Navajo name: Jungle Hill, Washington Pass, Where a Pig Stands
 - A lot of land available for development - various agencies and groups are interested
 - Being isolated
 - Chapter has its own tract of land
 - Many historical, cultural and sacred sites that are undisturbed exist within the community
 - The many available resources – e.g., open space, trees, etc.
 - Major highway runs through the chapter
 - Sheep herds
 - Horse trails/ Bike trails
 - Strong use of the Navajo Language
 - Bible schools bring students from other states

Positives:

 - Clean Surroundings (Environment & Air)
 - Quiet Area

Negatives:

 - No access to emergency services
 - Lack of road maintenance
2. What do I want to preserve or maintain in my community?
 - The land - unused land should be preserved by not allowing any more roads, tree cutting, etc.
 - Livestock
 - Historical sites - leave them undisturbed
 - Open Range - do not locate development all in one place, but spread it out
 - Maintain our culture
 - Keep people in the community by providing local jobs, programs and services

- Hunting deer, elk, bobcats
- Preserve traditional practices, ceremonies and language
- Traditional style homes and structures

3. What do I want to change or discourage?

- Change overgrazing back to capacity and put the land into Range Units per permit
- Use the Chapter's Section 3 allotment and create Range Units
- There are too many roads
- Encourage more community response and involvement
- Discourage disturbances of land
- Replant trees or other types of vegetation
- Place overhead lines underground
- Programs for drugs/substance abuse
- More recreational opportunities and facilities – e.g., swimming, basketball, Boys and Girls Club, park
- Provide means for community input into what development goes on within the chapter
- More safety and protection from the police
- Better communication between the officials and members of the community, youth, etc.

4. What do I want my community to look like in 20 years?
The following needs were identified:

Economic Development

- A community that can operate its own businesses
- Well developed rural community
- More employment opportunities
- More retail stores and small businesses
- A convenience store – i.e., 7-11
- Gift Shop
- Restaurants
- Hotel
- Gas Station
- Truck Stop
- Casino
- High Tech Industry (i.e. Intel)

Community Facilities

- Education - More schools in community
 - Elementary and High Schools

- Daycare
- Summer School Program
- Library/Book Store
- College, Training School/Trade School
- More education programs for drugs, gangs, violence, etc.
- Bring in celebrities for special programs
 - Public Safety - More police protection
 - Fire Department
 - Police Station
- Health Care
 - Hospital for elders and children
 - Nursing Home
- Recreation
 - Recreation programs for the youth - skating, movies, sports, etc.
- Other Community Uses
 - Second community cemetery
 - Churches
 - Solid Waste

More Housing

Infrastructure

- Water and electricity to all homes
- Better Roads

Local Government

- Chapter to have its own local government

Farming

- More farming within the community
 - The Chapter will be getting water from the Navajo-Gallup Water Supply Project
- 4-H / Horsemanship Programs

4a. What do I think of the proposed housing development site?

- Good Idea – the community is growing and there needs to be more housing
- It's nice if the "red tape" can be reduced
- Where will the funding come from?

- The Chapter members need to agree to a site with a unanimous vote
- I like it, no objections
- I like the idea of the current site being built into the community, along main routes within the Chapter
- The current site is in a good location. If you look at it in a phased approach, in five to ten years the main roads in the community will begin to be paved and maintained and it will bring traffic in along those roads. It won't seem like the housing site is so far away from everything
- Concern about the site being difficult to get to, also will there be enough land to build the number of houses the community needs?
- Looking long-term, will more development within the community eventually interfere with land status, i.e. grazing rights? What happens if in the future development occurs near grazing lands?
- The idea of the site is a good one, but will there be some kind of educational classes that will help the community member to deal with the problems that develop when building this kind of a housing site, e.g., protecting their homes and their animals?
- There have been these kinds of development plans talked about before and they go nowhere. It will be important for the community to support this planning process if it is going to work

4b. Where do I want commercial development to occur?

- Along Highway 550
- Within the community
- Phase development
- If commercial development occurs along side of the road, it seems to create more "red tape"
- Near the Chapter Compound, along the frontage road
- In a central location within the community

5. Other comments on the Land Use Plan?

- Have all types of development and facilities available to the community such as Clinics, Police Sub-Station, Fire Department, Livestock Facility
- Can the CLUP find ways to fund the development and do things in order?

1.3 Chapter Planning Goals

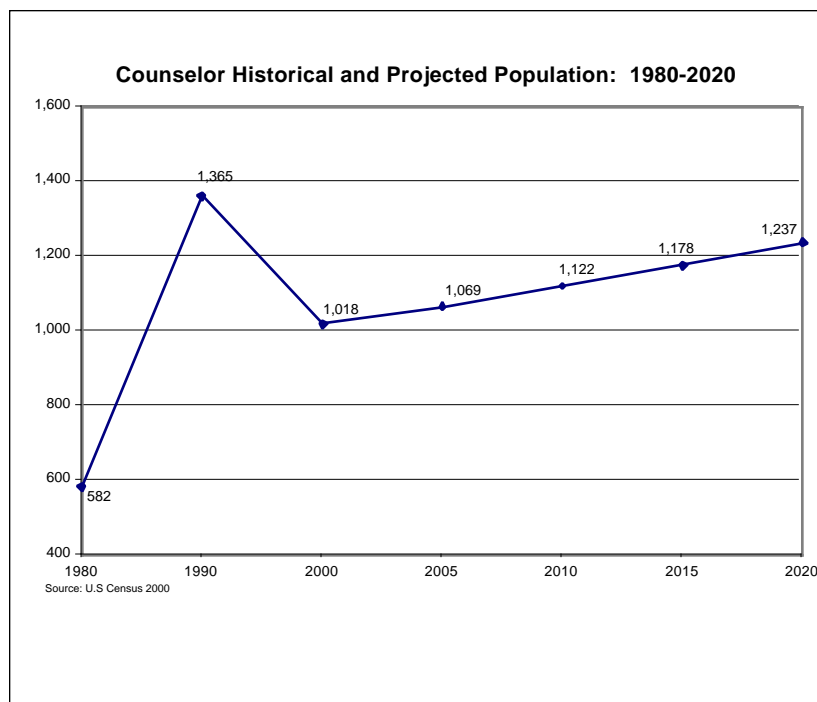
Based on the community issues identified above, the planning goals for the chapter are:

1. Promote business development to keep young people in the community:
 - tourism-related along U.S. 550
 - later, businesses in community
2. Provide more housing
 - new housing and rehabilitation of existing housing
 - design appropriate to community
 - clustered and scattered projects
3. Provide community facilities and services:
 - multi-purpose center
 - recreation and youth
 - senior center
 - new chapter house
 - high school, community college, nursing home, sponsored regionally or locally
 - public safety.
4. Provide basic infrastructure throughout the community, including:
 - new water lines
 - pave roads.
5. Improve rangeland management.
 - revive farming in the community

2.0 Community Socio-economic Trends

This section describes population, demographic and economic trends in the Counselor community. Future housing and other community needs are determined by these factors.

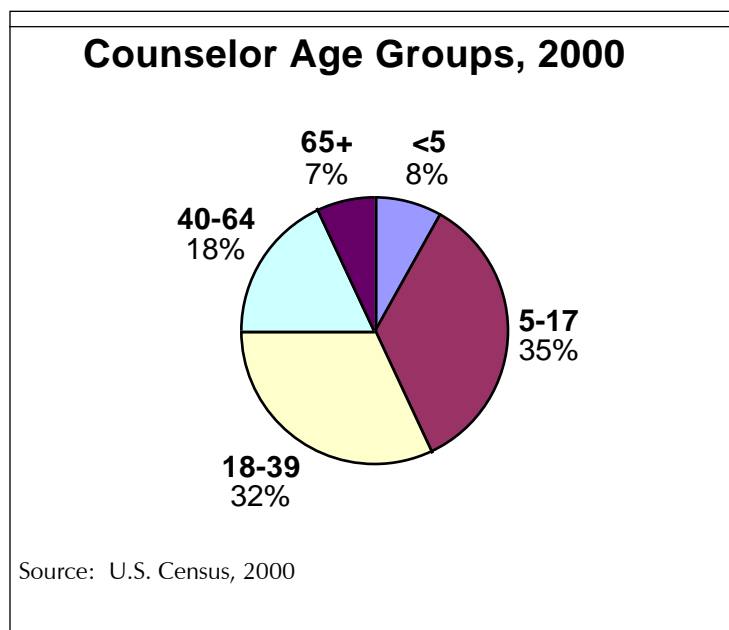
Exhibit 14: Population



2.1 Population Trends

After a large increase in population during the 1980s, Counselor Chapter lost significant population between 1990 and 2000. It dropped from 1,365 in 1990 to 1,018 in 2000 (Exhibit 14). There are 630 registered members in the community. According to the chapter, it is likely that the chapter was undercounted in 1980 and possibly again in 2000. Many community members did leave in the 1990s to live in the Farmington area.

Exhibit 15: Age Composition



Using a slow annual growth rate of 1%, the chapter has been projected to increase to 1,122 in 2010 and 1,237 in 2020.

2.2 Demographic Characteristics

Counselor Chapter has a relatively young population with 43% under age 18 (Exhibit 15).

The breakdown of population by age group is as follows:

Under 5	82
5-17	356
18-39	325
40-64	185
Over 65	70

2.3 Employment and Income

It is estimated that unemployment in the chapter is more than 50%. Employment available in or near Counselor is as follows:

Counselor Chapter	23
Counselor Health Station	4
Lybrook Public School	5
Family Farms	47
Trading Posts	4
Lybrook Giant Oil Refinery	1
Lybrook Williams Field	4
Total	<u>88</u>

Businesses located in Counselor include:

- Gas Stations (3)
- Convenience Store
- Trading Posts (2)
- Video Shop
- Laundromat
- Café.

The Lybrook store is now open from 8 AM until 10 PM, the laundry until mid-night. A new game room in the store is open in the evenings.

A number of community residents work in the Farmington and Shiprock areas. Many also work for the railroads throughout the southwest, as migrant farmers in southern Colorado, and on highway construction projects.

2.4 Tourism

Tourist attractions in the area include:

- Chaco Culture National Historic Park is located 30 miles southwest of Counselor.
 - The park received 78,400 visits annually in 1997.
 - A Visitors Center is located at the park with self-guided tours, campground and picnic areas.

- Aztec Ruins National Monument is located 62 miles northwest of Counselor on US 550.
 - The monument received 58,318 visitors annually in 1999.
 - A Visitors Center offers exhibits, a movie and maps for a self-guided tours. Picnic areas are also available.
- Angel Peak is located 30 miles northwest of Counselor.
 - Offers a recreation area, picnic area and free campground.
 - Convenient camp spot between Aztec Ruins National Monument and Chaco Cultural National Historic Park
- Durango, Colorado is located 93 miles north of Counselor on US 550.
 - Durango is popular for its summer and winter recreation opportunities, e.g., rock climbing, fishing, adventure tours, jeep tours, skiing, and snowmobiling
- Other local areas could be developed for tourism. Roads should be improved both to the north of Escrito Trading Post and to the south of the community where there are spectacular bluff views and potential picnic areas.

2.5 Education Levels

For the Navajo Nation, in 1990, 43.5% of people over age 25 had a high school diploma and 5.5% had graduated from college. In comparison, for Sandoval County, 31.1 % of the population are high school graduates, dropping to 28.8% in Cuba, and 25.1 % in the county have a college degree.

Higher education and training programs available to Counselor include:

- Diné College - Crownpoint and Shiprock
- San Juan College - Farmington
- SIPI - Albuquerque
- UNM and TVI - Albuquerque
- Ft. Lewis College - Durango.

3.0 Housing

Existing and proposed housing uses described in this section are shown in Exhibits 18 and 19 and listed in Exhibit 20.

3.1 Existing Housing

The 2000 U.S. Census identified 405 total housing units in Counselor. Of these, 283 units were occupied. Forty-five vacant houses are used seasonally. Some residents may live elsewhere for employment part of the year and occasionally return to the community. Of the total units in 1990, 78% were single family units, 1% multi-family, 13% mobile homes, and 8% unidentified.

None of the housing units are built by NHA. Three mobile homes house teachers at the Lybrook School. A mobile home park and other housing at the Lybrook Natural Gas Plant were moved out in the early 1990s. A household survey conducted by ARC has found 355 housing units.

3.2 Housing Needs

The waiting list for Counselor Chapter identifies 89 units needed: 32 homeowner, 40 rental and 17 scattered houses. While the population has declined, the chapter will still need to build replacement housing for existing substandard housing. Population growth over the next 10 years will require an additional 27 houses be built in the chapter (not including current replacement and renovation needs). A weatherization program is available through Sandoval County for those residents needing home improvements. Of those households surveyed, a third of residences need repairs to walls and roofs, and a quarter of houses need repairs to foundations. In addition, over 40% of homes still don't have complete plumbing, and almost half, water lines. The majority of houses do not have telephone, and 88% don't have electricity.

3.3 Proposed Housing

NHA is currently planning to build a 30-unit subdivision at Counselor. Units may be both rental and homeownership, although the chapter emphasizes that rental units should be for community members on the waiting list. NHA also has 28 scattered units budgeted for next year, 12 scattered units

for this year, and eight scattered units from two years ago, for a total of 48 scattered units. Currently, one NHA scattered house is under construction.

The chapter has identified a 160-acre site on tribal trust land for housing. The chapter is in the process of surveying and withdrawing the site. Water and power are available. A road through the site will be paved in the next few years.

