

**LEGISLATIVE SUMMARY SHEET**

Tracking No. 0314-18

**DATE:** September 27, 2018

**TITLE OF RESOLUTION:** PROPOSED STANDING COMMITTEE RESOLUTION; AN ACTION RELATING TO RESOURCES AND DEVELOPMENT COMMITTEE, CERTIFYING PINEDALE CHAPTER'S COMMUNITY-BASED LAND USE PLAN WHICH HAS REEVALUATED AND READJUSTED PINEDALE CHAPTER'S FIRST COMMUNITY-BASED LAND USE PLAN

**PURPOSE:** The Chapters are required to reevaluate and readjust their initial Community-Based Land Use Plan every five years. The purpose of this legislation is for the Resources and Development Committee to certify Pinedale Chapter's new Community-Based Land Use Plan which has been reevaluated and readjusted since the Chapter's first Community-Based Land Use Plan was approved.

**This written summary does not address recommended amendments as may be provided by the standing committees. The Office of Legislative Counsel requests each Council Delegate to review each proposed resolution in detail.**

PROPOSED STANDING COMMITTEE RESOLUTION  
23<sup>rd</sup> NAVAJO NATION COUNCIL—Fourth Year, 2018

INTRODUCED BY

Primary Sponsor

TRACKING NO. 0314-18

AN ACTION

RELATING TO RESOURCES AND DEVELOPMENT COMMITTEE, CERTIFYING  
PINEDALE CHAPTER'S COMMUNITY-BASED LAND USE PLAN WHICH HAS  
REEVALUATED AND READJUSTED PINEDALE CHAPTER'S FIRST  
COMMUNITY-BASED LAND USE PLAN

BE IT ENACTED:

SECTION 1. AUTHORITY

- A. The Resources and Development Committee, pursuant to 26 N.N.C. §2004(D)(2) shall certify community-based land use plans.
- B. Pursuant to 26 N.N.C. §2004(D)(2), "Every five years the plan shall be reevaluated and readjusted to meet the needs of the changing community" and such readjustment is subject to the certification of the Resources and Development Committee of the Navajo Nation Council.
- C. Pursuant to 26 N.N.C. § 2004 (B), "Community Based Land Use Plan. The chapter, at a duly-called chapter meeting shall by resolution, vote to implement a community based land use plan, after the CLUPC has educated the community on the concepts, needs, and process for planning and implementing a community based land use plan. The community based land use plan shall project future community land needs, shown by location and extent, of areas identified for

1 residential, commercial, industrial, and public purposes. The land use plan shall  
2 be based upon the guiding principles and vision as articulated by the community;  
3 along with information revealed in inventories and assessments of the natural,  
4 cultural, human resources, and community infrastructure; and, finally with  
5 consideration for the land-carrying capacity. Such a plan may also include the  
6 following: 1. An open space plan which preserves for the people certain areas to  
7 be retained in their natural state or developed for recreational purposes. 2. A  
8 thoroughfare plan which provides information about the existing and proposed  
9 road network in relation to the land use of the surrounding area. 3. A community  
10 facilities plan which shows the location, type, capacity, and area served, of  
11 present and projected or required community facilities including, but not limited  
12 to, recreation areas, schools, libraries, and other public buildings. It will also  
13 show related public utilities and services and indicate how these services are  
14 associated with future land use.”

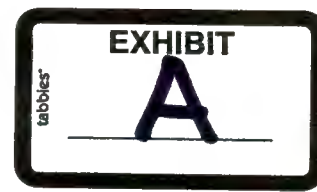
## 15 16 **SECTION 2. FINDINGS**

- 17 A. Pursuant to Committee Resolution TCDCJY-22-05, the Transportation and Community  
18 Development Committee (predecessor to the Resources and Development Committee;  
19 CO-45-12) approved the Pinedale Chapter’s Community-Based Land Use Plan in 2005.  
20 B. Pursuant to Pinedale Chapter Resolution PDC-09-18-203, attached as **Exhibit B**,  
21 the Pinedale Chapter approved the Community-Based Land Use Plan which is  
22 attached as **Exhibit A**.  
23 C. The Resources and Development Committee of the Navajo Nation Council finds  
24 it in the best interest of the Navajo Nation to certify the Pinedale Chapter’s  
25 Community-Based Land Use Plan which has been reevaluated and readjusted to  
26 meet the needs of the changing community.

## 27 28 **SECTION 3. Certification of Pinedale Chapter’s Reevaluated and Readjusted** 29 **Community-Based Land Use Plan** 30

- 1 A. The Resources and Development Committee of the Navajo Nation Council hereby  
2 certifies the reevaluated and readjusted Pinedale Chapter's Community-Based  
3 Land Use Plan, attached hereto as **Exhibit A**.
- 4 B. Certification of this Community-Based Land Use Plan shall not delineate adjacent  
5 chapter boundaries. Any chapter disputes rest solely with the Courts of the  
6 Navajo Nation.





# PINEDALE CHAPTER COMMUNITY LAND USE PLAN

Titus Nez, Community Services Coordinator



# Tó Béełhwiisgání

# Acknowledgements

## Pinedale Chapter Officials

Raphael Martin, President

Clara J. Daye, Vice-President

Dorothy Harjo, Secretary/Treasurer

Loren Cooke, Land Board Member

## Community Land Use Planning Committee

Willie Norton, President

Joan Miller, Vice-President

Louise Mariano, Secretary

Lawrence T. Morgan, Member

Clara Harry, Member

## Administration Team

Titus J. Nez, Community Services Coordinator

Laverna Holtsoi, Accounts Maintenance Specialist

Ruby Tsosie, Office Aide II

Jonathan Begay, Administrative Assistant

## *Prepared by:*

Titus Nez for Pinedale Chapter  
P.O. Box 03  
Churchrock, New Mexico 87311  
[tnez@navajochapters.org](mailto:tnez@navajochapters.org)

In a collaborative effort with the Pinedale Chapter Officials, Administration and Community Land Use Planning Committee. We are one community, one voice and one direction.



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**RESOLUTION OF THE PINEDALE  
COMMUNITY BASED LAND USE PLANNING COMMITTEE**

**ACCEPTING AND APPROVING THE CBLUPC 2018 MANUAL FOR RECERTIFICATION FOR USE OF  
DEVELOPMENT OF PINEDALE CHAPTER COMMUNITY**

**WHEREAS:**

1. The Community Based Land Use Committee have been established by Pinedale Chapter in accordance to Navajo Nation Title 26, section 2004 (B), (C), (D), and (E); and
2. The Pinedale Chapter have appointed and authorized the CBLUPC to immediately began process for re-certification of the Land Use Manual of 2018; and
3. The Navajo Nation Council Resource and Development Committee have reviewed and approved the initial land use plan from July 07, 2005; and
4. The Pinedale CBLUPC and the Administration Staff to take the lead and begun working on the re certification of the manual; and
5. The Pinedale CBLUC have conducted work session, and public hearing (2), and performed surveys with the community residents to serve as "census" for developing sustainable plans; and
6. The Pinedale CBLUPC have to present the 2018 manual to the current Resource and Development Committee for recertification and re-authorization for the next five (5) years; and
7. The Pinedale CBLUPC have reviewed, amended and recommends to the Pinedale Chapter for approval of this foregoing 2018 manual.

**NOW THEREFORE IT BE RESOLVED THAT:**

1. The Pinedale Chapter to review and approve the 2018 Community Based Land Use Planning Committee working manual for next 5 years.
2. The Pinedale Chapter recommends to approve the plan to the Pinedale Chapter and the Navajo Nation Resource and Development Committee.

**CERTIFICATION**


We, the duly undersigned have discussed the forgoing matter at a duly called meeting with a said quorum on this 5<sup>th</sup> day of September, 2018 at the Pinedale Chapter in Pinedale, (Navajo Nation) New Mexico with 04 in favor, 00 opposed and 01 abstaining.


Motion by: Lawrence T. Morgan

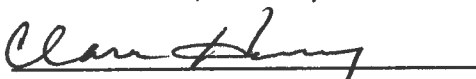
Seconded by: Joan Miller

  
Willie Norton, President

  
Joan Miller, Vice-President

  
Louise Mariano, Secretary

  
Lawrence T. Morgan, Member

  
Clara Harry, Member

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## 2 INTRODUCTION

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This plan is known as “Pinedale Chapter Community-based Land Use plan”, as adopted by the Pinedale Chapter through resolution no. \_\_\_\_\_ and certified by the Resource and Development Committee of the Navajo Nation Council. This plan is a full revision of the Final Report plan created in 2005.

The purpose of this plan is required under Navajo Nation Tribal Code 26, Section 2004. This plan will emphasize the past, present and future of Pinedale Chapter and its surrounding communities with authority vested within this act.

This Community-based Land Use Plan is an official document approved by the Pinedale Chapter community members through resolution. It will serve as a policy guide for all land use development and assist in future growth for the community. This document is a working document and will continue to change constantly.

### 2.1 MISSION STATEMENT

To develop and formulate infrastructure (i.e. agricultural, economic, industrial, and social development) and provide opportunities for the younger generation to carry on public and private land use, resources management, and future preservation of the environment and cultural assets

### 2.2 OUR VISION

We envision a detailed land use planning organization with an effective leadership within the next five years by:

1. Re-naming the Pinedale Community-Based Land Use Planning Committee and establishing the Pinedale Community Development Committee
2. Establish, plan, and construct Rainbow Falls Cemetery, Sounding Wells Park and To Beehwiisgani historical marker
3. Withdrawing land in accordance to our approve land use plan
4. Continue to increase land base for the community (State, Fee, BLM, Executive-order, Private and Land-buy back areas)
5. Continue to work closely with the chapter and when it becomes local governance certified under Navajo Nation Code (NNC) 26 to ensure both documents are compatible
6. Creating a framework for a Zoning ordinance and other ordinances
7. Partnering with the Navajo Nation Division of Transportation to implement the approved Community Thoroughfare Plan
8. Approving and issuing land for housing, economic, industrial and public/infrastructure development (communication tower, solar/wind turbine farm, farming, electric/water easement, mobile home park, waste disposal, water tank, cemeteries and additional development)



## 2.3 GOALS AND OBJECTIVES

According to our approved Strategic plan, our goals and objectives are listed as follows:

### 2.3.1 Land Use Planning

#### 2.3.1.1 Goal #1 – Re-develop our Plan of Operation & name

| Objective:   | Assignment  | Begin Date                | Deadline                  |
|--|---|---------------------------|---------------------------|
| Conduct a worksession to review Plan of operation and make amend changes                                   | CLUPC President & members                               | FY 2019 – Qtr. 1 October  | FY 2019 – Qtr. 1 November |
| Present Plan of Operation to CLUPC for favorable consideration   | CLUPC members, Chapter Officials, PDC Community members | FY 2019 – Qtr. 1 November |                           |
| Introduce supporting/adopting resolution for consideration of POO revisions by Pinedale Chapter membership |   |                           |                           |

#### 2.3.1.2 Goal# 2 – Withdraw lands according to approved Community Land Use Plan

| Objective:   | Assignment                                      | Begin Date               | Deadline |
|--|---|--------------------------|----------|
| Review land status and formally approve supporting resolution                                    | CLUPC   | FY 2019 – Qtr. 2 January |          |
| Procure services to hire consultant to conduct land analysis, survey and archeological reporting | CLUPC, Chapter Administration, Hired Consultant | FY 2019 – Qtr. 2 March   |          |
| Present supporting resolution for consideration to Pinedale Chapter membership                   | CLUPC, Chapter Officials, PDC community members | FY 2019 – Qtr. 4 July    |          |

#### 2.3.1.3 Goal# 3 – Continue to increase land base for the community (State, Fee, BLM, Executive-Order, Private and Land Buy-back areas)

| Objective:   | Assignment         | Begin Date       | Deadline |
|--|--------------------|------------------|----------|
| Identify land status that are not: Navajo Tribal Trust land within the Pinedale Chapter community service area | CLUPC              | FY 2019 – Qtr. 4 |          |
| Meet with landholder owners and began discussing land transfers  | CLUPC, land owners | FY 2020 – Qtr. 1 |          |
| Develop land use planning for each land transferred back to chapter  |                    | FY 2020 – Qtr. 2 |          |

#### 2.3.1.4 Goal# 4 – Continue to work closely with the chapter and when it becomes local governance certified under Navajo Nation code (NNC) 26 to ensure both documents are compatible

| Objective:  | Assignment                        | Begin Date | Deadline |
|---|-----------------------------------|------------|----------|
| Work with chapter administration on projects relevant to community land use | CLUPC, CSC                        | On-going   |          |
| Attend chapter worksession related to LGA review and development            | CLUPC, CSC/AMS, Chapter officials | On-going   |          |



**2.3.1.5 Goal#5 Create framework for Zoning ordinance and other ordinances**

| Objective:  | Assignment              | Begin Date       | Deadline |
|---|-------------------------|------------------|----------|
| Research different zoning ordinances within the Navajo Nation, cities, County and State | CLUPC, CSC              | FY 2020 – Qtr. 3 |          |
| Hold CLUPC worksession and create a draft policy on Zoning ordinance                    | CLUPC, CSC              | FY 2020 – Qtr. 3 |          |
| Approval process for Zoning ordinance   | CLUPC, CSC, NN DOJ, PDC | FY 2020 – Qtr. 4 |          |

**2.3.1.6 Goal#6 – Partnering with Navajo Nation Division of Transportation to implement the approved Community Thoroughfare Plan**

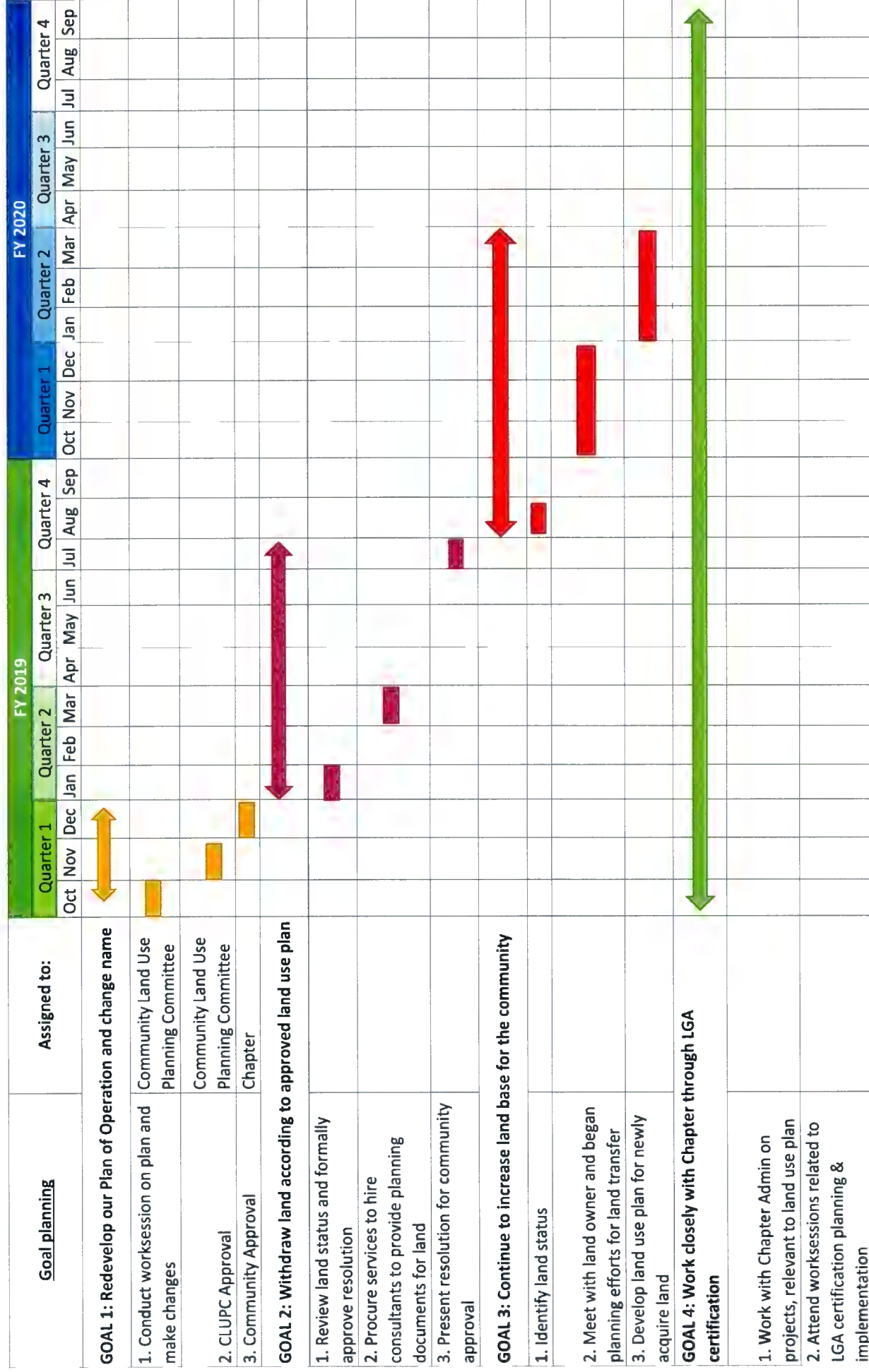
| Objective:   | Assignment        | Begin Date       | Deadline |
|--|-------------------|------------------|----------|
| Meet with NNDOT and discuss approved community Thoroughfare Plan | CLUPC, NNDOT      | FY 2021 – Qtr. 1 |          |
| Create MOA/MOU between PDC and NNDOT on partnership              | CLUPC, PDC, NNDOT | FY 20121– Qtr. 2 |          |
| Implement Thoroughfare Plan                                      | CLUPC, NNDOT, PDC | FY 2021 – Qtr. 3 |          |

**2.3.1.7 Goal #7 - Approving and issuing land for housing, economic, industrial and public/infrastructure development (communication tower, solar/wind turbine farm, farming, electric/water easement, Mobile Home Park, waste disposal, water tank, cemeteries and additional development)**

| Objective:   | Assignment                       | Begin Date       | Deadline |
|--|----------------------------------|------------------|----------|
| Research Kayenta model on approving own land usage                       | CLUPC                            | FY 2020 – Qtr. 2 |          |
| Begin communication with Navajo Nation Council in possible pilot project | CLUPC, Chapter, Council Delegate | FY 2020 – Qtr. 3 |          |



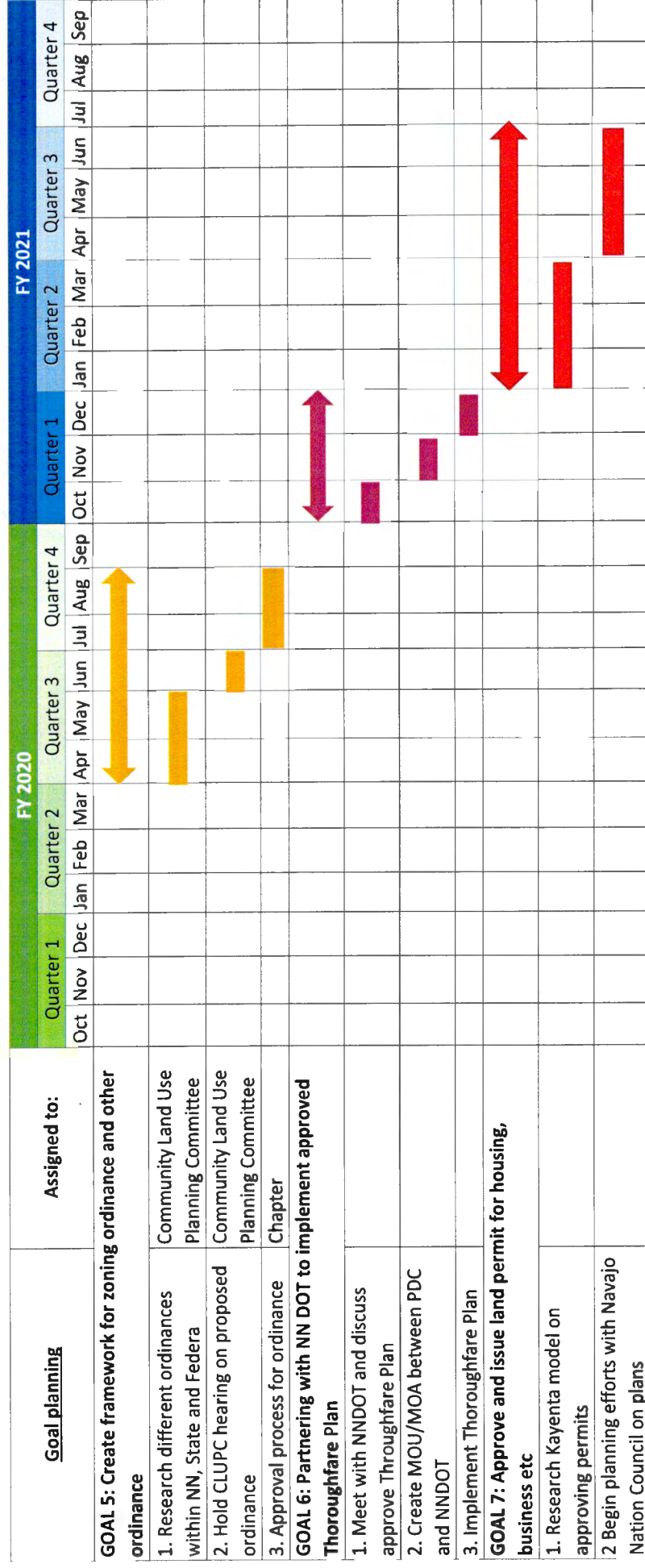
## GANNT CHART PLANNING FOR COMMUNITY LAND USE PLANNING COMMITTEE





## PINED

## GANNT CHART PLANNING FOR COMMUNITYLAND USE PLANNING COMMITTEE



## 2.4 RAINBOW FALLS CEMETERY

Project start date: November 1, 2018

Rainbow Falls Cemetery will be located about 2.5 miles north of Pinedale Chapter in the Rainbow Canyon area. The Pinedale Chapter Officials, Administration and CLUPC will work in collaborative effort to plan, design and construct a community cemetery with a total of 4 acres.

Proposed amenities: fenced property, access road and landscape.

## 2.5 SOUNDING WELL PARK

Project start date: November 1, 2018

Sounding Well Park will be located about 1.5 miles south of Pinedale Chapter near the historic old Pinedale Chapter building. The Chapter Officials, Administration and CLUPC will work in collaborative effort to plan, design and construct a community cemetery with a total of 3 acres.

Proposed amenities: Picnic table, arbor, benches and gravel parking.

Short-term planning: Basketball court, volleyball court, walking/hiking/bike trail and playground.

Long-range planning: paved parking, paved access road, veteran memorial, expanded picnic area, permanent restroom facilities and plaza.

## 2.6 TO BEEWHIISGANI HISTORICAL MARKER

Project start date: February 2019

The Tobeewhiisgani Historical marker will located old To Gani well, historic location/landmark of well. The well is permanently closed to public use since the early part of the 2000's. Community members expressed concerns to ensure the well has historic significants for future generations to visualize early hardship of community sustainability.

Proposed amenities: Historical marker

Long-term planning: gravel parking lot, plague and access road.



## 2.7 COMMITTEE IMPLEMENTATION PLAN

### 2.7.1 Introduction

The implementation plan identifies specific actions that the Pinedale Community Land Use Planning Committee should take to further their actions in community, economic, expansion and development of the community.

| Time Frame                |                             |                         |          | Action  |
|---------------------------|-----------------------------|-------------------------|----------|---|
| Short Term<br>(1-2 Years) | Intermediate<br>(3-5 Years) | Long Term<br>(5+ Years) | On Going |   |
|                           |                             |                         |          | Create Land Development Standards to be consistent with CLUPC manual                            |
|                           |                             |                         |          | Develop a Zoning Ordinance for designated land use recommendation sites                         |
|                           |                             |                         |          | Create regional partnership to build economic hub with neighboring Chapters                     |
|                           |                             |                         |          | Annex nearby areas that have direct chapter affiliation for direct services                     |
|                           |                             |                         |          | Organize study group to implement 50 year plan  |
|                           |                             |                         |          | Acquire Foutz land with collaboration with the Navajo Land Department and Navajo Nation Council |
|                           |                             |                         |          | Implement Chapter's Infrastructure Capital Improvement Plan                                     |



## 2.8 TITLE 26 AUTHORITY

The Navajo Nation Council passed “Navajo Nation Local Governance Act” Leg. No. CAP-34-98 Enacted April 20, 1998 and signed by Former President Thomas Atcitty.

### According to Section 2004 B.

“The Chapter, at a meeting duly-called chapter meeting, shall by resolution, vote to implement a community based land use plan, after the CLUPC has educated the community on the concepts, needs, and process for planning and implementing a community based land use plan. The community based land use plan shall project future community land needs, shown by location and extent, of areas identified for residential, commercial, industrial, and public purposes. The land use plan shall be based upon 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; and, finally with consideration for the land-carrying capacity. Such a plan may also include, the following:

1. An open space plan which preserves for the people certain areas to be retained in their natural state or developed for recreational purposes.
2. A thoroughfare plan which provides information about the existing and proposed road network in relation to the land use of the surrounding area.
3. A community facilities plan which shows the location, type, capacity, and area served, of present and projected or required community facilities including, but not limited to, recreation areas, schools, libraries, and other public buildings. It will also show related public utilities and services and indicate how these services are associated with future land use.

## 2.9 ORIGINAL INTENT OF PLAN

The original intent of the Pinedale Chapter Land Use Plan Manual was created through NAHASDA (Native American Housing Assistance and Self Determination Act of 1996). NAHASDA provided grants to the Navajo Nation to assist all 110 chapters to create a land use plan for potential housing development and land use planning

CLUPC at the time recommended 3 potential housing development sites; however due to certain findings they were unable to begin planning & construction. Since the original approval of the plan, there have been economic growth and changes within the land use landscape.

## 2.10 PLANNING PROCESS - PARFAI

The Pinedale Chapter Community Based Land Use Planning Committee begin its planning initiative in January 2018 collaborating with the Chapter Officials and Administration. Flowchart (Figure 1 Planning Process for Pinedale CLUPC) refers to the process will take to get the plan draft, reviewed, finalized, approved and implemented.



## PLANNING PROCESS FLOWCHART

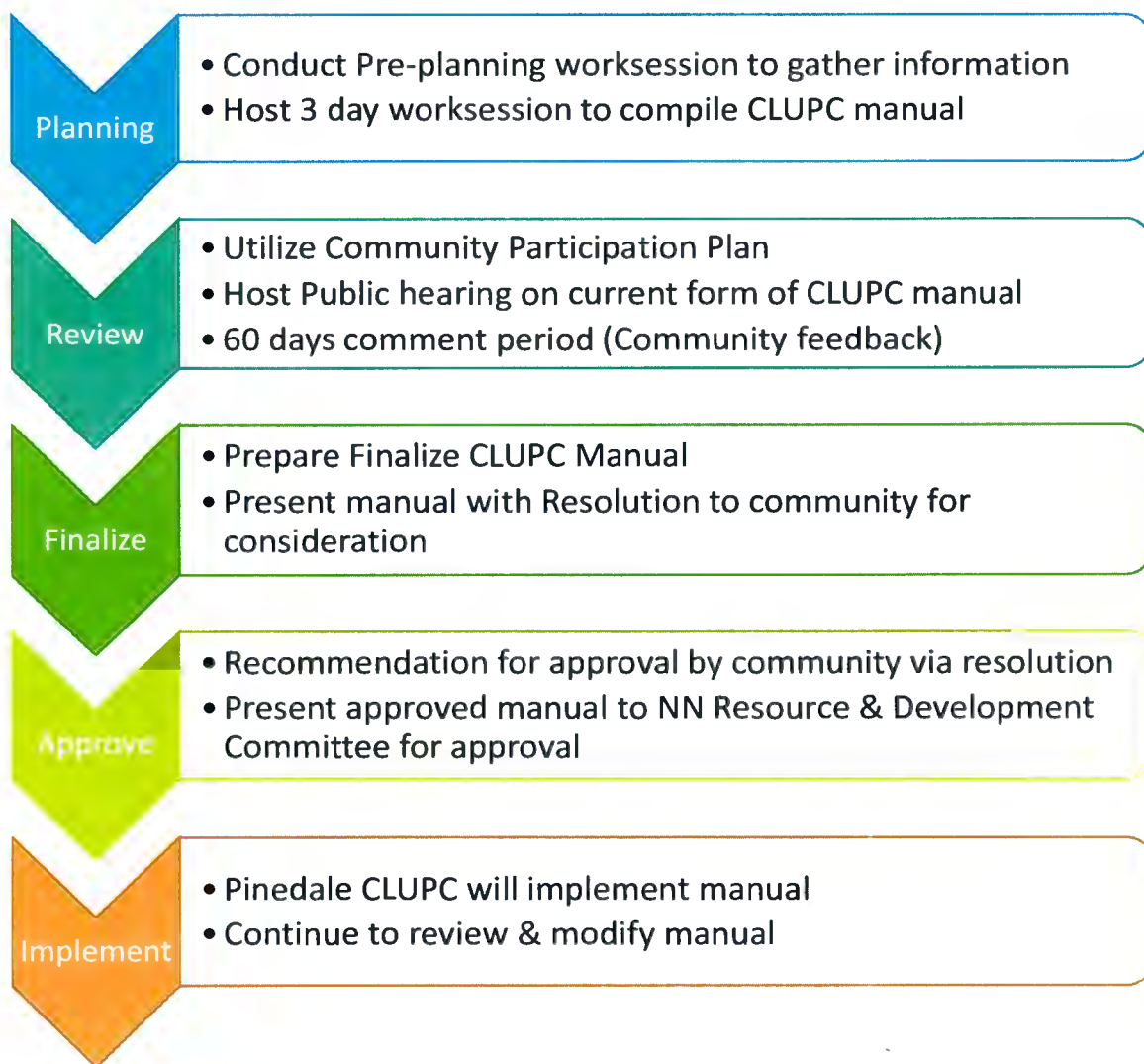


Figure 1 Planning Process for Pinedale CLUPC



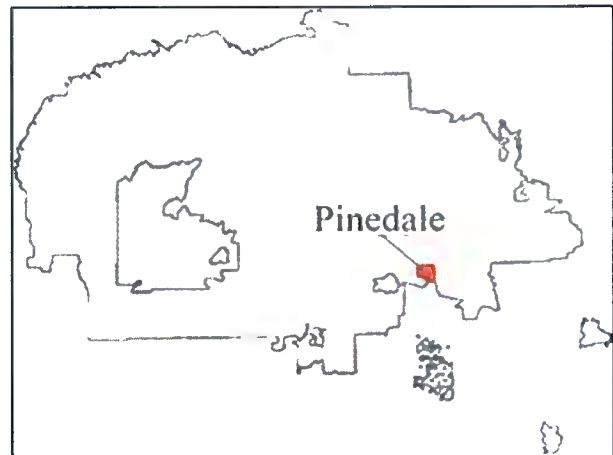


### 3 COMMUNITY PROFILE

#### 3.1 GEOGRAPHICAL LOCATION

Pinedale Chapter boundary is located within the northwest of the State of New Mexico within McKinley County. The chapter boundary is located in Eastern Navajo Agency in the southeast corner of the Navajo Nation.

The Pinedale Chapter is located at latitude 35.610568° and longitude -108.449318° at Township 16N Range 15W Section 17 within the SWSE quadrant.



*Figure 2 Location of Pinedale Chapter within the Navajo Nation boundary (Photo courtesy of Navajo Times)*

#### 3.2 ORIGINATION OF NAVAJO NAME

The Pinedale Chapter (*Tó Béełhwiisgání*) is located in the northwest quadrant of the State of New Mexico, centrally located in McKinley County. The late Bennie Y. Begay (Begay, 2004) says Pinedale originally had two artesian wells. One of the well was originally by the old Pinedale Store. During the dry seasons, the well would evaporate, and there would be hard crusted edges of dried mud surrounding the edges. That is where the name – Hardened Mud around water came to be – *To baasghani*. The Diné name *Tó Béełhwiisgání*, was named after a local artisan well founded by Hastiin *Tó ganí*, who had dug the well.

#### 3.3 FIRST CHAPTER HOUSE (1931)

According to Bennie Y. Begay (Begay, 2004), he was just a boy when the first chapter was built.

Here is Mr. Begay's recount at that time:

"At that time, Sam Gray was the community leader and Chapter President. During those days, the leaders met outside near the old Pinedale Day School to discuss community issues. During that time, the people would come together and talk about who wanted to help with corn fields or house building and road improvement projects. They talked about who would be willing to offer help to those families that needed help. If there was any type of family conflict, the chapter officials helped the disputing families resolve their conflict.



*Figure 3 First Pinedale Chapter House, located about 1/2 mile south of new chapter house*



Sam Gray proposed that the Pinedale community build a chapter house, so the community members discussed who would be willing to help build the chapter. The community members hauled stones from Second Canyon by wagon. It took about three months to build the chapter house.

Some of the students from Wingate Vocational High School (WVHS) helped. Also, money was not a major part of the Navajo economy. The people in office volunteered their time. They even brought their own food to the worksites. They were not paid to be leaders. The students from WVHS built the roof for the chapter house. The wood for the roof came from Ft. Wingate. The older men built benches for the chapter house and finished the interior.

After the chapter house was finished, there was a dedication. Sheep was butchered to celebrate the opening. At the time, they did not have processed foods. They relied only on the crops they grew and their livestock.”

Bennie Y. Begay, a boy at the time, also assisted with the building of the Pinedale Chapter House. He helped with the mixing of the mud for the inlaying of the bricks.

### 3.4 LOCAL COMMUNITY NAMES

Every region, chapter and community has its unique name based off of land feature, clan leader, location or proximity of area. Here are some history community names and locations within Pinedale Chapter.

| Navajo Name       | English Name  | Location & history  |
|-------------------|---|---|
| Toyeii'           | Name of dam against ridge. Nooda'l bik'indashdo. Used for centuries | Ram Mesa District<br>Southside of Navajo Route 11-49 near MP 2  |
| Itnáásjin         | Fire Dance Ceremony   | Ram Mesa District<br>Southside of Navajo Route 11-49 near MP 3  |
| Nááyizí háásná'   | Pumpkin crawl up  | Second Canyon District<br>North of N-7054 in Second Canyon area   |
| Yáániil K'íd      |   | Pinedale District<br>West of Lobo Valley Road   |
| Yáátbeeh          |   | Ram Mesa District<br>Northside of Navajo Route 11-49 near MP 4<br>West of Pinedale Chapter                                  |
| Béesh Sitiní      | Lime metal (referred to culvert never used)                         | Rio Puerco District<br>NW of Lobo Valley Road and Rainbow Trail Rd  |
| Nááts'íilid       | Rainbow Canyon  | Rio Puerco District<br>Rainbow Trail Road area, 2 miles north of store<br>After it rains, a rainbow forms within the valley |
| Tsé Nizhoní       | Pretty Rock   | Pinedale District<br>Northside of Navajo Route 11-49 near MP 6  |
| Nák'eehtó Naaliní | Tear drop flowing   | Rio Puerco District<br>Waterfalls community, north of Navajo Route 11-49  |
| Ch'íli Yaat'í     | Chimney   | Pinedale District<br>South of Navajo Route 11-49 near MP 6  |



|                    |  |  |
|--------------------|--|--|
|                    |  | Old cabin home owned by non-Navajo, home burned down and only chimney was left.              |
| Nidishchíí yaa'ííh | Under the pine trees                           | Pinedale District<br>South of Navajo Route 11-49 near MP 5                                   |
| ligai da'áts'osí   | Pointed White Rock mesa                        | Second Canyon District<br>Navajo Route 7054  |
| T'iis Naakezi      | Falling Maple Canyon                           | Falling Maple District<br>Southeast of Pinedale Chapter                                      |
| Tse Alnii si'ani   | Rock in the middle of the canyon (Table Rock)  |  |
| Tse yaa chaalheel  | Darkness under the rock                        | North of Ram Mesa District<br>Pipeline Road  |
| Tsin ii'ahi        | Near late Ben Yazzie area                      | Ram Mesa District<br>NM Hwy 566<br>Northwest of Pinedale Chapter                             |
| Jaa neez habitiin  | Mule track                                     | West of Falling Maple District<br>South of Midget Mesa Road<br>Southwest of Pinedale Chapter |
| Tse shijaah        | Sole pile of rock (Near Keith Begay residence) | Ram Mesa District<br>North of Navajo Route 11-49<br>West of Pinedale Chapter                 |
| Xoshta             | Cactus area                                    | Second Canyon District<br>Intersection of N7054 and NRt 1149                                 |
| Naa na'aztiin      | Curve road                                     | West of Ram Mesa District<br>Uphill Road and Old Churchrock Mine Road                        |
| Tsih daal chiih    | Red Top  | West of Ram Mesa District<br>Uphill Road & Red Top Road                                      |
| Yaa'iih tiin       | Up Hill road                                   | West of Ram Mesa District<br>Uphill Road – Springsteads                                      |
| Tse awozi sila     | Rock Ridge area                                | East of Falling Maple District<br>Rocky Ridge Road – Mariano Lake                            |
| To Diits'a'i       | Sound well                                     | Pinedale District<br>Pinedale Loop near old Chapter house                                    |



### 3.5 OUR PAST AND PRESENT LEADERS

Every clan, community and region have a leader, one who leads for improving the land, bringing opportunities and setting a legacy for the future. Pinedale is known to set that example and to have leaders with many ideas, visions and leaving behind for generations to remember. We proudly introduce some of our known leaders here:

#### 3.5.1 Navajo Tribal Vice-Chairman Johnny R. Thompson



*Figure 4 L-R NN Vice-Chairman Johnny R. Thompson and NN Chairman Peter MacDonald.*

Mr. Johnny R. Thompson a life-long resident of the Pinedale community served as the local Tribal Council Member representing District 16. He was elected Vice-Chairman with former Navajo Tribal Chairman Peter MacDonald Sr.