4.0 Land Status

Counselor Chapter is located in the checkerboard area of the Navajo Nation. The total area of the chapter is 105,942.54 acres (Exhibit 16). Land status includes:

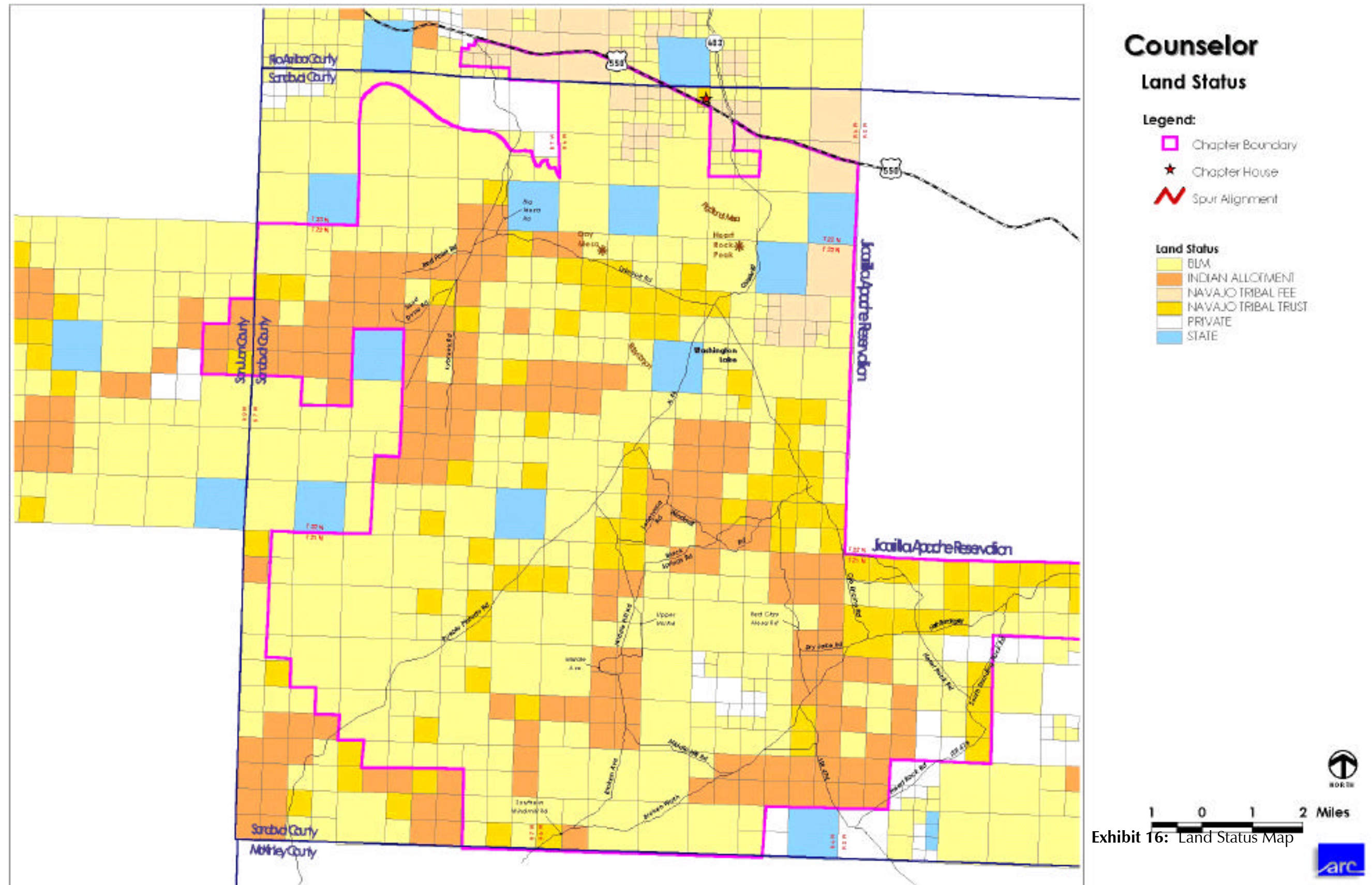
- Tribal Trust - 13,501
- Tribal Fee - 3,782.61
- Allotted - 22,092.90
- Bureau of Land Management - 61,283.23
- State of New Mexico - 3,842.80
- Private - 1,440.

The chapter is interested in making land exchanges with the BLM to convert lands to tribal trust status. Some allottees are selling their allotments to the Tribe to further land consolidation.

5.0 Grazing and Agriculture

Grazing is still a large part of the livelihood of community residents. Sixty-three permittees graze cattle and sheep in the chapter.

Approximately 20 families still farm in the chapter. The chapter would like to see more farming within the community. An area should be set aside in the southwestern part of the chapter for agriculture. Drip irrigation and other water conservation techniques should be used. The proposed Navajo-Gallup Water Supply project branch pipeline to Counselor is primarily for domestic and industrial water use.





6.0 Commercial and Industrial Development

Existing and proposed commercial uses described in this section are shown in Exhibits 18 and 19 and listed in Exhibit 20.

6.1 Existing

Currently, Counselor has the following businesses:

- Gas Stations (3)
- Convenience Store
- Trading Posts (2)
- Video Shop
- Laundromat
- Café.

A Williams natural gas refinery is located in nearby Lybrook. Gas wells are located throughout the area on private and allotted lands.

Natural Gas Refinery



6.2 Proposed

The chapter has proposed a number of new businesses. Businesses should be located along U.S. 550 first (in the chapter compound area and/or on chapter land on southside of U.S. 550) and later within community areas.

- More stores and small businesses
- Restaurants
- Museum
- Hotel
- Gas Station, Auto Repair
- Rest Area with Information Center
- RV Park
- Laundromat
- 24-Hour Truck Stop and Convenience Store
- Tourist Shops and Place for Vendors
- High Tech Industry (e.g., Intel)
- Casino - under new Navajo Nation legislation, a business plan would have to be developed.

7.0 Community Facilities

Existing and proposed community facilities described in this section are shown in Exhibits 18 and 19 and listed in Exhibit 20.

7.1 Chapter House

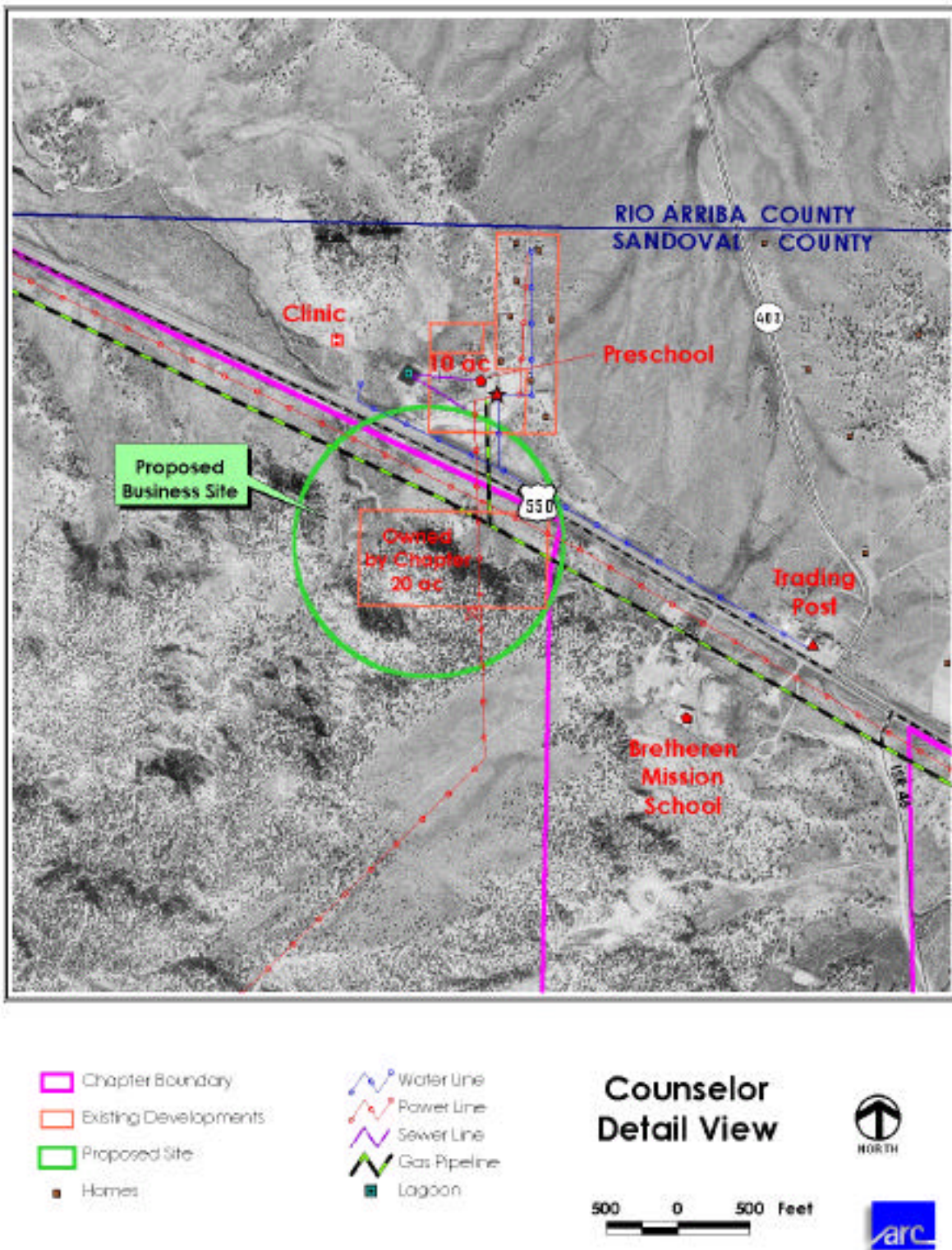
Existing

The Counselor Chapter House was built in 1976. Services provided out of the chapter house include:

- Community Health Representative (CHR)
- Senior Citizen Center
- Adult In-Home Care
- Food Stamps
- Division of Social Services
- Food Distribution
- Summer Feeding Program
- Child Development
- Women, Infants & Children
- Department of Employment & Training

Refer to Exhibit 17 for a map showing the chapter compound area.

Exhibit 17: Chapter House Area Land Use





Chapter House

Proposed

The chapter has proposed to build a new chapter house as part of a multi-purpose center at the proposed housing site.

7.2 Community Centers

Existing

No community centers exist in the chapter.

Proposed

A new multi-purpose community center is proposed for siting on the 160-acre housing site. The center would include the following uses:

- New Chapter House
 - offices
 - conference/meeting rooms
 - library
 - computer room
 - kitchen/dining facility.
- New Preschool
- New Senior Center (also proposed for existing chapter compound site)
- Recreation and Youth Center
 - basketball with bleachers
 - tennis
 - rodeo grounds
 - gym – aerobics, weights
 - swimming pool
 - skating rink
 - movies and stage for performances.

7.3 Educational

Existing

Students in Counselor Chapter attend the following schools:

- Lybrook School (K-6)
- Ojo Encino Day School (K-8)
- Dzilh'na'o'dith'hle (Blanco) Boarding School (K-8)
- Cuba High School (9-12).

Some of the children from the Counselor Chapter attend Lybrook Elementary School. The school serves children in kindergarten through 6th grade, with full-day kindergarten. Up until about 10 years ago, the school served students through 8th grade. The enrollment numbers have dropped dramatically over the last five years, from 61 students enrolled in 1994 to 36 enrolled in the current school year. The school has a total staff of 10. The school facilities are in fairly good condition except for the need of a new roof on

Lybrook School



the classroom and gymnasium buildings. The main concern is that the school is located directly across the highway from the Williams Gas Plant.

The Ojo Encino Day School currently serves 240 students, kindergarten through 8th grade, from the Ojo Encino and Counselor Chapters. That number has been increasing slightly over the past few years and with the building of new homes in the chapter, it is likely that enrollment will continue to increase.

The facility, originally built in 1966, is in need of a new gym or a larger multipurpose building and additional classrooms. An addition was completed in 1984 but there is still a need for at least 10 more classrooms. The school is in need of a new multi-purpose building. The current multi-purpose building is used for a gym and a cafeteria. The building is not practical for both purposes mainly because it requires set-up and tear-down after every meal or event. The building is not useful as a gym because there are no bleachers nor is there really enough room around the court to set up chairs for an audience.

There are no after school programs or recreation opportunities for the children. They are currently allowed to play on the school grounds but in the near future the school will be fenced in to help to reduce vandalism. During the summer, the school is able to organize the summer food program for children in the community. The school has 39 employees, most of whom live near-by but some do commute from Cuba. In past years teachers commuted from as far away as Albuquerque. The school has some teacher housing, which includes three three-bedroom homes, one two-bedroom home and two one-bedroom apartments. The school has requested that six additional teacher housing units be built. The community has many needs, but even its basic needs are not being met. Approximately 50% of families lack services such as water and electricity. There is no high school in the area so those children who go onto high school must go to Cuba and will likely spend as much as two hours on the bus a day.

Proposed

A replacement school for Ojo Encino Day School has been funded. Planning, site studies and design must be completed before construction can begin.

The chapter has proposed the following educational facilities:

- High School to be located in the Pueblo Pintado area.
- Community College satellite or distance learning site, possibly sponsored by the Five Chapters and located centrally.

- Day Care Center will be needed when more local businesses are started.

In addition, a new K-12 Lybrook School is proposed, to be built on state land along U.S. 550 just west of the chapter house.

7.4 Recreational

Existing

Currently, there are no community recreational facilities available in the chapter. Two private ballfields are located on allotments. Living Springs Baptist Church also has a ballfield.

Proposed

Recreation programs for youth as part of the proposed multi-purpose center.

7.5 Health Care

Existing

Currently, a new clinic exists in the chapter operated by Presbyterian Health Services offices in Cuba. Presbyterian Health Care is contracted by the I.H.S. to provide health care services for the communities of Torreon, Counselor,

Counselor Clinic



Ojo Encino, Rincon Marquez, and to Native Americans living in Cuba. Each year they serve approximately 5,000 people from all five communities. The Counselor Clinic is located near the Chapter House in a newly constructed

facility.

This 1,958 square foot facility has three exam rooms, a waiting room, surgery room, treatment room, an office and medical records area.

The facility is open three days a week and staffs a dentist, two dental assistants, one doctor, and three medical assistants. Aside from the dentist and the doctor, the staff at the clinic lives within the community. The clinic was established as a primary care facility. Any specialty care that a patient may require is referred to another doctor outside of the system by I.H.S. Presbyterian Health Care tries to work with the chapter to help coordinate special events such as health fairs or sign-ups for Medicare and Medicaid.

Proposed

The chapter has proposed the following uses possibly sponsored by the Five Chapters and located centrally:

- Urgent care clinic or hospital
- Nursing Home
- Tri-agency Detox facility in Cuba.

Lybrook Fire Station



7.6 Public Safety

Existing

The Lybrook Fire Department is located just outside of the Counselor Chapter boundaries. The fire department is made up of 20 volunteers including two EMTs, four EMTs in training and several first responders. Housed at the station

are a 750 gallon tanker, 1800 gallon four-wheel drive tanker and a rescue unit. A second vehicle is in the process of being modified so that it can be used as an additional rescue unit. The Lybrook Fire Department serves southwest Rio Arriba County and the far northwest portion of Sandoval County. The fire department works with the Counselor Chapter by teaching fire safety and providing stickers to those families with children to display in windows at home.

The Lybrook Fire Department is in need of an additional fire truck, a mini-pumper with a foam apparatus to more efficiently and effectively put out fires. One of the problems that the fire department faces is that communication between the fire victim and 911 is difficult. Since many of the residents of Counselor Chapter are without telephone service, they have no way to call for help. Once they are able to call, the fire department has lost so much response time that the fire has likely already burned the structure down. The fire department also loses response time when receiving a dispatch call, which first goes to Sandoval County and then gets dispatched to San Juan County. It is possible that up to 20 minutes can be lost with the current relay response system. Yet another delay is caused by the lack of paved roads within the community. Within the chapter, there are very few paved roads and that makes it difficult for the fire equipment to get to a site quickly.

Proposed

The chapter is proposing the following:

- Lybrook Fire Substation - a more centrally located satellite fire station near the new housing area.
- Police Substation - could be sponsored by Sandoval County Sheriff and Navajo Nation Police Department.

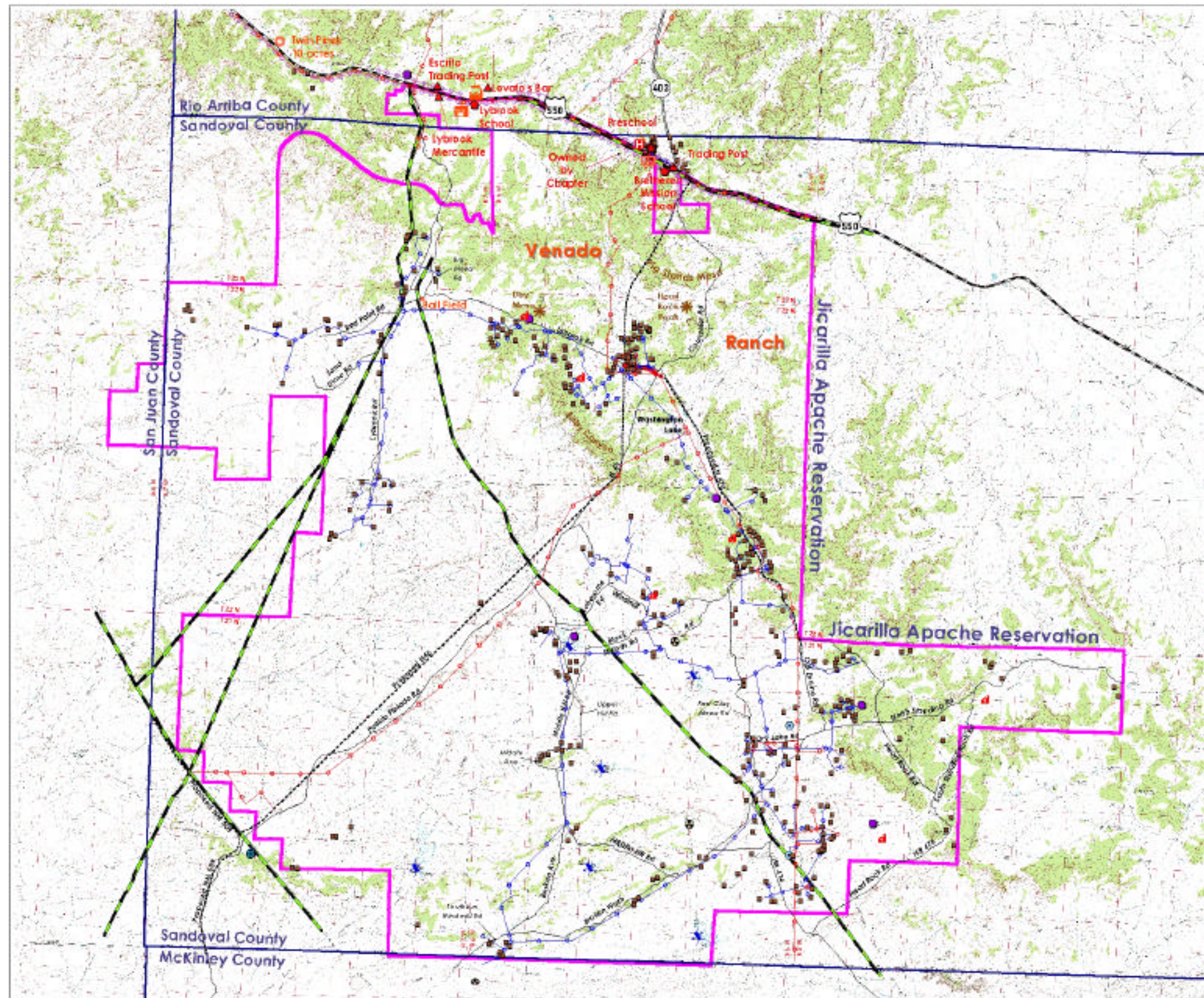
7.7 Other Community Uses

Other community uses proposed by the chapter include:

- Second Community Cemetery to be located with one of the five churches in the community. It should be

located away from any housing. The chapter's 20 acre parcel on the southside of U.S. 550 could be a potential site for a cemetery, although it is rocky.

- A number of churches are located in the community. Future church sites may be set aside near new development areas.



Counselor Existing Land Use

Legend:

- Chapter Boundary
- ★ Chapter House
- Spur Alignment
- Existing Developments
- Homes
- Utilities:**
 - Pipeline
 - Electric Lines
 - Water Lines
- Lagoon
- Tanks
- ⊗ Windmills
- Wells
- Ⓜ Counselor Clinic
- Ⓜ Schools
- Ⓜ Williams Gas Plant
- Ⓜ Lybrook Fire Department
- Ⓜ Churches

Exhibit 18: Existing Land Use Map



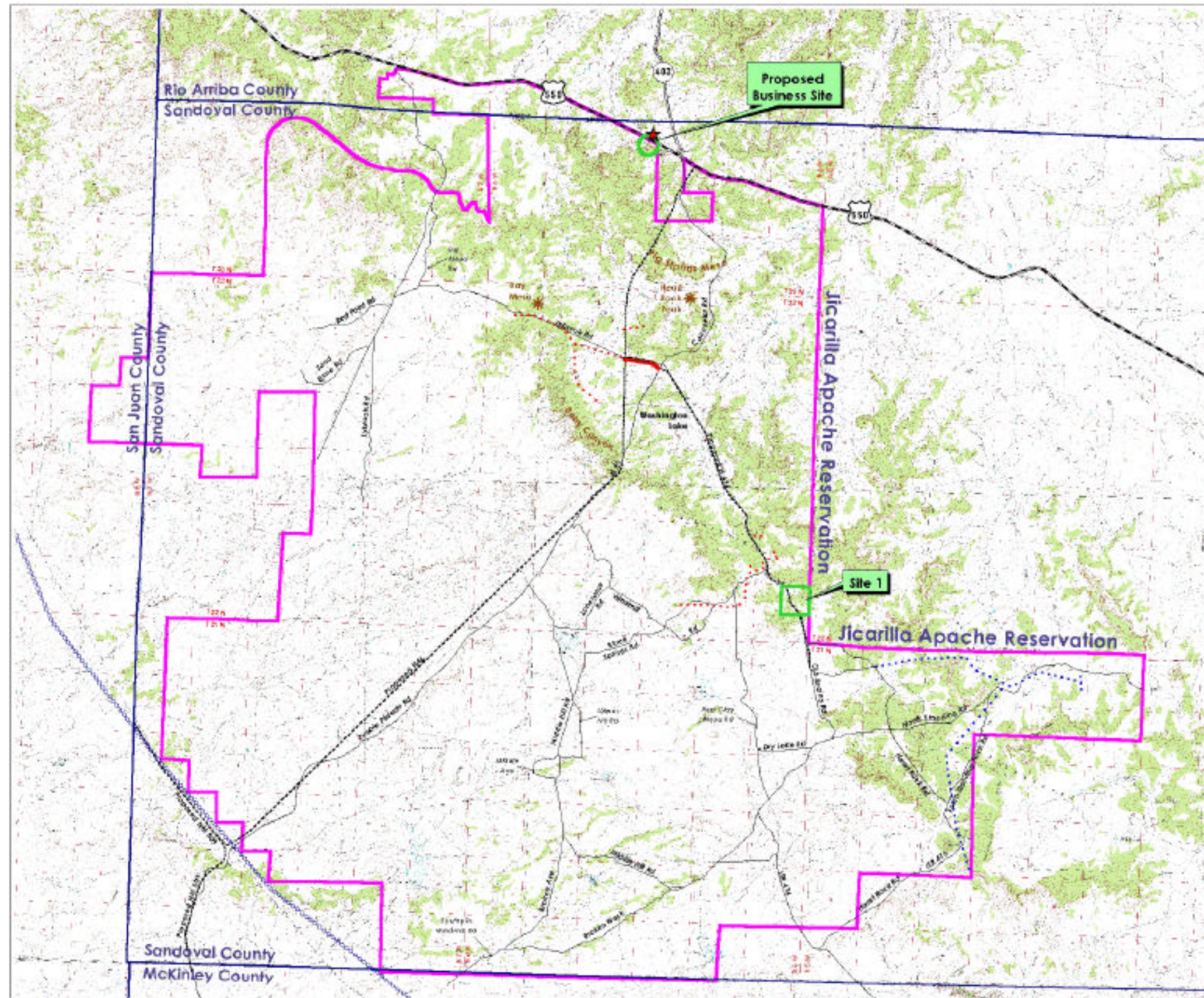


Exhibit 19: Proposed Land Use Map

Exhibit 20: Land Use Chart

Counselor Location	Existing Uses	Acreage	Proposed Uses	Withdrawn
Chapter House Compound	Chapter House Preschool Warehouse	10	<i>Businesses:</i> Retail Restaurants Museum Hotel Gas Station, Auto Repair Rest Area w/ Information Center RV Park Laundromat 24-Hour Truck Stop Convenience Store Tourist Shops & Place for Vendors Casino High Tech Industry	yes
Chapter Land on South side of U.S. 550	Vacant	20	<i>Businesses: (see above list)</i>	yes
Twin Pines site	Scattered houses	10	<i>Businesses: (see above list)</i>	yes
State Land along U.S. 550 in R Arriba County Regional-Pueblo Pintado	Vacant Vacant	640 640	Elementary school High School Satellite Community College	
Clinic	Clinic	ND	Urgent Care Clinic Nursing Home	yes
Apache Corner	Grazing	160	Housing Lagoon New Chapter House/Multi-purpose Center Police/fire substation <i>Business:</i> Retail?	no
Community Cemetery (unidentified site)		ND		no

ND = not determined

C. Infrastructure Analysis

This section describes the existing and needed infrastructure, such as roads and utilities, in the community. It also assesses the proposed housing sites in terms of their need for additional infrastructure.

Average daily traffic (ADT) is a measure of the average number of vehicles that pass through a location along a road in a day.

1.0 Existing and Needed Infrastructure

This portion of the plan describes the existing and needed infrastructure, such as roads and utilities, in the community (shown in Exhibits 18 and 19).

1.1 Transportation Roads

Existing

The principal roads in the community are:

- U.S. 550 - paved four-lane highway (currently under construction). Traffic counts are 2,672 average daily traffic count (ADT) at Counselor Road.
- Counselor Road
- Sandoval County 403
- N474 - Ojo Encino Road (dirt, graded by county). 328 ADT from N46 to Apache Corner, 262 ADT is the 20-year projection. 180 ADT from N474 to county line; 262 ADT is the 20-year projection.
- N46 - Pueblo Pintado Road (dirt, graded by county). 434 ADT; 20-year ADT projection is 645.