Mr. Thompson was raised around the Tsé Nizhoní area. His Diné clans are: Two Who Came to the Water Clan (Tó Baazhni'áazhi) and born for Towering House Clan (Kiy'áá'áánii). He is the son of the late Ben & Roberta Thompson and grandson of the late Sam Silversmith.



*Figure 5 Vice-Chairman Thompson speaking before the State of New Mexico Legislature on tribal-state relations*

Mr. Thompson advocated to pave Navajo Route 11-49, lobbied to create a State-Nation partnership.

#### 3.5.2 Navajo Nation Speaker Lawrence T. Morgan



*Figure 6 Official Portrait of Navajo Nation Speaker Lawrence T. Morgan.*

Mr. Lawrence T. Morgan of Timber Ridge within the Pinedale community was elected to the Navajo Nation Council in 1992. He served 20 years representing Pinedale and Iyanbito Chapters. His clans are Black-streak wood clan (Tsinaajini) and born for Meadow Clan (Haltsooi). He is the son of Mr. Tom Morgan and the late Elizabeth Morgan.

During his 20 years on the Navajo Nation Council he was elected Speaker, a two year term serving more than 4 terms in his capacity. Mr. Morgan advocated for his people in Window Rock and Washington, D.C. He also served as Chairman of the Transportation

and Community Development Committee. He continues to serve his people through being elected as Chapter Vice-President, School Board member and recently on the Pinedale Community Land Use Planning Committee.



*Figure 7 L-R Fmr. NN President Ben Shelly, Fmr. NN Speaker Lawrence T. Morgan and Fmr. NM Governor Bill Richardson. (Photo courtesy of Navajo-Hopi Observer)*





3.5.3 Pinedale Community Naat'aaniis  
Kai (Nelson Zuni's paternal grandfather)

Jake Segundo, Hástiin Táchiinii (Tom Morgan's maternal grandfather)

Sam Gray, Hástiin Daghaii

Hástiin Ilnááshjiní

Sam Silversmith (Johnny R. Thompson's grandfather)

Charley Willie

Hastíin Tsoii (Bennie Y. Begay's father)

Brown Begay Sr.

Lee Smith, Hástiin Smith

Jeff King, Haské Yíí íyáh

Tom Silversmith, Chapter President 1947

Askii Martin, Chapter President

Ben Thompson, Chapter President

James Martin, Chapter President

Charley Brown (Hastíin íí ígai), Chapter Vice-President

Johnson Beocitty, Chapter Vice-President

Frank White, Chapter Vice-President

John Lee, Chapter Secretary/Treasurer

John Gruber, Chapter Secretary/Treasurer

3.5.4 Chapter President

Billie Norton 1955-1959

David Mason 1959-1983

Raphael Martin 1983-1987, 1992-2000, 2004-2008,  
2016-current

Lawrence T. Morgan 1987-1992

Jesse Kirwin 2000-2004

Anslem Morgan 2008-2012

Willie Norton 2012-2016



Figure 8 The late Sam  
Silversmith B: 1869 D: 1964  
(Photo: Gallup Independent)



Figure 9 The late Jeff King B:  
1851?1865 D: 1964



Figure 10 L-R The late Howard Gorman, the late Keith  
Begay, the late Scott Preston, the late Billie Norton.  
Photo taken at dedication of new Chapter house on April  
16, 1960 (Photo: Gallup Independent 04/18/1960)





### 3.5.5 Chapter Vice-President

Frank Willie 1955-1963, 1971-1975

Roberta Thompson 1963-1971

Bennie Y. Begay 1971-1987

Nelson Zuni 1987-1992, 1996-2000

Lewis B. Yazzie 1992-1996

Larry Miller 2000-2004

Anslem Morgan 2004-2008

Dorothy Harjo 2008-2012

Lawrence T. Morgan 2012-2014

Raphael Martin, 2014-2016

Clara Daye, 2016 – present

### 3.5.6 Chapter Secretary/Treasurer

Lee Smith 1955-1956

Keith Begay 1956-1971

Ford Y. Begay 1971-1980

Arlinda Keyanna 1980-1983

Lawrence T. Morgan 1983-1987

Betty Johnson 1987-1992

Anslem Morgan 1992-2000

Gladys Brodie 2000-2004

Sarah Jackson 2004-2016

Dorothy Harjo 2016 – present



## 3.6 COMMUNITY EDUCATION & PARTICIPATION PLAN

### 3.6.1 Introduction:

The purpose of the Community Education & Participation Plan is to inform, educate and involve community members in all aspect of land use planning process and public input in all forgoing matters relevant to local governance

### 3.6.2 Executive Summary:

The Pinedale Community Based Land Use Planning Committee (CLUPC) was created by the Pinedale Chapter. CLUPC composes of five (5) members selected by the community members' through an approved resolution. CLUPC will inform the community through an approved Community Participation Plan about community land use planning by disseminating flyers & road signs, direct communication, public hearing, newsletter, media (radio & newspaper) report and social media.

### 3.6.3 Conducting a Community Hearing Process:

Pinedale CLUPC will be hosting continuance public hearing about land use planning. CLUPC will provide Community Participation process:

#### 3.6.3.1 Community Awareness:

| Objective   | Assignment             | Deadline                        | Completed |
|---|------------------------|---------------------------------|-----------|
| Draft & finalized Media notice                                    | CLUPC - President      | 10 business days before hearing |           |
| Dissemination of notice: Media & Social media; flyers & road sign | Chapter Administration | 10 business days before hearing |           |

#### 3.6.3.2 Community Education:

| Objective  | Assignment    | Deadline       | Completed |
|--|---------------|----------------|-----------|
| Thoroughly review plan: Pinedale community members, other public resources/entities, | CLUPC members | End of hearing |           |

#### 3.6.3.3 Community Input:

| Objective   | Assignment             | Deadline      | Completed |
|---|------------------------|---------------|-----------|
| Record public feedback                            | CLUPC – Secretary      | After hearing |           |
| Provide comment forms for recommendations of plan | Chapter Administration | After hearing |           |

### 3.6.4 Community Newsletter

Pinedale CLUPC will plan, develop and implement a local community newsletter relevant to planning, land, chapter news and information to the community. The community newsletter will be provided at least twice a month and be distributed locally in Pinedale, Churchrock and Mariano Lake communities for public awareness. CLUPC will also send out newsletter to community members through mailing address as provided during community survey:



**3.6.4.1 Community Awareness:**

| Objective                       | Assignment               | Deadline                                     | Completed |
|---------------------------------|--------------------------|--|-----------|
| Create newsletter for community | CLUPC,<br>Administration | Second and fourth<br>Friday of each<br>month |           |

**3.6.4.2 Community Education:**

| Objective   | Assignment     | Deadline  | Completed |
|---|----------------|---|-----------|
| Provide administrative insight on projects, plans and updates                   | Administration | 2 <sup>nd</sup> & 4 <sup>th</sup> Friday of<br>each month |           |
| Provide committee update on all community land use planning initiatives monthly | CLUPC          | 2 <sup>nd</sup> & 4 <sup>th</sup> Friday of<br>each month |           |

**3.6.4.3 Community Input:**

| Objective  | Assignment                         | Deadline | Completed |
|--|------------------------------------|----------|-----------|
| Develop feedback form and attach to newsletter           | CLUPC/Administration               | On-going |           |
| Share ideas/opinions/input during CLUPC/Chapter meetings | CLUPC, Admin,<br>Chapter officials | On-going |           |

**3.6.5 Recording process**

Pinedale CLUPC will follow the Chapter's Five Management System – Records Manual. All records will be filed with the Chapter Community Services Coordinator and will become public document.



### 3.6.6 Public Meetings held:

| Meeting type                      | Date/Time/Location                                    | Purpose  |
|-----------------------------------|---|--|
| <b>Regular CLUPC Meeting</b>      | January 9, 2018 at 9:00 a.m.<br>Pinedale Chapter      | Regular CLUPC meeting:<br>Plan of Operation, Burial sites, land purchase (Foutz), Worksession update   |
| <b>1<sup>st</sup> Worksession</b> | January 25-26, 2018<br>NMSU – Grants, NM              | Worksession: Plan and create outline for new CLUPC manual. Created Gantt chart for timeline of activities  |
| <b>Regular CLUPC Meeting</b>      | February 6, 2018 at 9:00 a.m.<br>Pinedale Chapter     | Regular CLUPC meeting: Updates on Survey Tech & Community Assessment and budget: Approval: Map Sec. 16/23, Thoroughfare Plan/Open Space. Community facilities Plan |
| <b>Regular CLUPC Meeting</b>      | March 6, 2018 9:00 a.m.<br>Pinedale Chapter           | Regular CLUPC meeting:<br>Community Assessment update, District Service Plan   |
| <b>Regular CLUPC Meeting</b>      | April 3, 2018 9:00 a.m.<br>Pinedale Chapter           | Regular CLUPC meeting:<br>Proposals for Section 16/21, Rural addressing  |
| <b>2<sup>nd</sup> Worksession</b> | April 9-11, 2018<br>Acoma, NM                         | Worksession: GIS review, Draft 1 compiling & map creation for Land Use plan.   |
| <b>Regular CLUPC Meeting</b>      | May 21, 2018 9:00 a.m.<br>Pinedale Chapter            | Regular CLUPC meeting:<br>Review/approve Mission Statement, Vision, and Public Education & Participation Plan. Thoroughfare Plan                                   |
| <b>Regular CLUPC Meeting</b>      | June 5, 2018 9:00 a.m.<br>Pinedale Chapter            | Regular CLUPC meeting:<br>Review/approve Mission Statement, Vision, and Public Education & Participation Plan. Thoroughfare Plan                                   |
| <b>Public Hearing</b>             | June 18, 2018<br>10:00 a.m.<br>Pinedale Chapter House | CLUPC conducted public hearing on Community Land Use Manual. Public input from members of Pinedale Chapter   |
| <b>Regular CLUPC Meeting</b>      | August 14, 2018 9:00 a.m.<br>Pinedale Chapter         | CLUPC 2 <sup>nd</sup> public hearing updates & planning, finalize agenda for hearing   |
| <b>Public Hearing #2</b>          | August 17, 2018                                       | End of 60 comment period and final CLUPC hearing on manual   |
| <b>Special CLUPC meeting</b>      | September 25, 2018                                    | Meet with Council Delegate to discuss plans to begin CLUPC manual certification.   |



## 3.7 COMMUNITY DEMOGRAPHICS

### 3.7.1 Community Survey

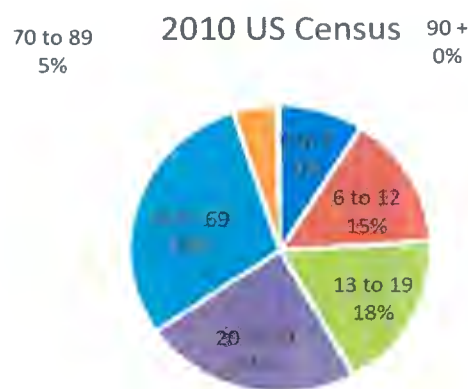
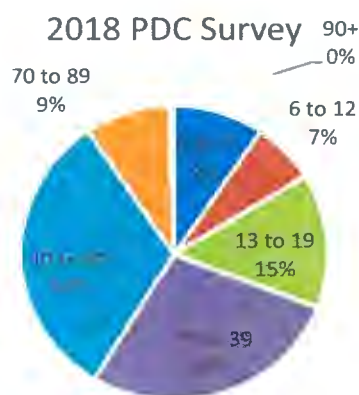
The Pinedale Chapter Administration in collaboration with the Community Based Land Use Planning Committee and Officials agreed to conduct a survey on the community, grazing and rural address. During one of its worksession, the group discussed creating a survey and hiring local community members to conduct the surveys throughout the community. The survey reflects similar data from the 2010 U.S. Census:

There was a total of 309 household that have been surveyed, compared to 293 household that were surveyed by the 2010 U.S. Census.

### 3.7.2 Population

According to the Survey responses there was a total of 1061 community members. The 2010 US Census has a total of 1,109 community members.

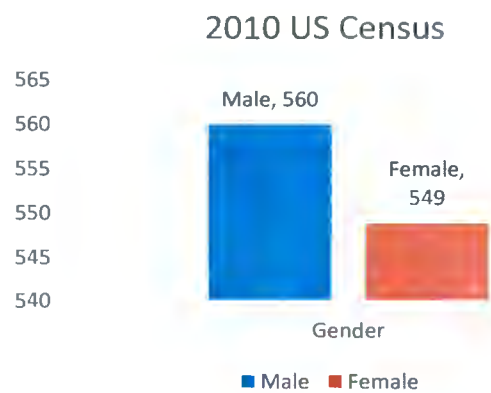
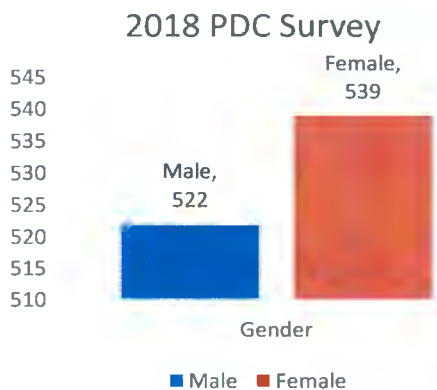
| 2018 PINEDALE CHAPTER SURVEY |       |         | 2010 US CENSUS DATA |       |         | Change<br>10 to 18 |
|------------------------------|-------|---------|---------------------|-------|---------|--------------------|
| Household age                | Total | Percent | Household age       | Total | Percent |                    |
| 0 to 5                       | 101   | 9.53%   | 0 to 5              | 100   | 9.01%   | 0.52               |
| 6 to 12                      | 71    | 6.68%   | 6 to 12             | 166   | 14.97%  | -8.29              |
| 13 to 19                     | 157   | 14.79%  | 13 to 19            | 199   | 17.94%  | -3.15              |
| 20 to 39                     | 294   | 27.71%  | 20 to 39            | 260   | 23.45%  | 4.26               |
| 40 to 69                     | 338   | 31.87%  | 40 to 69            | 328   | 29.58%  | 2.29               |
| 70 to 89                     | 95    | 8.98%   | 70 to 89            | 51    | 4.60%   | 4.38               |
| 90 +                         | 5     | 0.44%   | 90 +                | 5     | 0.45%   | -0.01              |
| TOTAL                        | 1061  |         | TOTAL               | 1,109 |         | 0.00               |



Our population demographics show that we are getting older, a steep climb in age ratio from 2010 to 2018. Age 20 to 39 and Age 70 to 89 shows increase of more than 4%. The average age is 22 years old for the 2018 PDC Survey vs. 24.08 for the 2010 US Census

### 3.7.3 Population by Gender

| 2018 PDC Survey |       |       | 2010 US Census |       |       |
|-----------------|-------|-------|----------------|-------|-------|
| Gender          | Total | %     | Gender         | Total | %     |
| Female          | 539   | 50.80 | Female         | 549   | 49.50 |
| Male            | 522   | 49.20 | Male           | 560   | 50.50 |
| Total           | 1061  | 100%  | Total          | 1109  | 100%  |



### 3.7.4 Community Clans

#### 3.7.4.1 Maternal Clan

Community head of household were asked what their maternal and paternal clans were: According to the 2018 PDC Survey, the top five Diné clans are: Dził t'ahnii (Mountain Cove clan), Tó Baazhni'ázhi (Two who came to water clan), Tsináájiníí (Black streak wood clan), Kinyaa'áanii (Towering House clan), and Dshchííiníí (Start of the Red Streak clan).

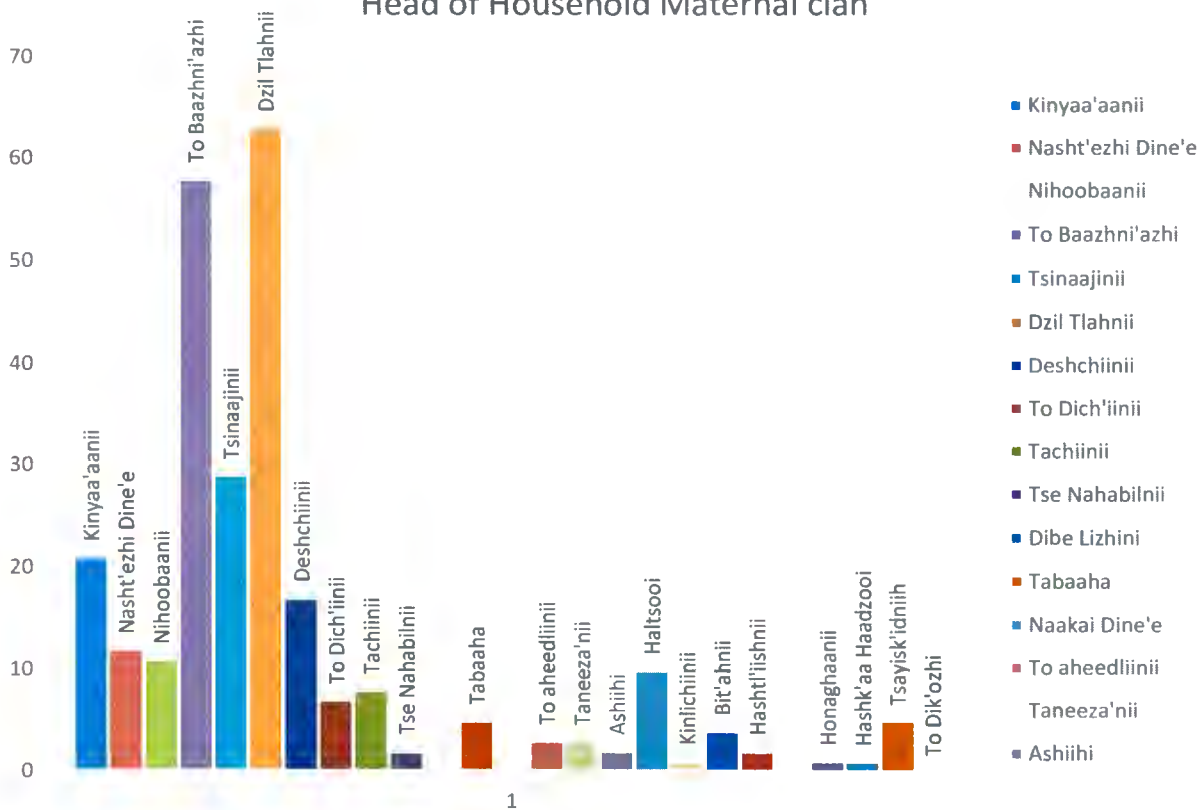
The survey found that the five top clans are dominated in certain areas of Pinedale community. The Mountain Cove clan are well dominated in Second Canyon area, the Two Who Came to Water clan are dominate around Pinedale Chapter, Rainbow Canyon, Tse Nizhoni and Water Falls area; the Black streak wood clan is dominated in western Pinedale area and Timber Ridge area; the Towering House clan are dominates at Falling Maple Canyon area.

Other clans such as: Zuni Clan, Gray streaked-ends clan and Bitterwater clan also had some local domination. Many Zuni clan members dominated Far western areas of Pinedale, Gray streaked-end clan are dominated in west central Pinedale and west-end of Rainbow Canyon. The Bitter Water clan are well represented in the west central areas of Pinedale. See graph on next page to show clan affiliation for each household member.





## Head of Household Maternal clan

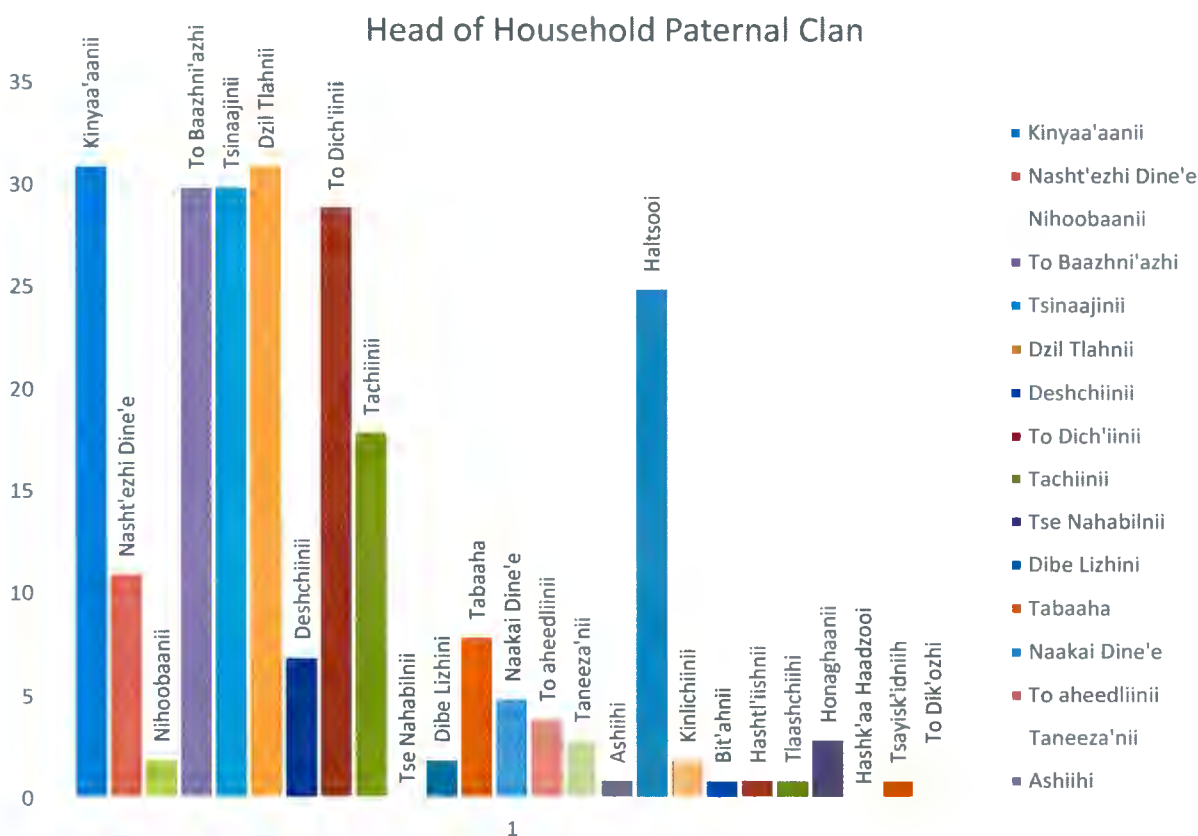


| CLAN NAME         | TOTAL |                       |            |
|-------------------|-------|-----------------------|------------|
| KINYAA'AANII      | 21    | TANEEZA'NII           | 3          |
| NASHT'EZHI DINE'E | 12    | ASHIIHI               | 2          |
| NIHOOBAANII       | 11    | HALTSOOI              | 10         |
| TO BAAZHNI'AZHI   | 58    | KINLICHIIINII         | 1          |
| TSINAAJINII       | 29    | BIT'AHNII             | 4          |
| DZIL TLAHNII      | 63    | HASHTL'IISHNII        | 2          |
| DESHCHIIINII      | 17    | TLAASHCHIIHI          | 0          |
| TO DICH'IINII     | 7     | HONAGHAANII           | 1          |
| TACHIINII         | 8     | HASHK'AA HAADZOOI     | 1          |
| TSE NAHABILNII    | 2     | TSAYISK'IDNIIH        | 5          |
| DIBE LIZHINI      |       | TO DIK'OZHI           | 0          |
| TABAAHA           | 5     | DECLINE TO STATE      | 44         |
| NAAKAI DINE'E     |       |                       |            |
| TO AHEEDLIINII    | 3     | <b>TOTAL ANSWERED</b> | <b>309</b> |



### 3.7.4.2 Paternal Clan

The top five paternal clans of head of household members are: Towering House clan, Mountain Cove clan, Two Who Came to Water clan, Black streaked wood clan and Bitter Water clan. There are many more clans that hold stories on how they came to Pinedale. We see trends such as most Northern Pinedale community members with Mountain Cove clan; whereas western Pinedale is dominated by Black Streaked wood clan and Bitter Water clan.



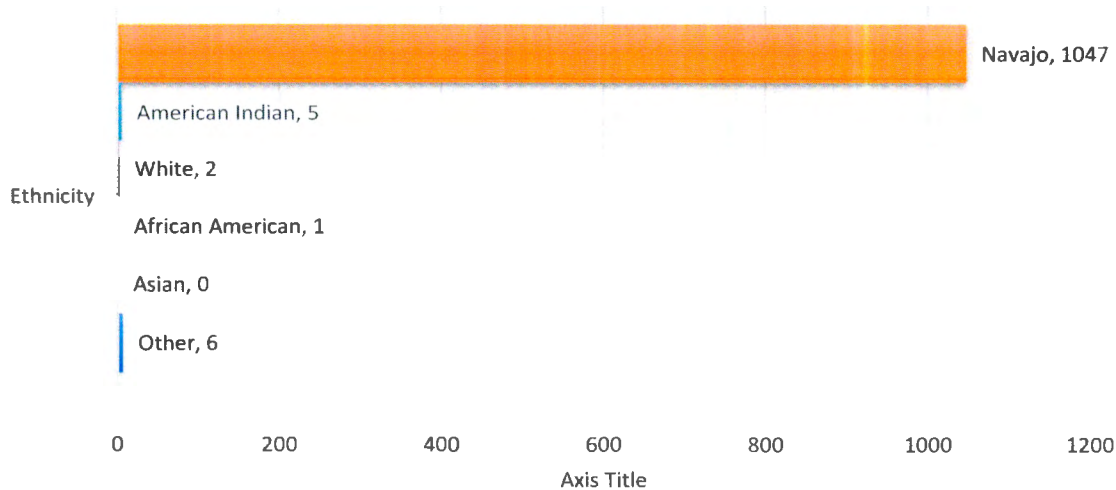
| CLAN NAMES        | TOTAL |                |    |                   |            |
|-------------------|-------|----------------|----|-------------------|------------|
| KINYAA'AANII      | 31    | TSE NAHABILNII | 0  | BIT'AHNII         | 1          |
| NASHT'EZHI DINE'E | 11    | DIBE LIZHINI   | 2  | HASHTL'IISHNII    | 1          |
| NIHOOBAANII       | 2     | TABAHA         | 8  | TLAASHCHIIHI      | 1          |
| TO BAAZHNI'AZHI   | 30    | NAAKAI DINE'E  | 5  | HONAGHAANII       | 3          |
| TSINAAJINII       | 30    | TO AHEEDLIINII | 4  | HASHK'AA HAADZOOI | 0          |
| DZIL TLAHNII      | 31    | TANEEZA'NII    | 3  | TSAYISK'IDNIIH    | 1          |
| DESHCHIIINII      | 7     | ASHIIHI        | 1  | TO DIK'OZHI       | 2          |
| TO DICH'IINII     | 29    | HALTSOOI       | 25 | DECLINE TO STATE  | 63         |
| TACHIINII         | 18    | KINLICHIIINII  | 2  | <b>TOTAL</b>      | <b>309</b> |



### 3.7.5 Pinedale Community Ethnicity

According to the survey, the Diné people make up 99.05% of the community. The other 0.95% are other American Indian, White, African American, Asian American and other.

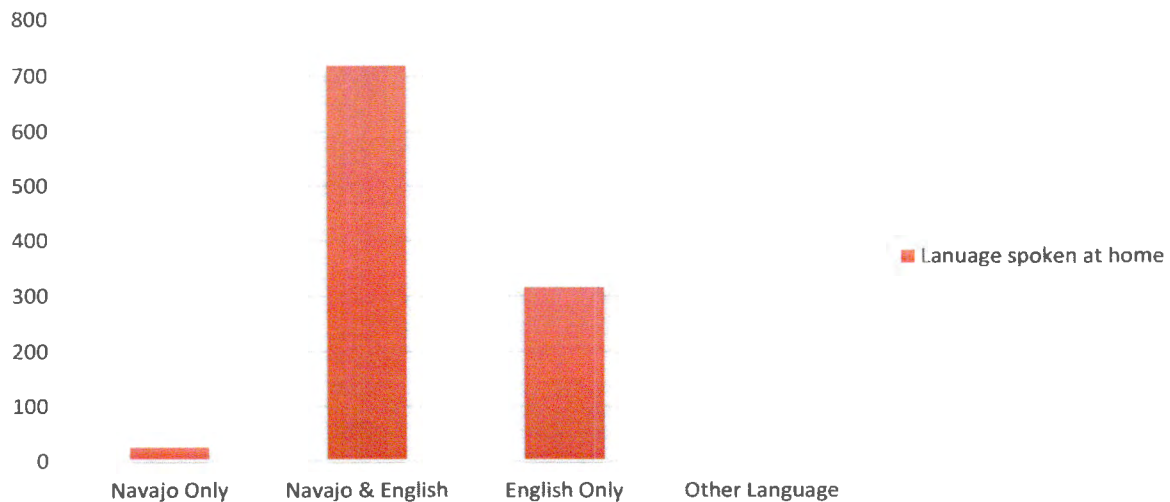
#### 2018 PDC Survey - TOTAL ETHNICITY



### 3.7.6 Pinedale's language spoken at home

This survey shows that only 67.77% of the community speak/understand Navajo/English, while 29.78% of the community only speak/understand English. Only 2.36% speak/understand fluent Diné. The 2005 approved Pinedale CLUPC manual shows that 83.9% spoke and understood Navajo/English and only 16.1% spoke/understood only English.

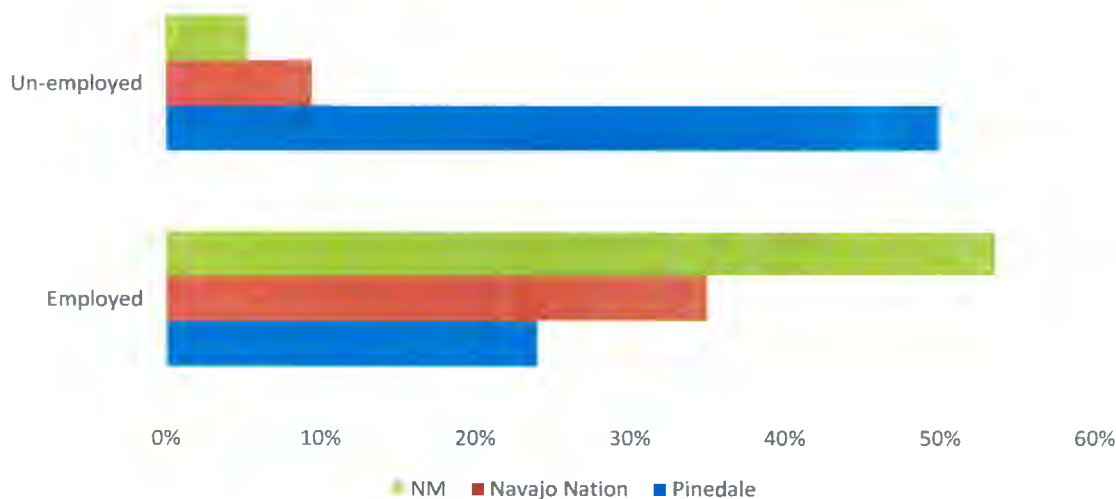
#### 2018 PDC Survey - Language spoken at home



### 3.7.7 Employment Status

All 309 surveys included employment status of the head of household. According to the survey 154 (50%) responded they are currently not employed, 74 (24%) said they were employed and 24 (8%) said there were self-employed. 24 (11%) are retired, 8 (3%) are other employed, and 15 (5%) decline to answer.

Pinedale, NN and New Mexico Employment status



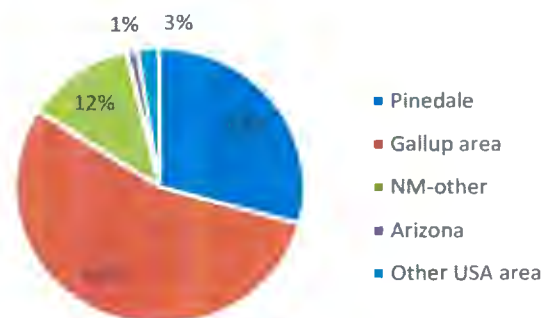
Source: PDC 2018 Survey and NM Dept. of Workforce Solution "Tribal Demographic and Employment Data – Mark Flaherty"

### 3.7.8 Employment location

According to the PDC 2018 survey those who answered were employed/self-employed 55% stated their employment in the Gallup area (Ft. Wingate, Churchrock, Mentmore, and Gamarco), 29% stated they work in Pinedale area (Pinedale, Mariano Lake and Smith Lake), 12% work in other NM areas such as Albuquerque, Grants, Santa Fe and Farmington. 3% work in other States throughout the United States, while 1% worked in Arizona (Window Rock, Phoenix and Flagstaff).

This survey only requested the Head of Household's employment status and location. It does not reflect the entire household.

Employment location



### 3.7.9 Pinedale community Telecommunication

The community members were asked what type of telecommunication service they used at their home. Nearly 64% utilize a cell phone. Those with cell phone were asked what type of cell service they had: 37% have 4G service, 29% have 3G service, 20% have 4GLTE service and 15% have 2G service.

| Type of communication utilized: | Total | (%) |
|---------------------------------|-------|-----|
| Home Phone                      | 44    | 14% |
| Cell Phone                      | 199   | 64% |
| No answer                       | 66    | 21% |

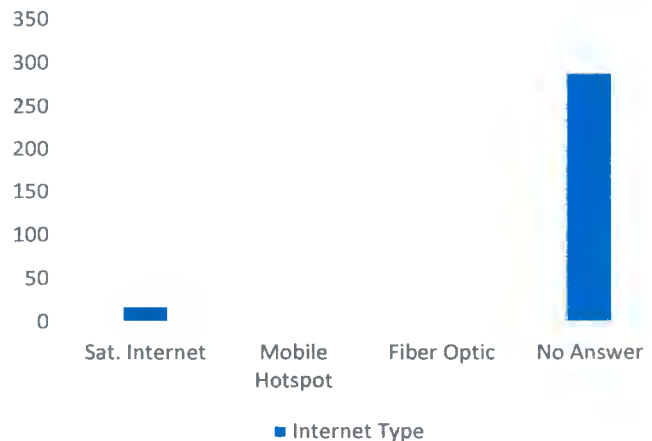


### 3.7.10 Pinedale community internet service

The Pinedale community has little or no type of high speed internet throughout the community. This survey shows that only a few have satellite internet from Hughes Net.

The Pinedale Chapter also utilizes satellite internet and for this reason does not provide public Internet to community members.

| Type of internet services: | Total | (%) |
|----------------------------|-------|-----|
| Sat. Internet              | 19    | 6%  |
| Mobile Hotspot             | 1     | 0%  |
| Fiber Optic                | 0     | 0%  |
| No Answer                  | 289   | 94% |



### 3.7.11 Pinedale Satellite T.V. providers

Of the 309 survey taken, 127 household answered that they receive satellite T.V. service from either Dish Network or Direct TV.

| Type of Satellite TV provider | Total | (%) |
|-------------------------------|-------|-----|
| Dish Network                  | 63    | 20% |
| Direct TV                     | 64    | 21% |
| No answer                     | 182   | 59% |

### Type of Satellite TV provider

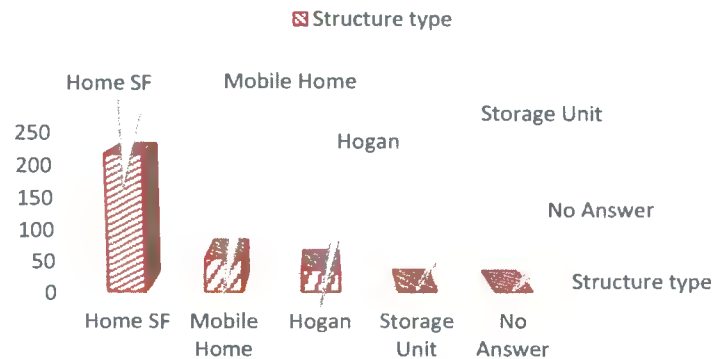


**3.7.12 Pinedale community structure type**  
According to the 2010 US Census, there were 370 housing units in Pinedale community.

The 2018 Pinedale Chapter survey concluded there were 400 structures throughout the community. There was only one building that was being constructed at time of survey.

|              |            |             |
|--------------|------------|-------------|
| Home SF      | 216        | 70%         |
| Mobile Home  | 54         | 17%         |
| Hogan        | 36         | 12%         |
| Storage Unit | 2          | 1%          |
| No answer    | 1          | 0%          |
| <b>TOTAL</b> | <b>309</b> | <b>100%</b> |

## 2018 PDC SURVEY STRUCTURE TYPE



### 3.7.13 Existing Housing Issue

Of the 309 structures conducted, 254 (80%) has electric and 55 (18%) decline to answer or had no electric in their home. Nearly 238 (78%) have indoor plumbing to their home and 71 (23%) decline to answer or had no running water into their home. 205 (66%) homes have a septic system in their home and 104 (34%) do not have no sort of septic tank in their home.

### 3.7.14 Heating Source

According to the survey completed, nearly 283 (62%) of structures use woods for heating source to their home. 83 (20%) utilize coal, 40 (9%) use LP propane, 21 (5%) use wood pellet and 18 (4%) use diesel and other source of heat for their home.

|             |     |     |
|-------------|-----|-----|
| Wood        | 260 | 62% |
| Coal        | 83  | 20% |
| LP Propane  | 40  | 9%  |
| Wood Pellet | 21  | 5%  |
| Other       | 18  | 4%  |





## 4 NATURAL RESOURCE INVENTORY

The purpose of a natural resource inventory (NRI) is to provide building blocks for comprehensive land-use and future conservation planning. It also allows natural resource information to be included in local planning and future zoning.

This NRI will include maps and data on geology and soils, water resources, habitats and wildlife, climate, and cultural resources.