Other minor residential roads (all dirt, graded by county):

- Red Point Road
- Sand Dune Road
- Big Mesa Road
- Lybrook Road
- Middle Hill Road
- Lonesome Road
- Windmill Road
- Black Springs Road
- Upper Hill Road
- Middle Avenue
- Red Clay Mesa Road
- Dry Lake Road
- North/South Standing Road
- Heart Rock Road
- Broken Wash Road
- Southern Windmill Road.

Proposed

Road improvements planned are:

- Pave N474 - Ojo Encino Road in 2004.
- Pave N46 - Pueblo Pintado Road in 2005.

Transit

Existing

No bus service exists in the community.

Proposed

Navajo Transit has been running a test bus service from Nageezi to Farmington. It was hoped it could be extended to Counselor and eventually to Cuba and Albuquerque. Currently, ridership has been low and a possibility of cancelling the service has been discussed. Also, planned is bus service from Crownpoint to Pueblo Pintado to Counselor to Farmington/Shiprock.

Airport

Existing

No airport exists in the chapter. The nearest airport is Farmington Municipal Airport.

Proposed

No airport is proposed near Counselor.

1.2 Utilities

Gas

Existing

Williams Company natural gas pipelines run through the chapter. A new pipeline is currently being built along existing right-of-way in the southwest part of the chapter. Safety valves are being installed every 10-15 miles. No individual houses are served, however. Many homes have propane tanks.

Proposed

No individual natural gas service is proposed.

Electric

Existing

The chapter house and housing along U.S. 550 are served by electric power. Power lines run along and near Lybrook Road to serve those homes. Housing along Ojo Encino and Pueblo Pintado Roads is served. Jemez Mountain Electric Cooperative is the power provider for the community.

Proposed

The chapter got a CDBG grant for Jemez Cooperative to

provide power to 16 homes in Middle Hill and near the Lybrook Road area.

Water

Existing

Several areas of the community are served by a community water system including:

- areas along Lybrook Road
- area south of Lybrook Road
- Windmill Road area
- Middle Hill Road area
- areas along Ojo Encino Road.

Areas along U.S. 550, including the chapter house, mission, trading posts, and Lybrook School, are served by a private water company.

Two water storage tanks are located in the chapter, both storing 100,000 gallons. A storage tank is also located near Lybrook school.

Two wells are located in the southeastern part of the chapter.

Proposed

A proposed water line will serve 18 houses in the north and south Standing Road area. A proposed water line would serve 31 houses south of Lybrook.

A Navajo-Gallup Water Supply pipeline branch is proposed to be extended to the Counselor chapter area. The pipeline would run along the outside of the southwest boundary of the chapter. A water tank will also be located there.

Sewer

Existing

All houses and buildings are on septic systems. No community sewer is in place in Counselor. A small lagoon serves the chapter house compound.

Proposed

The chapter compound lagoon is going to be enlarged by two cells to serve the newsenior center facility and other

buildings in the compound. A lagoon must be built to serve the proposed housing site.

Telephone

Existing

Telephone lines run along U.S. 550 and serve the chapter house and a few houses along the highway. None of the interior houses of the community is served by telephone. Telephone service is provided by Valor Telecom. A cellular tower is located on the mesa by the mission on BLM land.

Proposed

No telephone lines are currently proposed.

Solid Waste

Existing

No solid waste transfer station exists in Counselor. The nearest landfill is in Cuba.

Proposed

Three area chapters, Ojo Encino, Torreon, and Counselor, are planning a solid waste transfer station. Navajo Nation Solid Waste and Sandoval County are providing \$7,000 each in matching funds.

2.0 Analysis of Individual Sites

This section assesses the proposed housing sites in terms of their need for additional infrastructure.

Potential Site Development Costs

The presence of expansive soils, those soils that have a high clay content, can significantly increase the cost of development. These types of soils are unstable when saturated and the cost of preparing the soils for development can be extreme.

A soils test is recommended to determine the extent of expansive soil under the site, to determine the bearing capacity of the soil, and to determine the best engineering means towards overcoming limitations.

A drainage study and site development plan are also recommended. It is necessary to prepare these documents so that proper site drainage is ensured. Proper drainage from the site will help prevent future saturation of the soils.

Development costs will need to include the possibility of over-excavation of the expansive soils from the building site and replacement with engineered fill. On average, the cost for excavation is \$3 to \$4 a cubic yard. To replace the removed expansive soil with an engineered fill is \$17 to \$18 a cubic yard. For a house that is approximately 1500 square feet in size, with four feet of expansive soil below the surface, it would cost between \$5,500-\$6,500 to simply prepare the earth for the pouring of the concrete foundation. If the expansive soil extends beyond the four feet, than over-excavation becomes an issues and costs increase.

A second option would be a pier and beam foundation. Rather than use a slab of concrete as the foundation for the house, structural columns would be sunk into the ground until they reached solid bedrock. The columns would then be filled with a steel cage and concrete. The columns are level across the top, usually two to three feet above the ground, and then beams of wood are placed over the columns. The pier and beam foundation is then covered with a sheet of plywood and the framework for the first floor is ready to be built. Pier and beam foundations can at times be more cost effective than excavation. It depends upon the amount of expansive soil that needs to be excavated or over-excavated, the type of clay that is present, the cost of engineered fill in that part of the state and many other factors, some of which will be addressed in a soils test.

Rocky Soils

Rocky soils can easily be dealt with when building a foundation. If the soil is made up of loose rock, removal of the rock and then placement of the foundation on solid ground would be the easiest approach. If the site is solidrock, it is best to build up the ground with a engineered fill so that the anchors can be stable, usually about two feet. Once the concrete slab is poured, it can then be sloped to

insure proper drainage. If the condition of the land is extremely rocky then increase costs of infrastructure by 10%.

General Utility Cost Information

When developing a subdivision, it is more cost-effective to complete all of the earthwork at one time. It allows for larger equipment to be used and s a more effective use of time. When constructing a single unit or scattered units, smaller machines have to be used and work is done more slowly. There are some expenses involved in extending utilities to new housing developments. On average the following are the costs associated with extending utilities:

- Electric - \$2.50 to \$3.50 / foot, depending on provider and site built vs. mobile home
- Water - \$29.00/foot
- Natural Gas - \$26.00/foot
- Fire Hydrants - \$ 2,000/unit
- 10-foot deep manhole every 200 to 300 feet - \$2,000 each
- Meter - \$500 per dwelling unit (in rural areas only)

2.1 Site 1:

Site 1 is located along Ojo Encino Road on the eastern chapter boundary with the Jicarilla Apache Reservation. It is located on 160 acres of tribal trust land (Exhibit 21).

Site Accessibility:

The site is accessible from Ojo Encino Road (NR474). This dirt road is scheduled to be paved in 2004.

Project Utilities Development

Water: A six-inch water line crosses the site on the south side of Ojo Encino Road. An eight-inch line is generally required for fire flow. Fire hydrants should be installed.

Sewer: No sewer service is available on the site. Individual houses will need to provide septic systems. A subdivision-type development will require the construction of a sewer lagoon. A four- to six-acre cell will serve between 20 and 160 homes. A 1,000 foot setback from lagoon is required.

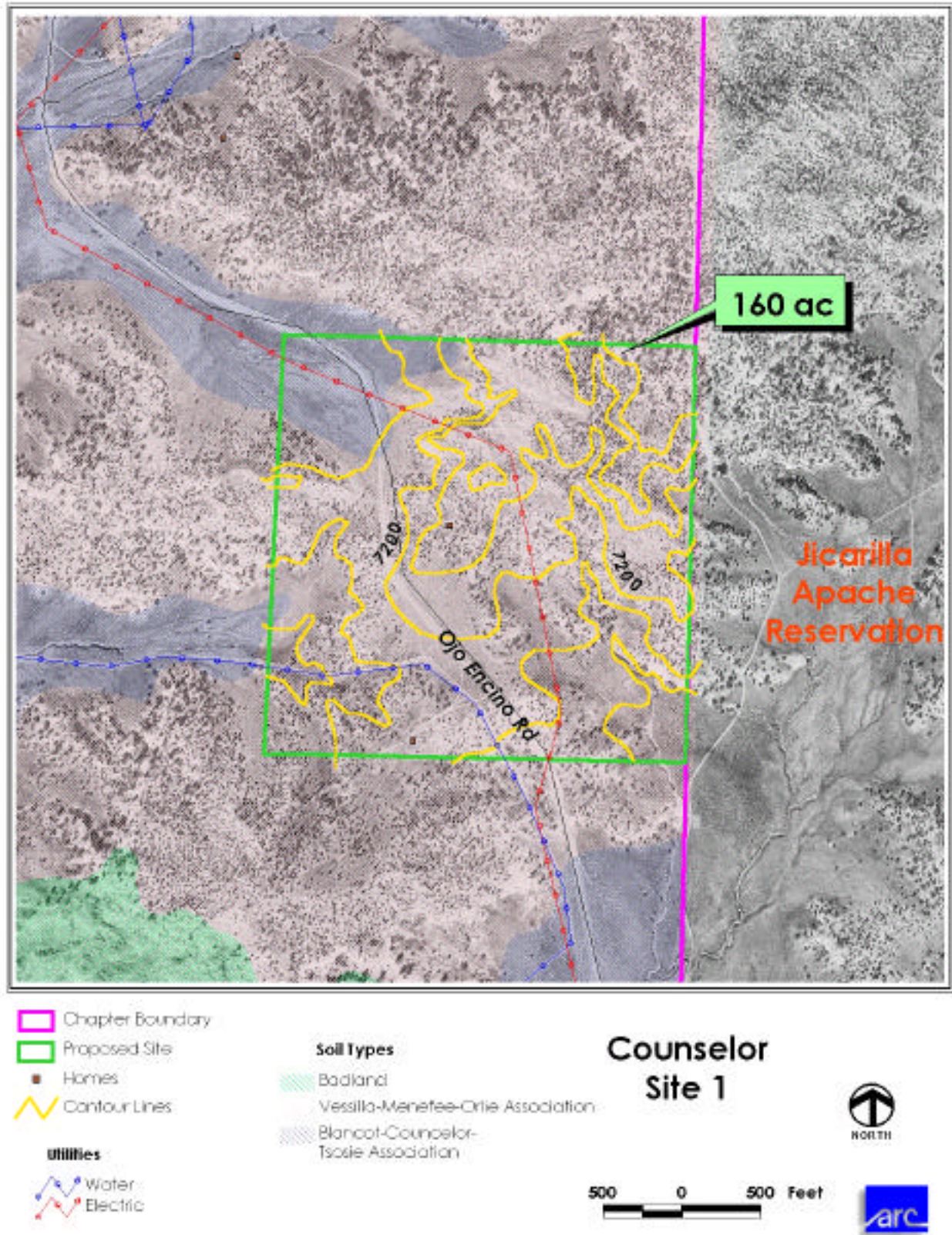


Exhibit 21: Site 1 Utilities

Gas: No natural gas service is available in the area. Individual houses may need to provide propane tanks.

Electrical: A single-phase power line crosses the site.

Telephone: No telephone service is available to the site. The nearest telephone line is 15 miles to the north on U.S. 550. Extensions beyond a half a mile cost \$2.50 per foot.

Special Site Development Requirements

Three small drainages flow out of the site to the southeast, west and northwest. A low ridge exists on the site on which housing has been planned. Care will need to be taken to clear the area of underbrush and some of the juniper/piñon/pine trees to prevent wildfire.

Mixed uses are proposed at the site: housing, a new chapter house and multi-purpose center, and police/fire substation. Infrastructure development should serve all of these uses.

D. Suitability Analysis

1.0 Overview Of Resources

This portion of the plan provides an overview of natural and cultural resources in the Counselor Chapter.

1.1 Natural Resources

Geology/Soils

The Counselor Chapter is situated in portions of Sandoval, Rio Arriba, and San Juan counties in northwestern New Mexico. Grassland and shrubland communities dominate the area, but savanna and woodland communities occur within the higher and more topographically varied portions.

The Chapter lies within the portion of the Colorado Plateau known as the San Juan Basin. The San Juan Basin is a large depositional geologic structure which occurs in northwestern New Mexico. The strata of the San Juan Basin are composed primarily of sandstone, shale, and clay deposits laid down in the Late Cretaceous and early Tertiary periods. During the Late Cretaceous period, the general chapter area was near the western shoreline of a tropical sea. The edge of the sea moved back and forth over time, leaving a variety of depositional strata as well as numerous marine and terrestrial fossils. At the end of the Cretaceous period, the sea finally retreated, and large volumes of sediments were deposited in the San Juan Basin. The rocks and fossils that were deposited during the Late Cretaceous and early Tertiary are of great importance to scientific study of the development of life on Earth.

The Counselor Chapter is within one major geological formation and a portion of another that have historically produced major fossil finds. The San Juan Basin contains some of North America's most significant paleontological deposits. Fossils present in the basin include vertebrates, invertebrates, fossil leaves, palynomorphs (pollen, spores, algae), and petrified wood.

The Eocene San Jose formation, found in the southern third of the area, contains many vertebrate fossils such as turtle shell fragments, crocodile teeth, and garfish scales (Lucas, 1977). The most important fossils are those from primitive mammals such as the hippopotamus-like herbivore *Coryphodon*, the primitive herbivore *Meniscotherium*, the

This sub-section discusses the natural resources of the chapter:

- *Geology/Soils*
- *Groundwater*
- *Surface Water*
- *Vegetation*
- *Wildlife*
- *Threatened and Endangered Species*

primitive horse Hyracotherium (or Eohippus), and small carnivores. Fossils of the San Jose formation have played a central role in the study of early Eocene vertebrate faunas in North America. The first collection was made by E. D. Cope during the Wheeler Geological Survey in 1874, when 25 new species of Wasatchian vertebrates were discovered in the Almagre and Blanco canyons. Although some complete skeletons have been removed, fossil remains of fauna in the San Jose formation are usually fragmentary.

Remains of flora in the San Jose formation are less common, but impressions of leaf fragments, ferns, and angiosperms are possible, along with water plants reflective of the humid, forested region of Eocene time (Lucas et al., 1981).

The Paleocene Nacimiento formation, in which a small portion of the western portion of the Chapter lies, contains some of the best and most abundant fossils of primitive mammals in the world (Kues, 1982). Fossils of turtles (shell fragments), crocodilians (teeth and bones), garfish (scales and vertebrae), freshwater mollusks, and plants are also included in this unit. Of the mammal fossils that have been collected, teeth and jaw fragments and occasionally skulls and partial skeletons have been found. Some 58 species of fossil plants have been found, including figs, palms, laurels, and others representative of swampy humid areas (Lucas et al., 1981).

Landforms

A landform is any recognizable physical feature of the earth's surface that has characteristic shape and is produced by natural causes. Landforms in aggregate are landscapes which may be considered at a wide range of scales. There are several natural landforms within the project area. Some of these landforms are of local significance. Angel Peak is located northwest of the Chapter.

Soils

The major soil associations found within the Chapter lands are: Blancot-Councilor-Tsosie Association, Doakum-Bettonie, Sparank and Vessilla-Menefee-Orlie Association (Sandoval Natural Resources Conservation District, 2001):

- *Blancot-Councilor-Tsosie Association*
“Blancot soils are on valley side slopes. These soils are deep,

The major soil associations found within the Chapter lands are:

- *Blancot-Counselor-Tsosie Association*
- *Doakum-Bettonnie Sparank*
- *Vessilla-Menefee-Orlie Association*

well drained, and moderately slowly permeable. They formed in alluvium derived from sandstone and shale. The surface layer is pale brown fine sandy loam about 2 inches thick. The subsoil is grayish brown and yellowish brown clay loam about 21 inches thick. The substratum to a depth of 60 inches or more is pale brown and light brownish gray sandy loam with thin strata of silty clay loam. These soils form on slight slopes.

Counselor soils are on stream terraces. These soils are deep, well drained, and of moderately rapidly permeability. They formed in eolian sediments and alluvium derived from sandstone and shale. The surface layer is pale brown fine sandy loam about 2 inches thick. The upper 35 inches of the underlying material is pale brown fine sandy loam. The next three inches is pale brown clay loam. The lower part to a depth of 60 inches or more is pale brown sandy loam. These soils occur on steep slopes.

Tsosie consists of a very deep, well drained moderately slowly permeable soils that formed in alluvium derived from shale and sandstone on alluvial fans on valley sides and stream terraces on valley floors. Slopes are 0-5 percent." This soil has light to moderate shrink-swell potential.

- *Doakum-Bettonnie Association*

This unit has deep soils on plateaus. Slopes are 0 to 8 percent. Elevation is 6,600 to 7,000 feet. It is about 55 percent Doakum soils, and 35 percent Bettonnie soils. The remaining 10 percent is components of minor extent.

"Doakum soils are along drainageways on plateaus. These soils are deep, well drained and moderately permeable. They formed in alluvium and eolian material derived from sandstone and shale. The surface layer is light yellowish brown fine sandy loam about 5 inches thick. The subsoil is brown clay loam and sandy clay loam about 19 inches thick. The substratum to a depth of 60 inches or more is very pale brown loam and clay loam." These soils have moderate shrink-swell potential.

Bettonnie soils are on knolls on plateaus. These soils are deep, well drained, and moderately rapidly permeable.

They formed in alluvium and eolian material derived from sandstone. The surface layer is light yellowish brown fine sandy loam about 2 inches thick. The subsoil is brown fine sandy loam and sandy loam about 16 inches thick. The substratum to a depth of 60 inches or more is yellowish brown and pale brown sandy loam."

- *Sparank*

"This unit has deep soils on valley floors. Slopes are 0 to 3 percent. Elevation is 5,500 to 6,400 feet. It is about 82 percent Sparank and similar soils. The remaining 18 percent is components of minor extent.

Sparank soils are on valley floors. These soils are deep, well drained, and very slowly permeable. They formed in alluvium. The surface layer is brown clay loam about 2 inches thick. The upper 22 inches of the underlying material is brown silty clay. The lower part to a depth of 60 inches or more is pale brown and dark grayish brown silty clay and silty clay loam... A hazard of flooding, slow permeability, and gullyng are the main limitations for most uses."

- *Menefee-Vessilla-Orlie Association*

"Menefee soils are on the sides of cuestas. These soils are shallow, well drained, and slowly permeable. They formed in materials derived mainly from shale. The surface layer is light yellowish brown clay loam about 5 inches thick. The underlying material to a depth of 17 inches is light olive brown and light brownish gray clay loam. Shale is at a depth of 17 inches. Limitations of this soil are severe depth to rock and slope and moderate shrink-swell potential.

Vessilla soils are on the tops of mesas and cuestas. These soils are shallow or very shallow, well drained, and moderately rapidly permeable. They formed in material derived from sandstone. The surface layer is light yellowish brown gravelly fine sandy loam about 2 inches thick. The underlying material is light brown gravelly fine sandy loam about 9 inches thick. Sandstone is at a depth of 11 inches. Limitations of this soil are severe depth to rock and slope.

Orlie soils are on valley side slopes. These soils are deep, well drained, and moderately slowly permeable. They formed in alluvium and eolian material derived from shale and sandstone. The surface layer is pale brown loam about 2 inches thick. The subsoil is brown clay loam about 20 inches thick. The substratum to a depth of 60 inches or more is pale brown, and brown silty clay loam and clay loam." Slight to moderate shrink-swell may occur with these soils.

Badland areas are on ridges and side slopes. Badlands are steep or very steep, commonly non-stony, barren land dissected by many intermittent drainage channels. Rudolf potential is very high and geologic erosion is active. Severe depth to rock and slope exists with these soils.

Farmland

According to the Natural Resources Conservation Service, no farmlands are located within the chapter, but grazing leases do exist within areas of the chapter.

Agricultural land may be categorized as prime and unique, or as of statewide and local importance. The Natural Resources Conservation Service, which has jurisdiction over farmlands, defines prime or unique farmlands as those lands whose value is derived from their general advantage as cropland due to soil and water conditions. Farmlands deemed of statewide importance are important to agriculture but exhibit some properties that exclude them from the prime farmland classification.

Air Quality

Section 109 of the Clean Air Act (CAA) (42 U.S.C. 1857-18571, as amended by Public Law 91-604), requires that national primary and secondary ambient air quality standards be established. In New Mexico, the EPA has identified seven Air Quality Control Regions (ACQRs) and has approved, with some exceptions, New Mexico's plan for the attainment and maintenance of the national ambient air quality standards (NAAQS) in these interstate and intrastate regions. The State of New Mexico also has promulgated some ambient air quality standards that are more stringent than the NAAQS.

Portions of Counselor Chapter are located in Sandoval, Rio Arriba, and San Juan counties. Sandoval County is located within State of New Mexico-designated AQCR Number 2, which corresponds to EPA Region 152. Rio Arriba County is located within AQCR Number 3, which corresponds to EPA Region 157, and San Juan County is within AQCR Number 1, which corresponds to EPA Region 014. All three AQCRs have been classified by the EPA as attainment areas, which indicates that ambient air quality meets or exceeds the levels identified in the NAAQS.

Groundwater

Groundwater within Counselor Chapter area is generally reported to be quite deep. The extreme northern end of the Chapter may have water tables less than 200 feet below the surface. The central and southern end of the Chapter may have water tables 200-500 feet below the surface, areas classified as less vulnerable aquifers. Domestic water along US 550 is supplied by the Lybrook Water Users Association for the portion of the Chapter that extends from Counselor to the San Juan County line.

Surface Water

Surface water within the project area includes the storm water flows which result from rain and snow in the area. Most surface runoff in the upland areas is ephemeral, provided by summer thunderstorms. There are no active streams within the Chapter. There are five ephemeral drainages occurring within Counselor Chapter. They are the Alamito Arroyo in the northwestern section, the Canada Alamita in the western section, the Canada Alamosa in the southwestern portion, and the Canada Corrales and Canada Alamos in the southern portion.

All of the drainages within the project area are west of the Continental Divide and ultimately flow into the San Juan River which drains to the Colorado River. Some of the larger drainage systems near the Chapter lands include Canyon Largo, Escrito Canyon and Rincon Largo.

Floodplain/ Flood Hazard/Drainage/NPDES

Executive Order 11988, Floodplain Management, requires that any potential impacts to floodplain areas be studied,

assessed, and identified to reduce the risk of flood loss; to minimize the impact of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by floodplains.

Unincorporated areas of San Juan, Rio Arriba, and Sandoval counties have been mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRM), Community Panels 35043C0025 C, 35043C0125 C, 35043C0100 C, and 35043C 0200 C. The majority of the Chapter lies within the Zone X floodplain boundary, which refers to areas determined to be outside the 500-year floodplain. There are a number of Zone A floodplain boundaries, This zone comprises special flood hazard areas inundated by the 100-year flood, where no base elevations have been determined.

Wetlands

There have been no surveys of wetlands completed within the Chapter, except within the US 550 right-of-way, however a number of wetlands can occur. Wetlands are lands transitional between terrestrial and aquatic systems that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation that is typically adapted for life in saturated soil conditions (Environmental Laboratory, 1987). Specifically, wetlands are defined by three essential characteristics: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Hydrophytic vegetation includes species that require the presence of permanent or semipermanent water for their existence, such as cattails and water lilies. Hydric soils are those flooded long enough during the growing season to develop anaerobic (without oxygen) conditions. Wetland hydrology refers to the availability of water that creates the wetland environment. Wetlands require permanent or periodic inundation at least during the growing season.

Vegetation

The plant communities within the Chapter are primarily Great Basin Desert Scrub intermixed with Desert Grassland and Coniferous Woodland and consist of four general vegetation classifications. They are the big sagebrush,

galleta grass, and blue grama with western wheatgrass and rabbitbrush inclusions; the big sagebrush with western wheatgrass, galleta grass dropseeds, occasional pinyon pine and juniper; the oneseed juniper, pinyon pine, and big sagebrush with western wheatgrass, galleta grass, blue grama grass and dropseed grasses; and the Indian ricegrass and big sagebrush, with dropseed, galleta grass, threeawn grass, blue gram grass, and inclusions of western wheatgrass and rabbitbrush.

Noxious Weeds

Numerous localities of noxious weeds (*Acropitlon repens*, *Cardus nutans*, and others) have been found along US 550 within the Chapter's boundary.

Threatened and Endangered Plant Species

No federal or Navajo listed plants were seen during a general reconnaissance of the potential housing sites, and few are likely to occur within the proposed housing site. However, due to the presence of suitable habitat and/or foraging area within the general area, some federal species of concern and Navajo candidate and threatened species could potentially occur on or near the project site (See Exhibit 22).

Federal, tribal, and state endangered or threatened species are protected by law. Species categorized as state sensitive or review species are not protected by state statute or policy. Species classified as federal candidate or species of concern have no formal protection under federal law.

Wildlife

Characteristic wildlife includes coyote, prairie dog, pocket gopher, blacktailed jackrabbit, burrowing owl, horned lark, meadowlark, horned lizard, and western toad, coyote, kit fox, pronghorn antelope, spotted ground squirrel, prairie falcon, bullsnake, and prairie rattlesnake, scaled quail, sandpiper, woodhouse toad, and garter snake, mule deer, bobcat, porcupine, mountain cottontail, woodrat, scrub jay, junco, Cooper's hawk, brown towhee, and blacktailed rattlesnake.

An **endangered** species is one that is in danger of extinction throughout all or a significant portion of its range.

A **threatened** species is one that is likely to become endangered in the foreseeable future.

A proposed or **candidate** species is one being considered for listing as threatened or endangered.

An **extirpated** species is one that has been eliminated from its range, usually in a specific geographic area.

Threatened and Endangered Species

Threatened and Endangered Species/Species of Concern, Federal and Navajo threatened or endangered species are protected by law. Species from those currently listed as proposed, threatened, and endangered by the U.S. Fish and Wildlife Service (USFWS) and candidate, threatened, endangered and extirpated by the Navajo Fish and Wildlife Department (NF&WD) were reviewed during this planning study.

No federal or Navajo listed animal or bird species were seen during a general reconnaissance of the potential housing sites, and few are likely to occur within the proposed housing site. However, due to the presence of suitable habitat and/or foraging area within the general area, some federal species of concern and Navajo candidate and threatened species could potentially occur on or near the project site (See Exhibit 22).

Federal, tribal, and state endangered or threatened species are protected by law. Species categorized as state sensitive or review species are not protected by state statute or policy. Species classified as federal candidate or species of concern have no formal protection under federal law.