### 4.1 GEOLOGY AND SOILS

#### 4.1.1 Geology formation

The geology formation of the Pinedale community are as following:



*Figure 11 Geology formation of the Pinedale Quadrangle*

#### **Pinedale Quadrangle**

**Quaternary** (Holocene, Pleistocene) Qa1, Qa2, Qa3, Qoa, Qe, Qoe, Qp, af, Qf, Qc, Qt, Ql

**Cretaceous** (Upper Cretaceous) Kga, Km, Kmj, Kdt, Kmw, Kd

**Jurassic** (Upper Jurassic, Middle Jurassic) Jmbs, Jmb, Jmw, Jmrs, Jmr, Jcsu, Jcsm, Jcsi, Jwb, Jwt, Jeu, Jer, Jei

**Triassic** (Upper Triassic) TR co, TR cpc, TR cpu, TR cpt

#### **Oak Spring Quadrangle**

**Quaternary** (Holocene, Holocene and Pleistocene) Qar, Qal, Qoa, Ql, Qe, Qc, Qt

**Cretaceous** (Upper Cretaceous) Kmfc, Kpl, Kms, Kplh, Kplh, Kcg, Kcda, Kmm, Kcdi, Kgt, Kg, Kgb, Km, Kga

**Jurassic** (Upper Jurassic) Jmb, Jmw, Jss,, Jmr

#### 4.1.2 Soils

Soils are the unconsolidated weathered material that covers the surface of the earth. Soil is used to support building foundations, grow food, filter groundwater recharge, and sustain vegetation and wildlife habitat. Understanding the different type of soil properties and limitation will assist in future land use planning, conservation and preserving natural resources and habitats.



The Chapter Administration conducted a soil analysis of the entire Pinedale community through an Area of Interest (AOI) and generated a study report from the USDA website.

According to the Soil Resource report compiled by UDSA on the type of soil within the Pinedale community there are 26 different soil types throughout AOI. The table below lists the type of soil total, total acreage of soil and percent. There is also a detail map of each location of soil.

The climate within the AOI is: Mean annual precipitation of 10-16 inch per year, mean annual air temperature range from 46F to 49F degrees. Only about 643.5 acres 1.6% of land is suitable for farming of 39,932.6 100% reported.

| Map Unit Symbol | Map Unit Name   | Acres in AOI | Percent of AOI |
|-----------------|---|--------------|----------------|
| 230             | Sparank-San Mateo-Zia complex, 0 to 3 percent slopes              | 2,483.9      | 6.2%           |
| 241             | Mentmore loam, 1 to 8 percent slopes                              | 4,505.7      | 11.3%          |
| 242             | Gish-Mentmore complex, 1 to 8 percent slopes                      | 1,810.1      | 4.5%           |
| 244             | Buckle fine sandy loam, 1 to 8 percent slopes                     | 1,579.7      | 4.0%           |
| 245             | Buckle-Gapmesa-Barboncito complex, 1 to 6 percent slopes          | 584.1        | 1.5%           |
| 258             | Eagleeye-Atchee-Rock outcrop complex, 2 to 35% percent slopes     | 2.5          | 0.0%           |
| 265             | Uranium mined lands   | 512.3        | 1.3%           |
| 290             | Rock outcrop-Westmion-Skyvillage complex, 30 to 80 percent slopes | 3,019.3      | 7.6%           |
| 291             | Rock outcrop-Eagleeye-Atchee complex, 35 to 70 percent slopes     | 2,439.6      | 6.1%           |
| 305             | Celavar-Atarque complex, 1 to 8 percent slopes                    | 1,385.7      | 3.5%           |
| 310             | Parkelei sandy loam 1 to 8 percent slopes                         | 111.3        | 0.3%           |
| 315             | Flugle-Fragua complex, 1 to 10 percent slopes                     | 1,712.0      | 4.3%           |
| 317             | Highdye-Evpark-Bryway complex, 2 to 20 percent slopes             | 0.0          | 0.0%           |
| 320             | Parkelei-Fraguni complex, 1 to 8 percent slopes                   | 461.8        | 1.2%           |
| 332             | Evpark-Arabrab complex, 2-6 percent slopes                        | 1,763.5      | 4.4%           |
| 338             | Zyme-Lockerby association, 5 to 35 percent slopes                 | 3,252.2      | 8.1%           |
| 350             | Toldohn-Vessila-Rock outcrop 8 to 35 percent slopes               | 7,995.9      | 20.0%          |
| 351             | Rock outcrop-Vessilla complex, 35 to 70 percent slopes            | 590.7        | 1.5%           |
| 352             | Zia sandy loam, 1 to 5 percent slopes                             | 532.2        | 1.3%           |
| 355             | Rizno-Tekapo-Rock outcrop complex, 2 to 45 percent slopes         | 32.2         | 0.1%           |
| 360             | Hosta-Concho association, 0 to 5 percent slopes                   | 245.4        | 0.6%           |
| 365             | Vesilla-Rock outcrop complex, 2 to 15 percent slopes              | 1,893.7      | 4.7%           |
| 375             | Todest-Shadilto complex, 2 to 8 percent slopes                    | 2,447.5      | 6.1%           |
| 380             | Berryhill-Casamero clays, 2 to 10 percent complex                 | 97.8         | 0.2%           |



|                                    |   |                 |               |
|------------------------------------|---|-----------------|---------------|
| 404                                | Rock outcrop-Techado-Stozuni complex, 5 to 60 percent complex | 312.1           | 0.8%          |
| 555                                | Parkelei-Evpark fine sandy loams, 2 to 8 percent slopes       | 161.6           | 0.4%          |
| <b>Totals for Area of Interest</b> |   | <b>39,932.6</b> | <b>100.0%</b> |

## 4.2 WATER RESOURCES

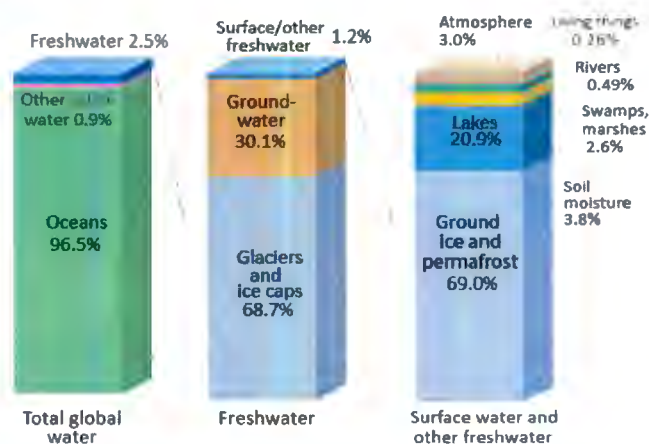
### 4.2.1 Groundwater and Aquifers

Water is vital resource for drinking water and an element of habitat suitability for a wide array of aquatic organism. In addition to these use, the movement of water through atmosphere, streams, lakes, and aquifers carries necessary materials such as dissolved oxygen and nutrients and harmful pollutants. The availability of water as well as quantity affects the natural factors such as soil, vegetation, and geology formations. Disturbance by human activities affect the overall state of water resources, by properly planning for future land use it is important to remember the vital resource. Water resource activities must be balance between usage and natural functioning aquatic ecosystems.

According to the USGS, Less than two and one half (2.5%) percent of the total water on Earth is freshwater, and other saline water make up 0.9% and the ocean making up the vast majority of 96.5%. Of the 2.5% of freshwater less than 1.2% is surface/other freshwater. The rest 98.8% is inaccessible for use. The 1.2% consists of 69% ground ice and permafrost 20.9% lakes and the rest from the atmosphere, living things, rivers, swaps, marshes and soil moisture.

Water continues to be recycled through "the water cycle" see figure 12. Water evaporates into the atmosphere, the water vapor condenses into clouds and falls back

### Where is Earth's Water?



Source: Igor Shiklomanov's chapter "World fresh water resources" in Peter H. Gleick (editor), 1993, *Water in Crisis: A Guide to the World's Fresh Water Resources*.  
NOTE: Numbers are rounded, so percent summations may not add to 100.

Figure 12 Where is Earth's Water? photo by USGS

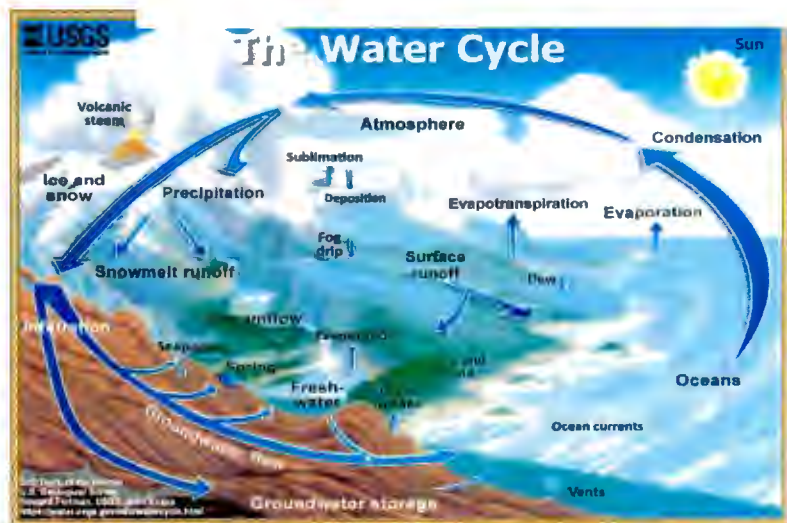


Figure 13 "The Water Cycle" Photo from USGS



to earth as precipitation in the form of rain, snow, sleet, and hail.

#### 4.2.1.1 San Juan Basin

The San Juan Basin was formed during the Laramide orogeny (Late Cretaceous-early Tertiary age) at the eastern edge of the Colorado Plateau. The basin is located in the southwest corner of Colorado, northwest New Mexico and little areas of northeast Arizona.

#### 4.2.1.2 Aquifer

##### 4.2.1.2.1 Gallup Sandstone

The Gallup Sandstone<sup>1</sup> is located within the Gallup aquifer. It is Late Cretaceous age consisting of light-gray, buff, and pale-red very fine to very coarse grain sandstone and thin to thick beds of shale, thickness ranges from 180 to 350 feet.

According to the report the Gallup Sandstone, the principal aquifer yields 260 gpm of water to wells in the area. The Gallup Sandstone is recharged from precipitations and run-offs and recharging a small levels due to heavy usage.

There is one well site within the Gallup sandstone – Gallup aquifer that provides domestic water use to the communities within Pinedale Chapter. Well site # 353816108170101 16.N14W.11.2223 located in Mariano Lake, NM. The well depth is 1375 feet, the hole depth is 1400 feet it is 7,365.00 feet above NGVD29.

#### Well site# 353816108170101 16N.14W.11.2223

Water level, feet below land surface  
1977 to 2018

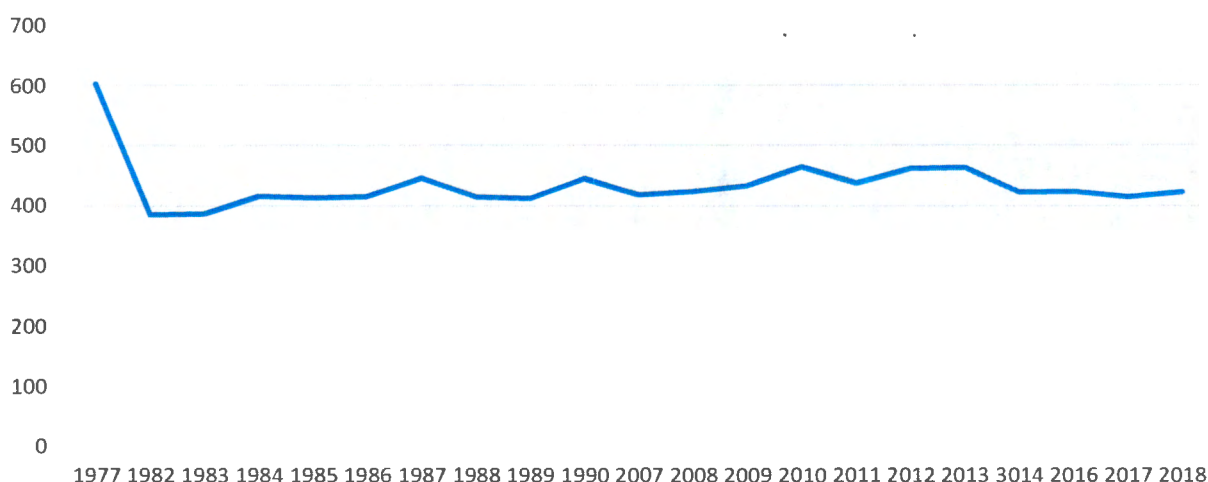


Figure 14 Source: USGS - National Water Information System: Web Interface. Ground Water levels for the nation. [https://nwis.waterdata.usgs.gov/nwis/gwlevels?site\\_no=353816108170101&agency\\_cd=USGS&format=html](https://nwis.waterdata.usgs.gov/nwis/gwlevels?site_no=353816108170101&agency_cd=USGS&format=html)

<sup>1</sup> Availability of Ground Water in the Gallup area, New Mexico By S. W. West 1961





## 4.2.2 Surface Water

### 4.2.2.1 Run-offs & Stream directions

All run-offs within the Pinedale community move towards the Rio Puerco. The stream then heads west and southwest down towards the community of Springstead and flows into the Little Colorado River.

### 4.2.2.2 Lakes

There are no active lakes within the Pinedale community. However there is one in Mariano Lake, since the monsoon pattern began in May 2018, the lake has refilled and is currently at 20% capacity.

### 4.2.2.3 Earthen Dams

A recent field report conducted by the Chapter Administration concluded there are 24 Earthen Dams that are active. Earthen dams are vital to grazing permittees, due to current drought conditions plans are being drafted to repair and upgrade the many active dams before the first major summer monsoon .

Earthen dams provide water resources for livestock. According to the Navajo Nation Department of Water Resource there are over 1,500 Earthen Stock ponds throughout the reservation. Many of the dams currently have yet to receive adequate repairs and renovations due to lack of Chapter support and funding.

| TOTAL EARTHEN DAMS WITHIN THE PINEDALE CHAPTER |                    |
|--|--------------------|
| District Name                                  | Total Earthen Dams |
| Ram Mesa District                              | 6                  |
| West Second Canyon District                    | 3                  |
| Fallen Maple Canyon District                   | 4                  |
| Pinedale District                              | 4                  |
| Rio Puerco District                            | 7                  |
| <b>Total</b>                                   | <b>24</b>          |

### 4.2.2.4 Windmills

A 2015 field assessment completed by CLUPC indicated there are 6 windmills located at the following locations: Waterfall road, 2<sup>nd</sup> Canyon Road near Zunie residence, Midget Mesa Road, Lobo Valley Road and Chestnut Canyon Road. There is also two windmill that are no longer operational they are: Uphill Road and Old Churchrock mine road.

### 4.2.2.5 Old pump wells

There were previous operational pump wells that are no longer operate, they are: N-1149 by First Canyon Road, North of Nellie Thompson's resident, Keith Begay (drill well) and South of Pinedale Chapter – 7 wells removed.





## 5 OPEN SPACE PLAN

The open space & recreation concept identifies areas that should be preserved for the benefit of community use and enjoyment. Areas that are culturally significant, contain significant wildlife and vegetation area, along with drainage corridors, benefit the entire community.

The proposed open space plan is an initial start for the Pinedale planning area. As the population demographics and numbers change, the committee needs to revisit and revise the plan in accordance to future community needs and growth.

### 5.1 EXECUTIVE SUMMARY

The Pinedale Chapter Administration, Officials and its committees seek to identify cultural, historical, and natural resources which should be considered for protection, preservation and restoration over the next five years. This plan also seeks to identify recreation needs and Pinedale Chapter's role in providing facilities to meet future needs. There are two main goals that will provide a guiding principle for an Open Space Plan.



*Figure 15 Tse Nizhoni (Pretty Rock) a rock formation located 2 miles east of the Chapter. This significant rock formation has many traditional stories and served as a defensive barricade to many Navajo families at the beginning of discovery of the new world.*

### 5.2 INTRODUCTION

The Pinedale Chapter has a total of 40,949.96 according to its 2005 approved Land Use manual. Pinedale lands consists of: Navajo Nation Tribal Trust, New Mexico State Land, Bureau of Land Management, Navajo Tribal Fee and Private Land. With this diverse set of land, most of Eastern Navajo Agency chapters are within the "checkerboard lands"; this type of land make-up makes it difficult to obtain land withdrawals and right-of-way in a reasonable time.

### 5.3 PLAN PURPOSE

The purpose of this plan is to identify any cultural, historical, and natural resources throughout the community and preserve those resources through an open space plan and policy. This plan will visualize future open space usage and create a Parks & Recreation department under the chapter administration.

### 5.4 VISION STATEMENT & GOALS

Our visions and goals are relevant to our principles of preserving and protecting our environment.

#### 5.4.1 Vision Statement

Connecting our people to mother earth and father sky through land resources of Pinedale Chapter



#### 5.4.2 Goals

1. Research, acquire and develop park land and recreation facilities to meet the demand of the Pinedale Chapter residents without adversely affecting current natural resources.
2. Preserve large tracts of natural, agricultural and traditional rural landscapes that will provide space for resource protection and recreation benefits.

### 5.5 CLASSIFICATION SYSTEM

The Pinedale Chapter hereby creates the following open space classification system into three categories:

- Recreational area
- Natural Resource Areas
- Historical/Cultural Sites

### 5.6 EXISTING LAND & FACILITY INVENTORY

#### 5.6.1 Recreational Area

A recreation area is created to benefit the community through healthy and life initiatives. There are currently no identified location within the Pinedale community. However there is the Red Rock Park, located 10 miles southeast of Pinedale Chapter house in Churchrock, New Mexico.

##### 5.6.1.1 Red Rock Park

Excerpt from City of Gallup's website on the Red Rock Park:

Red Rock Park is the crown jewel of Gallup's parks and recreation system. Cradled by spectacular red cliffs formed over 200 million years ago in the Age of the Dinosaurs, the park combines a glimpse into past civilizations with modern amenities to serve the needs of contemporary residents and guests.

#### Facilities

The park offers comfortable campground facilities with electrical and water hookups, picnic areas, restrooms and showers. There is also a camp store and post office on-site. Call (505) 722-3839 for information and reservations.

The 5,000 seat Red Rock Arena is well-suited for outdoor performances including rodeos and other activities. The lighted arena can be configured for roughstock and timed-event performances and there are approximately 600 permanent horse stalls. The convention center has a theatre, meeting rooms and exhibit space.

#### Activities

Red Rock Park is proud to present a full slate of sports, entertainment and cultural events. Rodeo events feature prominently throughout the summer months. The annual Lions Club Rodeo is ranked with the best in the state of New Mexico. For the past several years, the nation's best youth cowboys and cowgirls have competed in the Red Rock arena at the National Junior High School Finals Rodeo. The USTRC team roping series comes to Gallup in July, as well as perhaps the most anticipated event when bull riding stars gather to "Rock the Rocks" at the Wild Thing Bullriding Championship.



Every year for nearly a century, Gallup has been the site of the world famous Inter-Tribal Indian Ceremonial celebrated in August. Native American tribe members attired in colorful dress perform traditional dances and music, display jewelry and crafts, and tempt visitors with authentic cuisine. The Ceremonial Rodeo filled with Native performers is also a highlight each year. The modern ceremonial has added new activities such as a wine-tasting and ceremonial half-marathon and 5K run.

The Red Rock Balloon Festival takes flight the first weekend of December each year. As one of the world's largest balloon rallies, you can expect to see over 100 balloons soar above the stunning red rock landscape.

### 5.6.2 Natural Resource Areas

A natural resource area is an area of interest set aside for protection of valuable natural environment. This includes habitat protection and open space preservation. Recreation within these areas should be limited due to the preservation of its current state.

#### 5.6.2.1 Overview

Lands protected within these areas should be large, contiguous blocks that may include a mixture of agricultural, steep topography, and prairie. Natural Resource Area will have no land use or zoning use to be implemented

#### 5.6.2.2 Inventory

There are no inventory for Natural Resources Area. Pinedale CLUPC will conduct public hearings and designate some locations

### 5.6.3 Historical/Cultural Sites

A historical/cultural site consists of land that is specifically set aside for preservation, restoration, or reconstruction of features significant to the local history and Dine cultural heritage. This will include: buildings, archaeological sites and ceremonial grounds.

#### 5.6.3.1 Overview

Pinedale Chapter has several historical and cultural sites throughout the community. Some significant historical sites include: Old Pinedale Chapter House, and old Pinedale Day School site. There are also countless Dine traditional sites that hosted previous ceremonies and continuous ceremonies. Those sites are reflected on the map as listed in the next page

## 5.7 PROPOSED COMMUNITY PARK

The Committee in collaboration with the Administration and Officials are planning to create the first community park, Sounding Well Park. This park will be located in Executive Order lands just south of the Pinedale Chapter house.

Funds from the Unhealthy food tax and Capital Budget funds will be used to invest in the park and future planning efforts to improve community land use planning



Ceremony map



### 5.7.1 Current Land Status

Pinedale Chapter is located in the eastern portion of the Navajo Nation in the State of New Mexico. Many of the local chapters within New Mexico face land ownership a majority of time due to its checkerboard status. Lands within Pinedale consist of Navajo Tribal Trust Land, Bureau of Land Management, and State of New Mexico, Individual Indian Land Allotment owners, private land and fee land.

See map in next page on current land status for Pinedale Chapter. The map provides insight in the difficult position Pinedale Chapter faces in future land use planning and development. One of the Committee's goal is to acquire non-Navajo Tribal Trust Lands for Pinedale to ease future planning of land development.





# Pinedale Chapter Current Land Status



## Legend

### Road Classification

- Rural Minor Arterial
- Rural Major Collector
- Rural Local Road
- - - Proposed Rural Road

### Pinedale Chapter Boundary

- Chapter boundary

### Pinedale Land Status

#### Land Status

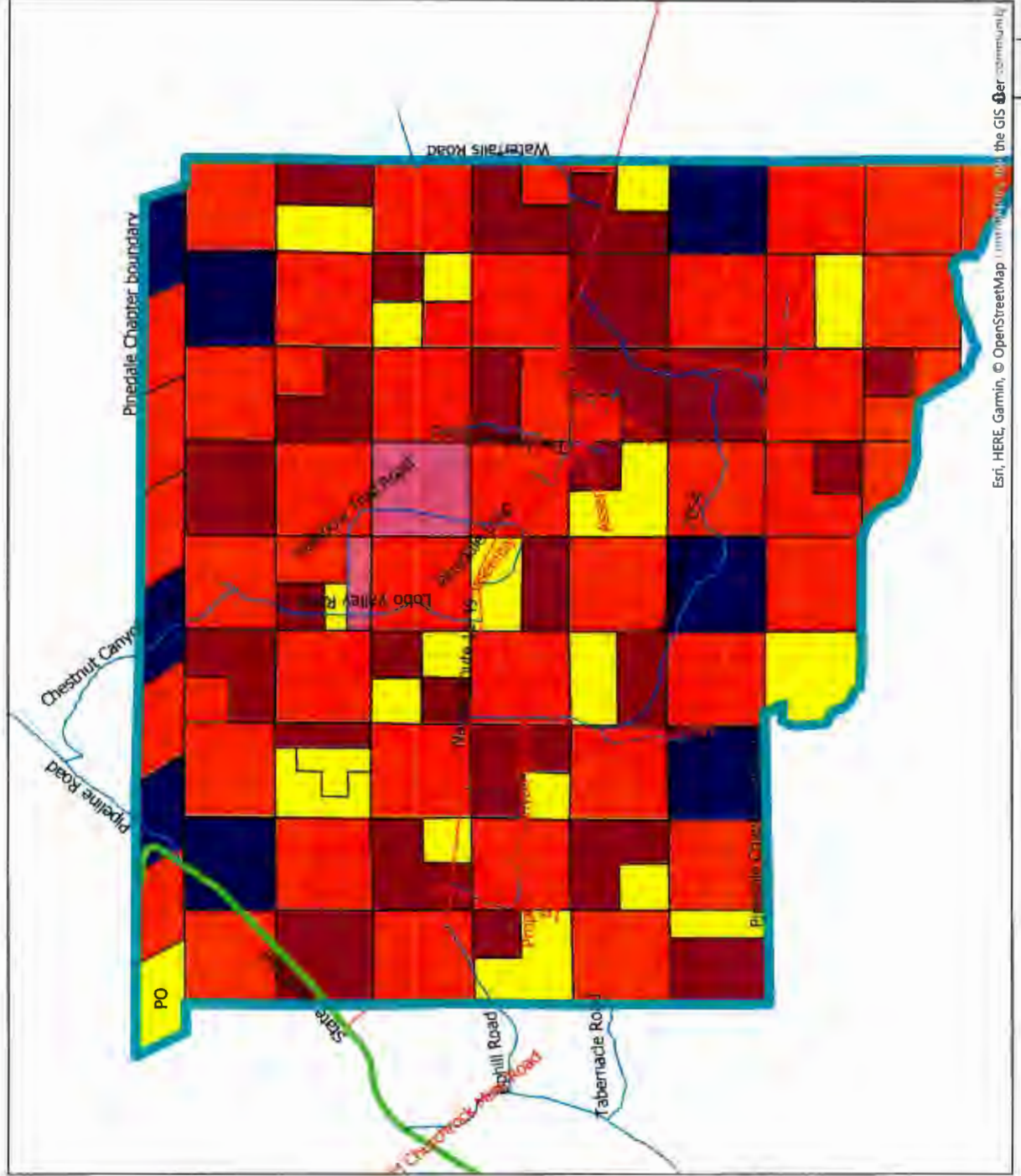
- Navajo Tribal Trust Land
- Indian Allotment
- State Land
- Other Land status
- Private land



6 Miles

3

1.5



## 5.8 NEW MEXICO SPECIAL STATUS SPECIES – ESA LISTED (TYPE 1) – AUGUST 2016

Northwest New Mexico habitat (Pinedale, NM included)

| AMPHIBIANS                              |   |        |              |
|---|---|--------|--------------|
| <i>Pseudoeurycea neomexicana</i>        | Jemez Mountain Salamander                     | E + CH | Peripheral   |
| BIRDS                                   |   |        |              |
| <i>Coccyzus americanus occidentalis</i> | Western yellow-billed cuckoo<br>(Western DPS) | T + CH | Verified     |
| <i>Empidonax traillii extimus</i>       | Southwestern willow flycatcher                | E + CH | Verified     |
| <i>Strix occidentalis lucida</i>        | Mexican spotted owl                           | T + CH | Peripheral   |
| <i>Sterna antillarum</i>                | Least tern (interior population)              | E      | Verified     |
| FISH                                    |   |        |              |
| <i>Xyrauchen taxanus</i>                | Razorback sucker                              | E + CH | Hypothetical |
| <i>Catostomus discobolus yarrow</i>     | Zuni bluehead sucker                          | E + CH | Peripheral   |
| <i>Ptychocheilus lucius</i>             | Colorado pikeminnow                           | E + CH | Hypothetical |
|   |   |        |              |
|   | T = Threaten                                  |        |              |
|   | E = Endangered                                |        |              |
|   | CH – Critical Habitat                         |        |              |
|   | P = Proposed                                  |        |              |
|   | ENE = Experimental, Non-essential             |        |              |

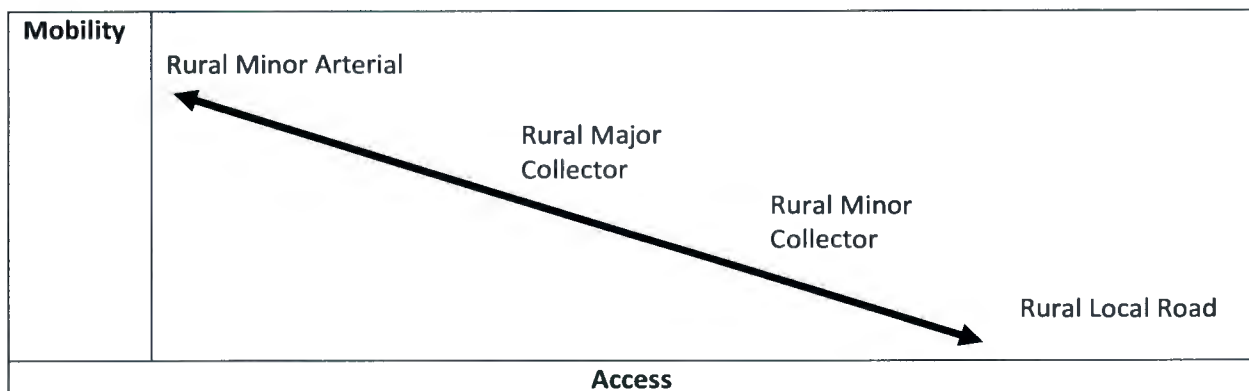


## 6 THOROUGHFARE PLAN

The Pinedale Chapter Thoroughfare Plan will be used to develop current and future roads for the community. This current plan will adopt the Federal Highway Administration and Bureau of Indian Affairs Division of Transportation standards.

### 6.1 THOROUGHFARE MAP

The Thoroughfare Map categorizes and identifies new and proposed roads in terms of a combination of three considerations: 1) the functional characteristics that they are intended to provide. 2) The dominant adjacent land use, and 3) the develop character of the areas they pass through



*The functional classification of this Thoroughfare Plan includes: Rural Minor Arterial, Rural Major Collector, Rural Minor Collector and Rural Local Road depending on access vs. mobility access.*

However, the use of the functions, (access and mobility) as the only element that distinguishes one road from another disregards the broader aspect that roads also affect and are affected by the use of adjacent properties.

Therefore, this Thoroughfare Plan provides additional considerations that relate the road design criteria with the development characteristics and predominate land uses of the areas being served.

Thus, the Pinedale Chapter Thoroughfare Plan categorizes roadways by traditional functional classifications. It further distinguishes according to their character (community and rural area) and their prominent land use characteristics (residential, commercial, or industrial).

A sample **Design Elements Matrix** is included in the Appendix as a representation of these concepts included in the plan. The matrix is a sample of road specification; every transportation entity has a set plan in place. CLUPC will work with the Navajo Nation Division of Transportation to establish set policies for Pinedale roads.

#### 6.1.1 Interpretation of new road connections

The Thoroughfare Plan map shows some recommended road connections to be made at undefined point in the future. Additionally the chapter submits its annual New Mexico ICIP and Navajo Nation ICIP both in appendix, which also includes road projects. In no instance shall the Thoroughfare Plan Map be



## Thoroughfare Map



interpreted as showing exact alignments for new roads; they are instead intended to represent conceptual connections from one location to another.

The new proposed roads are recommended base on future needs, traffic demand, development, and financial feasibility. This plan should not be used as a legal binding document of set plans to build road, but as a supporting documentation for future development of residential, commercial, and industrial.

Further, in no way should any future connection shown on the Thoroughfare Plan Map be interpreted as establishing an easement of right-of-way for that connection or in any way claiming property for public use.

## 6.2 CONSIDERATION #1 FUNCTIONAL, CLASSIFICATIONS

The classification system of the Pinedale Thoroughfare Plan includes: Rural Minor Arterial, Rural Major Collector, Rural Minor Collector and Rural Local Road depending on access vs. mobility. These functional classification definitions are adopted from the Federal Highway Administration.

### 6.2.1 Rural Minor Arterial

In rural settings, Minor Arterials should be identified and spaced at intervals consistent with population density, so that all developed areas are within a reasonable distance of a high level Arterial. Additionally, Minor Arterials in rural areas are typically designed to provide relatively high overall travel speeds, with minimum interference to through movement. Normally, the speed should not exceed 1 mile in fully developed areas.

| Rural Characteristics for Minor Arterial  |
|---|
| <ul style="list-style-type: none"><li>• Link cities and larger towns (and other major destinations such as resorts capable of attracting travel over long distances) and form an integrated network providing interstate and inter-county service</li><li>• Be spaced at intervals, consistent with population density, so that all developed areas within the State are within a reasonable distances of an Arterial roadway</li><li>• Provide service to corridors with trip lengths and travel density greater than those served by Rural Collectors and Local Roads and with relatively high travel speeds and minimum interference to through movement</li></ul> |



### 6.2.2 Rural Major Collector

Collectors serve a critical role in the roadway network by gathering traffic from Local Roads and funneling them to the Arterial network. Within the context of functional classification, Collectors are broken down into two categories: Major Collectors and Minor Collectors. Until recently, this division was considered only in the rural environment. Currently, all Collectors, regardless of whether they are within a rural area or an urban area, may be sub-stratified into *major* and *minor* categories. The determination of whether a given Collector is a Major or a Minor Collector is frequently one of the biggest challenges in functionally classifying a roadway network.





In the rural environment, Collectors generally serve primarily intra-county travel (rather than statewide) and constitute those routes on which (independent of traffic volume) predominant travel distances are shorter than on Arterial routes. Consequently, more moderate speeds may be posted.

The distinctions between Major Collectors and Minor Collectors are often subtle. Generally, Major Collector routes are longer in length; have lower connecting driveway densities; have higher speed limits; are spaced at greater intervals; have higher annual average traffic volumes; and may have more travel lanes than their Minor Collector counterparts. Careful consideration should be given to these factors when assigning a Major or Minor Collector designation. In rural areas, AADT and spacing may be the most significant designation factors. Since Major Collectors offer more mobility and Minor Collectors offer more access, it is beneficial to reexamine these two fundamental concepts of functional classification. Overall, the total mileage of Major Collectors is typically lower than the total mileage of Minor Collectors, while the total Collector mileage is typically one-third of the Local roadway network

| Rural Characteristics for Major Collector   |
|---|
| <ul style="list-style-type: none"><li>• Provide service to any county seat not on an Arterial route, to the larger towns not directly served by the higher systems and to other traffic generators of equivalent intra-county importance such as consolidated schools, shipping points, county parks and important mining and agricultural areas</li><li>• Link these places with nearby larger towns and cities or with Arterial routes</li><li>• Serve the most important intra-county travel corridors</li></ul> |

6.2.3 Local Road

Locally classified roads account for the largest percentage of all roadways in terms of mileage. They are not intended for use in long distance travel, except at the origin or destination end of the trip, due to their provision of direct access to abutting land. Bus routes generally do not run on Local Roads. They are often designed to discourage through traffic. As public roads, they should be accessible for public use throughout the year.

Local Roads are often classified by default. In other words, once all Arterial and Collector roadways have been identified, all remaining roadways are classified as Local Roads

| Rural Characteristics for Local Road  |
|---|
| <ul style="list-style-type: none"><li>• Serve primarily to provide access to adjacent land</li><li>• Provide service to travel over short distances as compared to higher classification categories</li><li>• Constitute the mileage not classified as part of the Arterial and Collector systems</li></ul> |

## 6.3 LIST OF ROADS

### 6.3.1 Rural Minor Arterial Road

NM Hwy 566 – Maintained by NM Department of Transportation

### 6.3.2 Rural Major Collector Road

Navajo Route 11-49 – Maintained by NN Division of Transportation

### 6.3.3 Rural Local Road

Old Churchrock Mine Road – Maintained by McKinley County

Uphill Road – Maintained by BIA and/or McKinley County

Tabernacle Road – Maintained by Pinedale Chapter (limited access road)

1<sup>st</sup> Canyon Road – Maintained by Pinedale Chapter (limited access road)

Navajo Route 7054 – Maintained by NN Division of Transportation and/or Pinedale Chapter

Midget Mesa Road – Maintained by Pinedale Chapter (limited access road)

Fallen Maple Road – Maintained by Pinedale Chapter (limited access road)

Sunnyside Ranch Road – Maintained by Pinedale Chapter (limited access road)

Waterfalls Road – Maintained by Pinedale Chapter (limited access road)

Timber Ridge Drive – Maintained by Pinedale Chapter (limited access road)

Tse Nizhoni Road – Maintained by Pinedale Chapter (limited access road)

Assembly Valley Road – Maintained by Pinedale Chapter (limited access road)

Rainbow Trail Road – Maintained by McKinley County

Lobo Valley Road – Maintained by McKinley County

Pinedale Loop – Maintained by Pinedale Chapter

Chestnut Canyon Road – No maintenance (limited access road)

### 6.3.4 Limited Access road

Roads that are listed “limited access road” means there is no public access to additional roads or connected to other public roads. These roads merely access homes and certain public lands. These roads do not provide immediate access to other roads throughout community or other communities.



## 7 COMMUNITY FACILITIES PLAN

There is currently a limit and future limit in prospects for current and future facilities within the Pinedale community.

### 7.1 NAVAJO NATION GOVERNMENT FACILITIES

#### 7.1.1 Current facilities

##### 7.1.1.1 Pinedale Chapter House

The Pinedale Chapter was dedicated on April 18, 1960. Since then there has been countless improvements on the facility including: office space, public restroom facilities and HVAC installations. Total capacity: 200

The meeting room can host up to 200 people and according to the current administration, always open for the community people for use.

##### 7.1.1.2 Pinedale Senior Center

The Pinedale Senior Center building was constructed and dedicated in 2000. Prior to moving to a permanent facility, the Senior Center was located in the Chapter house. Total capacity: 70

##### 7.1.1.3 Pinedale Head Start

The new Pinedale Head Start building was dedicated on January 16, 2008 providing two classroom, a dining room, kitchen and public restroom facilities. Total capacity: 50

The old head start building is located next to the Pinedale Chapter on the eastside. It has been used over 30 years and is currently vacant.

#### 7.1.2 Future facilities

##### 7.1.2.1 Pinedale Veteran & Administration Building

The Chapter is currently in the planning stage of constructing a 3000 S.F. Veterans and Administration building. The building will house the Chapter administration office, a veteran office, large conference room, two small conference room and additional office space for other resources to meet community needs.

Recently, the 23<sup>rd</sup> Navajo Nation Council and President of the Navajo Nation approved nearly \$100 million dollars in project finances, Pinedale Chapter will be receiving about \$694,000 for construction cost; additionally the State of New Mexico has allocated \$75,000 for pre-planning and \$96,000 from the Navajo Nation CIP fund with Pinedale Chapter matching up to \$25,000. Totaling \$890,000.



Figure 16 Construction of the new Chapter house circa 1960 (Photo: Gallup Independent 4/20/1960)



Figure 17 Dedication of the new Pinedale Head Start building. Standing with two Pre-school students are: L-R Anslem Morgan, Speaker Morgan, President Martin, Young Jeff Tom, Charles Long, Bob Sandaval and Olsen Arvisa. (Photo: Navajo-Hopi Observer)



## 7.2 PUBLIC UTILITIES

### 7.2.1 Electric

#### 7.2.1.1 *Current facilities*

##### 7.2.1.1.1 Continental Divide Electric Co-op

Current electric facilities are provided by Continental Divide Electric Co-op. Powerline transmission run through-out community with concurrent Right-Of-Way with the Bureau of Indian Affairs.

##### 7.2.1.1.2 PNM

PNM has an 115kV transmission line that runs through the heart of Pinedale. The transmission line had been built in the late 1960's and early 1970's. The main transformer is located in Yatahey, NM and the 115 kV line runs towards Ambrosia, NM and connects to additional lines and transformers.

Since 2016 PNM has been in the planning stage to add a 2<sup>nd</sup> transformer at the Yatahey site due to mitigate overloads and improve voltage performance according to a 2015 Open Transmission Planning meeting PowerPoint presentation.

#### 7.2.1.2 *Future facilities*

There are no current or future projects for electric utilities within Pinedale Chapter.

### 7.2.2 Water

#### 7.2.2.1 *Current facilities*

##### 7.2.2.1.1 NTUA (Navajo Tribal Utility Authority)

NTUA provides water services to Pinedale community. Water service comes from wells located in Mariano Lake, NM.

#### 7.2.2.2 *Future facilities*

##### 7.2.2.2.1 Navajo-Gallup Water Supply Project

Excerpt from website:

"The Navajo-Gallup Water Supply Project is a major infrastructure project that once constructed, will convey a reliable municipal and industrial water supply from the San Juan River to the eastern section of the Navajo Nation, southwestern portion of the Jicarilla Apache Nation, and the city of Gallup, New Mexico via about 280 miles of pipeline, several pumping plants, and two water treatment plants.

These areas currently rely on a rapidly depleting groundwater supply that is of poor quality and inadequate to meet the current and future demands of more than 43 Navajo chapters, the city of Gallup, and the Teepee Junction area of the Jicarilla Apache Nation. Ground water levels for the city of Gallup have dropped approximately 200 feet over the past 10 years and over 40 percent of Navajo Nation households rely on hauling water to meet their daily needs. Inadequate water supply also impacts the ability of the Jicarilla Apache people to live and work outside the reservation town of Dulce.



The Navajo-Gallup Water Supply Project is designed to provide a long-term sustainable water supply to meet the future population needs of approximately 250,000 people in these communities by the year 2040 through the annual delivery of 37,764 acre-feet of water from the San Juan Basin. The project's eastern branch will divert approximately 4,645 acre-feet of water annually with no return flow to the San Juan River. The project's western branch will divert the remaining 33,119 acre-feet of water with an anticipated average annual return flow of 1,871 acre-feet.

The Omnibus Public Land Management Act of 2009, Title X Part III (Public Law 111-11) signed on March 30, 2009, provided the authorization to construct this important project as a major component of the Navajo Nation San Juan River Basin Water Rights Settlement in New Mexico. The act requires that all project features are completed no later than December 31, 2024.

On October 11, the Obama Administration announced the selection of 14 infrastructure projects to be expedited through the permitting and environmental review process including the Navajo-Gallup Water Supply Project

### 7.3 RURAL ADDRESSING

The Pinedale Chapter currently works closely with McKinley County GISC office in providing current up to date rural address plans. Since 1998 Pinedale Chapter has been a part of McKinley County GISC plans with rural addressing and E-911 initiatives.

Pinedale Chapter and Community Land Use Planning Committee are working closely with McKinley County to update road signs and home markers to ensure public safety and emergency response is available for all response calls.

Pinedale Chapter recently was provided a ArcGIS Pro software from Department of Interior and Bureau of Indian Affairs. Current plans will be to create comprehensive mapping and GIS plans utilizing data provided by Tech team and CLUPC.

### 7.4 NM INFRASTRUCTURE CAPITAL IMPROVEMENT PLAN 2020-2024

The Pinedale Chapter adopted the NM Infrastructure Capital Improvement Plan for FY 2020-2024 during its August 2018 regular chapter meeting. The following projects are listed and their ranking of priority are also provided:

1. Pinedale Administration & Veterans Building
2. N7054
3. New Bathroom Additions
4. Bathroom Addition renovations
5. Communication Tower
6. New Solid Waste Transfer Station
7. Rainbow Trail Road Improvements
8. Old Churchrock Mine Road Crossing
9. Waterfall Road Improvement
10. 1<sup>st</sup> Canyon Road Improvement
11. Regional Water System SCADA





## 8 LAND USE PLANNING

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The Pinedale Community Land Use Planning Committee have recommended the following land use plan for the next five years. These recommended locations were carefully reviewed and will benefit the people and economic growth for the next generation.



## 8.1 BELOW THE PINES HOUSING DEVELOPMENT

### Housing Site #1 – 3 acres (1/2 southeast of Pinedale Chapter – Pinedale Loop)

#### Geology/Soil

The current elevation of this site location is 6400 ft. above sea level

Soil type:

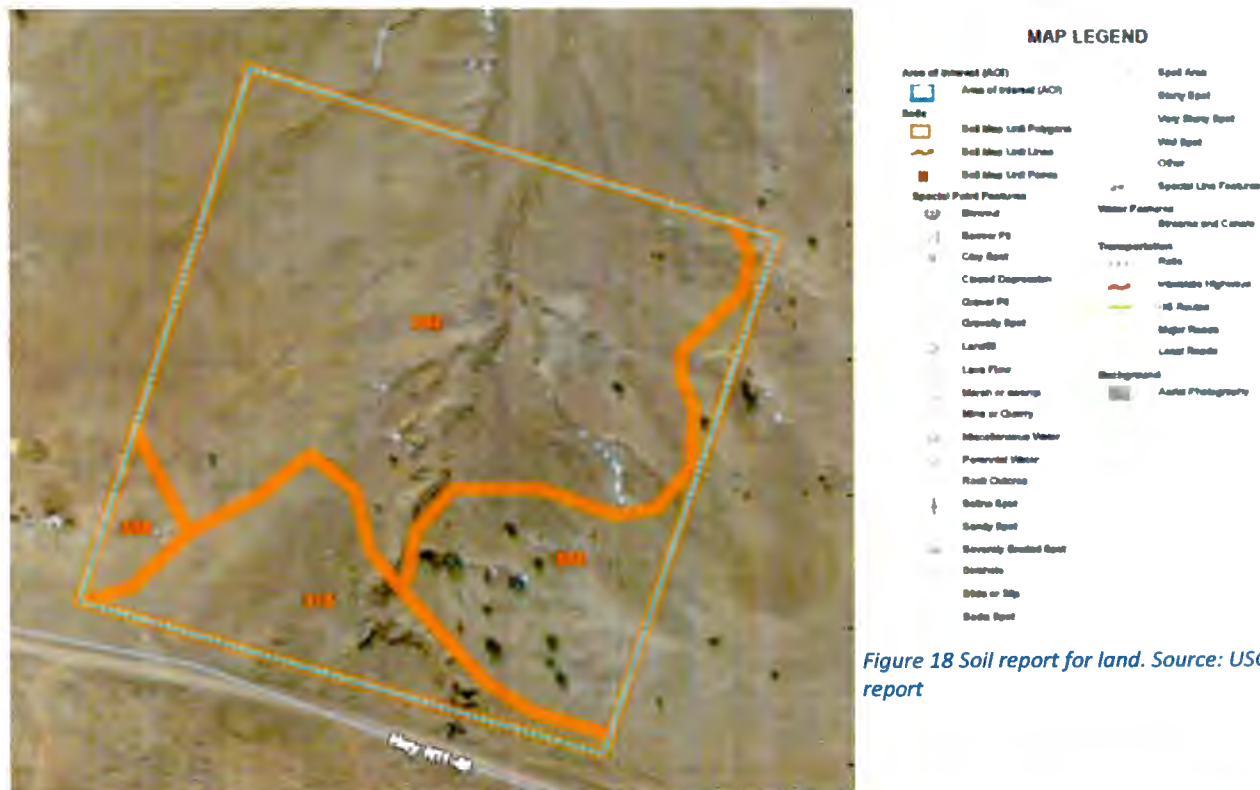


Figure 18 Soil report for land. Source: USGS Soil report

| Map Unit Symbol           | Map Unit Name                                     | Acres in AOI | Percent of AOI |
|---------------------------|---|--------------|----------------|
| 242                       | Gish-Mentmore complex, 1 to 8 percent slopes      | 12.5         | 63.7%          |
| 315                       | Flugle-Fragua complex, 1 to 10 percent slopes     | 3.1          | 15.7%          |
| 338                       | Zyme-Lockerby association, 5 to 35 percent slopes | 4.0          | 20.6%          |
| Total of Area of Interest |   | 19.5         | 100.0%         |



**Surface/water drainage:** There is a major drainage running through the site. However the small arroyo does not have wetland or eco system.

**Vegetation:** Small patches of grassland can be found in certain areas, some native plants also exist within the area.

**Wildlife:** According to recent survey of the area there are prairie dog, snakes, lizards and small insect in the area.



*Figure 19 Below the Pines Housing development location, Pinedale Loop about ½ SE of Pinedale Chapter House.*

Environmental Sensitive area: There are

**Cultural Significant Area/Traditional Significant Area:** After taking survey there are no

#### Recommendation

This housing development will be located near the old artesian well within Executive Order Land. This land is currently available for land use by the Pinedale Chapter and its organization. Total acreage of land development 3.18 acres of land.

Utility information: Continental Divide Electric Co-Op, NTUA, Frontier



**MHP Site #1 – 3 acres (1/2 southeast of Pinedale Chapter – Pinedale Loop)**

The current elevation of this site location is 6400 ft. above sea level



## MAP LEGEND










































|  |                        |   |                       |
|--|------------------------|---|-----------------------|
|    | Area of Interest (AOI) |  | Spot Area             |
|    | Area of Interest (AOI) |  | Streamy Spot          |
|    | Spot Map LWP Polygons  |  | Very Streamy Spot     |
|    | Spot Map LWP Lines     |  | Void Spot             |
|    | Spot Map LWP Points    |  | Other                 |
|    | Special Point Features |  | Special Line Features |
|    | Stream                 |  | Water Features        |
|    | Stream PI              |  | Stream and Canal      |
|    | City Spot              |  | Transportation        |
|    | Closed Depression      |  | State                 |
|    | Circular PI            |  | Interstate Highway    |
|    | Gravelly Spot          |  | US Road               |
|    | Landolt                |  | Major Road            |
|    | Lake Floor             |  | Local Road            |
|    | Marsh or swamp         |  | Background            |
|    | Mine or Quarry         |  | Aerial Photography    |
|    | Miscellaneous Water    |   |                       |
|    | Perennial Water        |   |                       |
|    | Reach Outcrop          |   |                       |
|   | Saline Spot            |   |                       |
|  | Sandy Spot             |   |                       |
|  | Reversely Graded Spot  |   |                       |
|  | Sandbar                |   |                       |
|  | Shiba or Slip          |   |                       |
|  | Rocky Spot             |   |                       |

Figure 20 Soil report for land. Source: USGS Soil report

| Map Unit Symbol           | Map Unit Name  | Acres in AOI | Percent of AOI |
|---------------------------|--|--------------|----------------|
| 242                       | Gish-Mentmore complex, 1 to 8 percent slopes                 | 0.9          | 12.9%          |
| 315                       | Flugle-Fragua complex, 1 to 10 percent slopes                | 6.0          | 85.5%          |
| 338                       | Zyme-Lockerby association, 5 to 35 percent slopes            | 0.1          | 1.2%           |
| 404                       | Rock outcrop-Techado-Stozuni complex, 5 to 60 percent slopes | 0.0          | 0.4%           |
| Total of Area of Interest |  | 7.0          | 100.0%         |

Surface/water drainage: There is a major drainage running through the site. However the small arroyo does not have wetland or eco system.

*Figure 21 Below the Pines Housing development location, Pinedale Loop about 1/2 SE of Pinedale Chapter House.*



**Vegetation:** Small patches of grassland can be found in certain areas, some native plants also exist within the area.

**Wildlife:** According to recent survey of the area there are prairie dog, snakes, lizards and small insect in the area.

**Environmental Sensitive area:** There are

**Cultural Significant Area/Traditional Significant Area:** After taking survey there are no

**Recommendation**

The potential to build a mobile home park near the old artesian well within Executive Order Land will have some issues related to historic building, old artesian well and old store foundation. There is also an earthen dam located just due south of the proposed area.

**Utility information:** Continental Divide Electric Co-Op, NTUA, Frontier



*Figure 22 Old Artesian well, possible location for Mobile Home Park*





### 8.3 PINE TREE COMMUNITY CEMETERY

Cemetery Site #1 – 10.8 acres (1/2 south of Pinedale Chapter – Pinedale Loop)

Geology/Soil

The current elevation of this site location is 6375 ft. above sea level

Soil type:



Figure 23 Below the Pines Housing development location, Pinedale Loop about ½ SE of Pinedale Chapter House.



Figure 24 Soil report for land. Source: USGS Soil report

| Map Unit Symbol           | Map Unit Name                                     | Acres in AOI | Percent of AOI |
|---------------------------|---|--------------|----------------|
| 242                       | Gish-Mentmore complex, 1 to 8 percent slopes      | 3.0          | 28.1%          |
| 315                       | Flugle-Fragua complex, 1 to 10 percent slopes     | 4.3          | 40.3%          |
| 338                       | Zyme-Lockerby association, 5 to 35 percent slopes | 3.4          | 31.6%          |
| Total of Area of Interest |   | 10.8         | 100.0%         |

**Surface/water drainage:** There is a major drainage running through the site. However the small arroyo does not have wetland or eco system. Earthen dam located just south of proposed development



**Vegetation:** Small patches of grassland can be found in certain areas, some native plants also exist within the area.

**Wildlife:** According to recent survey of the area there are prairie dog, snakes, lizards and small insect in the area.

**Environmental Sensitive area:** There are

**Cultural Significant Area/Traditional Significant Area:** After taking survey there are no

**Recommendation**

The potential development of a community cemetery at this location is feasible. Immediate access road is Pinedale Loop and Navajo Route 11-49. Total amount of acres could accommodate for future expansion for veteran and public use for cemetery land.

**Utility information:** Continental Divide Electric Co-Op, NTUA, Frontier



*Figure 25 South of old artesian well, proposed community cemetery.*



## 8.4 EDUCATIONAL COMPLEX

Educational site #1 – 10.8 acres (1/4 south of Pinedale Chapter – Pinedale Loop & N11-49)

### Geology/Soil

The current elevation of this site location is 6400 ft. above sea level

Soil type:



Figure 26 Soil report for land. Source: USGS Soil report

| Map Unit Symbol           | Map Unit Name  | Acres in AOI | Percent of AOI |
|---------------------------|--|--------------|----------------|
| 230                       | Sparank-San Mateo-Zia Complex, 0 to 3 percent slopes | 0.0          | 0.1%           |
| 242                       | Gish-Mentmore complex, 1 to 8 percent slopes         | 7.8          | 38.0%          |
| 338                       | Zyme-Lockerby association, 5 to 35 percent slopes    | 12.7         | 61.9%          |
| Total of Area of Interest |  | 10.8         | 100.0%         |

**Surface/water drainage:** There is a minor drainage running through the south end of the site. However the small arroyo does not have wetland or eco system. Earthen dam located just south of proposed development



**Vegetation:** Small patches of grassland can be found in certain areas, some native plants also exist within the area.

**Wildlife:** According to recent survey of the area there are prairie dog, snakes, lizards and small insect in the area.

**Environmental Sensitive area:** There are

**Cultural Significant Area/Traditional Significant Area:** After taking survey there are no findings at present time.

**Recommendation**

The potential development of a future education complex site okay. The location is steep up about 10 ft. above Pinedale Loop, future level of land to accommodate both Navajo Route 11-49 and Pinedale Loop.

**Utility information:** Continental Divide Electric Co-Op, NTUA, Frontier



*Figure 28 looking north toward Pinedale Chapter, proposed site for educational complex*





## 8.5 PUBLIC SAFETY COMPLEX

**Public Safety site #1 – 11.3 acres (1/4 southeast of Pinedale Chapter – Pinedale Loop & N11-49)**

### Geology/Soil

The current elevation of this site location is 6100 ft. above sea level

Soil type:



Figure 29 Soil report for land. Source: USGS Soil report

Figure 30 Public Safety complex, Pinedale Loop about ¼ SE of Pinedale Chapter House.

| Map Unit Symbol           | Map Unit Name                                     | Acres in AOI | Percent of AOI |
|---------------------------|---|--------------|----------------|
| 242                       | Gish-Mentmore complex, 1 to 8 percent slopes      | 11.0         | 97.8%          |
| 338                       | Zyme-Lockerby association, 5 to 35 percent slopes | 0.20         | 2.2%           |
| Total of Area of Interest |   | 11.3         | 100.0%         |

**Surface/water drainage:** There is a minor drainage running through the south end of the site. However the small arroyo does not have wetland or eco system. Earthen dam located just south of proposed development

**Vegetation:** Small patches of grassland can be found in certain areas, some native plants also exist within the area.

**Wildlife:** According to recent survey of the area there are prairie dog, snakes, lizards and small insect in the area.





**Environmental Sensitive area:** There are no significant findings for sensitive area.

**Cultural Significant Area/Traditional Significant Area:** After taking survey there are no findings at present time.

**Recommendation**

The potential development of a future public complex site is okay. The location is located in prime location and easy access for public safety response time.

**Utility information:** Continental Divide Electric Co-Op, NTUA, Frontier



*Figure 31 looking east of Pinedale Loop, propose site for Public Safety complex*



## 8.6 FOUTZ LAND

Total land size: 660 acres

Current Land owner: Foutz family

Community Land Use Planning Committee members have made planning priorities for future land acquisition at Township 16 Range 15 west Section 20 also known as “Foutz land”. The current status of this land is listed as private. Pinedale Chapter continues to work with the Navajo Nation and the current landowners in transferring the land to Navajo Tribal Trust land.



*Figure 32 Northeast corner of Foutz land, potential site for community cemetery plot*

There have been numerous findings in the potential purchase of the land. One of the major finding was illegal trash dump. Local residents have been known to dump their trash within the land and its arroyo. Over the years the area has been contaminated with illegal trash dump site. The dump site is located within the Puerco arroyo and near an access road.

Potential land development of these lands include:

- Wastewater treatment plant utilizing green energy
- Water tank
- Waste disposal site & program
- Housing development
- Mobile home park
- Community cemetery
- Commercial development





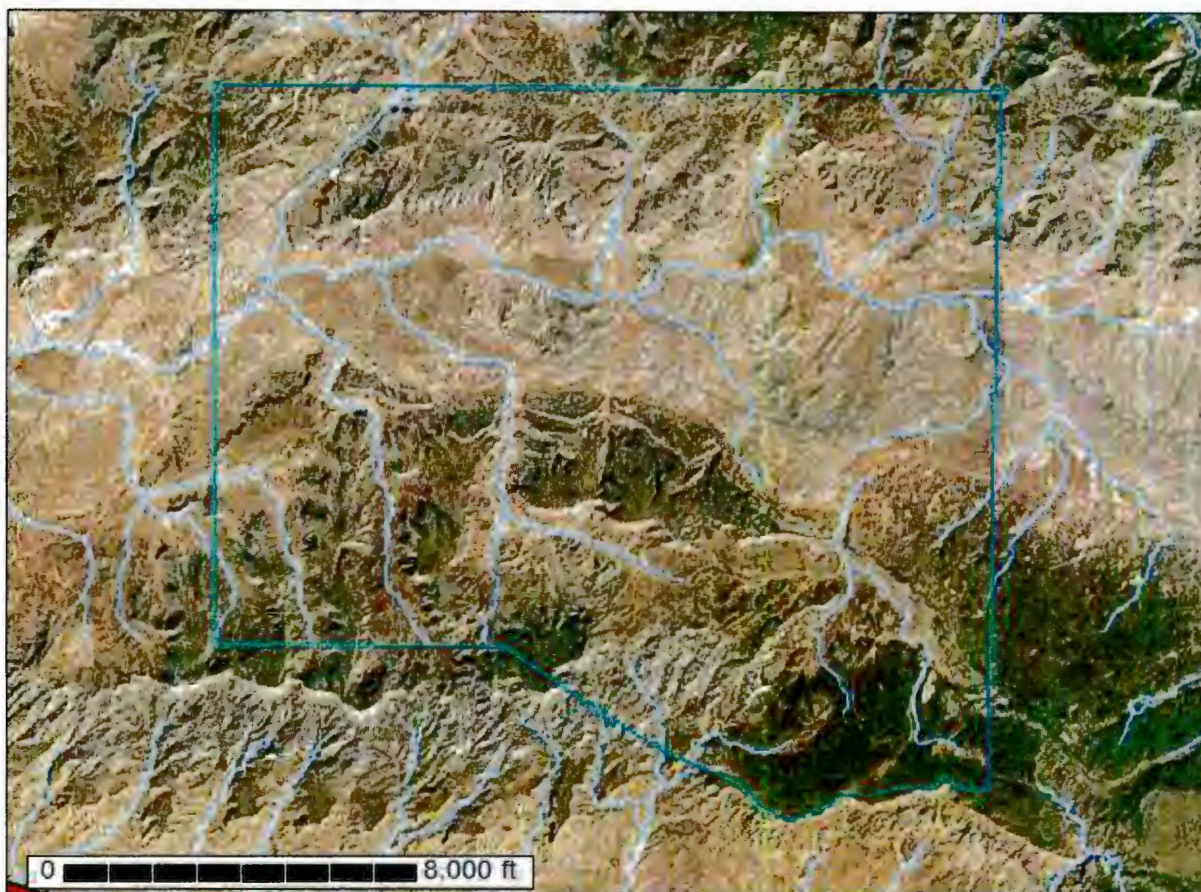
United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

## **Custom Soil Resource Report for McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties**



May 7, 2018



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

RESOLUTION OF THE  
RESOURCES AND DEVELOPMENT COMMITTEE  
OF THE 23RD NAVAJO NATION COUNCIL --- FIRST YEAR, 2015

AN ACTION

RELATING TO RESOURCES AND DEVELOPMENT; DELEGATING AUTHORITY TO THE DIRECTOR OF THE NAVAJO LAND DEPARTMENT TO APPROVE LAND WITHDRAWALS ON THE NAVAJO NATION; AND APPROVING THE ADMINISTRATIVE RULES AND REGULATIONS FOR LAND WITHDRAWALS

BE IT ENACTED:

**Section One. Findings**

- A. Pursuant to 2 N.N.C. §502(B)(2), the Resources and Development Committee is authorized to give final approval of all land withdrawals; and
- B. Pursuant to 2 N.N.C. §501(B)(3), the Resources and Development Committee is authorized to delegate its powers to appropriate divisions of the Navajo Nation for efficiency and streamlining of government processes provided the Committee first grants final approval of rules and regulations governing such delegations and rescission of such delegations; and
- C. The current system of processing land withdrawals is confusing, time consuming, and inconsistent. It has resulted in delay and loss of development on the Navajo Nation; and
- D. Therefore, there is a need to delegate the authority to approve land withdrawals to the Director of the Navajo Land Department to streamline the land withdrawal process; and
- E. The process of reviewing documents associated with land withdrawals is an administrative task that can be performed by the Director of the Navajo Land Department; and
- F. The Resources and Development Committee finds it is in the best interest of the Navajo Nation to approve the delegation of authority.

**Section Two. Delegation to the Director of the Navajo Land Department to Process Land Withdrawals and Approval of the Administrative Rules and Regulations for Land Withdrawals**

- A. The Resources Committee of the Navajo Nation Council hereby approves the delegation of authority to the director of the Navajo Land Department, Division of Natural Resources, to approve Land Withdrawals on the Navajo Nation.
- B. The Navajo Nation hereby approves the Administrative Rules and Regulations, attached hereto as Exhibit "A".

**CERTIFICATION**

I, hereby, certify that the foregoing resolution was duly considered by the Resources and Development Committee of the 23<sup>rd</sup> Navajo Nation Council at a duly called meeting at Navajo Nation Council Chambers, Window Rock, Navajo Nation (Arizona), at which quorum was present and that same was passed by a vote of 3 in favor, 0 opposed, 0 abstain this 16<sup>th</sup> day of June, 2015.



Benjamin Bennett, Vice-Chairperson  
Resources and Development Committee

Motion: Honorable Benjamin Bennett  
Second: Honorable Davis Filfred  
Vote : 3-0 (Vice Chair not voting)





## LAND WITHDRAWAL DESIGNATION REGULATIONS

### § 1. Purpose.

The purpose of these Regulations is to clarify and expedite the Land Withdrawal Designation process on the Navajo Nation, and explains that a Land Withdrawal Designation does not authorize development or disturbance on Navajo Nation land. This Land Withdrawal Designation process does not apply to how to get a lease. Prior to any development on the land, a lease must be obtained in addition to the withdrawal. The purpose of a Land Withdrawal Designation is to designate an area of land for future development by,

- a. Ensuring that the rights of grazing permittees, who are in compliance with their grazing permits, are properly addressed as applicable and as required under 16 N.N.C. §§ 1401 *et seq.* and to prevent any subsequent claims to the land; and
- b. Ensuring that the affected Chapter supports the Land Withdrawal Designation and use of the land.

### § 2. Scope.

These regulations apply to all Land Withdrawal Designations on the Navajo Nation.

### § 3. Delegation

- a. The Resources and Development Committee hereby delegates to the Director of the Navajo Land Department the power and authority to give final approval of all Land Withdrawal Designations on the Navajo Nation. The Director may sub-delegate this authority to a person under the Director's supervision, but this delegation of authority shall not be re-delegated to any other Department or Division within the Nation without the consent and approval of the Resources and Development Committee of the Navajo Nation Council.
- b. Resources and Development Committee hereby delegates authority to the Navajo Land Department to administer and manage Land Withdrawal Designations on the Navajo Nation, with the express power to adopt rules to further implement these regulations.

### § 4. Definitions.

- a. **Community Development:** Community Development encompasses infrastructure, economic development projects, installation of public facilities, community centers, housing, public services, businesses, schools, hospitals, government offices, and other similar projects.
- b. **Designation Holder:** Any person or entity who has obtained a Land Withdrawal Designation.
- c. **Industrial Development:** Economic activity concerned with the manufacture, and processing of materials or construction.
- d. **Land Withdrawal Designation:** A formal action used to designate and reserve a parcel of land for:
  - i. Community Development
  - ii. Industrial Development
- e. **The Navajo Nation Business Site Leasing Regulations of 2005 (Business Site Leasing Regulations):** Navajo Nation regulations that make business site leases mandatory for all businesses operating on the Navajo Nation.
- f. **The Navajo Nation General Leasing Regulations of 2013 (General Leasing Regulations):** Navajo Nation regulations that apply to all leases and permits for the use or possession of Navajo Nation trust land, with the exception of business and mineral leases.
- g. **The Navajo Nation Government:** The Navajo Nation Government is comprised of the legislative, executive, and judicial branches, as well as political subdivisions. For the purpose of land use, ownership, and these regulations, enterprises, businesses, housing authorities, or other entities created or owned by the Navajo Nation are not entities of the Navajo Nation Government.
- h. **The Navajo Nation Trust Land Leasing Act of 2000 (Navajo Leasing Act, 25 U.S.C. §415(e)):** A federal law that regulates the leasing of Navajo Nation lands. It allows the Nation to lease certain lands without Secretarial approval.
- ~~X~~i. **Resolution of Support:** A Resolution of Support is a resolution passed by an affected Chapter stating that they are in support of a particular entity or business locating within their chapter on withdrawn land.

**§ 5. Use and Occupation of Navajo Nation Land.**

A Land Withdrawal Designation does not authorize an entity outside the Navajo Nation Government to use, occupy, or disturb Navajo Nation land. The Navajo Leasing Act, Business Site Leasing Regulations, and General Leasing Regulations apply to all land use on the Navajo Nation. A lease is always required if the land is being developed by any entity outside the Navajo Nation Government.

**§ 6. Land Withdrawal Designations for Navajo Nation Government.**

The Navajo Leasing Act, Business Site Leasing Regulations, and General Leasing Regulations do not apply to the Navajo Nation Government. The Navajo Nation Government may develop on land designated by a Land Withdrawal Designation without a lease for government purposes only.

**§ 7. Procedure to Acquire a Land Withdrawal.**

- a. Every individual, chapter, or entity desiring a Land Withdrawal Designation on the Navajo Nation shall submit an Application for Land Withdrawal to the Navajo Land Department (NLD). The Application shall be accompanied by the following supporting documents:
  - i. A letter of application or cover letter;
  - ii. A proposal for the planned use of the land; and
  - iii. A legal survey or GPS land description indicating the location.
- b. An entity requesting a Land Withdrawal Designation shall then submit their proposal to the Chapter to obtain a Resolution of Support.
  - i. All Chapter Resolutions should contain standard language approving a Land Withdrawal for either community development or industrial development.
  - ii. Resolutions of Support for community development Land Withdrawal Designations shall contain the following language: "The \_\_\_\_\_ Chapter hereby supports and recognizes this land withdrawal for community development, which may include, but is not limited to, the following purposes: housing, education, economic development, healthcare facilities, public use, or governmental use. Industrial development is not supported for this area." To change the use, Chapter approval must be obtained.

- iii. Resolutions of Support for industrial development Land Withdrawal Designations shall contain the following language: "The \_\_\_\_\_ Chapter hereby supports and recognizes this Land Withdrawal Designation for the sole purpose of industrial development. Industrial development shall be considered the economic activity concerned with the manufacture, and processing of materials or construction." To change the use, Chapter approval must be obtained.
- iv. Once the Chapter Resolution of Support is passed by the affected Chapter, return the signed Resolution of Support to the NLD.
- c. The NLD will acquire the necessary consent from all grazing permittees holding a valid grazing permit with an interest in the land as applicable and required under 16 N.N.C. sections 1402 *et seq.* Consent will include infrastructure that supports the development and no additional consents are necessary.
- d. In the event the grazing permittees will not consent, but the proposed project is in the best interest of the community and the Navajo Nation, the appropriate authorities may undertake eminent domain as allowed pursuant to 16 N.N.C. §§ 1401-1403.
- e. Approval from NLD.
  - i. If all requirements are met, the NLD will approve the Land Withdrawal Designation. NLD will subsequently record the Land Withdrawal Designation on the Navajo land title recording system.
  - ii. The NLD will not approve and record a Land Withdrawal Designation until all required documents are provided for review.
- f. If the Designation Holder is not the Navajo Nation Government, they must then begin the leasing process pursuant to The Navajo Leasing Act, Business Site Leasing Regulations, or General Leasing Regulations prior to any development, disturbance, use, or occupation of the land.

**§ 8. Change in purpose.**

- a. If the Designation Holder changes the purpose of the Land Withdrawal Designation, they must go back to the affected Chapter to obtain a new Resolution of Support.
- b. If a Chapter, as Designation Holder, wishes to permit an outside entity use of a portion of or the entire Land Withdrawal Designation, the Chapter must relinquish

**The scope and administration of this delegation of authority to the Director of the Navajo Land Department and Administrative Regulations may be amended or rescinded by the Resources and Development Committee of the Navajo Nation Council.**

**6/16/2015 (3)**



**LAND WITHDRAWAL DESIGNATION PROCEDURE**  
**consistent with Resolution No. RDCJN-33-15**

**I. Chapter or Proposed Land Withdrawal Designation Holder Responsibilities**

A. Draft proposed Chapter Resolution of Support (Resolution) for the land withdrawal designation.

1. Make sure a land withdrawal designation is necessary and not some other type of land use. Seek Project Review's assistance for clarification.
2. If it is determined that a land withdrawal designation is necessary, prepare a resolution consistent with the language identified in Section 7 (b) of the Land Withdrawal Designation Regulations found in the Resources and Development Committees Resolution No. RDCJN-33-15.
3. Attach a legal survey or GPS description as an Exhibit to the proposed Chapter Resolution showing the exact location and acreage of the proposed land withdrawal designation.
4. Attach the letter, as an Exhibit to the proposed Chapter Resolution, from the Grazing Official identifying the appropriate valid permit holders (land use or grazing).

B. After the proposed Chapter Resolution is approved and finalized, the Designation Holder will compile a land withdrawal designation package consisting of the following documents:

1. A letter of application or cover letter
2. A proposal for the planned use of the land; and
3. A legal survey or GPS land description indicating the location and acreages of land.
4. The approved signed Support Chapter Resolution

C. The Designation Holder will hand-carry or mail the land withdrawal designation package to:

Division of Natural Resources  
Navajo Land Department – Project Review Section  
Post Office Box 2249  
Window Rock, Arizona 86515  
(928) 871-6447

D. If the Designation Holder is not the Navajo Nation Government, after the Director of the Navajo Land Department (NLD) approves the land

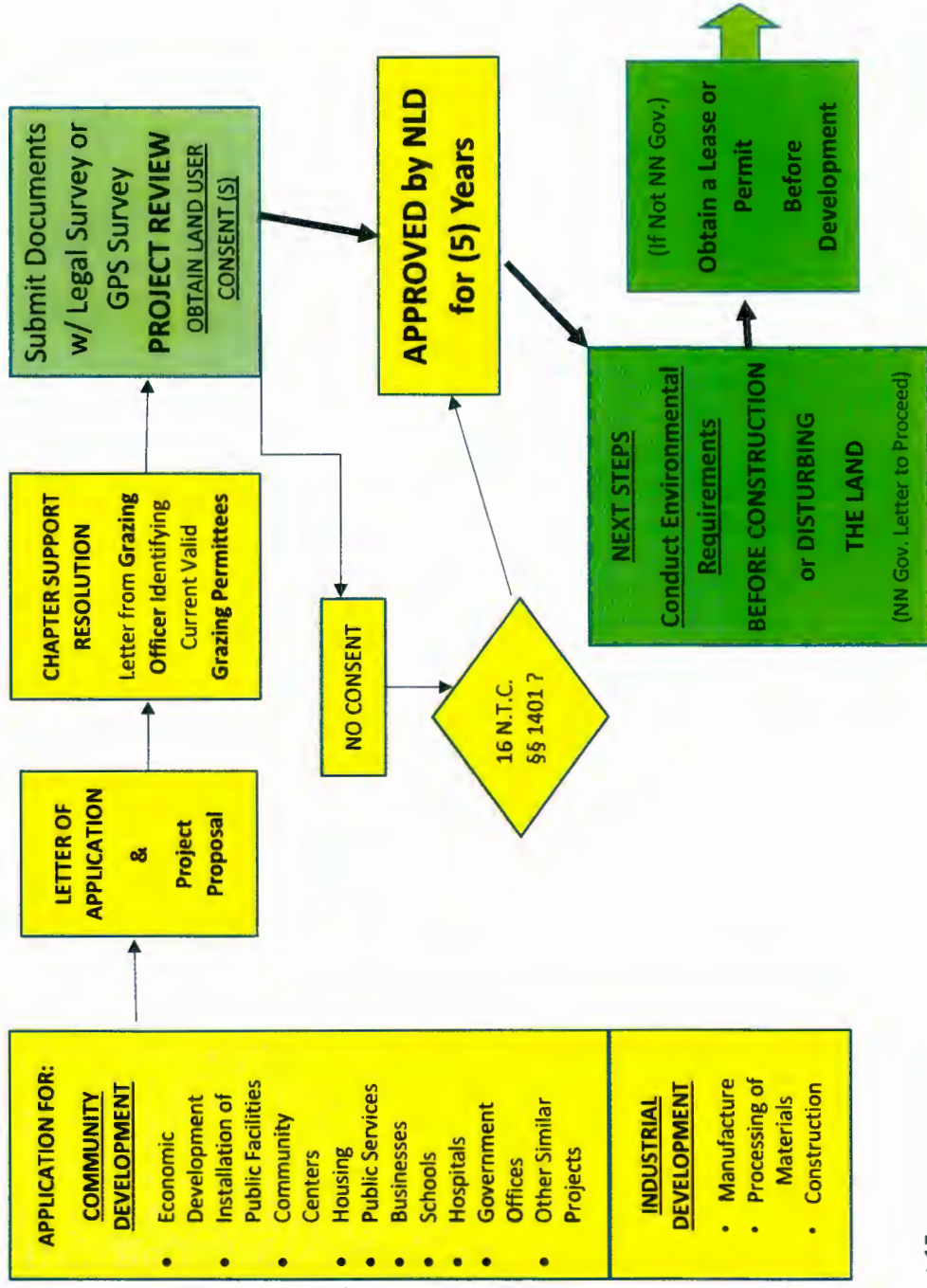
withdrawal designation, the proposed Designation Holder must then begin the leasing process pursuant to the Navajo Leasing Act, Business Site Leasing Regulations, or General Leasing Regulations prior to any development, disturbance, use, or occupancy of the land.