1.2 Cultural Resources

Cultural resources are defined as objects, structures, locations, or natural features that reflect the culture of a human group. Protection of cultural resources is granted under several management procedures, laws, statutes, and amendments, including the National Historic Preservation Act of 1966, as amended; the Archaeological and Historic Preservation Act of 1974; the Archaeological Resources Protection Act of 1979; the American Indian Freedom of Religion Act; and the Native American Graves Protection and Repatriation Act. Cultural resources are evaluated by professionals for their potential of inclusion on the National Register of Historic Places. The criteria used to evaluate these resources is as follows:

"The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and

Exhibit 22: Potential Threatened and Endangered Species Chart

Rare, Threatened, Endangered, Review, or Sensitive Species of Plants Potentially within the Counselor Chapter					
Species	Common Name	Navajo Name	Federal	State	Navajo
<i>Aletes macdougallii</i> ssp. <i>breviradiatus</i>	Macdougall's false carrot		None	Sensitive	None
<i>Aletes sessiliflorus</i>	False carrot		None	Sensitive	None
<i>Astragalus knightii</i>	Knight's milkvetch		USFWS-SOC*	Sensitive	None
<i>Astragalus micromerius</i>	Chaco milkvetch		None	Sensitive	None
<i>Erigeron bistiensis</i>	Bisti fleabane		USFWS-SOC	Sensitive	None
<i>Escobaria missouriensis</i>	Plains pincushion cactus		None	Review	None
<i>Pucinellia pairshii</i>	Parish's alkali grass		USFWS-SOC	Endangered	None
<i>Sclerocactus cloveriae</i> ssp. <i>brackii</i>	Brack's hardwall cactus		SOC	Endangered	None

*Species of Concern

Rare, Threatened, Endangered, Review, or Sensitive Species of Animals Potentially within the Counselor Chapter					
Species	Common Name	Navajo Name	Federal	State	Navajo
<i>Aquila chrysaetos</i>	Golden eagle	Atsà	MBTA*	Protected	Group 3
<i>Athene cunicularia hypugea</i>	Burrowing owl		SOC*, MBTA	Protected	None
<i>Antilocapra americana</i>	Pronghorn antelope	Jàdi	None	Game	Group 3
<i>Bubo virginianus</i>	Great horned owl		MBTA	Protected	None
<i>Buteo jamaicensis</i>	Red-tailed hawk		MBTA	Protected	None
<i>Buteo regalis</i>	Ferruginous hawk	Gini	SOC, MBTA	Protected	Group 3
<i>Buteo swainsonii</i>	Swainson's hawk		MBTA	Protected	None
<i>Cathartes aura</i>	Turkey vulture		MBTA	Protected	None
<i>Circus cyaneus</i>	Northern harrier		MBTA	Protected	None
<i>Falco columbarius</i>	Merlin		MBTA	Protected	None
<i>Falco sparverius</i>	American kestrel		MBTA	Protected	None
<i>Lanius ludovicianus</i>	Loggerhead shrike		SOC, MBTA	None	None
<i>Mustela nigripes</i>	Black-footed ferret	Dlò'ii Lizhinii	Endangered	-----	Group 2
<i>Phrynosoma cornutum</i>	Texas horned lizard		SOC	None	None

* MBTA = Migratory Bird Treaty Act, SOC = Species of Concern

objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (a) are associated with events that have made a significant contribution to the broad patterns of our history; or (b) are associated with the lives of persons significant in our past; or (c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or possess high artistic values, or represent a significant distinguishable entity whose components may lack individual distinction; or (d) have yielded or may be likely to yield information important in history or prehistory."

A cultural resources inventory including previous research and site files check was completed for the potential housing site. No archeological, architectural, or ethnographic resources were identified. However, if the site is chosen for development, a Class III intensive pedestrian survey and ethnographic research must be completed.

2.0 Analysis Of Individual Sites

One potential site has been identified for future development of housing in the chapter. The potential site is shown in Exhibit 23.

2.1 Site 1:

Size: 160 acres

Land Status: Tribal Trust

Geology/Soils

This proposed housing site is located near Apache Corner. The site lies at approximately 7,200 feet above sea level.

Soil types (refer to soils map in Exhibit 23) in the area are classified as being Blancot-Counselor-Tsowie Association, Vessilla-Menefee-Orlie Association and Badland. Some soil limitations may exist. Tsowie, Menefee and Orlie soils have light to moderate shrink-swell characteristics. Counselor

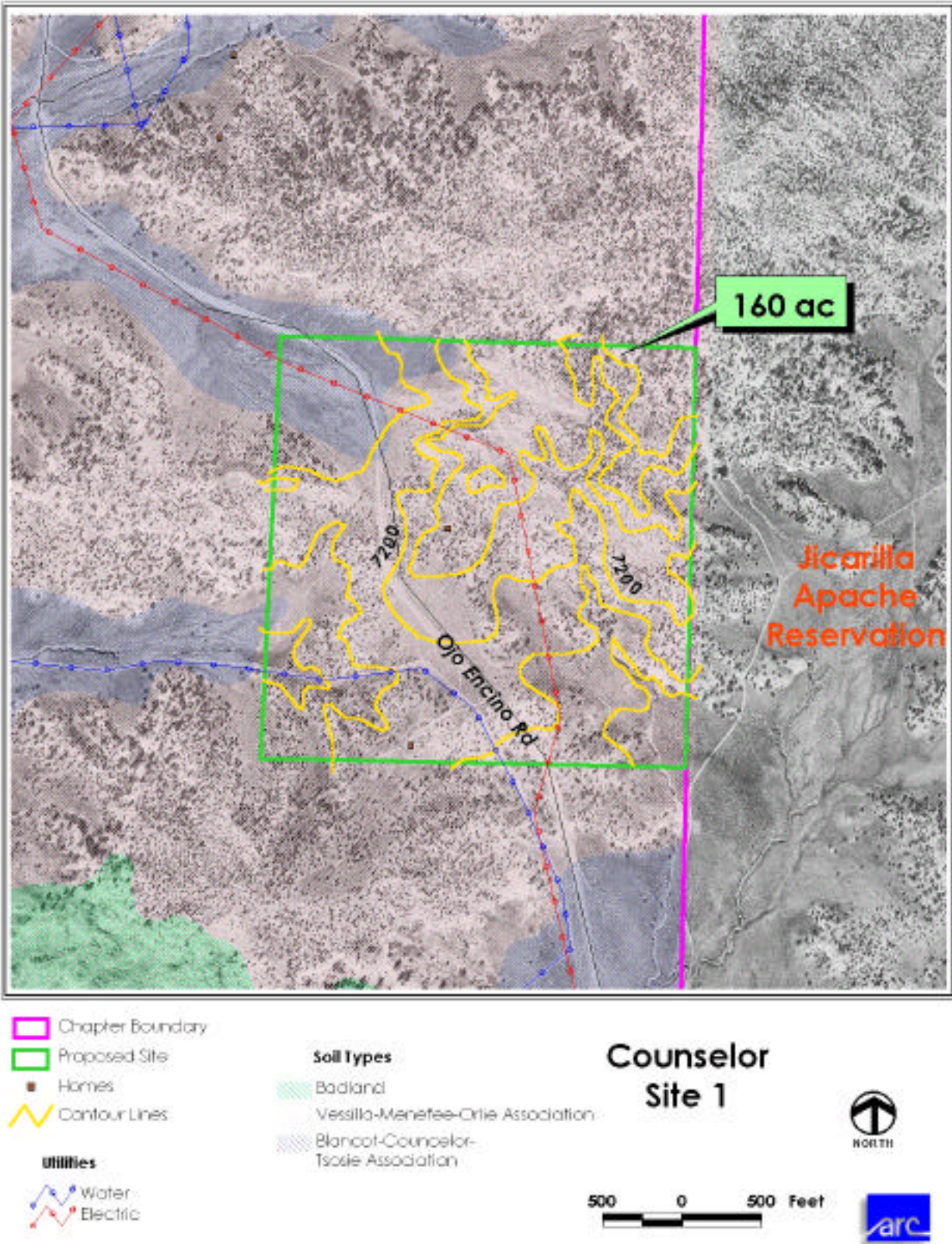


Exhibit 23: Site 1 Soils

and Menefee soils occur on steep slopes and Menefee and Orlie soils have shallow depth to rock.

Surface Water/Drainage

A small wash with a spring runs through the center of the site and should be avoided.

Vegetation

The vegetation types which are likely to occur within the proposed site is Desert Grassland, Great Basin Desert Scrub and Coniferous and mixed woodland.

Wildlife

Wildlife that occupies the study area is expected to be typical of that found in a Savanna/Woodland Habitat. Although no animals were noted during the site visit, it can be expected that coyotes, rabbits, prairie dogs, lizards, snakes, small rodents, ravens and birds of prey, deer could be common residents in the study area.

Environmentally Sensitive Areas

Environmentally sensitive areas can include such areas as designated habitat for threatened and endangered species, important wildlife areas or corridors, riparian areas, and protected plant populations. The Navajo National Heritage Program maintains records of this information.

The following is a list of species that could potentially be affected by the proposed undertaking:

- Golden eagle
- Burrowing owl
- Pronghorn
- Great horned owl
- Red-tailed hawk
- Ferruginous hawk
- Swainson's hawk
- Turkey Vulture
- Northern harrier
- Merlin
- American kestrel
- Loggerhead shrike

- Black-footed ferret
- Texas horned lizard

The following is a list of vegetation that could potentially be affected by the proposed undertaking:

- Macdougal's false carrot
- False carrot
- Knight's milkvetch
- Chaco milkvetch
- Bisti fleabane
- Plains pincushion cactus
- Parish's alkali grass
- Beck's hardwall cactus

The data request and assessment of species of concern is intended to provide a summary of the current information that is on file with the Navajo Nation Natural Heritage Program. The report is not intended to represent an intensive survey of threatened or endangered species within the study area.

Culturally Significant Areas/Traditionally Sensitive Areas

A Class I records check was conducted and found that there are no culturally significant areas present. No traditional cultural properties were identified within the site.

Recommendations

Based on the initial inspection of existing environmental data and the site visit, this site is marginally suited for development.

The site has many steep slopes and major rock formations which will cause the cost of construction to increase significantly. A spring in the area will also need to be avoided when developing the land. It may be more feasible to extend the housing site to the corner post of Apache Corner. That area is much flatter and has less drainage problems. Some drainage engineering would also need to be completed in this area. Scattered housing may work more effectively, but the cost of infrastructure would increase. It is recommended that if this site is chosen, soil testing be completed for compaction and building.

E. Land Use Plan

The Land Use Plan for Counselor chapter is comprised of three sections:

This section contains a description of the recommended housing sites and information on plan implementation.

- E1. Recommendations
- E2. Implementation
- E3. Land Use Map/Site Maps.

E1. Recommendations

This section contains a description of the recommended housing site as shown in Exhibit 24.

As described in the Community Assessment Section, the 2000 U.S. Census identified 405 total housing units in Counselor. Of these, 283 units were occupied. Forty-five vacant houses were used seasonally. The waiting list for Counselor Chapter identifies 89 units needed: 32 homeowner, 40 rental and 17 scattered houses. An additional 27 houses will be needed over the next 10 years to meet needs due to anticipated population growth in the chapter.

Of those households surveyed, a third of residences need repairs to walls and roofs, and a quarter of houses need repairs to foundations. In addition, over 40% of homes don't have complete plumbing, and almost half lack water lines. The majority of houses do not have telephone, and 88% don't have electricity.

NHA is currently planning to build a 30-unit subdivision at Counselor. Units may be both rental and homeownership, although the chapter emphasizes that rental units should be for community members on the waiting list. NHA also has 28 scattered units budgeted for next year, 12 scattered units for this year, and eight scattered units from two years ago, for a total of 48 scattered units. Currently, one NHA scattered-site house is under construction.

The chapter has identified a 160-acre site on tribal trust land for housing. The chapter is in the process of surveying and withdrawing the site. Water and power are available. A road through the site will be paved in the next few years. Based on the initial inspection of existing environmental data and the site visit, this site is marginally suited for development.

The site has many steep slopes and major rock formations which will cause the cost of construction to increase significantly. A spring in the area would also need to be avoided when developing the land. It may be more feasible to extend the housing site south to the corner post of

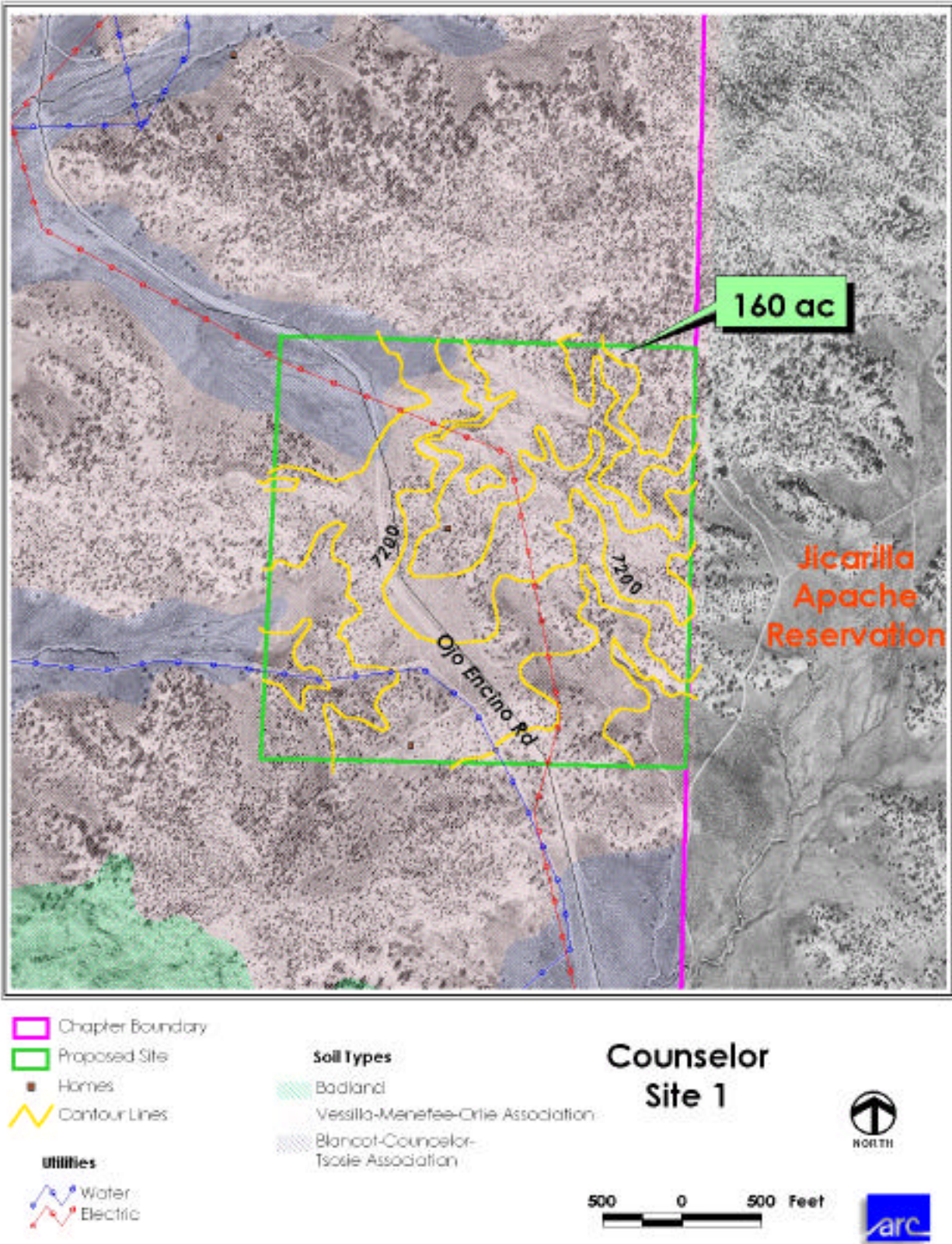


Exhibit 24: Site 1

Apache Corner. That area is much flatter and has less drainage problems. Some drainage engineering would need to be completed in this area also. Scattered housing may work more effectively but the cost of infrastructure would increase. It is recommended that if this site is chosen, soil testing be completed for compaction and building.