*NOTE: Division of Economic Development, Business Regulatory Office handles all Business Site Lease applications.*

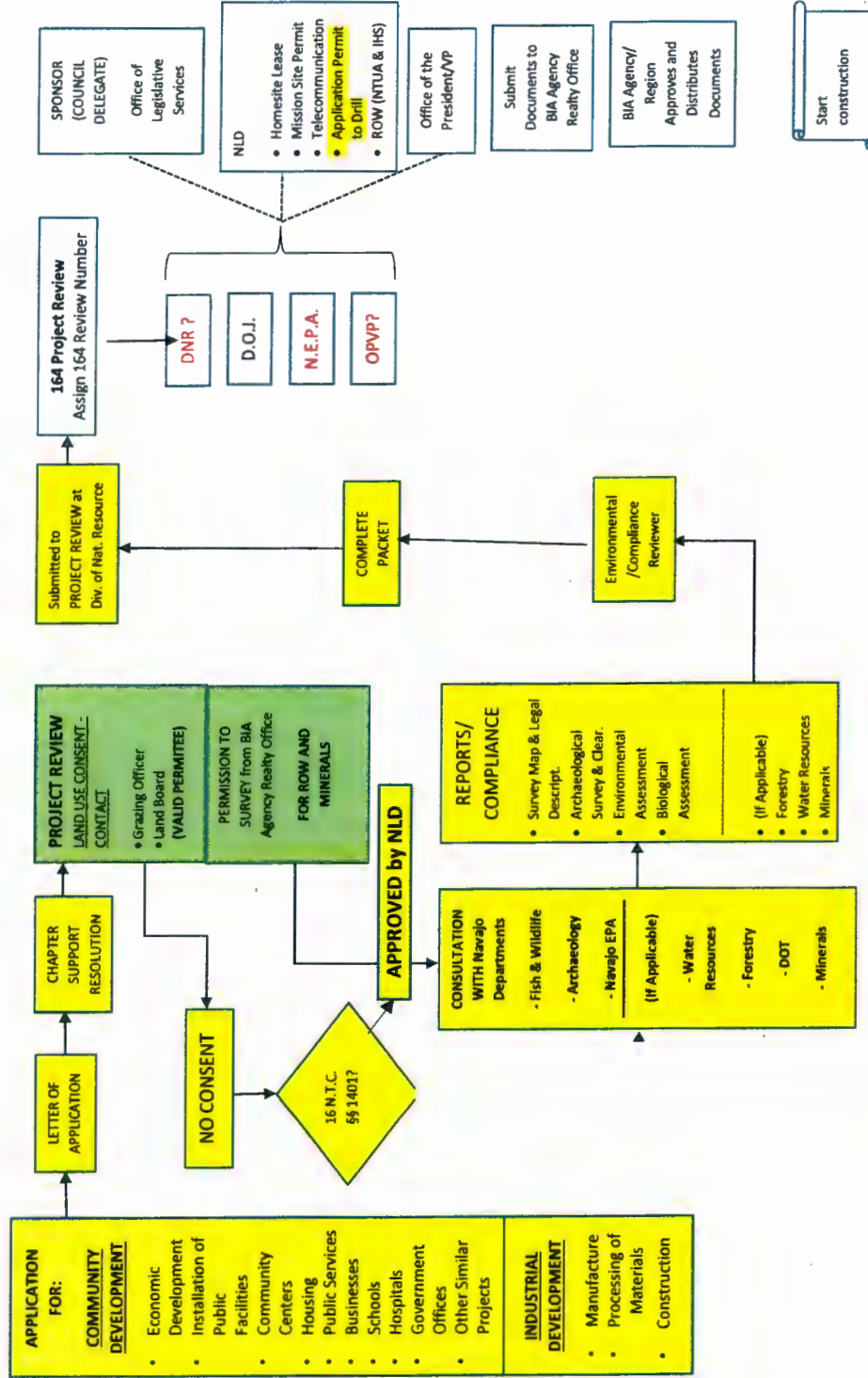
## **II. Project Review Section Responsibilities**

- A. Log in proposed land withdrawal designation package and assign project identification number.
- B. Request Field Clearance services for the proposed designation project area to the Project Review Section Right-of-Way Agents.
- C. After field clearances are obtained, Project Review Section will submit the land withdrawal designation package to the Director of the Navajo Land Department for his/her approval.
- D. If all requirements are met, the Director of NLD will approve the Land Withdrawal Designation.
- E. NLD will subsequently record the Land Withdrawal Designation on the Navajo land title recording system.

# Land Withdraw for Designation



# PROJECT DEVELOPMENT PROCESS





the Land Withdrawal Designation and the outside entity must apply for their own Land Withdrawal Designation in their name for their specific purpose.

**§ 9. Duration and Renewal.**

- a. All Land Withdrawals shall be issued for a term of no more than five (5) years, with the possibility of extension of the term every five years thereafter, so long as the Designation Holder is not in violation of any provision set forth in these Regulations. The term shall be determined by NLD on a case-by-case basis.
- b. If the Designation Holder wishes to extend the Land Withdrawal Designation, the Designation Holder shall give written notice to NLD ninety (90) days prior to expiration of the original term. Renewal of the Land Withdrawal Designation will be at the sole discretion of NLD.
- c. A Land Withdrawal Designation will be terminated if any provision set forth in these Regulations is violated by a Designation Holder.
- d. A Land Withdrawal will be removed from the Navajo Nation land title recording system and open to other applicants for Land Withdrawal Designation or other land use at the expiration of the term or if the Land Withdrawal Designation is terminated for any reason. In the case of a Land Withdrawal Designation for a portion of a pre-existing Chapter land withdrawal, the area will revert back to the Chapter withdrawal status prior to the Land Withdrawal Designation application.

**§ 10. Environmental Review Process.**

- a. No environmental review is required for Land Withdrawal Designations issued to the non-Navajo Nation Government entities; however, when the entity obtains a lease, the General Leasing Regulations require environmental review.
- b. Since the Navajo Nation Government is not required to obtain a lease prior to development on the land, when the Navajo Nation Government obtains a Land Withdrawal Designation for Navajo Nation Governmental use, an environmental review must be completed.
- c. In the event that a Land Withdrawal Designation was done by the Navajo Nation Government, but the Navajo Nation Government relinquished the Land Withdrawal Designation for use by another non-Navajo Nation Governmental entity, the new Designation Holder must still undergo environmental review when a lease is obtained. Each program conducting an environmental review will determine if the use is



consistent with the former environmental review and will determine whether further analysis needs to be conducted.

**§ 11. Oversight and Enforcement.**

- a. Every department within the Navajo Nation Government that is responsible for such oversight shall work to ensure that all Land Withdrawal Designations are in compliance with these Regulations and other applicable Navajo Nation law.
- b. The Navajo Nation shall have the authority to enforce the provisions set forth in these Regulations in accordance with applicable Navajo Nation and federal law.

**§ 12. Penalties.**

- a. If a Designation Holder develops or otherwise disturbs the land without first having a valid lease, the Designation Holder is subject to trespass, and a penalty will be assessed by the NLD. 16 N.N.C. §§ 2251 and 2252.

**§ 13. Transfer of Land Withdrawal Designations.**

The NLD will approve transfers of Land Withdrawal Designations if the following conditions are met:

- a. Consent from the original Designation Holder has been acquired.
- b. The original Designation Holder or the transferee are not in violation of the Land Withdrawal Designation;
- c. No development or disturbance has taken place on the land in question;
- d. The purpose of the new Designation Holder is in accordance with the Resolution of Support, or a new Resolution of Support has been obtained;
- e. The transferee agrees to be bound by the terms of the Land Withdrawal Designation; and
- f. The NLD finds no compelling reason to withhold approval.

**§ 14. Review and Amendments.**

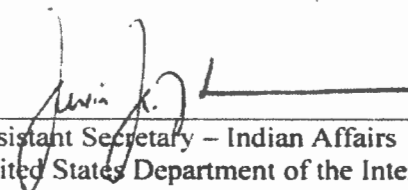


**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS**

**APPROVAL OF  
THE NAVAJO NATION  
GENERAL LEASING REGULATIONS OF 2013**

The attached Navajo Nation General Leasing Regulations of 2013, submitted by the Navajo Nation, Arizona, New Mexico, & Utah, and prepared in accordance with 25 U.S.C. § 415(e) Leases of restricted lands for the Navajo Nation, consisting of 25 pages and adopted by the Navajo Nation Council on November 6, 2013, are hereby approved.

Dated: 5/16/14

  
\_\_\_\_\_  
Assistant Secretary – Indian Affairs  
United States Department of the Interior

Pursuant to the authority delegated by 209 DM 8

RESOLUTION OF THE  
NAVAJO NATION COUNCIL

22nd NAVAJO NATION COUNCIL - Third Year, 2013

AN ACT

RELATING TO RESOURCES AND DEVELOPMENT AND NAABIK'ÍYÁTI'; APPROVING  
THE NAVAJO NATION GENERAL LEASING REGULATIONS OF 2013 AND ENACTING  
THE SAME AT 16 N.N.C. §2301 ET SEQ.

BE IT ENACTED:

Section 1. Findings and Purposes

A. Except for mineral leases, the Navajo Nation Trust Land Leasing Act of 2000, 25 U.S.C. § 415(e), Public Law 106-568 ("Leasing Act"), authorizes the Navajo Nation to issue leases without the approval of the Secretary of the Interior. Regulations for issuance of such leases must be consistent with the Leasing Act and approved by the Secretary of the Interior.

B. The process on the Navajo Nation for agriculture, public, religious, educational, recreational and residential leases must be streamlined.

C. The review and approval of the Secretary of the Interior is not necessary for leases authorized and approved by the Navajo Nation under the Leasing Act and Navajo Nation law and regulations.

Section 2. Approving the Navajo Nation General Leasing Act of 2013

The Navajo Nation hereby approves and enacts the Navajo Nation General Leasing Act of 2013, as provided below. Such enactment shall be codified at 16 N.N.C. §2301 et seq. as follows:

---

Title 16. Land

Chapter 23. Navajo Nation General Leasing Regulations of 2013

Subchapter 1. General Provisions

§ 2301. Authority

The Navajo Nation Trust Land Leasing Act of 2000, 25 U.S.C. § 415(e), P.L. 106-568, Title XII, § 1202, December 27, 2000, 114 Stat. 2933 (hereinafter "Navajo Leasing Act"), authorizes the Navajo Nation to issue Leases, except mineral Leases, without the approval of the

Secretary, provided such Leases are executed under tribal regulations approved by the Secretary. The Secretary is authorized to approve such tribal regulations if such regulations are consistent with the regulations of the Secretary promulgated under 25 U.S.C. § 415(a), and any amendments thereto, and provide for an Environmental Review Process. These regulations will fulfill the requirements of the Navajo Leasing Act.

#### § 2302. Purpose

The purposes of the Navajo Nation General Leasing Regulations of 2013 are to:

A. Implement the authority of the Navajo Nation to issue Leases and Permits pursuant to the Navajo Leasing Act, as amended, and to establish streamlined procedures for environmental review, approval, management and enforcement of Leases;

B. Develop a framework for future Navajo Nation regulations that cover specific areas of leasing referenced in § 2305 as required by the Navajo Leasing Act and which are consistent with these General Leasing Regulations. The General Leasing Regulations must be in place prior to any Leases or Permits being approved under the authority of the Navajo Leasing Act;

C. Promote self-determination, encourage self-sufficiency, and improve efficiency of leasing of Navajo Nation Trust Lands;

D. Identify and implement processes to protect and preserve Navajo Nation Trust Land, including provisions for trust asset accounting, modern leasing practices, and accurate record keeping and title recording.

#### § 2303. Title

These Regulations shall be referred to as the Navajo Nation General Leasing Regulations of 2013.

#### § 2304. Definitions

For purposes of these Regulations:

A. Assignment means an agreement between a lessee/assignor and an assignee whereby the assignee acquires all of the lessee/assignor's rights and assumes all of the lessee/assignor's obligations under a Lease.



B. Bond:

i). Appeal Bond means a guarantee of a certain sum of money sufficient to protect the financial interest of the Navajo Nation pending the outcome of any appeals provided for under these Regulations;

ii). Performance Bond means a guarantee from a third party Surety that ensures performance obligations under a Lease, including but not limited to annual lease payments, development of improvements and reclamation requirements, if any.

C. BIA means the Bureau of Indian Affairs of the United States Department of the Interior.

D. Categorical Exclusion or CATEX means a category of actions which do not individually or cumulatively have a significant effect on human health or the environment and is therefore not subject to the Environmental Review Process under Subchapter 8 of these Regulations.

E. Cognizant Agency for purposes of environmental review means the Navajo Nation Environmental Protection Agency and the Navajo Nation Departments of Historic Preservation and Fish and Wildlife, and any successor or equivalent Navajo Nation agencies with authority for environmental compliance review.

F. Compliance Determination for purposes of environmental review means a "Cultural Resource Compliance Form," a "Biological Resource Compliance Form," or their equivalent.

G. Delegation of Authority means, where, upon approval of the Resources and Development Committee of the Navajo Nation Council, or its successor in authority, a political subdivision of the Navajo Nation assumes leasing authority for Leases described within these Regulations that are also delegable pursuant to the Local Governance Act, 26 N.N.C. §§ 1-2005, as amended, or other relevant Navajo Nation law.

H. Exempt Activities means activities that are exempt by Navajo Nation or federal law from the Environmental Review Process under Subchapter 8 of these Regulations.

I. Fair Annual Lease Value means the most probable dollar amount a property would bring in a competitive and open market.



**§ 2305. Scope**

A. These Regulations apply to all Leases and Permits for use or possession of Navajo Nation Trust Lands authorized under 25 U.S.C. §§ 415(a), 415(e) and 635(a), including Leases for the development or utilization of natural resources, including renewable energy Leases and agricultural Leases, telecommunications site Leases, and Leases for public, religious, educational, recreational, or residential purposes, except business site leases which are authorized pursuant to Navajo Nation Business Leasing Regulations of 2005 approved by the Secretary on July 10, 2006. These Regulations shall not apply to mineral Leases. Nothing herein shall be construed to affect the terms and conditions of an existing Lease.

B. Leases are mandatory for any short or long term use of Navajo trust land or where any permanent structure is fixed or located on Navajo trust land. Failure to comply with this section shall be addressed pursuant to Navajo Nation law.

**§ 2306. Effective Date**

These Regulations shall take effect upon approval by the Secretary.

**§ 2307. Choice of Law**

All disputes arising out of Leases shall be resolved under the laws of the Navajo Nation, unless such laws are in conflict with federal law. Nothing herein shall be construed as a waiver of the sovereign immunity of the Navajo Nation.

**§ 2308. Duration and Renewal**

No Lease shall be approved more than twelve (12) months prior to the commencement of the term of the Lease. A Lease for public, religious, educational, recreational, or residential purposes may provide for a term up to and not to exceed seventy-five (75) years. The term of a Lease for any other purpose shall not exceed twenty-five (25) years except that any such Lease may include an option to renew for up to two additional terms, each of which may not exceed twenty-five (25) years on such terms and conditions as may be specified in such Lease, or such greater term as may be authorized by Congress. Unless the term of a Lease is for less than one year, a lessee shall notify the Navajo Nation of its intent to renew a Lease at least one year prior to the end of the lease term.

**Subchapter 2. Obtaining a Lease**

§ 2320. Information

Information on obtaining a Lease shall be available at the Navajo Land Department (NLD) of the Navajo Nation Division of Natural Resources, or other places authorized by Navajo Nation law. All applicants for Leases shall submit to the Navajo Nation a cover letter requesting a Lease. The Navajo Land Department, or political subdivision of the Navajo Nation, as applicable, shall inform the potential lessee of the requirements and requisite documentation needed to obtain a Lease.

§ 2321. Lease Application Supporting Documents

A. A final Lease application requires the following documents for processing: (1) a fully completed Lease form; (2) an appraisal, if applicable; (3) a certified site survey, survey plat and legal description; (4) documentation of environmental review made pursuant to subchapter 8 of these Regulations; and (4) other documents as may be required pursuant to Navajo Nation law or policies, or applicable federal law.

B. The NLD or its successor shall not process the Lease or Permit application for final approval until all the required documents under this section have been provided for review and consideration by the authorized approving authority.

§ 2322. Records

A. The Navajo Nation shall record all Leases, Permits (except Permits that do not involve any land disturbance) Subleases, Assignments, amendments, encumbrances, renewals, modifications and cancellations, made, issued or otherwise authorized pursuant to these Regulations, with the:

Land Title and Records Office

Southwest Regional Office

Bureau of Indian Affairs

P.O. Box 26567

Albuquerque, NM 87125-6567

B. A copy of a Lease and all amendments, renewals, cancellations, and Assignments thereto shall also be sent for information purposes only to the Secretary of the Interior, c/o the Bureau of Indian Affairs, Navajo Regional Office, for the appropriate Agency Real Estate Services Offices at the addresses provided below,

pursuant to 25 U.S.C. §§ 415 (e) (4) (A) and (B). The five Agency Real Estate Services Offices are:

| Agency                       | Address   |
|------------------------------|---|
| <u>Chinle Agency</u>         | <u>Real Estate Services</u><br><u>P.O. Box 7H</u><br><u>Chinle, AZ 86503</u>  |
| <u>Eastern Navajo Agency</u> | <u>Superintendent</u><br><u>Attention: Real Estate</u><br><u>Services</u><br><u>P.O. Box 328</u><br><u>Crownpoint, NM 87313</u> |
| <u>Fort Defiance Agency</u>  | <u>Real Estate Services</u><br><u>P.O. Box 619</u><br><u>Ft. Defiance, AZ 86504</u>   |
| <u>Shiprock Agency</u>       | <u>Real Estate Services</u><br><u>P.O. 3538</u><br><u>Shiprock, NM 87420</u>  |
| <u>Western Navajo Agency</u> | <u>Real Estate Services</u><br><u>P.O. 127</u><br><u>Tuba City, AZ 86045</u>  |

#### § 2323. Ownership of Records

Records of activities taken pursuant to these Regulations are the property of the United States and the Navajo Nation and its delegated political subdivisions. Records compiled, developed or received by the Navajo Nation in the course of business with the Secretary are the property of the Navajo Nation.

### Subchapter 3. Lease Requirements

#### § 2330. Terms and Conditions

Leases shall be in a form approved by the Navajo Nation in accordance with applicable law and shall include standard terms and conditions. The standard terms and conditions may be modified only with the approval of the Navajo Nation. Leases may contain a provision that requires a lessee to consent to the jurisdiction of the Navajo Nation to address all issues arising out of the Lease.



§ 2331. Land Descriptions

Leases shall contain adequate site surveys and legal descriptions based on metes and bounds, rectangular, or lot and block systems.

§ 2332. Appraisal, Local StudiesA. Appraisal Method:

1. The Fair Annual Lease Value shall be determined by an appraisal or equivalent procedure performed by the Navajo Nation utilizing the following data: improvement cost, replacement cost, earning capacity, and sales and Lease data of comparable sites.

2. Alternatively, the Fair Annual Lease Value shall be determined by an appraisal performed by a licensed appraiser utilizing the Uniform Standards of Professional Appraisal Practice or other commonly accepted method of appraisal.

3. An appraisal log reporting the methods of appraisal and appraisal value of trust land shall be attached to every Lease.

B. If the need arises, the Navajo Nation may seek assistance from the Office of Special Trustee's Navajo Region, Branch of Appraisal, for technical assistance in reviewing an appraisal or to perform an appraisal required under these Regulations.

C. No appraisal shall be required for a Lease for i) residential purposes, including home sites, schools, religious facilities, or medical facilities; ii) Leases for use of Navajo Nation Trust Land by federal, state and local governments, non-profits, public projects or public utilities, where such entities or projects are providing essential governmental or utility services to Navajo people; or iii) for other public purposes as authorized by applicable laws and regulations.

§ 2333. Environmental Review Process

The Navajo Nation shall not make a final Leasing or Permitting Decision unless the Nation has ensured compliance with the Environmental Review Process ("ERP") required under these Regulations. The Navajo Nation shall not approve of any Lease or Permit if there is a determination of non-compliance under Subchapter 3 in these Regulations. Leases executed in material violation of this section shall be null and void.

§ 2334. Fair Annual Lease Value

A. Unless otherwise provided, no Lease shall be approved for less than the present Fair Annual Lease Value as set forth in the appraisal, except as follows:

1. The lessee is in the authorized development period;
2. The Navajo Nation is providing an incentive for the Lease applicant to locate on the Navajo Nation, and must provide Lease concessions, Lease improvement credits, and Lease abatements to attract the proposed Lease activity ; or
3. The Navajo Nation otherwise determines such action is in the best interest of the Navajo Nation.

B. Unless otherwise provided, Lease payments will be structured on a flat lease rate basis.

C. Unless otherwise provided, the Lease shall provide for periodic review and adjustment at least every five years. Such review and adjustment shall give consideration to the then existing economic conditions, exclusive of improvement or development required by the contract or the contribution value of such improvement or development.

D. Leases for terms of less than five years may be structured to allow for lease rate adjustments. The Lease shall specify how adjustments will be made, who will make such adjustments, when adjustments will go into effect, and how disputes shall be resolved.

E. Leases may be amended to allow for lease rate adjustments.

F. The Navajo Nation may waive the rent, or charge nominal rent, for i) residential Leases, including home sites, schools, religious facilities, or medical facilities; ii) Leases for use of Navajo Nation Trust Land by federal, state and local governments, non-profits, public projects and public utilities, where such entities or projects are providing essential governmental or utility services to Navajo people; or iii) for other public purposes as authorized by applicable laws and regulations.

G. The Navajo Nation shall keep written records of the basis used in determining the Fair Annual Lease Value, as well as the basis for adjustments. These records shall be included in the appropriate Lease file.



§ 2335. Performance Bond

A. The lessee, unless otherwise provided, shall obtain a satisfactory Performance Bond or other Surety acceptable to the Navajo Nation, in an amount that reasonably assures performance of the Lease. Such Bond shall be for the purpose of guaranteeing:

1. The annual Lease payment;
2. The estimated development cost of improvements;
3. Compliance with a reclamation plan, if applicable; and
4. Any additional amount necessary to ensure compliance with the Lease.

B. The Navajo Nation may waive the Bond requirement, or reduce the amount, if doing so is in the best interest of the Navajo Nation. In the event that a reclamation plan is determined to be necessary by the Nation, the lessee shall be required to submit such a plan prior to Lease approval, and implement the plan at termination of the Lease. This Bond requirement shall not apply where the Navajo Nation has waived the rent, except where a reclamation plan is determined necessary. The Navajo Nation shall maintain written records of waivers and reductions in the appropriate Lease file.

§ 2336. Insurance

A lessee shall secure insurance from a nationally accredited insurance company with a financial strength rating of "A" or equivalent, and must be authorized to do business in the state where the premises is located, or authorized by the Navajo Nation according to applicable Navajo Nation law. It shall cover general liability and casualty. The amount shall be sufficient to cover the improvements, personal injury or death, and any reasonably potential foreseeable loss of the lessor and the United States. The insurance shall expressly identify the lessor and the United States as additional named insured parties. The insurance requirements shall not apply to home site Leases or when the Navajo Nation is the lessee. The Navajo Nation may waive the insurance requirement for any lessee that is an entity or enterprise of the Navajo Nation.

§ 2337. Improvements

A. Improvements to the premises shall become the property of the Navajo Nation at the termination of the leasehold unless otherwise provided for in the Lease. If the Lease authorizes the

improvements to be removed by the lessee, the Lease shall specify the time allowed for such removal.

B. If provided for in the Lease, a lessee may develop equity value in the improvements, and sell its interest in the Lease based on the equity value. The Navajo Nation shall have a right of first refusal to purchase such interest.

#### § 2338. Subleases, Assignments, Amendments and Encumbrances

A. All Subleases, Assignments, amendments or encumbrances of any Lease shall require the written consent of the Navajo Nation as well as any sureties, unless otherwise provided herein.

B. A Lease may authorize Subleases, in whole or in part. The lessee shall remain liable for its duties under the Lease notwithstanding any subleasing of the leasehold or any part thereof.

C. The Lease may authorize encumbrances to the leasehold interest for the purpose of financing to develop and improve the premises, subject to the approval of the Navajo Nation. If a sale or foreclosure occurs and the encumbrancer is the purchaser, the encumbrancer may assign the Lease without approval of the Navajo Nation or lessee, provided the encumbrancer/assignee must agree in writing to be bound by all the terms and conditions of the Lease. If the purchaser is a party other than the encumbrancer, approval by the Navajo Nation shall be required, and any approved purchaser must agree in writing to be bound by all the terms and conditions of the Lease.

#### Subchapter 4. Lease Administration

##### § 2350. Administration

A. The Navajo Nation shall administer Leases executed pursuant to these Regulations and may administer existing Leases previously approved by the Secretary as may be provided for under a P.L. 93-638 self-determination contract or compact or under other applicable authority.

B. The Navajo Nation shall employ sound real estate management practices in exercising its authority under these Regulations, including without limitation accounting, collections, monitoring, enforcement, relief, and remedies.

C. Political subdivisions of the Navajo Nation may issue Leases pursuant to a Delegation of Authority provided they do so in accordance with these Regulations and Navajo Nation law.

Administration by a political subdivision of Leases executed prior to such political subdivision obtaining such authority shall require an Assignment of the Navajo Nation's duties and rights as lessor and consent of the lessee. Such Delegation of Authority shall be revocable by the Resources and Development Committee of the Navajo Nation Council upon recommendation of the Navajo Nation Department of Justice.

#### § 2351. Accounting

The Navajo Nation shall implement and/or maintain an accounting system to ensure proper payment on Leases where applicable, in accordance with Navajo Nation law and fiscal policies.

#### § 2352. Administrative Fees

The Navajo Nation may charge administrative fees for costs associated with issuing a Lease, Sublease, Assignment, amendment, mortgage or other administrative transaction.

### Subchapter 5. Enforcement

#### § 2360. Enforcement

The Navajo Nation and its delegated political subdivisions shall have the authority to enforce the terms and conditions of Leases and Permits issued under these Regulations in accordance with applicable Navajo Nation and federal law.

#### § 2361. Defaults, Cancellation and Remedies

A. A Lease shall include provisions for fair notice, default, and remedies. Upon a showing satisfactory to the Nation that there has been a violation of the Lease or these Regulations, or of any law or regulation specifically applicable under the Lease, by a lessee, the lessee shall be provided with written notice of the alleged breach, and given ten (10) days to show cause why the Lease should not be cancelled. Upon request by the lessee, the lessee shall be given a reasonable opportunity to cure a breach which the Navajo Nation determines can be corrected and the lessee shall proceed diligently to perform and complete the corrective actions within a reasonable time period as established by the Navajo Nation's authorized representative.

B. If the Navajo Nation cancels a Lease, the Navajo Nation shall provide the lessee with thirty (30) days' advance notice of the cancellation by certified mail, which shall become effective thirty-two (32) days after mailing. Such notice shall state the right to



appeal to the Office of Hearing and Appeals pursuant to Subchapter 6 of these Regulations, and a statement of any monies due.

C. In case of the cancellation of a Lease, the filing of an appeal shall not change the effective date of the cancellation, but shall stay any eviction proceeding in accordance with Subchapter 6 of these Regulations. Pending the outcome of an appeal, the lessee shall make all requisite payments, as well as comply with the terms of the Lease, including any requirements for environmental or hazardous waste remediation and reclamation of the leasehold premises. If the lessee fails to make such payments pending the outcome of an appeal, the stay shall be lifted and the Navajo Nation may immediately commence eviction proceedings, bring an action in forcible entry and detainer, pursue remedies under the Navajo Nation Civil Trespass Act, or take any other action the Navajo Nation deems appropriate to protect its interests.

#### **§ 2362. Penalties**

A Lease shall specify the rate of interest to be charged if the lessee fails to make payments in a timely manner and identify additional late payment penalties. Unless the Lease provides otherwise, interest charges and late payment penalties shall apply in the absence of any specific notice to the lessee from the Navajo Nation, and the failure to pay such amounts shall be treated as a breach of the Lease.

#### **§ 2363. Harmful or Threatening Activities**

If a lessee or other party causes or threatens to cause immediate and significant harm to the premises, or engages in criminal activity thereon, the Navajo Nation may take appropriate emergency action in accordance with Navajo Nation law, including immediately cancelling the Lease, commencing eviction proceedings, bringing an action in forcible entry and detainer, pursuing remedies under the Navajo Nation Civil Trespass Act, or taking any other action deemed appropriate to protect the public interest, the premises, and the environment.

#### **§ 2364. Holdover and Trespass**

If a lessee remains in possession after the expiration or cancellation of a Lease, the Navajo Nation may treat such occupation as a holdover tenancy, or as a Trespass, and if treated as a Trespass may pursue any remedy available under Navajo Nation or federal law.

### **Subchapter 6. Appeals**

§ 2370. Appeals

A. A lessee or Interested Party may appeal a final determination of the Navajo Nation regarding a Lease within twenty (20) days of the determination. Such appeal shall be filed with the Navajo Nation Office of Hearings and Appeals (OHA). The written complaint shall set forth in plain language the basis for the appeal, a short statement demonstrating the interest of the appellant, a short statement indicating the nature and circumstance of the appeal, and a short statement indicating the remedy being sought. A stay of enforcement shall be effectuated only by the filing of an Appeal Bond set by the OHA pending the exhaustion of all available Navajo Nation remedies, except in matters involving home site Leases, which shall not require an Appeal Bond. Service of process shall be made on the authorized Navajo Nation representative identified in the Lease and to the Navajo Nation Office of the Attorney General in accordance with the Navajo Rules of Civil Procedure.

B. An Appeal Bond shall be set in an amount sufficient to protect the Navajo Nation from all financial losses that may occur as result of the appeal. Appeal Bond requirements shall not be separately appealed, but may be contested during the appeal as a preliminary matter for expedited decision by OHA.

C. The OHA shall uphold the determination of the Navajo Nation unless it is:

1. Arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law;
2. In excess of statutory jurisdiction, authority, or limitations or short of statutory right;
3. Without observance of procedure required by law; or
4. Unsupported by substantial evidence.

§ 2371. Appeals to the Navajo Nation Supreme Court

The lessee or Interested Party may appeal, within thirty (30) days, the final decision of OHA to the Navajo Nation Supreme Court. A stay of execution may be effectuated by the Navajo Nation Supreme Court only by the filing of an Appeal Bond except in matters involving home site Leases which shall not require an Appeal Bond. The failure to exhaust administrative remedies before the OHA or to file an appeal within thirty (30) days shall be a jurisdictional bar to the filing and consideration of any such appeal. Review shall be limited to issues of law and the record. The Court shall uphold



findings of fact if supported by substantial evidence and review issues of law de novo. A finding of fact is supported by substantial evidence where, upon examining the relevant evidence, a reasonable mind could accept the evidence as adequate to support the conclusion, even if it is possible to draw two inconsistent conclusions from the evidence.

[Subchapter 7. Reserved]

Subchapter 8. Environmental Review Process

§ 2380. Environmental Reviewer

Prior to exercising leasing authority under these Regulations, the Navajo Nation shall create a position within the Navajo Nation Division of Natural Resources to be the Environmental Compliance Officer for Leases ("Environmental Reviewer" or "ER") who shall be responsible for carrying out the Environmental Review Process ("Environmental Review Process" or "ERP") under this Subchapter. The ER will consult with the relevant Navajo Nation agencies and determine which Cognizant Agency is responsible for making Compliance Findings for each of the areas and/or laws identified in §2384 of this Subchapter.

§ 2381. Environmental Reviewer's Authorities and Duties

A. The ER shall:

1. Review all proposed Leases and Permits to ensure compliance with these Regulations and other applicable law and policies.

2. Establish procedures to expedite the Compliance Determination process, and consult with appropriate Navajo Nation agencies in the development and implementation of any such procedures.

3. Perform the ERP and make a summary of Environmental Review Findings and Compliance Determinations ("Compliance Determination Summary").

4. Complete an Environmental Review Record ("ERR" or "Record").

B. At his or her discretion, the ER may provide the lessee with technical assistance to remedy deficiencies found within the contents of the Compliance Determination forms.

§ 2382. Threshold Determinations

A. Leasing and Permitting Decisions Not Subject to ERP: (i) The Navajo Nation is not required to undertake an environmental review under these Regulations for activities exempt under Navajo Nation or federal law. (ii) The Navajo Nation is not required to undertake an environmental review under these Regulations for activities it determines are a CATEX, unless the activities may have a Significant Impact on the quality of the human environment. If the ER determines that a Leasing Decision is exempt or qualifies as a CATEX, the ER shall provide written documentation of such determination.

B. If the ER determines, after consulting with the Cognizant Agencies, that the Leasing Decision by its nature would not individually or cumulatively have a Significant Impact on human health or the environment, to include the biological and cultural resources of the Navajo Nation, the ER shall issue a written Finding of No Significant Impact and the Leasing Decision shall be exempt from additional requirements of the ERP, subject to the recording requirements of §2388 and §2389; CATEX activities include:

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of buildings and improvements not requiring a change in land use.
2. Acquisition, repair, reconstruction, or rehabilitation of facilities (other than buildings) and improvements not changing the size or capacity, and not changing the design use.
3. Activities already contemplated under a master Lease for which the environmental review was already completed.
4. Renewals, extensions and amendments to existing Leases and Permits where the environmental review was already completed, and no Significant Impact to the human environment will occur.
5. Removal of materials and architectural barriers that restrict the accessibility of elderly and handicapped persons.

C. Leasing Decision Subject to Environmental Review Process: If the ER determines that the Leasing Decision may individually or cumulatively have a Significant Impact on human health or the environment, including but not limited to impacting, altering, or

disturbing the biological and cultural resources of the Navajo Nation, the Leasing Decision shall be subject to the ERP.

§ 2383. Action on Leasing Decision Subject to Completion of ERP

If the ER determines that a Leasing Decision is subject to an ERP, the Leasing Decision shall not be made until the ER completes the ERP as required by these Regulations.

§2384. Lessee Responsible for Environmental Compliance Determinations

A. A lessee has primary responsibility for providing documentation of environmental compliance. The Lessee shall provide to the ER a Compliance Determination for all environmental laws, Regulations and policies, as amended, applicable to the Leasing Decision, including, but not limited to the following:

- National Historic Preservation Act, 16 U.S.C. §§ 470 et seq.
- Endangered Species Act, 7 U.S.C. § 136, U.S.C. §§ 1531 et seq.
- Farmland Protection Policy Act, 7 U.S.C. §§ 4201 et seq.
- Clean Air Act, 42 U.S.C. §§ 7401 et seq.
- Eagle Protection Act, 16 U.S.C. §§ 668-668c
- Migratory Bird Treaty Act, 16 U.S.C. §§ 703-712
- Navajo Nation Environmental Policy Act, 4 N.N.C. §§ 901 et seq.
- Navajo Nation Cultural Resources Protection Act, 19 N.N.C. §§ 1001 et seq.
- Navajo Nation Solid Waste Act, 4 N.N.C. §§ 101 et seq.
- Navajo Nation Air Pollution Prevention and Control Act, 4 N.N.C. §§ 1101 et seq.
- Navajo Nation Safe Drinking Water Act, 22 N.N.C. §§ 2501 et seq.
- Navajo Nation Clean Water Act, 4 N.N.C. §§ 1301 et seq.



- Navajo Nation Underground Storage Tank Act, 4 N.N.C. §§ 1501 et seq.
- Navajo Nation Pesticide Act, 4 N.N.C. §§ 301 et seq.
- Golden and Bald Eagle Nest Protection Regulations (GBENPR)
- Navajo Endangered Species List (NESL)
- Biological Resource Land-Use Clearance Policies and Procedures (RCP)
- All other applicable Navajo Nation and federal laws, regulations and policies

B. Lessee's responsibility to provide said environmental Compliance Determinations under this Subchapter is in addition to and separate from lessee's ongoing obligation to comply with all applicable environmental laws.

#### § 2385. Compliance Determinations

A. The lessee shall request a Compliance Determination from each Cognizant Agency identified by the ER and shall provide said agency with the information it requires to make the Compliance Determination. Findings and Compliance Determinations must be signed by the agency official responsible for such findings and determinations.

B. The Compliance Determination performed by the Cognizant Agencies must clearly describe the Leasing Decision under consideration, provide an evaluation of the Leasing Decision's impact on the regulated resource or condition, and provide a finding whether the Leasing Decision will comply with all applicable environmental laws under that agency's purview, and identify any mitigation required for compliance.

C. If the ER and the lessee have made reasonable efforts to obtain a Compliance Determination from the Cognizant Agency, and are unable to obtain a Compliance Determination within thirty (30) days of the Agency having received the request for a determination and all applicable information, the ER may make the Compliance Determination, provided, the Compliance Determination must be supported by knowledge and reliable information which can be obtained from other sources.

§2386. Compliance Determinations in Earlier or Concurrent Environmental Review Documents

A. If the Leasing Decision pertains to an existing Lease that has undergone an environmental review pursuant to the these Regulations, the Nation's Business Site Leasing Regulations, or the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 et. seq. (NEPA), those earlier environmental review documents may be used to meet one or more Compliance Determination(s) under this Subchapter, subject to the ER's determination in §2388 that the Compliance Determination adequately evaluates the impacts of the Leasing Decision.

B. As early in the process as possible, the ER should review the earlier environmental review documents and assess whether the Compliance Determinations in those documents sufficiently evaluate the impacts of the Leasing Decision. If disturbances associated with the Leasing Decision were not evaluated by the earlier environmental review documents, a compliance update or amendment from the agency that has regulatory responsibility for the resource that has not been adequately evaluated shall be required.

C. In the event a federal agency requires the lessee to conduct an environmental review under NEPA in connection with a federal decision that is related to the Leasing Decision, the ER may use those NEPA documents for purposes of the ERP if the documents meet the requirements of this Subchapter.

§ 2387. Public Notice Requirements and Hearings

A. If the ER finds that a Leasing Decision is likely to have a Significant Impact on the human environment, the ER will consider and analyze reasonable alternatives that may minimize the impacts and provide the public notice of the Navajo Nation's intent to complete an ERP as well as the opportunity to comment on the alternatives.

B. Such notice will be published in a local newspaper of general circulation, and will provide for a thirty (30) day comment period, which may be extended for good cause in the ER's discretion. The Notice will identify where the Environmental Review Record ("Record" or "ERR"), may be obtained. The notice will state that public comments which are timely received will be considered before the ER completes the ERP.

C. The ER shall determine whether or not to hold public hearings. The ER shall consider the following factors in making its determination:



1. Economic cost;
2. Geographic areas;
3. Amount of resources needed;
4. Degree of controversy or support; and
5. Extent to which public involvement may have been achieved by other means.