E2. Implementation

A number of planning policies have been identified to implement the land use plan. They are described in this sub-section. References to future land use are shown in Exhibit 25.

Counselor Planning Policies

Policy 1: Preserve significant natural and cultural resources

Policy 2: Develop appropriate housing projects

Policy 3: Promote housing to meet the entire community's needs

Policy 4: Create local business opportunities

Policy 5: Identify business locations

Policy 6: Identify community facility locations and funding

Policy 7: Implement land use procedures

Policy 8: Use master Leasing

Policy 9: Continue grazing and revive farming

Policy 10: Define chapter boundaries

Policy 11: Coordinate between chapters

Policy 1. Preserve the scenic landscape, forested mesas, riparian areas, and open spaces of the chapter.

- 1a. Identify sites for potential development that have the least impact on the landscape
- 1b. Prohibit development on steep slopes, or in floodplains or in areas of poor soils, or natural and cultural significance
- 1c. No new roads and no tree cutting on BLM land
- 1d. Limit the height of all structures, including signs
- 1e. Designate protected areas where development is restricted:
 - Heart Rock Peak
 - Pig Stands Mesa
 - Day Mesa
 - Baby Canyon.

Policy 2. Develop housing projects appropriate to the community's needs.

- 2a. Encourage clustered housing development (not necessarily subdivisions)
- 2b. Scattered housing sites should be located in areas near existing/planned infrastructure
- 2c. Streamline homesite approval process
- 2d. Promote the use of alternative technologies:
 - solar
 - windmills
 - cisterns and water collection
 - constructed wetlands
- 2e. Working with NHA, develop design guidelines for new housing areas
 - rural standards for streets
 - plant trees
 - stagger placement of housing
 - lots large enough to accommodate compound housing, corrals, and ceremonial hogans

- underground utilities
 - solar orientation
 - local building materials
- 2f. Work with funding agencies to renovate and repair existing housing.

Policy 3. Promote housing programs that can bring housing within the reach of all community members at all income levels.

- 3a. Types of available housing assistance:
- HUD's Office of Native American Programs (ONAP)
 - Native American Housing Self-Determination Act (NAHASDA)
 - Title VI Indian Tribal Housing Activities Loan Guarantee Program provides loan guarantees for block grant recipients who need additional housing funds but are unable to borrow from other sources.
 - Indian Housing Block Grants - combines all Housing and Urban Development (HUD) funds for Native Americans into one needs based block grant providing a wide range of housing services.
 - Section 184 Program - for Native Americans who want to buy, build or rehabilitate a home in an Indian Area and need mortgage financing.
 - Indian Community Development Block Grant (CDBG) - low/moderate income funding for housing rehabilitation, new construction, purchase of land, and community facilities.

Other funding sources include:

- Housing Assistance Council (HAC) - a non-profit organization, provides technical assistance and training; seed money and some short term loans are available.
- Community Housing Development Organization (CHDO). Eligible Activities: Acquisition and/or rehabilitation of rental housing, New construction of rental housing, Acquisition and/or

rehabilitation of homebuyer properties. New construction of homebuyer properties. Direct financial assistance to purchaser of HOME-assisted housing sponsored or developed by a CHDO with HOME funds.

- Fort Defiance Development Corporation builds housing Navajo Nation-wide.
- US Department of Agriculture (USDA) Rural Housing Services (RHS) - low interest, low down payment loans for new housing, housing rehabilitation, subsidized rental housing
- US Department of Veteran Affairs - low interest, low down payment
- Fannie Mae - conventional loans, Native American loans
- Internal Revenue Service (IRS) - Low Income Housing Tax Credit (LIHTC) program - subsidizes capital investment in newly constructed or rehabilitated rental housing. Can be used to leverage NAHASDA funds
- Federal Home Loan Bank (FHLB) - Affordable Housing Program (AHP) provides subsidies or low interest loans to a housing developer; can leverage costs of construction, rehabilitation, and/or pay down payments, closing costs, etc.

Policy 4. Create opportunities for starting local businesses.

- 4a. Work with the Small Business Administration (SBA)/Regional Business Development Office (RBDO) in Shiprock to:
- provide a chapter sub-office for routine visits by SBA/RBDO agent
 - technical support for obtaining clearances, withdrawals
 - provide entrepreneurial training
 - assist in preparation of business plans
 - direct individuals to financing/business loan programs
 - obtain funding for market feasibility studies from the Navajo Nation's Economic Development Division.

- 4b. Work with the Economic Development Department to streamline the business site lease process. As described in the department's Overall Economic Development Program (OEDP), provide:
 - uniform site lease forms
 - delegation of lease approval authority to the Economic Development Department and eventually to chapters
 - revisions to the Business Site Leasing Act.
- 4c. Identify methods for chapters to start business ventures:
 - master leasing (see policy 8)
 - revenue sharing with chapters
 - partnering with nearby chapters
 - establishing cooperatives to market goods, provide shared spaces to sell and store merchandise.
- 4d. Various small business programs are available including:
 - Federal Omnibus Package of 1993 - allows faster depreciation of machinery and equipment on reservations; 20% tax credit on wages and benefits to Indian employees
 - The BIA Loan Guaranty Program (Indian Financing Act of 1974) for lenders guarantees up to \$500,000 for businesses
 - New Mexico Office of Indian Affairs Native American Initiative - provides technical assistance; offices located in border towns
 - New Mexico provides training incentives and tax credits for manufacturing companies
 - New Mexico Small Business loan program
 - New Mexico Enterprise Zones programs - tax credits
 - Business and Industrial Development Fund (BIDF): Navajo Nation revolving loan fund provides low interest loans of \$10,000 to \$150,000
 - Micro-Enterprise Lending Program (MELP) Navajo Nation micro loan program
 - Accion New Mexico and Westtcorp (for Women): foundations provide micro loans.

Policy 5. Identify locations for business.

- 5a. Businesses should be located in nodes at highway intersections
- 5b. Shared facilities should be set aside for vendors to sell farm products, arts and crafts, and for other small businesses (incubators)
- 5c. Businesses catering to tourism/travelers
- 5d. Businesses providing basic goods/services
- 5e. Identify expired business leases, to be re-issued to new lessees/tenants.

Policy 6. Identify locations and funding sources for community facilities.

- 6a. Land should be set aside for community uses such as parks, preschools, community centers, etc. in all subdivisions
- 6b. Co-locate/share community facilities within chapters
- 6c. Five-Chapter cooperation on new community facilities (see policy 11)
- 6d. Provide technical assistance/grant writing training for chapters
- 6e. Public and private funding sources for community facilities include:
 - Indian CDBG
 - New Mexico Community Foundation
 - McCune Charitable Trust
 - Ford Foundation
 - Revenue Bonds - now used by Kayenta Township, will become available to chapters under the LGA - debt is repaid with sales taxes or lease fees.

Policy 7. Implement the Land Use Plan to serve as a guide for decision makers when approving new development in the chapter.

- 7a. Adopt a permit approval process (performance-based zoning rather than traditional zoning). Possible steps might include:
 - 1. Permit application/development plan is submitted to Land Use Committee (or chapter

Performance-Based Zoning -

Developments are evaluated on a case-by-case basis to ensure that all of the potential impacts are addressed before approval. The land use plan serves as a guide to which uses are appropriate.

A development plan is a site plan showing how the land will be developed:

location of structures, parking, access, signs, utility connections, drainage, etc.

Traditional zoning, in contrast, automatically permits and excludes certain types of uses and developments, without regard to how impacts are addressed. A proposed use not listed as permitted requires that the land be 'rezoned.'

- planner if position exists)
2. Land Use Committee reviews development plans/issues or denies permit
3. Allow service provider agencies to review development plans
 - As part of the withdrawal process, all clearances must be given by appropriate authorities, including archeology and environmentally-sensitive areas.
4. Land Use Committee follows the land use plan and development guidelines in making the decision
5. Land Use Committee may recommend to amend the land use plan, if appropriate
 - Amendments to the land use plan require a public hearing (some more intensive uses, i.e., mining, industry, may also require a public hearing)
7. Chapter officials act as an appeals board
- 7b. Adopt development guidelines that take into account:
 - land status/grazing status
 - proposed improvements: structures, signage, lighting, landscaping, roads, utilities, etc.
 - mixed uses
 - compatibility with surrounding uses; mitigation of noise, light, visibility, if applicable
 - suitability of site: topography, floodplain, soils, vegetation, wildlife, cultural sites
 - housing guidelines (see policy 2e).

Policy 8. Work to withdraw chapter tracts prior to the proposal of new projects.

- 8a. The chapter should withdraw large enough tracts of land to meet the development needs of the community for the next 20 years
- 8b. Chapter tracts should identify land for a variety of uses: residential, commercial and community uses
- 8c. Clearances, leases, etc. should be approved for the entire tract rather than piecemeal. The chapter holds the master lease which then may be sublet to businesses and individuals.

Policy 9. Preserve and revive traditional farming and grazing land uses in the chapter.

- 9a. Work with Natural Resources Conservation District and Navajo Nation Department of Agriculture in using sustainable grazing management techniques
- 9b. Rehabilitate windmills and check dams.
- 9c. Work with BLM and Navajo Fish and Wildlife to restore antelope rangeland
- 9d. Identify and develop farming area in southwestern part of chapter.
- 9e. Preserve the special status of the chapter (under Section 3 Allotment) - Section 3 Allotment allows for grazing of up to 100 free sheep units on BLM land.

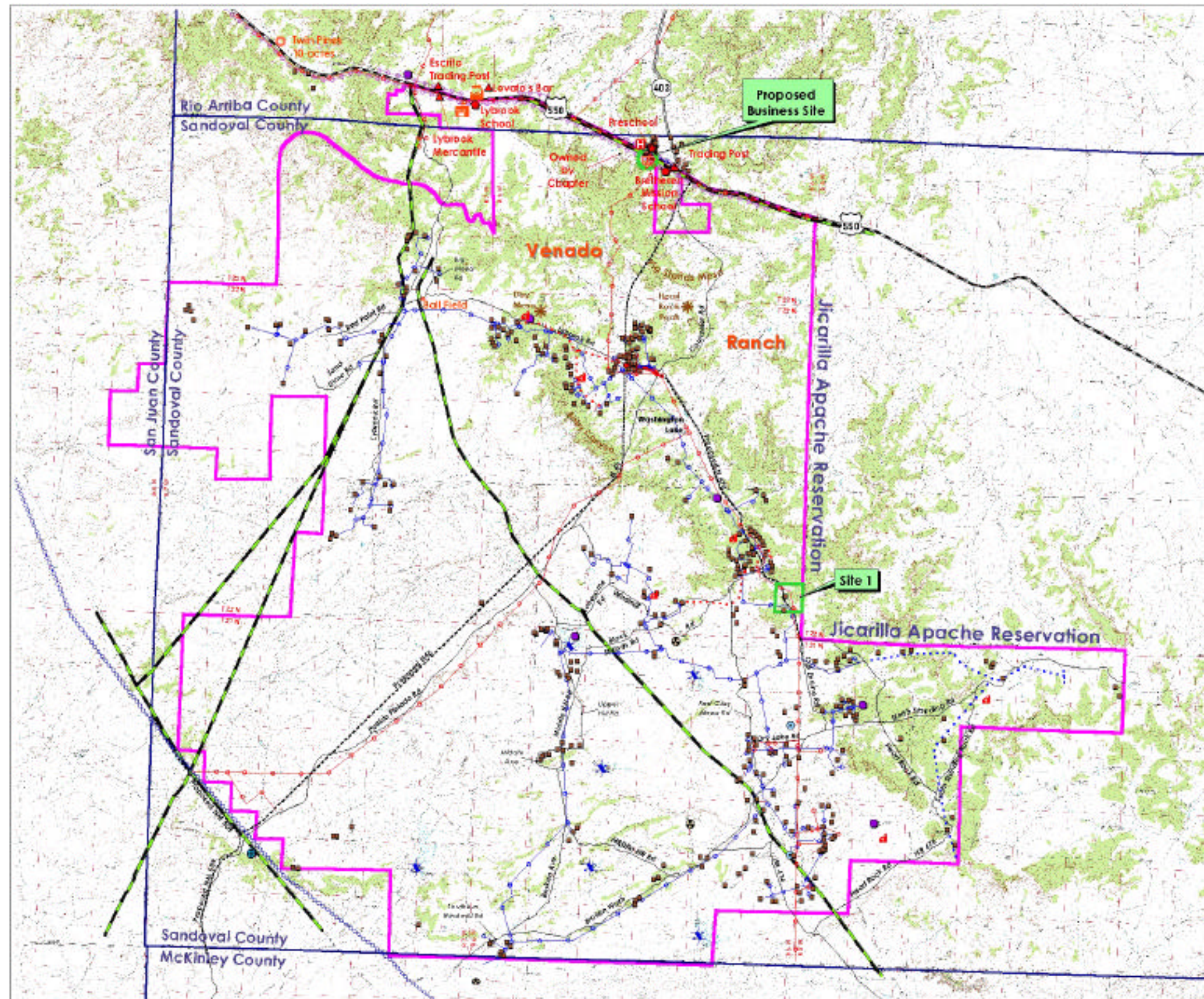
Policy 10. Chapters will define their boundaries and work to consolidate lands.