D. All public hearings shall be published in the media at least fifteen (15) days prior to the hearing. The notice shall include the following information:

1. The date, time, place and purpose of the public hearing;
2. A description of the project, its location, estimated cost and benefits;
3. A statement that individuals will be afforded the opportunity to comment on environmental issues;
4. State the ER's name and address; and
5. State what documents are available for review by the public where they may be obtained, and any charges that may apply to providing the information to the public.

§ 2388. Finding of Environmental Compliance and Completion

A. Before the ER may complete the ERP, the ER shall:

1. Ensure that the public comment period has passed, if applicable, and the ER has considered any comments and incorporated the comments and any responses of the Navajo Nation as appropriate into the Record;
2. Affirmatively find and place in the Record a signed, dated statement that the Leasing Decision is in compliance with all applicable environmental requirements ("Finding of Compliance").
3. Place a summary of the Compliance Findings in the Record, which shall include:
  - i. The identification of the source of a Compliance determination if contained in an earlier environmental review; and
  - ii. A summary and copy of each Cognizant Agency's Compliance Determination for all applicable

environmental laws under that agency's purview, including any conditions of compliance or required mitigation.

B. Upon Completion of the ERP, the ER will transfer the Record to the appropriate Navajo Nation official or legislative body that has the authority to make a final Leasing Decision.

§ 2389. Environmental Review Record

A. An Environmental Review Record must be completed for every ERP, including for Leasing Decisions the ER finds to be exempt from the ERP, qualifies as a CATEx or exempt from a full ERP based upon a Finding of No Significant Impact under §2382 (A) and (B). The ERR must be maintained in a written format and shall be available for public review in accordance with the Navajo Nation Privacy Act, 2 N.N.C. §§ 81 et seq., as amended.

B. The Environmental Review Record must contain all documents relevant to the ERP, including but not limited to, the following:

1. Written determinations by the ER pursuant to this Subchapter;
2. Correspondence with the Lessee and government agencies including all Cognizant Agencies;
3. Compliance Determinations including source documents and supporting documents;
4. Public notices, if applicable;
5. Public comments and any responses, if applicable; and
6. The Finding of Compliance and Compliance Determination Summary and ER Findings.

§ 2390. Revisions to the Environmental Review Record

A. The ER shall reopen an ERR if:

1. There are changes in the nature, magnitude or extent of a proposed activity, and that activity was not already contemplated and may have a significant effect on the human environment.

2. There are changes in the circumstances and environmental conditions, and these were concealed in the original ERR.

3. There are changes in data and conditions since the original ERR was completed.

B. Once the responsibility entity reevaluates the ERR, it shall either revise the ERR, or develop a new ERR.

#### Subchapter 9. Amendments; Severability

##### § 2395. Amendments

A. The Resources and Development Committee of the Navajo Nation Council or its successor may amend these Regulations without the Secretary's approval, so long as the amendment is for clarification or administrative convenience, and is not inconsistent with 25 U.S.C. § 415(e), as amended.

B. The determination of whether a proposed amendment to the Regulations is for clarification or administrative convenience and that it is not inconsistent with 25 U.S.C. §415(E) shall be made by the Attorney General, Navajo Nation Department of Justice.

##### § 2396. Severability

If any Navajo Nation court or other court of competent jurisdiction determines a provision in these Regulations or a Lease is invalid, void or unenforceable, the remainder shall remain in full force and effect without regard to the invalid, void or unenforceable portion.

##### § 2397. Petitions to the Secretary

Any Interested Party aggrieved by the Navajo Nation's violation of these Regulations may file a Petition with the Secretary within thirty (30) days after exhausting all available Navajo Nation remedies to review the alleged violation as provided for under 25 U.S.C. § 415(e). The failure to exhaust all available Navajo Nation remedies and to file a Petition within thirty (30) days shall be a jurisdictional bar to the filing and consideration of any such Petition. The Secretary shall review any findings of fact under a clearly erroneous standard and shall review any conclusions of federal law de novo, but shall defer to Navajo Nation administrative hearing bodies and/or Navajo Nation courts on the proper

interpretation of Navajo Nation law. In any such Petition, the Secretary shall limit relief to mediation, injunctive relief, declaratory relief, and/or rescinding approval of these Regulations and reassuming responsibility for the approval of Leases for Navajo Nation Trust Lands.

### Section 3. Effective Date

Subject to section 2306 of the regulations above, the Act Enacted herein shall be effective pursuant to 2 N.N.C. §221.

### Section 4. Codification

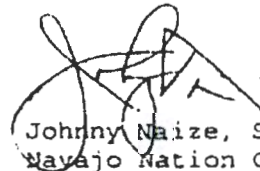
Subject to section 2306 of the regulations above, the provisions of this Act which amend or adopt new sections of the Navajo Nation Code shall be codified by the Office of Legislative Counsel. The Office of Legislative Counsel shall incorporate such amended provisions in the next codification of the Navajo Nation Code.

### Section 5. Savings Clause

Should any provision of this Act be determined invalid by the Navajo Nation Supreme Court, or the District Courts of the Navajo Nation without appeal to the Navajo Nation Supreme Court, those provisions of the Act which are not determined invalid shall remain the law of the Nation.

### CERTIFICATION

I hereby certify that the foregoing resolution was duly considered by the Navajo Nation Council at a duly called meeting in Window Rock, Navajo Nation (Arizona) at which a quorum was present and that the same was passed by a vote of 16 in favor and 1 opposed, this 22<sup>nd</sup> day of October 2013.

  
Johnny Naize, Speaker  
Navajo Nation Council

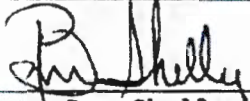
11-01-13

Date

Motion: Honorable Leonard Pete  
Second: Honorable Duane Tsinigine

ACTION BY THE NAVAJO NATION PRESIDENT:

1. I hereby sign into law the foregoing legislation, pursuant to 2 N.N.C. § 1005 (C) (10), on this \_\_\_\_\_ day of NOV 06 2013 2013.



Ben Shelly, President  
Navajo Nation

2. I hereby veto the foregoing legislation, pursuant to 2 N.N.C. § 1005 (C) (11), this \_\_\_\_\_ day of \_\_\_\_\_ 2013, for the reason(s) expressed in the attached letter to the Speaker.

Ben Shelly, President

Navajo Nation



J. Finding of No Significant Impact or FONSI means an Environmental Reviewer determines in a written document that a Leasing Decision will not have a significant impact on the quality of the human environment.

K. Interested Party means an Indian or non-Indian individual or corporation, or tribal or non-tribal government whose interest could be adversely affected by a tribal trust land Leasing Decision made by the Navajo Nation.

L. Lease means a written agreement between the lessor and a lessee, issued under these Regulations as authorized by 25 U.S.C. 55415 (a) and (e), wherein the lessee is granted a right to possess Navajo Nation Trust Land for a specific purpose and limited duration.

M. Leasing Decision in the context of the Environmental Review Process means the following types of Lease or Permit transactions that will be acted on by the Navajo Nation or its delegated political subdivision:

- i). Issuance of a Lease or Permit;
- ii). Amendment or modification of a Lease or Permit;
- iii). Assignment or transfer of a Lease or Permit; and
- iv). Granting of a Sublease as applicable.

N. Navajo Nation means the Navajo Nation Government.

O. Navajo Nation Trust Land means the surface estate of land or any interest therein held by the United States in trust for the Navajo Nation; land held by the Navajo Nation and subject to federal restrictions against alienation or encumbrance; land held by the United States in trust for a Navajo Nation corporation chartered under Section 17 of the Indian Reorganization Act.

P. Permit means a written authorization or license granted by the Navajo Nation whereby the permittee is granted a use or revocable use privilege to use Navajo Nation Trust Land for a specified purpose and limited duration.

Q. Petition means a written request submitted to the Secretary for the review of an action or inaction of the Navajo Nation that is claimed to be in violation of these Regulations. Petition may only be submitted within thirty (30) days after exhausting all remedies available on the Navajo Nation.

R. Regulations mean these Navajo Nation General Leasing Regulations of 2013.

S. Secretary means the Secretary of the U.S. Department of the Interior or his or her authorized representative acting under delegated authority.

T. Significant Impact means a determination that an action will have a significant effect on the quality of the human environment after considering the following:

- i). effects on public health and safety;
- ii). effects on the unique characteristics of the geographic areas, including its historic or cultural resources, park lands or ecologically critical areas;
- iii) highly controversial effects on the human environment;
- iv). highly uncertain or unknown effects on the human environment;
- v). effects in terms of precedent for future actions with significant effects;
- vi). effects that may be individually insignificant, but when considered with other projects, have a significant impact on the environment;
- vii). effects that cause loss or destruction of scientific, cultural, or historical resources; and
- viii). effects on endangered or threatened species or habitat protected under Navajo Nation or federal law.

U. Sublease means a written agreement by which the lessee grants a right of possession no greater than that held by the lessee under the Lease.

V. Surety means one who guarantees the performance of another.

W. Trespass means the unauthorized possession, or occupancy or use of Navajo Nation Trust Land as defined by Navajo Nation or federal law.

## 10 APPENDIX

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Sample Design Matrix

Pineda Chapter CLUPC By-Laws



# Appendix B

## Flexible Design Matrix

### OVERVIEW

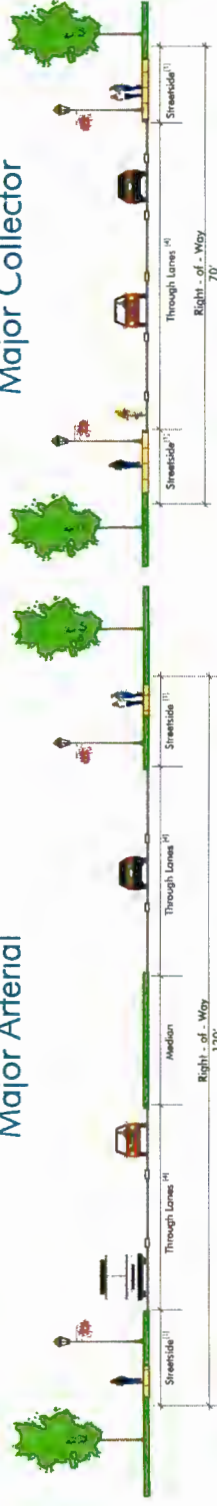
The Thoroughfare Development Plan (TDP) is a long-range plan that identifies the location and type of roadway facilities that are needed to meet projected long-term growth within the City. The TDP serves as a tool to enable the City to preserve future corridors for transportation system development as the need arises. It also forms the basis for Arlington's roadway capital improvement program, roadway impact fees, and developer requirements. The TDP provides detailed information related to roadway classification, right-of-way requirements, design criteria, and number of through travel lanes for each thoroughfare within the City.

Full TDP Report available at [www.arlingtontx.gov/planning/Transportation.html](http://www.arlingtontx.gov/planning/Transportation.html)

Direct questions to:  
(817) 459-6686

Last updated: 06/22/2011

## Major Arterial



## Minor Arterial



## Major Collector



## Minor Collector



|   | Major Arterial          |                      |                           |                             | Minor Arterial              |                             |                             |                      | Major Collector           |                          |                       |                            | Minor Collector          |                       |                            |                            |
|---|-------------------------|----------------------|---------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------|---------------------------|--------------------------|-----------------------|----------------------------|--------------------------|-----------------------|----------------------------|----------------------------|
|   | Suburban <sup>(1)</sup> | Urban <sup>(2)</sup> | Urban Core <sup>(3)</sup> | Suburban <sup>(4)</sup>     | Urban <sup>(5)</sup>        | Urban Core <sup>(6)</sup>   | Suburban <sup>(7)</sup>     | Urban <sup>(8)</sup> | Urban Core <sup>(9)</sup> | Suburban <sup>(10)</sup> | Urban <sup>(11)</sup> | Urban Core <sup>(12)</sup> | Suburban <sup>(13)</sup> | Urban <sup>(14)</sup> | Urban Core <sup>(15)</sup> | Urban Core <sup>(16)</sup> |
| Pedestrian Right-of-Way                             | 14 - 26 ft              | 15 - 27 ft           | 15 - 27 ft                | 9 - 23 ft                   | 11 - 25 ft                  | 11 - 25 ft                  | 9 - 23 ft                   | 9 - 25 ft            | 9 - 25 ft                 | 9 - 25 ft                | 9 - 19 ft             | 9 - 19 ft                  | 9 - 19 ft                | 9 - 19 ft             | 9 - 19 ft                  | 9 - 19 ft                  |
| Recommended Sidewalk Width <sup>(17)</sup>          | 4 - 10 ft               | 6 - 12 ft            | 6 - 12 ft                 | 4 - 10 ft                   | 6 - 14 ft                   | 6 - 14 ft                   | 4 - 10 ft                   | 4 - 10 ft            | 4 - 10 ft                 | 4 - 10 ft                | 4 - 8 ft              | 4 - 8 ft                   | 4 - 8 ft                 | 4 - 10 ft             | 4 - 10 ft                  | 4 - 12 ft                  |
| Recommended Pedestrian Buffer Width <sup>(18)</sup> | 8 - 14 ft               | 7 - 13 ft            | 7 - 13 ft                 | 4 - 12 ft                   | 4 - 10 ft                   | 4 - 8 ft                    | 4 - 12 ft                   | 4 - 10 ft            | 4 - 8 ft                  | 4 - 8 ft                 | 4 - 8 ft              | 4 - 8 ft                   | 4 - 8 ft                 | 4 - 10 ft             | 4 - 8 ft                   | 4 - 6 ft                   |
| Travel Lane Width                                   | 4 - 6                   | 4 - 6                | 4 - 6                     | 2 - 4                       | 2 - 4                       | 2 - 4                       | 2 - 4                       | 2 - 4                | 2 - 4                     | 2 - 4                    | 2 - 3                 | 2 - 3                      | 2 - 3                    | 2 - 3                 | 2 - 3                      | 2 - 3                      |
| Number of Through Lanes <sup>(19)</sup>             | 35 - 45                 | 35 - 45              | 35 - 45                   | 30 - 40                     | 30 - 40                     | 30 - 40                     | 30 - 40                     | 25 - 35              | 25 - 35                   | 25 - 35                  | 30                    | 30                         | 30                       | 30                    | 30                         | 30                         |
| Target Speed (MPH)                                  | 11 - 12 ft              | 11 - 12 ft           | 11 - 12 ft                | 11 - 12 ft                  | 11 - 12 ft                  | 11 - 12 ft                  | 11 - 12 ft                  | 10 - 12 ft           | 10 - 12 ft                | 10 - 12 ft               | 11 - 12 ft            | 11 - 12 ft                 | 11 - 12 ft               | 10 - 12 ft            | 10 - 12 ft                 | 10 - 12 ft                 |
| Lane Width  | 16 - 20 ft              | 16 - 20 ft           | 16 - 20 ft                | 0 - 16 ft                   | 0 - 16 ft                   | 0 - 16 ft                   | 0 - 16 ft                   | 0 - 16 ft            | 0 - 16 ft                 | 0 - 16 ft                | N/A                   | N/A                        | N/A                      | N/A                   | N/A                        | N/A                        |
| Median Width <sup>(20)</sup>                        | 8 - 9 ft                | 8 - 9 ft             | 8 - 9 ft                  | 8 - 9 ft                    | 8 - 9 ft                    | 8 - 9 ft                    | 8 - 9 ft                    | 8 - 9 ft             | 8 - 9 ft                  | 8 - 9 ft                 | 8 - 9 ft              | 8 - 9 ft                   | 8 - 9 ft                 | 8 - 9 ft              | 8 - 9 ft                   | 8 - 9 ft                   |
| On-Street Parking Width <sup>(21)</sup>             | 6 ft                    | 5 - 6 ft             | 5 - 6 ft                  | 6 ft                        | 5 - 6 ft                    | 5 - 6 ft                    | 6 ft                        | 5 - 6 ft             | 5 - 6 ft                  | 5 - 6 ft                 | 5 - 6 ft              | 5 - 6 ft                   | 5 - 6 ft                 | 5 - 6 ft              | 5 - 6 ft                   | 5 - 6 ft                   |
| Bike Lanes (minimum) <sup>(22)</sup>                | 120 ft                  | 120 ft               | 120 ft                    | 90 - 100 ft <sup>(23)</sup> | 90 - 100 ft <sup>(24)</sup> | 90 - 100 ft <sup>(25)</sup> | 90 - 100 ft <sup>(26)</sup> | 70 ft                | 70 ft                     | 70 ft                    | 60 ft                 | 60 ft                      | 60 ft                    | 60 ft                 | 60 ft                      | 60 ft                      |
| Right-of-Way (ROW) <sup>(27)</sup>                  | 20,000 - 50,000         | 15,000 - 50,000      | 15,000 - 50,000           | 20,000 - 35,000             | 20,000 - 35,000             | 15,000 - 30,000             | 20,000 - 35,000             | 15,000 - 30,000      | 15,000 - 30,000           | 15,000 - 30,000          | 1,500 - 25,000        | 1,500 - 25,000             | 1,500 - 30,000           | 1,500 - 25,000        | 1,500 - 25,000             | 1,500 - 25,000             |
| Anticipated Traffic Volumes                         | 20,000 - 50,000         | 15,000 - 50,000      | 15,000 - 50,000           | 20,000 - 35,000             | 20,000 - 35,000             | 15,000 - 30,000             | 20,000 - 35,000             | 15,000 - 30,000      | 15,000 - 30,000           | 15,000 - 30,000          | 1,500 - 25,000        | 1,500 - 25,000             | 1,500 - 30,000           | 1,500 - 25,000        | 1,500 - 25,000             | 1,500 - 25,000             |

<sup>(1)</sup> Street width includes sidewalk, pedestrian buffer and 1' buffer on outside edge of sidewalk.

<sup>(2)</sup> Minimum width requirement for a suburban sidewalk is 4', however 6' is preferred as minimum if ROW permits.

<sup>(3)</sup> In suburban locations, buffer is typically fitted with landscaping such as grass, while in urban locations buffer can have tree wells. Buffer includes width needed for the curb.

<sup>(4)</sup> Number of through lanes for thoroughfares are identified on the TDP Map.

<sup>(5)</sup> Median for 2 lane option can be a two-way left turn lane if desired. No medians or center turn lanes are possible on minor collectors.

<sup>(6)</sup> When combined with bike lanes parallel parking can be 8', but 9' is preferred if ROW permits.

<sup>(7)</sup> For urban contexts, bike lanes can be 5' when combined with on-street parking, and 6' without adjacent on-street parking. Refer to

Wike and Bike System Plan for additional details.

<sup>(8)</sup> Along roadways where previously dedicated right-of-way (ROW) is wider than the current required ROW, additional ROW may be

required to transition roadside elements (such as utilities) to the narrower roadway cross section.

<sup>(9)</sup> 100' of ROW is required only in specified instances; Eden Rd and Bowen Rd from Subject to Glenview Rd are the only thoroughfares

designated as 100' (See TDP map for details).

<sup>(\*)</sup> Information on context zones (suburban, urban, and urban core) can be found on page 10 of the manual.





**PINEDALE CHAPTER  
Community-Based Land-Use  
Planning Committee**

**P. O. Box 3  
Church Rock, NM 87311  
Office: 505-786-2208  
Fax: 505-786-2211**

**BYLAWS**

**PREAMBLE**

The Community-Based Land Use Planning Committee (CLUPC) is established to further the goals and objectives of Pinedale Chapter by finding and acquiring land for development, in order to improve the quality of life for community members.

**ARTICLE 1: NAME AND LOCATION**

**Section 1 - Name:**

The name of the organization is: Pinedale Community-Based Land Use Planning Committee.

**Section 2 - Location:**

The mailing address shall be: Community-Based Land Use Planning Committee  
c/o Pinedale Chapter  
P. O. Box 3  
Church Rock, NM 87311

The e-mail address shall be: [Pinedale@navajochapters.org](mailto:Pinedale@navajochapters.org)

**ARTICLE 2: AUTHORIZATION**

Pinedale Community-Based Land Use Planning Committee (CLUPC) was established by majority vote of Chapter membership in accordance with Navajo Nation Code, Title 26, Local Governance Act of 1998, Section 2004, 3(a).

**ARTICLE 3: PURPOSE**

The Community-Based Land Use Planning Committee was formally established by Pinedale Resolution No. PDC-03-13-092, to research, classify, and prepare zoning districts; to outline and formulate land use plans; and to implement development of land and buildings without impacting habitat and environmental conservation policies.

**ARTICLE 4: OBJECTIVES**

The committee objectives are: (1) To study, compile, assemble, and consolidate documents and material to revise and produce a new land use plan; (2) To plan efficient and economical infrastructure; develop plans and withdraw lands for agriculture, economic development, and community and urban development. (3) Address unmet needs of the community for social mobility and raising the standard of living.



## **ARTICLE 5: MEMBERSHIP**

### **Section 1 - Membership:**

A member of Community-Based Land Use Planning Committee shall be a registered voting member of Pinedale. The member is required to own and operate a motor vehicle and have a valid driver's license. He or she shall not be currently under disciplinary review or probationary status for disciplinary reasons; and must have paid all necessary dues and conformed to the requirements as set forth in this bylaw. Because CLUPC requires a member's undivided dedication, intense concentration, and attention to CLUPC tasks, he or she may not be a fulltime employee of another organization as it conflicts with meeting schedules, work assignments, teamwork and deadlines. It also disrupts emergency and special meetings.

### **Section 2 - Documentation:**

For CLUP Committee membership, interested individuals must submit a "Letter of Interest" to the Chapter for records and files. The records will be under strict confidence. "Section 2 – Documentation": is in keeping with "Section 1 – Membership": which says a fulltime employee's employment conflicts with or disrupts scheduling, assignments, teamwork, deadlines, emergency, and special meetings.

### **Section 3 - Contact:**

Committee member addresses, telephone numbers, and e-mail Addresses shall be kept on file in the Office of the Community Services Coordinator for contact purposes. Each member shall keep their cell-phone numbers and email addresses up-to-date and inform fellow members of any changes. For fast and efficient communications, all members shall provide and maintain current phone numbers and e-mail addresses.

### **Section 4 - Good Standing:**

All members shall be of good character and in good standing with the Chapter Officials, the community, and colleagues.

### **Section 5 - Work Conduct:**

All members must connect one another with complementary skills in order to function cooperatively. Each member must conduct him/herself with an attitude of hard work and teamwork; exhibit good work ethics; be success-oriented, honest, and self-motivated.

## **ARTICLE 6: OFFICERS**

### **Section 1 - Elected Officers:**

To apply for CLUPC membership, all interested persons shall submit a "Letter of Interest" to the Chapter. Committee members will be chosen by majority vote of Chapter constituents. Committee Officers shall be nominated and voted-on by CLUPC members. If a current active member chooses to continue Committee Membership, he or she must reapply with a new "Letter of Interest". The Officers shall consist of a President, Vice-President, and Secretary/Treasurer.

### **Section 2 - Eligibility:**

All Chapter members in good standing are eligible to be nominated and elected as CLUPC committee members.

### **Section 3 - Nomination:**

For majority rule and breaking a tie vote, an odd numbered committee membership is desirable for CLUPC.

Selection of new Land Use Planning Committee shall be conducted in the month of September. The newly selected members shall start on October one (1) following selection. Two months before selection, starting July 1 and ending on the deadline date of August 31, interested individuals may begin submitting "Letters of Interest". The list of interested applicants with an accompanying CLUPC Budget and a Budget Justification will be presented to the Chapter for approval by the community. The new committee members shall begin their duties on October 1, the start of a new Fiscal Year.

### **Section 4 - Term of Office:**

Election of new CLUPC members shall occur every four (4) years. Each member serving a term of 4 years will begin on October 1. The out-going officers who vacate their duties and responsibilities will give all files, records, and property to their successors.

### **Section 5 - Voluntary Resignation:**

A member of CLUPC may resign for any reason giving a date and reason for resignation in written form. The officers of the committee may consent without further action. Should an elected officer voluntarily vacate his/her position before his/her term expires, the Committee President shall fill the gap until the vacancy is filled. A new committee officer shall be elected within thirty (30) days after vacancy. If there is no candidate to fill the vacant position, the President may review the original applicant panel and approach the next qualified person on the list. If there's no consent, he or she will continue down the list until position is filled. If there are no interested applicants, the President may recommend a qualified community member. If the President appoints someone he or she deems qualified, the prospective member will be subject to ratification by Chapter membership. An officer may not otherwise hold more than one position within the organization.

### **Section 6 - Removal:**

The CLUP Committee may also permit a resignation in lieu of removal from office. Members who fail without just cause to attend three consecutive Land Use Planning meetings, regardless of whether such meetings are regular or special meetings, shall be deemed to have abandoned their office. CLUPC may remove an elected officer for reasons deemed legitimate, or beyond their control. The removal should be supported by a two-thirds vote of the membership and documented.

**ROTATION OF OFFICIAL POSITION(S):** Service as a Land Use Planning Committee member is a privilege, not a right, the purpose of which is to assist the committee in conducting its business in an appropriate, orderly and efficient manner. Therefore, a decision that there is cause for change of a committee members' official position(s), due to failing to work with fellow board members, and not giving time and effort to work to ensure quality leadership, communication, and devotion to land use planning, shall be cause for removal of the injurious officer from their current position as holder of a committee office, and will be rotated to another position within the committee leadership by a majority vote of board members. A vote to rotate a committee officer shall only take place within the seats held by the officers at a regular meeting or executive session called for that purpose. "Cause" includes, but is not limited to, any conduct that:

1. Affects the administration of the office in a manner deemed to be harmful to Board operations;
2. Negatively and directly affects the rights and interests of Chapter membership, chapter staff, or Chapter officers;

The Committee members and the public will be notified of a planned meeting one (1) week in advance of the meeting. Notification shall be made by phone, radio, email, flyers, or word-of-mouth.

### **Section 3 - Chapter Usage:**

As a matter of courtesy and because CLUP Committee is a Branch of the Chapter as community planners and liaison, costs for use of the Chapter House, tables, chairs, white board, restrooms, and kitchen is waived by Chapter Administration. Prior arrangements shall be made with Chapter Administration to use the Chapter House and to assign a janitor, or clean-up person, to clean the meeting room after the room is vacated.

### **Section 4 - Quorum:**

1. Prior to conducting an official meeting, a quorum of 3 or more committee members, with voting rights, shall be present. If a quorum is not present, the meeting shall be cancelled and rescheduled, and all members notified.
2. Each meeting agenda shall be as follows:
  1. Meeting called to order
  2. Invocation
  3. Roll Call
  4. Recognition of Guests
  5. Review and Adopt agenda
  6. Reading of Minutes
  7. New Business
  8. Old Business
  9. Decisions/Assignments
  10. Announcements
  11. Next Meeting Date
  12. Adjournment

## **ARTICLE 9 - COMPENSATION**

### **Section 1 - Compensation:**

The Committee Officers may be compensated for their services by resolution of the Land Use Planning Committee for Chapter concurrence. A fixed sum of \$75 shall apply to each regular meeting, to be paid to each member who attends a meeting, votes on issues, and whose action has been recorded on the Minutes. A fixed sum of \$50 shall apply to each Special Meeting to be conducted only in the event of unforeseen circumstances which require immediate action. A letter or statement of justification shall accompany the request.

### **Section 2 - Compensation to Representative(s):**

Representatives are individuals who are appointed by the President or chosen by two-thirds vote of Committee members, to perform a certain task or service for the CLUP Committee in the event the committee members are not available or unable to perform the duties/tasks delegated to the representative. The delegation of tasks shall be approved by two-thirds vote of the committee and shall be justified in writing by the committee President. A fixed sum of \$30 shall be paid to each representative for his/her service.

## **ARTICLE 10 - BUDGET**

All books and records shall be kept current and complete for each meeting or reporting period by the Committee Secretary/Treasurer. All budget and finance records shall be subject to review and approval by the Chapter Administration, Chapter Officials, or any Department or individual having oversight of the CLUP Committee activities. An annual budget which lists all applicable stipends, research material, supplies, travel, and training as line items shall be submitted to the Chapter with attachments and a Resolution to be negotiated and approved.

## **ARTICLE 11 - AMENDMENTS**

It is understood that these Bylaws will remain effective so long as it is agreed upon by Committee Members and all parties involved. An amendment may be incorporated as deemed necessary and recommended to the Pinedale Committee Members at a duly called regular or special meeting of the Community-Based Land Use Planning Committee. All amendments shall be reviewed by Pinedale Chapter Officials with Administrative personnel, or those who have oversight of land use planning committee.

## **ARTICLE 12 - CODE OF CONDUCT**

The Pinedale Community-Based Land Use Planning Committee is formed to meet monthly to serve the Community of Pinedale and its constituents. The Committee is formed to assist with meeting the unmet needs of the community pertinent to land acquisition, infrastructure development, social and economic improvement, and community beautification. As members who carry-out these duties and responsibilities, it is incumbent on each Committee Member to be alcohol and drug-free; to be ready and willing to participate in all meetings and activities maturely and responsibly; to be positive, productive and constructive; and to exhibit professionalism to the highest degree at all levels and always. Any talk or act of disrespect will not be tolerated and shall be discouraged at all meetings, functions, or recreation.

## **ARTICLE 13 - DISSOLUTION**

The Pinedale Community-Based Land Use Planning Community may be dissolved after all required duties, responsibilities, functions or any just cause deemed necessary. The committee may be dissolved by majority vote of Committee Members. Upon dissolution, all records, assets, liabilities, and obligations shall be distributed to Pinedale Chapter, who, in turn and by written mandate, will discharge them to those organizations deemed qualified under the Navajo Nation laws.

## **ARTICLE - CERTIFICATION**

We hereby certify that these Bylaws were review, considered, and discussed at a duly called meeting of the Community Based Land Use Planning Committee membership, at which time a quorum was present and the same was passed by a vote of \_\_\_\_\_ members in favor; \_\_\_\_\_ opposed; and \_\_\_\_\_ abstained on this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
Willie Norton, President

\_\_\_\_\_  
Joan Miller, Vice-President

\_\_\_\_\_  
Louise Mariano, Secretary/Treasurer



## 11 DISTRICT SERVICE PLAN

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The Pinedale Chapter District Service Plan is a comprehensive plan addressing: Local rural addressing, regional district information and community-wide road network improvement.

This plan will be completed after CLUPC manual has been approved and certified. There have previous projects on compiling rural address data throughout the community. Attached is a 2010 Pinedale Chapter Rural Address worksheet as completed by former Pinedale Chapter CLUPC member Ruby Tsosie.



CONFIDENTIAL

PINEDALE CHAPTER RURAL ADDRESSING WORKSHEET FORM--2010

| Name of Resident                                       | Mailing Address                  | Telephone      | RA or NHA# | Location                          | Structure Type      | Description                        |
|--|----------------------------------|----------------|------------|-----------------------------------|---------------------|------------------------------------|
| Michael Davis  | PO Box 937 Church Rock NM 87311  | (505) 766-5377 | 352        | 5mi N of N-11-49 on Waterfalls Rd | Log Cabin Hogan     | Light Brown Roof with Log bottom   |
| *Tosie Charleston                                      |                                  |                | 391        | 4mi N of N-11-49 on Waterfalls Rd | Brick House         | White and Red spots                |
| Marie Joe  | PO Box 1172 Church Rock NM 87311 | (928) 871-2342 | 301        | 4mi N of N-11-49 on Waterfalls Rd | Brick House         | White and Red spots                |
| *Sam & Fannie Gray                                     |                                  |                | 368        |                                   |                     |                                    |
| Cindy Begay  | PO Box 849 Church Rock NM 87311  |                | 378        | 4mi N of N-11-49 on Waterfalls Rd | Hogan w/bathroom    | Brown Roof and Stucco Gray         |
| Clifton Davis  | PO Box 1165 Church Rock NM 87311 | (505) 567-8246 | 242A       | 3mi N of N-11-49 on Waterfalls Rd | Framed House        | Green Roof                         |
| Evangelina Cadman                                      | PO Box 1195 Church Rock NM 87311 | (505) 979-8136 | 242B       | 3mi N of N-11-49 on Waterfalls Rd | Framed House        | White and Light Yellow             |
| Margaret Peterson                                      | PO Box 1055 Church Rock NM 87311 | (505) 713-6262 | 240        | 3mi N of N-11-49 on Waterfalls Rd | Framed House        | Brown Roof and Brown House         |
| Roger Lee & Pamela King                                | PO Box 1458 Church Rock NM 87311 | (505) 979-4004 |            | 3mi N of N-11-49 on Waterfalls Rd | Framed House        | Small Porch and Brown Board        |
| Julia & Dan Betom                                      | PO Box 5322 Gallup, NM 87301     | (505) 879-2282 | 238A       | 3mi N of N-11-49 on Waterfalls Rd | Hay Shed            | Uninhabitable                      |
| Julia & Dan Betom                                      | PO Box 5322 Gallup, NM 87301     | (505) 879-2282 | 238B       | 3mi N of N-11-49 on Waterfalls Rd | Hogan               | Green Roof Stucco House            |
| Julia & Dan Betom                                      | PO Box 5322 Gallup, NM 87301     | (505) 879-2282 | 238C       | 3mi N of N-11-49 on Waterfalls Rd | Hogan               | Red Roof Light Yellow House        |
| Julia & Dan Betom                                      | PO Box 5322 Gallup, NM 87301     | (505) 879-2282 | 238D       | 3mi N of N-11-49 on Waterfalls Rd | Framed House        | White Roof Light Green House       |
| Bessie Begay   | PO Box 1172 Church Rock NM 87311 | (505) 713-8898 | 236A       | 3mi N of N-11-49 on Waterfalls Rd | Framed House        | White Roof Beige House             |
| Shawn Begay  | PO Box 183 Rehobeth, NM 87322    | (505) 870-4709 | 236B       | 3mi N of N-11-49 on Waterfalls Rd | Dbi Wide Trailer    | Light Brown Roof Light Brown House |
| Shawn Begay  | PO Box 183 Rehobeth, NM 87322    | (505) 870-4709 |            | 3mi N of N-11-49 on Waterfalls Rd | Hogan               | Brown Roof Brown Hogan             |
| Oliver & Orinda Charleston                             |                                  |                |            | 3mi N of N-11-49 on Waterfalls Rd | Framed House        | Light Blue House                   |
| Ella George  | PO Box 84 Church Rock NM 87311   |                | 37A        | 2mi N of N-11-49 on Waterfalls Rd | Hay Shed            | Gray Roof Plyboard Shed            |
| Ella George  | PO Box 84 Church Rock NM 87311   |                | 37B        | 2mi N of N-11-49 on Waterfalls Rd | Hogan               | Green Roof Light Green House       |
| David Livingston                                       | PO Box 84 Church Rock NM 87311   | (505) 786-7132 | 37C        | 2mi N of N-11-49 on Waterfalls Rd | Shed House          | Shed                               |
| Mervin Leonard   | PO Box 84 Church Rock NM 87311   |                | 37D        | 2mi N of N-11-49 on Waterfalls Rd | Hogan               | Brown Roof Log Cabin               |
| Ella George  | PO Box 84 Church Rock NM 87311   |                |            | 2mi N of N-11-49 on Waterfalls Rd | NHA House           | Brown Roof White House             |
| Rena Livingston  | PO Box                           | (505) 406-6330 | 3A         | 1mi N of N-11-49 on Waterfalls Rd | Framed House        | Gray Roof Gray House               |
| Anita King   | PO Box                           | (505) 786-5505 | 3B         | 1mi N of N-11-49 on Waterfalls Rd | Hogan               | Red Roof Black Hogan               |
| Donald King  | PO Box 133 Church Rock NM 87311  | (505) 786-7132 | 3C         | 1mi N of N-11-49 on Waterfalls Rd | Hogan               | White Roof Beige Hogan             |
| John & Fannie King                                     | PO Box 133 Church Rock NM 87311  | (505) 786-7132 | 3D         | 1mi N of N-11-49 on Waterfalls Rd | Framed House        | Brown Roof Beige House             |
| John & Fannie King                                     | PO Box 133 Church Rock NM 87311  | (505) 786-7132 | 3E         | 1mi N of N-11-49 on Waterfalls Rd | Shed House          | Shed                               |
| ROAD ACROSS BROWN FALLS TRAIL (N-11-49 N of Highway)   |                                  |                |            |                                   |                     |                                    |
| Sam Gray Jr.   | PO Box 392 Gallup, NM 87301      |                | 53A        | 500yds N of N-11-49 N of Highway  | Framed House        | Brown Roof White House             |
| Sam Gray Jr  | PO Box 392 Gallup, NM 87301      |                | 53B        | 500yds N of N-11-49 N of Highway  | Old Church          | White                              |
| Sam Gray Jr  | PO Box 392 Gallup, NM 87301      | (505) 786-5804 | 853C       | 500yds N of N-11-49 N of Highway  | Framed House        | Brown Roof Pink House              |
| Sam Gray Jr  | PO Box 392 Gallup, NM 87301      |                | 53D        | 500yds N of N-11-49 N of Highway  | Dbie Wide Trailer   | Brown Trailer                      |
| Sam Gray Jr  | PO Box 392 Gallup, NM 87301      |                | 53E        | 500yds N of N-11-49 N of Highway  | Old Church          | White-East Side                    |
| Joe Gray Sr  | PO Box 122 Church Rock NM 87311  | (505) 979-6501 | 853A       | 500yds N of N-11-49 N of Highway  | Framed House        | Brown Roof White House             |
| Joe Gray Sr  | PO Box 122 Church Rock NM 87311  | (505) 979-6501 |            | 500yds N of N-11-49 N of Highway  | Framed House        | Gray Roof Beige House              |
| Michael Begay  | PO Box 182 Church Rock NM 87311  | (505) 786-2425 | 847        | 500yds N of N-11-49 N of Highway  | Single Wide Trailer | Gold Trailer with Porch            |
| Roberta & Emerson Luther                               | PO Box 2741 Gallup, NM 87301     | (505) 567-9276 |            | 500yds N of N-11-49 N of Highway  | NHA House           | Gray House                         |
| Roberta & Emerson Luther                               | PO Box 2741 Gallup, NM 87301     | (505) 567-9276 | 849        | 500yds N of N-11-49 N of Highway  | Single Wide Trailer | Blue Metal Roof Light Blue house   |
| Jean & Ellison Grey                                    | PO Box 66 Church Rock NM 87311   | (505) 786-7769 | 855        | 5mi N of N-11-49 N of Highway     | Framed House        | White Roof Light Green House       |
| Kinsey/Phoebe Barney                                   | PO Box 503 Church Rock NM 87311  | (505) 713-4468 | 851A       | 5mi N of N-11-49 N of Highway     | Framed House        | White Roof Beige House             |
| Kinsey/Phoebe Barney                                   | PO Box 503 Church Rock NM 87311  | (505) 713-4468 | 851B       | 5mi N of N-11-49 N of Highway     | Framed House        | White Roof Beige House             |
| Kathy Touslin  | PO Box                           |                | 851C       | 5mi N of N-11-49 N of Highway     | Framed House        | Brown Roof White House             |
| WEST OF ROAD ACROSS FALLS TRAIL (N-11-49 N of Highway) |                                  |                |            |                                   |                     |                                    |
| Ollinda Silago   | PO Box 781 Church Rock NM 87311  | (505) 713-1180 | 971        | 1mi N of N-11-49 N of Highway     | Framed House        | Brown Roof Light Brown House       |
| Rose Silago  | PO Box 781 Church Rock NM 87311  | (505) 713-1180 |            | 1mi N of N-11-49 N of Highway     | Dbie Wide Trailer   | White Trailer                      |
| Shana Sam  | PO Box 353 Church Rock NM 87311  | (505) 786-5627 | 791        | 500yds N of N-11-49 N of Highway  | Dbie Wide Trailer   | Gray Trailer                       |
| Betsy & Ronald Sam                                     | PO Box 353 Church Rock NM 87311  | (505) 786-5627 | 789        | 500yds N of N-11-49 N of Highway  | Dbie Wide Trailer   | Purple Trailer                     |
| Betty Silago   | PO Box 1064 Church Rock NM 87311 | (505) 786-5231 |            | 500yds N of N-11-49 N of Highway  | Framed House        | Green Roof Green House             |
| Francis Silago   | PO Box                           |                |            | 500yds N of N-11-49 N of Highway  | Framed House        |                                    |
| Bennie Silago  | PO Box 1286 Church Rock NM 87311 | (505) 567-8198 | 787        | 500yds N of N-11-49 N of Highway  | Framed House        | Brown Roof White House             |
| EAST OF PINEDALE TRAINING POST (N-11-49 N of Highway)  |                                  |                |            |                                   |                     |                                    |
| Johnnie Thompson                                       | PO Box                           | (505) 979-1083 | 691A       | 1mi Tse Nizhoni Road              | Single Wide Trailer | Tan Trailer                        |
| Johnnie Thompson                                       | PO Box                           | (505) 979-1083 | 691B       | 1mi Tse Nizhoni Road              | Framed House        | Green Roof Tan House               |
| Johnnie Thompson                                       | PO Box                           | (505) 979-1083 | 692        | 1mi Tse Nizhoni Road              | NHA House           |                                    |
| Jimmie Zuni  | PO Box                           | (505) 488-6428 |            | 1mi Tse Nizhoni Road              | NHA House           | Red Roof White House               |
| Virgil Thompson  | PO Box                           |                | 693        | 1mi Tse Nizhoni Road              | Framed House        | Brown Roof White House             |
| Priscilla Begay  | PO Box 1014 Church Rock NM 87311 | (575) 499-3494 | 617A       | 1/4mi E of PDC N of N-11-49       | Framed House        | White Roof Beige House             |