- 10a. Survey chapter boundaries and obtain legal descriptions
- 10b. Work with BIA, BLM, and state to bring checkerboard lands into trust status through exchanges
- 10c. Implement Land Consolidation Act for allotments.

Policy 11. Cooperate and participate in regional development in the Five Far Eastern Agency Chapters (Counselor, Whitehorse Lake, Torreon/Star Lake, Ojo Encino, and Pueblo Pintado).

- 11a. Participate in a regional planning effort for the five chapters by integrating chapter land use plan into a regional land-use, community and economic development plan for the five-chapter region. Cooperate in the regional planning process as a chapter and as a member of a five-chapter development organization.
- 11b. Work with regional chapters to identify projects that will serve all five chapters but may be located in any of the chapters. Projects may include:

- High School
 - Community College Branch and/or Trades School
 - Hospital
 - Nursing Home
 - Shopping Center
 - Radio Station
 - Youth Programs
 - Job Training Programs
 - Housing Assistance Programs
 - For-Profit Community-Owned Enterprises
 - Other.
- 11c. Collaborate in the implementation of projects that benefit the five-chapter region with the other members of the five-chapter region, including projects that may be most appropriate if located within Counselor chapter boundaries. Use the chapter land-use plan and regional plan to support these projects.
- 11d. Identify projects that will mutually benefit Counselor Chapter and other regional chapter(s) that may be outside the scope of the five-chapter collaboration. Cooperate with other regional chapters to attain needed resources and implement these projects. Use the chapter land-use plan and regional plan to support these projects.
- 11e. Form regional non-profit organization(s) to receive funding for regional projects.
- Work through CWTOP to fund and implement regional projects
 - Form a Community Housing Development Organization (CHDO) with other regional chapters to solicit funding and develop housing in individual chapters, as well as for the collaborative benefit of all five chapters.



Counselor Future Land Use

Legend:

- Chapter Boundary
- ★ Chapter House
- Spur Alignment
- Existing Developments
- Homes
- Proposed Sites
- Utilities:**
 - Pipeline
 - Electric Lines
 - Water Lines
 - Proposed Water
 - Proposed Electric
 - Navajo/Gallup Water Supply Pipeline (proposed)
- Lagoon
- Tanks
- Windmills
- Wells
- H Counselor Clinic
- S Schools
- G Williams Gas Plant
- F Lybrook Fire Department
- C Churches

1 0 1 Miles

Exhibit 25: Future Land Use Map



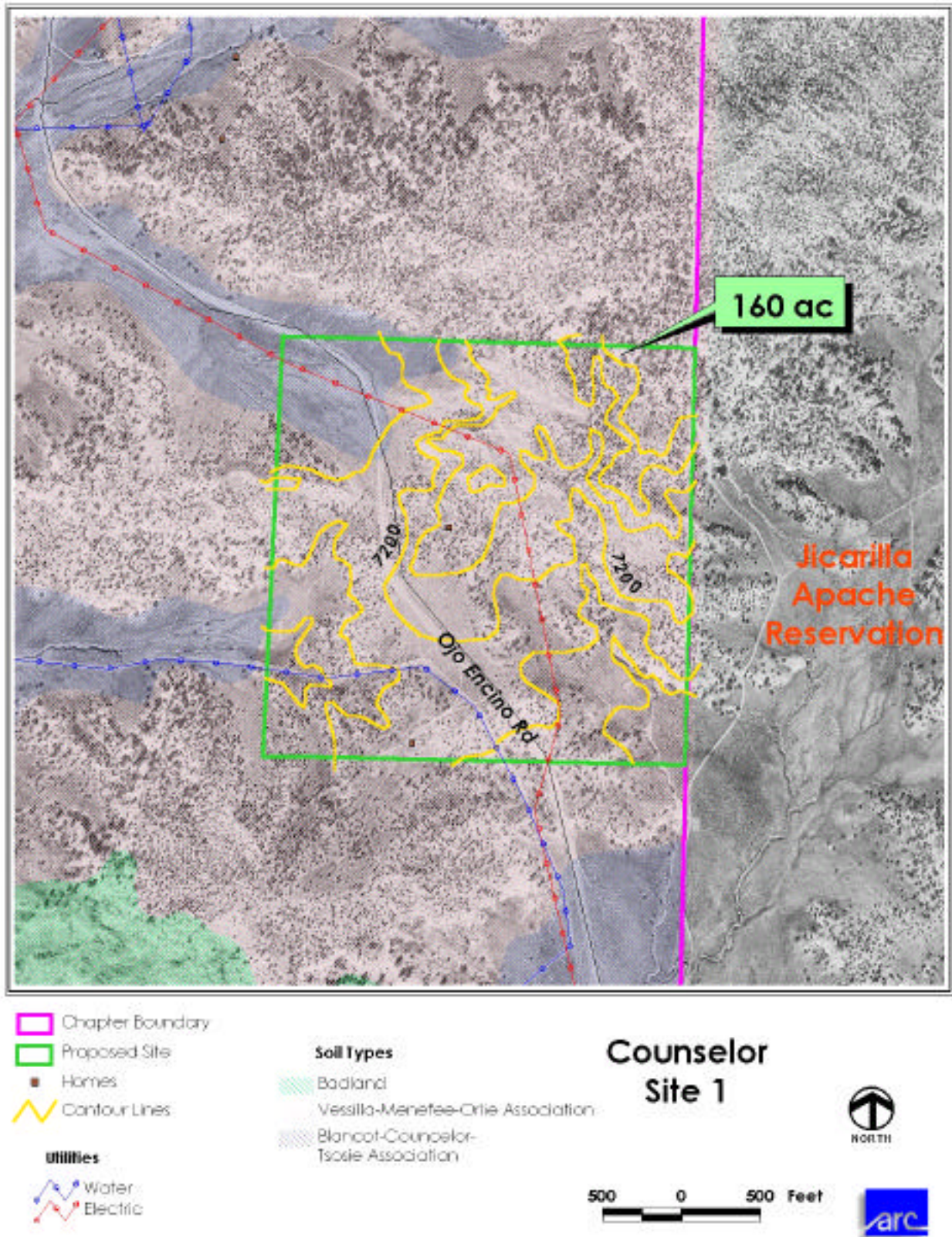


Exhibit 26: Proposed Housing Site

Planning Definitions

Average Daily Traffic: a measure of the average number of vehicles that pass through a location along a road in a day.

Candidate Species: a species being considered for listing as threatened or endangered.

Clustered Housing: housing developed in subdivisions or in a close-together pattern.

CLUP Committee: Comprehensive Land Use Planning Committee - committee designated under the LGA to oversee the development of a land use plan.

Community Facilities: schools, preschools, clinics, chapter houses, police/fire stations, recreation and senior centers, etc.

Development Plan: a site plan showing how the land will be developed: location of structures, parking, access, signs, utility connections, drainage, etc.

Economic Development: training programs, taxes or other incentives designed to retain existing businesses as well as create and/or attract new businesses.

Endangered Species: a species that is in danger of extinction throughout all or a significant portion of its range.

Extirpated Species: a species that has been eliminated from its range, usually in a specific geographic area.

Infrastructure: utilities (water, sewer, gas, electric, telephone, solid waste facilities), and roads.

Land Status: type of land ownership as identified below:
Allotment - Land in legal title of the U.S. held in trust for an individual Indian. The BIA has power over this land and the Tribe has no consent privilege. The land can be leased to non-Indians or sold to a tribe with the consent of an individual.

State Land - Lands in legal title of the State of New Mexico.

U.S. Purchase Lands - Lands purchased from 1915 to 1933 using tribal and government funds. Total purchase in New Mexico is 188,342 acres. These lands are held in trust by the Navajo tribe.

Public Domain - Lands owned by U.S. and administered by the BLM.

2198 Land - BLM land slated to be exchanged with individuals to consolidate Tribal lands.

Administrative Reserve - Lands specifically set aside by executive order or statute to be used as administrative sites for agency or school purposes. Lands in legal title of the U.S. conveyed into trust status. These lands are specifically set aside for administrative uses.

Private Land - Lands with legal title owned by a person or legal entity. These lands belong to individuals or legal entities and are taxable. The owner, who can be Indian, has power over the land.

Land Use Plan: a document identifying existing and future land use. It serves as a guide for the orderly development of a community. It generally contains information about current conditions and needs as well as goals, priorities, and vision for the future. Additionally, it identifies recommendations for implementing the plan. A land use plan is only one component of a **Comprehensive Plan** which may also include components on open space, community facilities, transportation, economic development, etc.

LGA: Navajo Nation Local Governance Act of 1998. Law passed by Navajo Nation that grants local authority over local issues related to:

- Economic development
- Taxation and Revenue Generation
- Bonds

- Infrastructure Development
- Land Use Planning/Zoning/Ordinances
- Federal, State and Tribal Contracts
- Public Safety/ Recreation

The LGA has two requirements:

- The adoption of the Five Management System - accounting, personnel, property, procurement, and record keeping policies and procedures.
- If a chapter wants to “administer land,” it must develop and adopt a comprehensive, community-based land use plan.

NAHASDA: Native American Housing Assistance and Self Determination Act of 1996

NAHASDA reorganized the system of federal housing assistance to Native Americans by:

- Eliminating several separate programs and replacing them with a single program
- Recognizing the right of Indian self-determination and tribal self-governance
- NAHASDA provides for tribal governing bodies to name a tribally designated housing entity (TDHE) to prepare an Indian Housing Plan (IHP)

Participation Process: process adopted by the CLUP committee to ensure community participation and education during the preparation of the land use plan.

Performance-Based Zoning: developments are evaluated on a case-by-case basis to ensure that all of the potential impacts are addressed before approval. The land use plan serves as a guide to which uses are appropriate.

Planning Process: steps involved in preparing a land use plan.

Community Assessment - assess community needs for housing, economic development and community facilities.

Infrastructure Analysis - compile data on transportation and utilities needed for development to occur.

Suitability Analysis - examine the natural and cultural resources and environmental constraints to development.

Scattered Housing: housing developed in a spread-apart pattern.

Service Area: the planning area of a chapter encompassing all lands within it. Chapter members may live outside of this area and still be eligible for chapter programs.

Traditional Zoning: automatically permits and excludes certain types of uses and developments, without regard to how impacts are addressed. A proposed use not listed as permitted requires that the land be 'rezoned.'

Threatened Species: a species that is likely to become endangered in the foreseeable future.

Withdrawn Land: sites for which all clearances and approvals have been given.

Acronyms and Abbreviations

ADT – Average Daily Traffic
AHP – Affordable Housing Program
BIA – Bureau of Indian Affairs
BIDF – Business and Industrial Development Fund
BLM – Bureau of Land Management
CHR – Community Health Representative
CIP – Capital Improvement Program
CLUPC - Community Land Use Planning Committee
CR – County Route
CDBG – Community Development Block Grant
EPA – U.S. or Navajo Environmental Protection Agency
EPA – Eagle Protection Act
ESA – Endangered Species Act
FNLB – Federal Home Loan Bank
GED – General Education Degree
HIP – Housing Improvement Program
HUD – U.S. Department of Housing and Urban Development
I.H.S. – Indian Health Service
IHP – Indian Housing Plan
ISR – Indian Service Route
JMEC – Jemez Mountain Electric Cooperative
LGA – Local Governance Act
LIHTC – Low Income Housing Tax Credit
MELP – Micro Enterprise Lending Program
MBTA – Migration, Bird Treaty Act
NAHASDA – Native American Housing and Self Determination Act
NCC – Navajo Communications Company
NDOT – Navajo Department of Transportation
NEPA – National Environmental Protection Act
NESL – Navajo Endangered Species List
NHA – Navajo Housing Authority
NHS – Navajo Housing Services
NRCS – Natural Resource Conservation Service
NSR – Navajo Service Route
NTUA – Navajo Tribal Utility Authority
OEDP – Overall Economic Development Program
OEH – Office of Environmental Health
ONAP – Office of Native American Programs
RBDO – Regional Business Development Office