|   |                |       |                                     |                     |                                    |
|---|----------------|-------|-------------------------------------|---------------------|------------------------------------|
| PO Box 1014 Church Rock NM 87311                    | (575) 495-3494 | 617B  | 1/4mi E of PDC N of N-11-50         | Hogan               | White Roof Brown House             |
| PO Box 271 Church Rock NM 87311                     | (505) 786-5328 | 02B   | 1/4mi E of PDC on Rainbow Trail Rd  | Framed House        | Gray Roof Light Blue House         |
| PO Box 292 Gallup, NM 87301                         | (505) 786-7890 | 22B   | 1/4mi E of PDC on Rainbow Trail Rd  | Hogan               | Light Green Roof Beige House       |
| PO Box 292 Gallup, NM 87301                         | (505) 786-7890 | 22A   | 1/4mi E of PDC on Rainbow Trail Rd  | Hogan               | Brown Roof Gray Hogan              |
| PO Box 6135 Gallup, NM 87301                        | (505) 786-7619 | 35    | 50yds S of PD Str Rainbow Trail Rd  | NHA House           | Gray House                         |
| PO Box 54 Church Rock NM 87311                      | (505) 786-4959 | 4B    | 1/4mi E of PDC on Rainbow Trail Rd  | Dble Wide Trailer   | Gray Roof White Trailer            |
| PO Box 962 Church Rock NM 87311                     | (505) 862-5553 | 4C    | 1/4mi E of PDC on Rainbow Trail Rd  | Framed House        | Black Roof White House             |
| PO Box 312 Church Rock NM 87311                     | (505) 786-5854 | 4A    | 12mi SE of PD Str Rainbow Trail Rd  | Dble Wide Trailer   | Lime Trailer                       |
| PO Box 312 Church Rock NM 87311                     | (505) 786-5601 |       | 34mi S of PD Str Rainbow Trail Rd   | Framed House        | Pink House With Brown Trim         |
| PO Box 2196 Gallup, NM 87301                        | (505) 786-5325 | 2D    | 34mi S of PD Str Rainbow Trail Rd   | Single Wide Trailer | Gray Roof Black House              |
| PO Box 4653 Gallup, NM 87301                        | (505) 979-0406 | 2     | 34mi S of PD Str Rainbow Trail Rd   | Framed House        | Green Trailer                      |
|   |                |       |                                     |                     | Brown Roof White House W/ Patio    |
| WEST OF PINEDALE TRADING POST ON RAINBOW TRAIL ROAD |                |       |                                     |                     |                                    |
| PO Box 1191 Church Rock NM 87311                    |                | NHA#7 | 50yds SE of PD Str Rainbow Trail Rd | NHA House           | Blue House                         |
| PO Box 1191 Church Rock NM 87311                    |                |       | 50yds SE of PD Str Rainbow Trail Rd | Single Wide Trailer | Brown Trailer Green Trimming       |
| PO Box  |                |       | 50yds SE of PD Str Rainbow Trail Rd | Framed House        | Tan House Maroon Trimming          |
| PO Box 351 Church Rock NM 87311                     | (505) 786-5827 | 17A   | 50yds SW of PD Str Rainbow Trail Rd | Framed House        | Tan House Brown Trimming           |
| PO Box 351 Church Rock NM 87311                     | (505) 786-5827 |       | 18mi W of PD Str Rainbow Trail Rd   | Hogan               | Red Roof Gray Stucco Hogan         |
| PO Box  |                | 19B   | 18mi W of PD Str Rainbow Trail Rd   | Single Wide Trailer | White Trailer Brown Trimming       |
| PO Box 1245 Church Rock NM 87311                    | (505) 786-5640 | 19A   | 18mi W of PD Str Rainbow Trail Rd   | Framed House        | Brown Roof Beige House             |
| PO Box 1200 Church Rock NM 87311                    | (505) 786-4979 | 19C   | 18mi W of PD Str Rainbow Trail Rd   | Hogan               | White Roof Gray Stucco             |
| PO Box 1013 Church Rock NM 87311                    | (505) 786-7618 |       | 18mi W of PD Str Rainbow Trail Rd   | Framed House        | White Roof Light Green House       |
| PO Box 1154 Church Rock NM 87311                    | (505) 786-7431 | 19D   | 1/4mi W of PD Str Rainbow Trail Rd  | Framed House        | Brown Roof Light Brown House       |
| PO Box 843 Church Rock NM 87311                     | (505) 786-5827 | 17B   | 1/4mi W of PD Str Rainbow Trail Rd  | Framed House        | Brown Roof White Stucco            |
| PO Box 843 Church Rock NM 87311                     | (505) 786-4912 | 7     | 1/4mi N of PD Str Rainbow Trail Rd  | NHA House           | Blue House                         |
| PO Box 970 Church Rock NM 87311                     | (505) 786-7986 | 17C   | 1/4mi N of PD Str Rainbow Trail Rd  | Single Wide Trailer | White Trailer                      |
| PO Box  | (505) 786-5402 |       | 1/4mi N of Pinedale Chapter House   |                     |                                    |
| PO Box  | (505) 786-5402 |       | 1/4mi N of Pinedale Chapter House   |                     |                                    |
| PO Box 1169 Church Rock NM 87311                    | (505) 862-5577 | 73    | 1/4mi N of PD Str Rainbow Trail Rd  | Framed House        | Gray House                         |
| PO Box 1169 Church Rock NM 87312                    | (505) 713-7430 | 73E   | 1/4mi N of PD Str Rainbow Trail Rd  |                     |                                    |
| PO Box 1169 Church Rock NM 87313                    | (505) 713-9322 | 73F   | 1/4mi N of PD Str Rainbow Trail Rd  |                     |                                    |
| PO Box 1169 Church Rock NM 87314                    | (505) 713-7430 | 73B   | 1/4mi N of PD Str Rainbow Trail Rd  |                     |                                    |
| PO Box 1169 Church Rock NM 87315                    | (505) 713-7430 | 73A   | 1/4mi N of PD Str Rainbow Trail Rd  |                     |                                    |
| PO Box 1169 Church Rock NM 87316                    | (505) 728-2094 | 73D   | 1/4mi N of PD Str Rainbow Trail Rd  |                     |                                    |
| PO Box 1169 Church Rock NM 87317                    | (505) 728-2094 | 73C   | 1/4mi N of PD Str Rainbow Trail Rd  |                     |                                    |
| RAINBOW CANYON VALLEY                               |                |       |                                     |                     |                                    |
| PO Box 1091 Church Rock NM 87311                    | (505) 786-9315 | 178E  | 3.5mi N of PD Str Rainbow Trail Rd  | Single Wide Trailer | White Trailer Light Green Trimming |
| PO Box 322 Gallup, NM 87301                         | (505) 728-8672 |       | 3.5mi N of PD Str Rainbow Trail Rd  | Single Wide Trailer | White Trailer                      |
| PO Box 2281 Gallup, NM 87301                        | (505) 786-7790 | 178A  | 3.5mi N of PD Str Rainbow Trail Rd  | Framed House        | Brown Roof Lumber Board Shed       |
| PO Box 3221 Gallup, NM 87301                        | (575) 586-1279 | 178B  | 3.5mi N of PD Str Rainbow Trail Rd  | Framed House        | Brown Roof Light Brown House       |
| PO Box 183 Church Rock NM 87311                     | (505) 786-7117 | 178C  | 3.5mi N of PD Str Rainbow Trail Rd  | Framed House        | Brown Roof Beige House             |
| PO Box 1368 Church Rock NM 87311                    | (505) 786-7117 | 178D  | 3.5mi N of PD Str Rainbow Trail Rd  | Hogan               | Brown Roof Ply Boards              |
| PO Box 287 Church Rock NM 87311                     | (505) 786-5414 | 178A  | 3.5mi N of PD Str Rainbow Trail Rd  | Hogan               | Brown Roof Red and White Logs      |
| PO Box 1392 Church Rock NM 87311                    | (505) 786-5414 | 178B  | 3.5mi N of PD Str Rainbow Trail Rd  | Hogan               | Red Roof Gray Logs                 |
| PO Box 1392 Church Rock NM 87311                    | (505) 786-5414 | 178C  | 3.5mi N of PD Str Rainbow Trail Rd  | Hogan               | Brown Roof Gray Hogan              |
| PO Box  |                |       | 3.5mi N of PD Str Rainbow Trail Rd  | Single Wide Trailer | White Trailer                      |
| PO Box 911 Gallup, NM 87301                         |                | 180   | 2mi N of PD Str Rainbow Trail Rd    | Framed House        | Brown Roof Gray Stucco House       |
| PO Box 911 Gallup, NM 87301                         |                |       | 2mi N of PD Str Rainbow Trail Rd    | Hogan               | Green Roof Black Hogan             |
| PO Box 1192 Church Rock NM 87311                    | (505) 786-5306 | 172   | 2mi N of PD Str Rainbow Trail Rd    | Framed House        | Red Roof Pink House                |
| PO Box 1192 Church Rock NM 87311                    | (505) 786-5306 |       | 2mi N of PD Str Rainbow Trail Rd    | Hogan               | Red Roof Black Hogan               |
| PO Box 1394 Church Rock NM 87311                    | (505) 786-5306 | 33C   | 2mi N of PD Str Rainbow Trail Rd    | Single Wide Trailer | Cream Colored Trailer Yellow Trim  |
| PO Box  | (505) 321-4795 |       | 2mi N of PD Str Rainbow Trail Rd    | Hogan               | Log Hogan Red Roof                 |
| PO Box 852 Church Rock NM 87311                     | (505) 567-9536 | 174B  | 1mi N of PD Str Rainbow Trail Rd    | Framed House        | Brown Roof Gray Stucco House       |
| PO Box 564 Church Rock NM 87311                     | (505) 567-9536 | 174A  | 1mi N of PD Str Rainbow Trail Rd    | Framed House        | Brown Roof Beige House             |
| PO Box 1020 Church Rock NM 87311                    | (505) 593-2722 | 174C  | 1mi N of PD Str Rainbow Trail Rd    | Framed House        | Brown Roof Yellow House            |
| PO Box 1231 Church Rock NM 87311                    | (505) 593-2722 | 174E  | 1mi N of PD Str Rainbow Trail Rd    | Framed House        |                                    |
| PO Box 1331 Church Rock NM 87311                    | (505) 480-9441 |       | 1mi N of PD Str Rainbow Trail Rd    | Hogan               | Brown Stucco Gray Hogan            |
| PO Box 984 Church Rock NM 87311                     | (505) 979-3485 | 170   | 1mi N of PD Str Rainbow Trail Rd    | Framed House        | Brown Roof Pink House              |
| PO Box 984 Church Rock NM 87311                     | (505) 406-0781 | 170B  | 1mi N of PD Str Rainbow Trail Rd    | Framed House        | Light Brown Roof Ply Board House   |
| PO Box 1403 Thoreau, NM 86323                       | (505) 236-1064 | 146C  | 1.5mi N of PD Str Rainbow Trail Rd  | Dble Wide Trailer   | White Trailer Tan Trimming         |
| PO Box 1149 Church Rock NM 87311                    | (505) 786-5446 | 146D  | 1.5mi N of PD Str Rainbow Trail Rd  | Hogan               | Brown Roof Beige Hogan             |
| PO Box 1214 Church Rock NM 87311                    | (505) 786-5446 | 146B  | 1.5mi N of PD Str Rainbow Trail Rd  | Framed House        | Gray House with Blue Trimming      |
| PO Box 1045 Church Rock NM 87311                    | (505) 786-5446 | 146A  | 1.5mi N of PD Str Rainbow Trail Rd  |                     |                                    |



|                            |                                    |                |      |                                    |                        |                                     |
|----------------------------|------------------------------------|----------------|------|------------------------------------|------------------------|-------------------------------------|
| Tony Bay                   | PO Box 1154 Church Rock NM 87311   | (505) 726-3191 | 168D | 1.5mi N of PD Str Rainbow Trail Rd | Hogan                  | Light Brown Roof Brown Hogan        |
| Rosemary                   | PO Box 1154 Church Rock NM 87311   | (505) 726-3191 | 168E | 1.5mi N of PD Str Rainbow Trail Rd | Hogan                  | Brown Roof Light Brown Hogan        |
| Robert                     | PO Box 103 Church Rock NM 87311    | (505) 862-2181 | 168C | 1.5mi N of PD Str Rainbow Trail Rd | Framed House           |                                     |
| Sophio Becenti             | PO Box 751 Church Rock NM 87311    | (505) 728-4216 | 168A | 1.5mi N of PD Str Rainbow Trail Rd | Hogan                  | Brown Roof Gray Stucco Hogan        |
| Harrison Becenti           | PO Box 1175 Church Rock NM 87311   | (505) 786-4216 | 168B | 1.5mi N of PD Str Rainbow Trail Rd | Framed House           | Brown Roof Light Green House        |
| Carol Holtsoi              | PO Box 1180 Church Rock NM 87311   | (505) 786-4216 | 164C | 1.5mi N of PD Str Rainbow Trail Rd | Single Wide Trailer    | White Trailer Brown Trimming        |
| Clyde Beyal, Jr            | PO Box 672 Church Rock NM 87311    | (505) 879-8870 | 164B | 1.5mi N of PD Str Rainbow Trail Rd | Framed House           | White Roof Pink House               |
| Harry Holtsoi              | PO Box 519 Fort Wingate, NM 87316  | (505) 906-2002 | 164A | 1.5mi N of PD Str Rainbow Trail Rd | Framed House           | Brown Roof Peach House              |
| Jones Holtsoi              | PO Box 1180 Church Rock NM 87311   | (505) 728-5395 | 164D | 1.5mi N of PD Str Rainbow Trail Rd | Framed House           | House w/Graded Entry                |
| Jones Begay                | PO Box 656 Fort Wingate, NM 87316  | (505) 728-5395 | 162D | 1.5mi N of PD Str Rainbow Trail Rd | Hogan                  | Small Hogan                         |
| Ruby Lynch & TJ Lewis      | PO Box 1115 Fort Wingate, NM 87316 | (505) 786-7324 | 162C | 1.5mi N of PD Str Rainbow Trail Rd | Framed House           | (by Jones Begays House)             |
| Wilbert Lynch              | PO Box 1115 Fort Wingate, NM 87316 | (505) 786-7324 | 162B | 1.5mi N of PD Str Rainbow Trail Rd | Framed House           | Grey Roof Peach Bottom              |
| Gloria Holtsoi             | PO Box 2377 Gallup, NM 87301       | (505) 728-0354 | 162A | 1.5mi N of PD Str Rainbow Trail Rd | Hogan                  | Lite Orange Hogan                   |
| Harold Harry               | PO Box 1300 Church Rock NM 87311   | (505) 862-2465 | 162G | 1.5mi N of PD Str Rainbow Trail Rd | Hogan                  | Red Roof Pink House                 |
| Herman Harry               | PO Box 2791 Gallup, NM 87301       | (505) 786-7159 | 162F | 1.5mi N of PD Str Rainbow Trail Rd | Single Wide Trailer    | Beige Roof Brown Trimming           |
| Kenneth & Louise Murrillo  | PO Box 2791 Gallup, NM 87301       | (505) 786-7159 | 166A | 1.5mi N of PD Str Rainbow Trail Rd | Single Wide Trailer    | White Trailer                       |
| Kenneth & Louise Murrillo  | PO Box 621 Church Rock NM 87311    | (505) 979-9026 | 166B | 1.5mi N of PD Str Rainbow Trail Rd | NHA House              | Gray House                          |
| Karen Yazzie               | PO Box 656 Fort Wingate, NM 87316  | (505) 236-9873 | 166C | 1.5mi N of PD Str Rainbow Trail Rd | Single Wide Trailer    | Gray Roof Beige Trailer             |
| Charlie Billie             | PO Box 4326 Gallup, NM 87301       | (505) 786-7127 | 248A | 1.5mi N of PD Str Rainbow Trail Rd | Framed House           | Light Brown Roof Light Yellow House |
| Elaine Begay/Nelson Martin | PO Box 1465 Church Rock NM 87311   | (505) 786-7127 | 248B | 1.5mi N of PD Str Rainbow Trail Rd | Hogan                  | Brown Roof Light Brown Hogan        |
| Leon Enrique               | PO Box 547 Church Rock NM 87311    | (505) 786-7127 | 258  | 1.5mi NW of PDC Rainbow Trail Rd   | Framed House           | Brown Roof Light Brown Hogan        |
| Nathyn Lynch               | PO Box 547 Church Rock NM 87311    | (505) 786-7127 | 258A | 1.5mi NW of PDC Rainbow Trail Rd   | Framed House           | Light Brown Roof Light Yellow House |
| Lynnie Lynch               | PO Box 433 Church Rock NM 87311    | (505) 263-3134 | 261A | 1.5mi NW of PDC Rainbow Trail Rd   | Dble Wide Trailer      | White Trailer Brown Trimming        |
| Paul Martin Sr.            | PO Box 433 Church Rock NM 87311    | (505) 862-3406 | 179A | 1.5mi NW of PDC Rainbow Trail Rd   | Single Wide Trailer    | White Trailer                       |
| Lorraine Martin            | PO Box 746 Church Rock NM 87311    | (505) 409-6522 | 179B | 1.5mi NW of PDC Rainbow Trail Rd   | Framed House           | Green Roof Beige House              |
| Roger Smith                | PO Box 581 Church Rock NM 87311    | (505) 979-1099 | 179C | 1.5mi NW of PDC Rainbow Trail Rd   | Dble Wide Trailer      | White Trailer Brown Trimming        |
| Kee & Arinda Keyanna       | PO Box 1174 Church Rock NM 87311   | (505) 870-9398 | 241  | 2.4mi N on Lobo Valley Road        | Single Wide Trailer    | White Trailer                       |
| Murphy Martin              | PO Box 252 Church Rock NM 87311    | (505) 979-0321 | 270A | 2.5mi N on Lobo Valley Road        | Framed House           | Brown Roof Ply Board Bottom         |
| Herman & Frank Martin      | PO Box 1330 Church Rock NM 87311   | (505) 979-0321 | 270B | 2.5mi N on Lobo Valley Road        | Framed House           | Brown Roof Peach House              |
| Murphy Martin              | PO Box 252 Church Rock NM 87311    | (505) 979-0321 | 270C | 2.5mi N on Lobo Valley Road        | Single Wide Trailer    | Gray Trailer                        |
| Dennis Becenti/Pam George  | PO Box 1258 Church Rock NM 87311   | (505) 409-6522 | 290C | 2.5mi N on Lobo Valley Road        | Hogan                  | Brown Roof Log Ceremonial Hogan     |
| Lucinda Martin             | PO Box 5174 Gallup, NM 87301       | (505) 979-1099 | 291A | 2.5mi N on Lobo Valley Road        | Hogan                  | Brown Roof Beige Hogan w/Addition   |
| Comelia Becenti            | PO Box 1181 Church Rock NM 87311   | (505) 870-9398 | 291B | 2.5mi N on Lobo Valley Road        | Framed House           |                                     |
| Rocky Dougi                | PO Box 1222 Church Rock NM 87311   | (505) 979-9035 | 291C | 2.5mi N on Lobo Valley Road        | Framed House           |                                     |
| Jimson Martin              | PO Box 25 Church Rock NM 87311     | (505) 979-9035 | 157D | 1.5mi NW on Lobo Valley Road       | Hogan                  | Light Brown Roof Light Yellow House |
| Morris/Virginia Tso        | PO Box 602 Church Rock NM 87311    | (505) 876-7149 | 157E | 1.5mi NW on Lobo Valley Road       | White House            |                                     |
| Jasper & Ina Livingston    | PO Box 602 Church Rock NM 87311    | (505) 862-4779 | 157F | 1.5mi NW on Lobo Valley Road       | Red Roof Red Hogan     |                                     |
| Rachael Manyoats           | PO Box 951 Church Rock NM 87311    | (505) 862-3513 | 109C | 1.5mi NW on Lobo Valley Road       | Hogan                  |                                     |
| Junie & Andy Begay         | PO Box 1256 Church Rock NM 87311   | (505) 567-8226 | 109D | 1.5mi NW on Lobo Valley Road       | Single Wide Trailer    | Gray Trailer                        |
| Junie & Andy Begay         | PO Box 1044 Church Rock NM 87311   | (505) 879-9035 | 264  | 1.5mi NW on Lobo Valley Road       | Framed House           | Brown Roof Ply Boarded House        |
| Julianseita Morgan         | PO Box 936 Church Rock NM 87311    | (505) 879-9035 | 109B | 1.5mi NW on Lobo Valley Road       | Single Wide Trailer    | White Trailer Blue Trimming         |
| Ruby Tsosie                | PO Box 1387 Church Rock NM 87311   | (505) 862-3513 | 109A | 1.5mi NW on Lobo Valley Road       | Framed House           | Black Roof Beige House              |
| Leulinda Tom               | PO Box 1086 Church Rock NM 87311   | (505) 567-8226 | 113A | 1.5mi NW on Lobo Valley Road       | Framed House           | Brown Roof Beige House              |
| Lewis Largo, Jr            | PO Box 4968 Gallup, NM 87301       | (505) 879-7228 | 113B | 1.5mi NW on Lobo Valley Road       | White House            | White House                         |
| Ronald Tom                 | PO Box 1402 Church Rock NM 87311   | (505) 979-9935 | 113C | 1.5mi NW on Lobo Valley Road       | Hogan                  | Beige Hogan                         |
| Evelyn Mann                | PO Box 424 Church Rock NM 87311    | (505) 728-6955 | 113E | 1.5mi NW on Lobo Valley Road       | Brown Roof Green Hogan |                                     |
| Evelyn Lee                 | PO Box 1238 Church Rock NM 87311   | (505) 713-1245 | 115  | 1.5mi NW on Lobo Valley Road       | Brown Roof Peach House |                                     |
| Ramona Lee                 | PO Box 436 Church Rock NM 87311    | (505) 728-5395 | 115B | 1.5mi NW on Lobo Valley Road       | Single Wide Trailer    | White Trailer                       |
| Francita Becenti           | PO Box 822 Church Rock NM 87311    | (505) 728-5395 | 111A | 1.5mi NW on Lobo Valley Road       | White Trailer          | White Trailer                       |
| James Antonio              | PO Box 1041 Church Rock NM 87311   | (505) 979-2183 | 111B | 1.5mi NW on Lobo Valley Road       | Single Wide Trailer    | Old House--Vacant                   |
| William/Rita Hubbard       | PO Box 896 Church Rock NM 87311    | (505) 713-9776 | 77B  | 1.25mi NW on Lobo Valley Road      | Yellow Trailer         | Yellow Trailer                      |
| William/Rita Hubbard       | PO Box 1091 Church Rock NM 87311   | (505) 713-6490 | 77C  | 1.25mi NW on Lobo Valley Road      | Framed House           | Gray House                          |
| Melissa Teller             | PO Box 1091 Church Rock NM 87311   | (505) 713-6061 | 77D  | 1.25mi NW on Lobo Valley Road      | Framed House           | Pink House With Brown Trim          |
| Tonita Lee                 | PO Box 1128 Church Rock NM 87311   | (505) 713-8726 | 95   | 1.25mi NW on Lobo Valley Road      | Framed House           | Brown Roof Yellow House             |
| Katherine Jim              | PO Box 1091 Church Rock NM 87311   | (505) 597-8084 | 95B  | 1.25mi NW on Lobo Valley Road      | Single Wide Trailer    | Silver Roof Gray Trailer            |
| Tulley Lee                 | PO Box 1091 Church Rock NM 87311   | (505) 713-8726 |      | 1.25mi NW on Lobo Valley Road      | Hogan                  | Brown Roof Beige Hogan              |
| Louise Jackson             | PO Box 1091 Church Rock NM 87311   | (505) 713-8726 |      | 1.25mi NW on Lobo Valley Road      | Framed House           | White Roof Peach House              |
| Nelson Charley             | PO Box 1091 Church Rock NM 87311   | (505) 713-8726 |      | 1.25mi NW on Lobo Valley Road      | Framed House           | Red Roof Red House                  |
| Marcella Tosie             | PO Box 1091 Church Rock NM 87311   | (505) 713-8726 |      | 1.25mi NW on Lobo Valley Road      | Framed House           | Brown Roof Ply Board Hogan          |
| Bertha Goldtooth           | PO Box 1091 Church Rock NM 87311   | (505) 713-8726 |      | 1.25mi NW on Lobo Valley Road      | Framed House           | Red Roof Red House                  |
| Matilda Charley            | PO Box 1091 Church Rock NM 87311   | (505) 713-8726 |      | 1.25mi NW on Lobo Valley Road      | Framed House           | Brown Roof Ply Board Hogan          |



|                         |             |                      |                |       |                                   |                     |                                      |
|-------------------------|-------------|----------------------|----------------|-------|-----------------------------------|---------------------|--------------------------------------|
| Steven Thompson         | PO Box 1091 | Church Rock NM 87311 | (505) 597-8084 | 95C   | 1.25mi NW on Lobo Valley Road     | Framed House        | Light Green Roof White House         |
| Veronica                | PO Box 891  | Church Rock NM 87311 | (505) 979-2098 | 95D   | 1.25mi NW on Lobo Valley Road     | Single Wide Trailer | Gray Trailer                         |
| Jim Tor                 | PO Box 1000 | Church Rock NM 87311 | (505) 728-8031 | 65A   | 1.25mi NW on Lobo Valley Road     | Framed House        | Brown Roof Light Green House         |
| Theodore Livingston     | PO Box 1130 | Church Rock NM 87311 | (505) 979-0900 | 57    | 1.25mi NW on Lobo Valley Road     | Framed House        | Dark Brown Roof Beige House          |
| Theodore Livingston     | PO Box 1130 | Church Rock NM 87311 | (505) 979-0900 | 57B   | 1.25mi NW on Lobo Valley Road     |                     |                                      |
| Theodore Livingston     | PO Box      | Church Rock NM 87311 | (505) 979-0900 | 57C   | 1.25mi NW on Lobo Valley Road     | Single Wide Trailer | White Trailer                        |
| Allison Livingston      | PO Box 1171 | Church Rock NM 87311 | (505) 786-7842 | 59A   | 1.25mi NW on Lobo Valley Road     | Framed House        | Brown Roof Ply Board House           |
| Tommy/Marylou Manygoats | PO Box 1171 | Church Rock NM 87311 | (505) 786-7842 | 59B   | 1.25mi NW on Lobo Valley Road     | Framed House        | Brown Roof Peach House               |
| Fabian/Jolene Manygoats | PO Box      | Church Rock NM 87311 | (505) 786-5565 |       | 1.25mi NW on Lobo Valley Road     | Single Wide Trailer | White Trailer                        |
| Hanley Manygoats        | PO Box      | Church Rock NM 87311 | (505) 786-7842 | 26    | 1.25mi NW on Lobo Valley Road     | Framed House        | Gray Roof Tan House with Porch       |
| Ben & Inez Morgan       | PO Box 726  | Church Rock NM 87311 | (505) 786-5016 | 28A   | 1mi W on Lobo Valley Road         | Framed House        | Gray Roof Beige House                |
| Ben & Inez Morgan       | PO Box 726  | Church Rock NM 87311 | (505) 786-5016 | 28B   | 1mi W on Lobo Valley Road         | Hogan               | Red Roof Light Brown Hogan           |
| Stephen/Kathleen King   | PO Box 839  | Church Rock NM 87311 | (505) 786-7698 | 12    | 1mi W on Lobo Valley Road         | Framed House        | Brown Roof Green House               |
| Joe Louie               | PO Box 839  | Church Rock NM 87311 | (505) 879-8340 | 4     | 1mi W on Lobo Valley Road         | Single Wide Trailer | White Trailer Peach Trimming         |
| NORTH OF SECOND CANYON  |             |                      |                |       |                                   |                     |                                      |
| Doris A. Begay          | PO Box 987  | Church Rock NM 87311 | (505) 728-5493 | 391A  | 5mi N of N11-49 Highway           | Framed House        | Brown Roof Gray Stucco Hogan         |
| Matilda Begay           | PO Box 6078 | Gallup, NM 87301     | (505) 728-5493 | 391B  | 5mi N of N11-49 Highway           | Hogan               | Brown Roof Gray Stucco Hogan         |
| Dennison Begay          | PO Box      |                      | (505) 240-7771 | 393A  | 5mi N of N11-49 Highway           | Hogan               | Green Roof Gray Stucco Hogan         |
| Phillip Livingston      | PO Box 395  | Church Rock NM 87311 | (505) 906-2084 | 393B  | 5mi N of N11-49 Highway           | Framed House        | Brown Roof Beige House               |
| Bennie Begay            | PO Box 1145 | Church Rock NM 87311 | (505) 979-0009 | 393C  | 2.5mi W of Pinedale Chapter House | Framed House        | Vanilla House w/ Brown Trimming Ramp |
| Shirley Mae Becenti     | PO Box 1252 | Church Rock NM 87311 | (505) 979-8008 | 349C  | 2.5mi W of Pinedale Chapter House | Framed House        | Green Roof Brown Stucco House        |
| Francis Price           | PO Box 1252 | Church Rock NM 87311 | (505) 879-4403 | 351A  | 2.5mi W of Pinedale Chapter House | Hogan               | Brown Roof Brown Hogan               |
| Roger Becenti           | PO Box 1252 | Church Rock NM 87311 | (505) 879-4403 | 351B  | 2.5mi W of Pinedale Chapter House | Hogan               | Red Roof Brown Hogan                 |
| Roger Becenti           | PO Box 1252 | Church Rock NM 87311 | (505) 879-4403 | 351C  | 2.5mi W of Pinedale Chapter House | Hogan               | Red Roof Brown Hogan                 |
| Vera Jones              | PO Box 604  | Gallup, NM 87301     | (505) 701-1212 | 353   | 2.5mi W of Pinedale Chapter House | Single Wide Trailer | Blue Light Blue Trailer              |
| Melba Becenti           | PO Box      |                      | (505) 701-1212 | 349A  | 2.5mi W of Pinedale Chapter House | NHA House           | Brown Roof Brown House               |
| Melba Becenti           | PO Box      |                      | (505) 701-1212 | 321 A | 2.5mi W of Pinedale Chapter House | Framed House        | Brown Roof Peach House               |
| Joanne Becenti          | PO Box 366  | Church Rock NM 87311 | (505) 701-1212 | 321B  | 2.5mi W of Pinedale Chapter House | Framed House        | Gray Roof Gray House                 |
| Joanne Becenti          | PO Box 366  | Church Rock NM 87311 | (505) 701-1212 | 321C  | 2.5mi W of Pinedale Chapter House | Framed House        | Brown Roof Brown House               |
| Joanne Becenti          | PO Box      |                      | (505) 701-1212 | 317A  | 2.5mi W of Pinedale Chapter House | Framed House        | Brown Roof Yellow House              |
| Mable Elstiffy          | PO Box      |                      | (505) 701-1212 | 317B  | 2.5mi W of Pinedale Chapter House | Framed House        | Red Roof Beige House                 |
| Patrick Begay           | PO Box 1313 | Church Rock NM 87311 | (505) 567-8158 |       | 3mi W of Pinedale Chapter House   | Framed House        | Brown Roof Peach House w/Porch       |
| Annie Grey              | PO Box 438  | Church Rock NM 87311 | (505) 567-8158 | 199   | 3mi W of Pinedale Chapter House   | Framed House        | Brown Roof Black/Gray Plyboard House |
| Darlene Grey            | PO Box 450  | Church Rock NM 87311 | (505) 567-8158 | 201A  | 3mi W of Pinedale Chapter House   | Hogan               | Brown Roof Red Hogan Stone Fndation  |
| Darlene Grey            | PO Box 450  | Church Rock NM 87311 | (505) 567-8158 | 201B  | 3mi W of Pinedale Chapter House   | Framed House        | Green Roof Gray Stucco House         |
| Nellie Thompson         | PO Box 1291 | Church Rock NM 87311 | (505) 879-1558 | 197   | 3mi W of Pinedale Chapter House   | Hogan               | Gray Roof Brown Stucco Hogan         |
| Lagina Thompson         | PO Box 1291 | Church Rock NM 87311 | (505) 879-1558 |       | 3mi W of Pinedale Chapter House   | Single Wide Trailer | Brown Trailer White Trimming w/Porch |
| Erik Grey               | PO Box 1263 | Church Rock NM 87311 | (505) 726-3036 | 195   | 3mi W of Pinedale Chapter House   | Framed House        | Green Roof Brown House               |
| Timothy Thompson        | PO Box 4441 | Gallup, NM 87301     | (505) 726-3036 |       | 3mi W of Pinedale Chapter House   | Framed House        | Brown Roof Beige House w/Patio       |
| Roy Edison, Sr          | PO Box 901  | Church Rock NM 87311 | (505) 879-1558 | 101A  | 3.5mi W of Pinedale Chapter House | Single Wide Trailer | Vanilla Trailer Grey Roof            |
| Roy Edison, Sr          | PO Box 901  | Church Rock NM 87311 | (505) 879-1558 | 101B  | 3.5mi W of Pinedale Chapter House | Framed House        | Gray Roof Gray House                 |
| EAST OF ROAD            |             |                      |                |       |                                   |                     |                                      |
| Dennette Largo          | PO Box 723  | Church Rock NM 87311 | (505) 870-5748 | 19A   | 3.5mi W of Pinedale Chapter House | Framed House        | Gray Roof Faded Purple 2 Story House |
| Devin Largo             | PO Box 686  | Church Rock NM 87311 | (505) 870-9989 | 19B   | 3.5mi W of Pinedale Chapter House | Single Wide Trailer | White Trailer                        |
| Daniel & Betty Largo    | PO Box 154  | Church Rock NM 87311 | (505) 862-1106 | 19C   | 3.5mi W of Pinedale Chapter House | Hogan               | Gray Roof Gray Hogan                 |
| Francis Largo           | PO Box 872  | Church Rock NM 87311 | (505) 713-6379 | 917   | 3.5mi W of Pinedale Chapter House | Hogan               | Gray Stucco Hogan w/ 2 Additions     |
| Francis Largo           | PO Box 872  | Church Rock NM 87311 | (505) 713-6379 | 910B  | 3.5mi W of Pinedale Chapter House | Framed House        | Green Roof Plyboard House            |
| Francis Largo           | PO Box 872  | Church Rock NM 87311 | (505) 713-6379 | 910C  | 3.5mi W of Pinedale Chapter House | Framed House        | Green Roof Stucco House BR Addition  |
| Gary Largo, Sr          | PO Box 367  | Church Rock NM 87311 | (505) 905-4510 | 912A  | 3.5mi W of Pinedale Chapter House | Framed House        | Brown Roof Plyboard House            |
| Galvison Largo          | PO Box 367  | Church Rock NM 87311 | (505) 905-4510 | 912B  | 3.5mi W of Pinedale Chapter House | Hogan               | Orange Hogan                         |
| Gary Largo, Sr          | PO Box 367  | Church Rock NM 87311 | (505) 905-4510 | 912C  | 3.5mi W of Pinedale Chapter House | Framed House        | Brown Roof Gray Stucco House         |
| Ned Yazzie              | PO Box 986  | Church Rock NM 87311 | (505) 905-7961 | 909   | 4mi NW of Pinedale Chapter House  | Framed House        | Brown Roof Gray Stucco House         |
| Ned Yazzie              | PO Box 986  | Church Rock NM 87311 | (505) 905-7961 |       | 4mi NW of Pinedale Chapter House  | hogan               | Red Roof Black Hogan                 |
| Lisa & Larry Benally    | PO Box 477  | Church Rock NM 87311 | (505) 905-0010 | 911A  | 4mi NW of Pinedale Chapter House  | Single Wide Trailer | White Trailer                        |
| Tommy & Maggie Nachin   | PO Box 163  | Church Rock NM 87311 | (505) 905-0010 | 911B  | 4mi NW of Pinedale Chapter House  | Single Wide Trailer | Gray Roof Light Blue Trailer         |
| *Jerry Nachin           | PO Box      |                      | (505) 905-0010 |       | 4mi NW of Pinedale Chapter House  | Framed House        | Gray Roof Light Blue House           |
| Eugene Joe              | PO Box      |                      | (505) 905-0010 |       | 4mi NW of Pinedale Chapter House  | Framed House        | Gray House                           |
| Judy King               | PO Box      |                      | (505) 905-0010 | 54    | 4mi NW of Pinedale Chapter House  | Framed House        | White Roof Beige House               |
| Cecelia B Arviso        | PO Box      |                      | (505) 905-0010 |       | 4mi NW of Pinedale Chapter House  | Framed House        | White Roof Beige House               |

REDWATER POND ROAD





5/17/2010

|                          |        |                |      |       |                           |                     |                                   |
|--------------------------|--------|----------------|------|-------|---------------------------|---------------------|-----------------------------------|
| Marie Johnson            | PO Box | (505) 979-3053 | 60D  | 1/2mi | Old Church Rock Mine Road | Single Wide Trailer | Trailer with Porch Tree in Front  |
| Jimmy Johnson            | PO Box |                | 60B  | 1/2mi | Old Church Rock Mine Road | Framed House        | Red House w/Fence around it       |
|                          | PO Box |                | 62A  |       | Old Church Rock Mine Road | Framed House        | Red Roof Gray House               |
| Andrew Begay/Lavem James | PO Box |                | 62B  |       | Old Church Rock Mine Road |                     |                                   |
| Andrew Begay/Lavem James | PO Box |                | 64   | 1mi   | Old Church Rock Mine Road | Framed House        | White Roof Gray Stucco House      |
| Louise James             | PO Box |                | 64C  |       | Old Church Rock Mine Road |                     |                                   |
| Lucy James               | PO Box |                | 64D  | 1mi   | Old Church Rock Mine Road | Hogan               | White Roof White Hogan            |
| Sally Henry/Regina Gray  | PO Box | (505) 713-8633 | 84A  | 1mi   | Old Church Rock Mine Road | Hogan               | Brown Roof Beige Hogan Brown Trim |
| Valene Chee              | PO Box | (505) 908-4275 | 86   | 1mi   | Old Church Rock Mine Road | Framed House        | Green Roof Beige House            |
| Sally Gray               | PO Box |                | 100A | 1mi   | Old Church Rock Mine Road | Framed House        | Pink House With White Trim        |
| Karen Gray               | PO Box | (505) 879-0323 | 100B | 1mi   | Old Church Rock Mine Road | Framed House        | Red Roof Pink House               |
| Sally Gray               | PO Box |                | 100D | 1mi   | Old Church Rock Mine Road | Framed House        | Black Roof Yellow/Gray House      |
| Sarah Manning            | PO Box | (505) 862-2008 | 100E | 1mi   | Old Church Rock Mine Road | Framed House        | Brown Roof Maroon House           |
| Nancy Benally            | PO Box |                | 102A | 1mi   | Old Church Rock Mine Road | Framed House        | Green Roof Gray House             |
| Beatrice Hood            | PO Box |                | 102B | 1mi   | Old Church Rock Mine Road | Framed House        | White Roof Dark Blue House        |
| Charmaine Thomas         | PO Box | (623) 521-8984 | 102C | 1mi   | Old Church Rock Mine Road | Hogan               | Gray Roof Beige Hogan             |
| Phyllis Manuelito        | PO Box |                | 106  | 1mi   | Old Church Rock Mine Road | Framed House        | Brown Roof Gray House             |

FIRST CANYON

|                  |        |                |     |  |                   |                     |                                |
|------------------|--------|----------------|-----|--|-------------------|---------------------|--------------------------------|
| Lucinda Garcia   | PO Box | (505) 409-0983 | 23  |  | First Canyon Road | Single Wide Trailer | White Roof Blue Trailer        |
| Zita Touchin     | PO Box | (505) 236-9120 |     |  | First Canyon Road | Single Wide Trailer | Tan Roof White Trailer         |
| Edith Irving     | PO Box |                |     |  | First Canyon Road | Hogan               | White Roof White Hogan         |
| Dan Chee         | PO Box | (505) 870-0138 | 106 |  | First Canyon Road | Framed House        | Brown Roof Yellow House        |
| Lily Norton      | PO Box | (505) 870-9110 | 101 |  | First Canyon Road | Framed House        | Brown Roof Red House           |
| Rosemary Gray    | PO Box | (505) 862-3217 | 99B |  | First Canyon Road | Framed House        | Green Roof Green House         |
| Delbert Gray     | PO Box |                |     |  | First Canyon Road | Single Wide Trailer | White Roof White House         |
| Anita Pete       | PO Box |                | 102 |  | First Canyon Road | Framed House        | White Roof Rust House          |
| Christina Yazzie | PO Box | (505) 879-0279 | 126 |  | First Canyon Road | Framed House        | Brown Roof Gray House          |
| Julia Baloo      | PO Box |                | 88C |  | First Canyon Road | Framed House        | Brown Roof Black House         |
| Perry John       | PO Box |                | 88A |  | First Canyon Road | NHA House           | White Roof Gray House          |
| Larry John       | PO Box |                | 88B |  | First Canyon Road | NHA House           | Brown Roof Yellow House        |
| Randy Chee       | PO Box |                |     |  | First Canyon Road | Single Wide Trailer | Silver Roof White Trailer      |
| Holly Gray       | PO Box |                |     |  | First Canyon Road | Single Wide Trailer | White Roof Brown White Trailer |
| Ophelia Grey     | PO Box | (505) 862-3217 | 90  |  | First Canyon Road | Framed House        | Brown Roof Orange Trailer      |
| Archie Tsosie    | PO Box | (505) 863-4369 | 68A |  | First Canyon Road | Hogan               | Brown Roof Gray Hogan          |
| Archie Tsosie    | PO Box | (505) 863-4369 | 68B |  | First Canyon Road | Hogan               | Green Roof                     |
| Alexander Tsosie | PO Box | (505) 863-4369 | 68C |  | First Canyon Road | Framed House        | Brown Roof Gray House          |
| Annie Edison     | PO Box |                | 26  |  | First Canyon Road | Framed House        | Brown Roof Pink House          |

SOUTH OF N11-49

|                    |        |                |      |       |                 |                     |                               |
|--------------------|--------|----------------|------|-------|-----------------|---------------------|-------------------------------|
| Kathy Jaye         | PO Box | (505) 979-8355 | 120C | 1/4mi | S of Hwy N11-49 | Framed House        | Brown Roof Brown House        |
| Kathy Jaye         | PO Box | (505) 979-8355 | 250A | 1/4mi | S of Hwy N11-49 | Hogan               | Black Roof Gray House         |
| Kathy Jaye         | PO Box | (505) 979-8355 | 250B | 1/4mi | S of Hwy N11-49 | Framed House        | Green Roof Gray House         |
| Roger Irving       | PO Box |                | 360B | 1/2mi | S of Hwy N11-49 | Single Wide Trailer | Silver Roof White Trailer     |
| Roger Irving       | PO Box |                | 360E | 1/2mi | S of Hwy N11-49 | Single Wide Trailer | Silver Roof White Trailer     |
| Roger Irving       | PO Box |                | 360A | 1/2mi | S of Hwy N11-49 | Hogan               | White Roof Red Hogan          |
| Louise Yazzie      | PO Box |                | 360C | 1/2mi | S of Hwy N11-49 | Single Wide Trailer | White Roof Beige Trailer      |
| Grace Ann Begay    | PO Box |                | 350B | 1/2mi | S of Hwy N11-49 | Hogan               | Brown Roof Green Stucco Hogan |
| Maggie Begay       | PO Box |                | 350A | 1/2mi | S of Hwy N11-49 | Framed House        | Brown Roof Yellow Cream House |
| Darlene Begay      | PO Box |                | 280A | 1/2mi | S of Hwy N11-49 | Framed House        | Brown Roof Cream House        |
| Kenneth Jones      | PO Box |                | 280B | 1/2mi | S of Hwy N11-49 | Single Wide Trailer | Silver Roof White Trailer     |
| Mimi Begay         | PO Box |                | 280E | 1/2mi | S of Hwy N11-49 | Framed House        | Gray Roof Green House         |
| Jasper White       | PO Box |                | 300C | 1/4mi | S of Hwy N11-49 | Single Wide Trailer | Silver Roof Beige Trailer     |
| Lucille Charley    | PO Box |                | 302B | 1/4mi | S of Hwy N11-49 | Single Wide Trailer | Silver Roof Beige Trailer     |
| Virgil White       | PO Box |                | 304  | 1/4mi | S of Hwy N11-49 | Hogan               | Green Roof Gray Hogan         |
| Tom White, Jr      | PO Box |                | 302A | 1/4mi | S of Hwy N11-49 | Single Wide Trailer | Blue Roof Gray Trailer        |
| Richard White      | PO Box |                | 300D | 1/4mi | S of Hwy N11-49 | Hogan               | Brown Roof Gray Hogan         |
| Tom/Lorraine White | PO Box |                | 300A | 1/4mi | S of Hwy N11-49 | Framed House        | Brown Roof Cream House        |
| Raymond Charley    | PO Box |                | 300B | 1/4mi | S of Hwy N11-49 | Framed House        | Brown Roof Light Yellow House |
| Lorinda Henlo      | PO Box |                | 300E | 1/4mi | S of Hwy N11-49 | Framed House        | Brown Roof Brown House        |
| Antionette Largo   | PO Box |                |      | 1/4mi | S of Hwy N11-49 | Single Wide Trailer | Silver Roof Beige Trailer     |
| Howard Largo       | PO Box |                |      | 1/4mi | S of Hwy N11-49 | Hogan               | Red Roof Beige House          |
|                    | PO Box |                |      | 1/4mi | S of Hwy N11-49 | Framed House        | Brown Roof Pinkish House      |

MIDGET MESA AND SECOND CANYON ROAD

|                  |        |                         |     |         |                  |              |                                 |
|------------------|--------|-------------------------|-----|---------|------------------|--------------|---------------------------------|
| Clifford Mariano | PO Box | 863 Crownpoint NM 87313 | 90A | 1 1/2mi | Midget Mesa Road | Framed House | Brown Roof Gray Two Story House |
|------------------|--------|-------------------------|-----|---------|------------------|--------------|---------------------------------|



5/17/2010

|                         |        |                           |      |         |                    |                     |                                |
|-------------------------|--------|---------------------------|------|---------|--------------------|---------------------|--------------------------------|
| Anderson, Mariano       | PO Box | Jones Ranch               | 98   | 1/2mi   | Midget Mesa Road   | Framed House        | White Roof Rust House          |
| Jaqueline Llano         | PO Box | 863 Crownpoint NM 87313   | 94   | 1/2mi   | Midget Mesa Road   | Framed House        |                                |
| Clifford Llano          | PO Box | 863 Crownpoint NM 87313   |      | 1/2mi   | Midget Mesa Road   | Hogan               | Brown Roof Log Hogan           |
| Robert/Christine Martin | PO Box |                           | 88B  | 1 1/2mi | Midget Mesa Road   | Hogan               | Brown Roof Beige House         |
| Arnold Begay            | PO Box | 863 Crownpoint NM 87313   | 112  | 1 1/2mi | Midget Mesa Road   | Hogan               | Green Roof Hogan               |
| Jasper Johnson          | PO Box | 1961 Gallup, NM 87301     | 78C  | 1 1/2mi | Midget Mesa Road   | Hogan               | White Roof White House         |
| DJ Begay-Church         | PO Box | 1961 Gallup, NM 87301     | 78A  | 1 1/2mi | Midget Mesa Road   | Framed House        | White Roof Green House         |
| Alice Begay             | PO Box | 277 Church Rock NM 87311  | 78B  | 1 1/2mi | Midget Mesa Road   | Framed House        | Brown Roof Cream Stucco House  |
| Tim Thompson            | PO Box | 1168 Church Rock NM 87311 | 61A  | 1mi     | Midget Mesa Road   | Framed House        | Brown Roof Cream Stucco House  |
| Lewis Largo             | PO Box | 1153 Church Rock NM 87311 | 59   | 1mi     | Midget Mesa Road   | Framed House        | Brown Roof Gray Stucco House   |
| Levore Largo            | PO Box | 1153 Church Rock NM 87311 | 61B  | 1mi     | Midget Mesa Road   | Framed House        | Brown Roof Gray Stucco House   |
| Lenette Largo           | PO Box | 1153 Church Rock NM 87311 | 59C  | 1mi     | Midget Mesa Road   | Framed House        | Tan Roof Gray Stucco House     |
| Geneva Robert           | PO Box | 1114 Church Rock NM 87311 | 57   | 1mi     | Midget Mesa Road   | Framed House        | Brown Roof Black House         |
| Carol Johnson           | PO Box | 1287 Church Rock NM 87311 | 60C  | 1mi     | Midget Mesa Road   | Framed House        | Red Roof Gray House            |
| David Johnson           | PO Box | 988 Church Rock NM 87311  | 60B  | 1mi     | Midget Mesa Road   | Single Wide Trailer | White Roof White Trailer       |
| Joann Johnson           | PO Box | 988 Church Rock NM 87311  | 60A  | 1mi     | Midget Mesa Road   | Framed House        | Gray Roof Gray House           |
| Betty Hollisoi          | PO Box | 1234 Church Rock NM 87311 | 62A  | 1mi     | Midget Mesa Road   | Hogan               | Brown Roof Cream Stucco House  |
| Betty Hollisoi          | PO Box | 1234 Church Rock NM 87311 | 64B  | 1mi     | Midget Mesa Road   | Framed House        | Brown Roof Gray Stucco House   |
| Vera Thompson           | PO Box | 1234 Church Rock NM 87311 | 58B  | 1mi     | Midget Mesa Road   | Framed House        | White Roof Gray House          |
| Lonnie Kee              | PO Box | 222 Gallup, NM 87301      | 58A  | 1mi     | Midget Mesa Road   | Hogan               | Green Roof                     |
| Fannie Yazzie           | PO Box | 4857 Gallup, NM 87301     | 38E  | 1mi     | Midget Mesa Road   | Framed House        | Green Roof Black House         |
| Margaret Whitegoat      | PO Box | 2935 Gallup, NM 87301     | 38A  | 1mi     | Midget Mesa Road   | Framed House        | Green Roof Blue Stucco House   |
| Theresa Whitegoat       | PO Box | 2935 Gallup, NM 87301     | 38B  | 1mi     | Midget Mesa Road   |                     |                                |
| Maggie Billie           | PO Box | 577 Church Rock NM 87311  | 36   | 1mi     | Midget Mesa Road   |                     |                                |
| Hilh Whitegoat          | PO Box | Thoreau, NM 86323         |      | 1mi     | Midget Mesa Road   |                     |                                |
| Hilh Whitegoat          | PO Box | Thoreau, NM 86323         |      | 1mi     | Midget Mesa Road   |                     |                                |
| Ned Brodie              | PO Box | Gallup, NM 87301          | 15   | 1mi     | Midget Mesa Road   |                     |                                |
| Darrel Begaye           | PO Box | 1961 Gallup, NM 87301     |      | 1mi     | Midget Mesa Road   | Framed House        | White Roof Gray Stucco House   |
| Nancy Lee               | PO Box | 877 Church Rock NM 87311  | 214D | 2.5mi   | Second Canyon Road | Framed House        | Brown Roof Gray House          |
| Darwin Bills            | PO Box | 2955 Church Rock NM 87311 | 222E | 2.5mi   | Second Canyon Road | Framed House        | Brown Roof Black House         |
| Lorraine Peterson       | PO Box | 2955 Church Rock NM 87311 |      | 2.5mi   | Second Canyon Road | Hogan               | Brown Roof Gray Hogan          |
| James Peterson          | PO Box | 2955 Church Rock NM 87311 | 214A | 2.5mi   | Second Canyon Road | Framed House        | Brown Roof Gray House          |
| Leo Silversmith         | PO Box | 211 Church Rock NM 87311  | 212E | 2.5mi   | Second Canyon Road | Framed House        | Brown Roof Beige House         |
| Selene Silago           | PO Box | 274 Church Rock NM 87311  | 212A | 2.5mi   | Second Canyon Road | Hogan               | Green Roof Gray Hogan          |
| Tully Silversmith       | PO Box | 1397 Church Rock NM 87311 | 212B | 2.5mi   | Second Canyon Road | Single Wide Trailer | White Roof Gray Trailer        |
| Orville Silversmith     | PO Box | 211 Church Rock NM 87311  | 212D | 2.5mi   | Second Canyon Road | Single Wide Trailer | Silver Roof White Trailer      |
| Travis Grey             | PO Box | 2972 Gallup, NM 87301     | 222A | 2.5mi   | Second Canyon Road | Framed House        | Brown Roof Gray House          |
| Louise Grey             | PO Box | 2972 Gallup, NM 87301     | 220C | 2.5mi   | Second Canyon Road | Framed House        | Brown Roof Gray House          |
| Lorna Grey              | PO Box | 2972 Gallup, NM 87301     |      | 2.5mi   | Second Canyon Road | Single Wide Trailer | White Roof Green Trailer       |
| Corrina Irving          | PO Box | 2972 Gallup, NM 87301     |      | 2.5mi   | Second Canyon Road | Single Wide Trailer | White Roof Brown Trailer       |
| Lucy Lee                | PO Box | 2972 Gallup, NM 87301     | 222D | 2.5mi   | Second Canyon Road | Concrete Block      | Brown Roof                     |
| Robert Irving           | PO Box | 853 Church Rock NM 87311  | 222B | 2.5mi   | Second Canyon Road | Single Wide Trailer | White Roof Green Trailer       |
| Priscilla Irving        | PO Box | 5046 Gallup, NM 87301     |      | 2.5mi   | Second Canyon Road | Single Wide Trailer | Brown Roof Light Green Trailer |
| Maria Irving            | PO Box | 877 Church Rock NM 87311  |      | 2.5mi   | Second Canyon Road | Single Wide Trailer | Brown Roof Yellow Trailer      |
| Grant Morgan            | PO Box |                           | 220B | 2.5mi   | Second Canyon Road | Framed House        | Green Roof Pink House          |
| Harry Morgan            | PO Box | 730 Church Rock NM 87311  | 216B | 2.5mi   | Second Canyon Road | Framed House        | White Roof Green Stucco House  |
| Harry Morgan            | PO Box | 730 Church Rock NM 87311  | 216A | 2.5mi   | Second Canyon Road | Framed House        | Green Roof Green House         |
| Harry Morgan            | PO Box | 730 Church Rock NM 87311  | 216C | 2.5mi   | Second Canyon Road | Hogan               | Green Roof Tan Hogan           |
| Francis Morgan          | PO Box |                           | 218A | 2.5mi   | Second Canyon Road | Hogan               | Green Roof Green Hogan         |
| Wilber Morgan           | PO Box |                           | 218C | 2.5mi   | Second Canyon Road | Framed House        | Brown Roof Rust House          |
| Francis Morgan          | PO Box |                           | 218B | 2.5mi   | Second Canyon Road | Framed House        | Brown Roof Rust House          |
| Francis Morgan          | PO Box |                           |      | 2.5mi   | Second Canyon Road | Framed House        | Brown Roof Rust House          |
| Johnny Largo            | PO Box | 171 Church Rock NM 87311  | 233B | 2.75mi  | Second Canyon Road | Hogan               | White Roof Tan Hogan           |
| Johnny Largo            | PO Box | 171 Church Rock NM 87311  | 234A | 2.75mi  | Second Canyon Road | Framed House        | Black Roof Gray Stucco House   |
| Alice Largo             | PO Box | 1253 Church Rock NM 87311 | 233E | 2.75mi  | Second Canyon Road | Framed House        | White Roof Gray House          |
| Ernest Burbank          | PO Box | 171 Church Rock NM 87311  | 233D | 2.75mi  | Second Canyon Road | Framed House        | Brown Roof Beige House         |
| Mary T Sherman          | PO Box | 2 Church Rock NM 87311    | 239A | 2.75mi  | Second Canyon Road | Framed House        | White Roof Gray House          |
| Ella Rose Davis         | PO Box | 514 Church Rock NM 87311  |      | 2.75mi  | Second Canyon Road | Framed House        | Brown Roof Black House         |
| Janice Sherman          | PO Box | 1247 Church Rock NM 87311 | 239B | 2.75mi  | Second Canyon Road | Framed House        | Brown Roof Gray House          |
| Bernice Tsosie          | PO Box | 335 Church Rock NM 87311  | 239C | 2.75mi  | Second Canyon Road | Single Wide Trailer | White Roof White Trailer       |
| Corina Davis            | PO Box | 23 Church Rock NM 87311   |      | 2.75mi  | Second Canyon Road | Framed House        | White Roof Gray House          |
| David Peterson          | PO Box | 931 Church Rock NM 87311  |      | 2.75mi  | Second Canyon Road | Framed House        | White Roof Brown House         |
| Frank Peterson          | PO Box | 203 Church Rock NM 87311  | 255A |         |                    |                     |                                |
| Danson Cadman           | PO Box |                           |      |         |                    |                     |                                |



|                                  |      |                               |                     |                                 |
|----------------------------------|------|-------------------------------|---------------------|---------------------------------|
| PO Box 4486 Gallup, NM 87301     | 255B | 1.75mi Second Canyon Road     | Framed House        | Brown Roof Yellow House         |
| PO Box 203 Church Rock NM 87311  | 259B | 1.75mi Second Canyon Road     | Framed House        | Brown Roof Yellow House         |
| PO Box 203 Church Rock NM 87311  | 257A | 1.75mi Second Canyon Road     | Hogan               | Brown Roof Hogan                |
| PO Box 974 Gallup, NM 87301      | 253  | 2.75mi Second Canyon Road     | Framed House        | Gray Roof Brown Stucco House    |
| PO Box 4217 Gallup, NM 87301     | 261  | 2.75mi Second Canyon Road     | Framed House        | Red Roof Rust Stucco House      |
| PO Box 922 Church Rock NM 87311  | 251A | 2.75mi Second Canyon Road     | Single Wide Trailer | Beige Roof Brown Trailer        |
| PO Box 536 Church Rock NM 87311  | 251B | 2.75mi Second Canyon Road     | Log Cabin House     | Brown Roof Log Cabin            |
| PO Box 536 Church Rock NM 87311  |      | 2.75mi Second Canyon Road     | Framed House        | White Roof Turquoise House      |
| PO Box 1027 Thoreau, NM 86323    |      | 2.75mi Second Canyon Road     | Framed House        | White Roof Gray House           |
| PO Box 1247 Church Rock NM 87311 | 224A | 2.75mi Second Canyon Road     | Framed House        | White Roof Black House          |
| PO Box 1247 Church Rock NM 87311 | 224B | 2.75mi Second Canyon Road     | Log Cabin House     | White Roof Log Cabin House      |
| PO Box 430 Church Rock NM 87311  |      | 3mi Second Canyon Road        | Log Cabin House     | Brown Roof Log Cabin House      |
| PO Box 437 Church Rock NM 87311  | 322A | 3mi Second Canyon Road        | Framed House        | Brown Roof Gray House           |
| PO Box 665 Church Rock NM 87311  | 322B | 3mi Second Canyon Road        | Hogan               | Brown Roof Brown Hogan          |
| PO Box 728 Church Rock NM 87311  | 322D | 3mi Second Canyon Road        | Framed House        | Red Roof White House            |
| PO Box 437 Church Rock NM 87311  | 322E | 3mi Second Canyon Road        | Hogan               | White Roof Gray Hogan           |
| PO Box 723 Church Rock NM 87311  | 322F | 3mi Second Canyon Road        | Framed House        | White Roof Gray House           |
| PO Box 826 Church Rock NM 87311  | 354  | 3mi Second Canyon Road        | Framed House        | White Roof White House          |
| PO Box 826 Church Rock NM 87311  | 320  | 3mi Second Canyon Road        | Framed House        | White Roof White House          |
| PO Box 826 Church Rock NM 87311  |      | 3mi Second Canyon Road        | Framed House        | Brown Roof Gray House           |
| PO Box 826 Church Rock NM 87311  |      | 3mi Second Canyon Road        | Hogan               | Brown Roof Hogan                |
| PO Box 1345 Church Rock NM 87311 | 317A | 3mi Second Canyon Road        | Single Wide Trailer | White Roof White Trailer        |
| PO Box 826 Church Rock NM 87311  | 317B | 3mi Second Canyon Road        | Framed House        | Brown Roof Yellow House         |
| PO Box 826 Church Rock NM 87311  | 318A | 3mi Second Canyon Road        | Framed House        | Brown Roof Gray Stucco House    |
| PO Box 1427 Church Rock NM 87311 |      | 3mi Second Canyon Road        | Framed House        | Brown Roof Gray House           |
| PO Box 1427 Church Rock NM 87311 |      | 3mi Second Canyon Road        | Hogan               | White Roof Gray Hogan           |
| PO Box 826 Church Rock NM 87311  |      | 3mi Second Canyon Road        | Framed House        | Metal Roof Metal Side           |
| PO Box 826 Church Rock NM 87311  | 473A | 4.8mi Second Canyon Road      | Framed House        | Brown Roof Brown House          |
| PO Box 202 Church Rock NM 87311  | 473B | 4.8mi Second Canyon Road      | Old Church          | Brown Roof Metal Side           |
| PO Box 1176 Church Rock NM 87311 | 476A | 4.8mi Second Canyon Road      | Framed House        | Brown Roof Red House            |
| PO Box 136 Church Rock NM 87311  | 476B | 4.8mi Second Canyon Road      | Framed House        | White Roof White House          |
| PO Box 1234 Church Rock NM 87311 | 476C | 4.8mi Second Canyon Road      | Framed House        | White Roof White House          |
| PO Box 1429 Church Rock NM 87311 | 476D | 4.8mi Second Canyon Road      | Framed House        | White Roof White House          |
| PO Box 1221 Church Rock NM 87311 |      | 4.8mi Second Canyon Road      | Framed House        | White Roof White House          |
| PO Box 276 Church Rock NM 87311  |      | 4.8mi Second Canyon Road      | Log Cabin Hogan     | Brown Roof Log Cabin Hogan      |
| PO Box 1176 Church Rock NM 87311 |      | 4.8mi Second Canyon Road      | Log Cabin Hogan     | Green Roof Log Cabin Hogan      |
| PO Box 1021 Church Rock NM 87311 |      | 4.8mi Second Canyon Road      | Single Wide Trailer | Brown Roof Pink Trailer         |
| PO Box 1021 Church Rock NM 87311 |      | 4.8mi Second Canyon Road      | Framed House        | Tan Roof Green House            |
| PO Box 2015 Gallup, NM 87301     | 530A | 4.8mi Second Canyon Road      | Framed House        | Brown Roof Reddish House        |
| PO Box 876 Church Rock NM 87311  | 530B | 4.8mi Second Canyon Road      | Framed House        | Brown Roof Beige House          |
| PO Box 876 Church Rock NM 87311  | 569  | 5.5mi Second Canyon Road      | Framed House        | Brown Roof Gray House           |
| PO Box 876 Church Rock NM 87311  |      | 5.5mi Second Canyon Road      | Framed House        | Brown Roof Light Yellow House   |
| PO Box 1216 Church Rock NM 87311 | 572  | 5.5mi Second Canyon Road      | Hogan               | Brown Roof Brown Hogan          |
| PO Box 1434 Church Rock NM 87311 | 558A | 5.5mi Second Canyon Road      | Single Wide Trailer | Brown Roof Pale Rose Trailer    |
| PO Box 1434 Church Rock NM 87311 | 558B | 5.5mi Second Canyon Road      | Dble Wide Trailer   | Tan Roof Tan Hogan              |
| PO Box 1434 Church Rock NM 87311 |      | 5.5mi Second Canyon Road      | Hogan               | Brown Roof Brown House          |
| PO Box 1133 Church Rock NM 87311 |      | 1.5mi E of Second Canyon Road | Framed House        | Log Hogan                       |
| PO Box 1133 Church Rock NM 87311 | 5    | 1.5mi E of Second Canyon Road | Hogan               | Gray Roof Gray House            |
| PO Box 480 Church Rock NM 87311  | 480C | 1/4mi Ellen Road              | Framed House        | Beige Roof Beige Hogan          |
| PO Box 480 Church Rock NM 87311  | 480A | 1/4mi Ellen Road              | Hogan               | Brown Roof Tan House            |
| PO Box 480 Church Rock NM 87311  |      | 1/4mi Ellen Road              | Hogan               | Brown Roof Vanilla Hogan        |
| PO Box 2834 Gallup, NM 87301     | 430A | 1/2mi Ellen Road              | Framed House        | Concrete Foundation             |
| PO Box 201 Church Rock NM 87311  | 430  | 1/2mi Ellen Road              | Framed House        | Gray Roof Brown/Gray House      |
| PO Box 201 Church Rock NM 87311  | 430B | 1/2mi Ellen Road              | Framed House        | Brown Roof Yellow House         |
| PO Box 2834 Gallup, NM 87301     | 430C | 1/2mi Ellen Road              | Hogan               | Red Roof Gray Stucco Hogan      |
| PO Box 402 Church Rock NM 87311  |      | 1/2mi Pinedale Loop           | Hogan               | Gray Roof Red Hogan w/ Addition |
| PO Box 1224 Church Rock NM 87311 | 37A  | 1/2mi Pinedale Loop           | Dble Wide Trailer   | Gray Roof White Trailer         |
| PO Box 3057 Gallup, NM 87301     | 40   | 1/2mi Pinedale Loop           | Bldg                | Stone Wall Building             |
| PO Box 3057 Gallup, NM 87301     | 38   | 1/2mi Pinedale Loop           | Dble Wide Trailer   | Rust Roof White Trailer         |
| PO Box 3057 Gallup, NM 87301     | 40B  | 1/2mi Pinedale Loop           | Dble Wide Trailer   | Brown Roof Beige Trailer        |
| PO Box 3057 Gallup, NM 87301     |      | 1/2mi Pinedale Loop           | Hogan               | Brown Roof Orange Yellow Hogan  |

Isabelle Curley  
Marie  
Merline  
Linda & Whittier Curley  
Rose Lee Yazzie  
Frank & Susie Arviso  
Frank & Susie Arviso  
Virginia Arviso  
Terry Yazzie  
Elvera Curley  
Jennie P. Begay  
Jones P. Begay  
Julia Begay  
Bertha Lewis  
Patricia Platero  
Leona Begaye  
Victor Lewis  
Leroy Lewis  
Delores Nolah  
Dixie Lewis  
Edison Yazzie  
Gelena Yazzie  
Adina Robertson  
Priscilla Lewis  
Priscilla Lewis  
Priscilla Lewis  
Harrison Billie  
Sarah Zuni  
Sarah Zuni  
Francis Zuni  
United Methodist Church  
United Methodist Church  
Emma Yazzie  
Lita Bah Antonio  
Virginia Lee  
Anita Francisco  
Hank Antonio  
Rena Antonio  
Lita Y. Antonio  
Bernie Jaye  
James S. Billy  
Ernest Lewis  
Ernest Lewis  
Emily Scott  
Janice Bennett  
Janice Bennett  
Laurel Felson  
Laurel Felson  
Willie Norton  
Willie Norton  
Willie Norton  
Bernice Norton  
Elita Mae Norton  
Larry Brown  
Presley Norton  
Raphael Martin  
Old Pinedale Chapter  
Don Daswood  
Elsie Arthur  
Elsie Arthur

|                           |             |                          |                |                            |                     |                                     |
|---------------------------|-------------|--------------------------|----------------|----------------------------|---------------------|-------------------------------------|
| Angus Silversmith         | PO Box 301  | Church Rock NM 87311     | 68A            | 1/2mi Pinedale Loop        | Framed House        | Brown Roof Yellow Stucco House      |
| Theresa Smith             | PO Box 594  | Church Rock NM 87311     | 68B            | 1/2mi Pinedale Loop        | Framed House        | Brown Roof Cream House              |
| Cheryl Smith              | PO Box 594  | Church Rock NM 87311     | 70             | 1/2mi Pinedale Loop        | Framed House        | Brown Roof White House              |
| Elizabeth Livingston      | PO Box 1086 | Church Rock NM 87311     | 72A            | 1/2mi Pinedale Loop        | Framed House        | Dark Green Roof Light Green House   |
| Belinda Tapaha            | PO Box 561  | Church Rock NM 87311     | 72B            | 1/2mi Pinedale Loop        | Framed House        | Brown Roof Gray House               |
| Richard Largo             | PO Box 514  | Gallup, NM 87301         | 78B            | 1/2mi Pinedale Loop        | Hogan               | White Roof Gray Hogan               |
| Victoria Largo            | PO Box 1232 | Church Rock NM 87311     | 78A            | 1/2mi Pinedale Loop        | Framed House        | Brown Roof Pink House               |
| Elva Largo                | PO Box 1232 | Church Rock NM 87311     | 52             | 1/2mi Pinedale Loop        | Hogan               | Gray Roof Brown Hogan               |
| Karen/Felix Nez           | PO Box      | Church Rock NM 87311     | (505) 786-7091 | 1/2mi Pinedale Loop        | Dble Wide Trailer   | Gray Roof White Trailer             |
| *Dan Largo                | PO Box      |                          | (505) 786-7091 | 3/4mi Pinedale Loop        | Framed House        | Green Roof Gray House               |
| *Dan Largo                | PO Box      |                          | (505) 786-7091 | 3/4mi Pinedale Loop        | Hogan               | Green Roof Cream Hogan              |
| Felix Nez                 | PO Box      |                          | (505) 786-7091 | 3/4mi Pinedale Loop        | Shed House          | Brown Shed                          |
| Leon Curley               | PO Box 292  | Church Rock NM 87311     | 101A           | 3/4mi Pinedale Loop        | Hogan               | White Roof Tan Hogan                |
| Leon Curley               | PO Box 292  | Church Rock NM 87311     | 101C           | 3/4mi Pinedale Loop        | Hogan               | White Roof Gray Hogan               |
| Leon Curley               | PO Box 292  | Church Rock NM 87311     | 88A            | 3/4mi Pinedale Loop        | Single Wide Trailer | Gray Roof White Trailer             |
| Leon Curley               | PO Box 292  | Church Rock NM 87311     | 88B            | 3/4mi Pinedale Loop        | Single Wide Trailer | Silver Roof White Trailer           |
| Leon Curley               | PO Box 292  | Church Rock NM 87311     | 86B            | 3/4mi Pinedale Loop        | Single Wide Trailer | Silver Roof White Trailer           |
| Vernon Harry              | PO Box 112  | Church Rock NM 87311     | 114            | 1mi Assembly Valley Road   | Framed House        | Green Roof Yellow House             |
| Emerson Degroat           | PO Box      | Nursing Home             | 116            | 1mi Assembly Valley Road   | Framed House        | Green Roof Cream House              |
| Alvin Harry               | PO Box 729  | Church Rock NM 87311     | 101            | 1mi Assembly Valley Road   | Framed House        | Brown Roof Gray Stucco House        |
| Susie Manuello            | PO Box 1103 | Church Rock NM 87311     | 100            | 1mi Assembly Valley Road   | Framed House        | Brown Roof Beige House              |
| Valarie Manedge           | PO Box      |                          | (505) 786-5605 | 1mi Assembly Valley Road   | Single Wide Trailer | Silver Roof White Trailer           |
| *Ben/Alberta Thompson     | PO Box      |                          | (505) 593-3227 | 3/4mi Assembly Valley Road | Framed House        | Blue Roof Blue House                |
| Patrick Chee              | PO Box      |                          | (505) 593-3227 | 3/4mi Assembly Valley Road | Dble Wide Trailer   | White Roof Light Blue Trailer       |
| Herman & Lucy Brown       | PO Box      | 846 Church Rock NM 87311 | 57             | 3/4mi Assembly Valley Road | Dble Wide Trailer   | Brown Roof Turquoise Trailer        |
| Orlanda Brown             | PO Box      | 552 Church Rock NM 87311 | 58             | 3/4mi Assembly Valley Road | Dble Wide Trailer   | White Roof Beige Trailer            |
| Deroy & Louise Tsosie     | PO Box 684  | Church Rock NM 87311     | 55             | 3/4mi Assembly Valley Road | Dble Wide Trailer   | Brown Roof Beige Trailer            |
| Tom Becenti               | PO Box 291  | Church Rock NM 87311     | 49             | 3/4mi Assembly Valley Road | Framed House        | Brown Roof Beige House              |
| Laranda John              | PO Box 541  | Church Rock NM 87311     | 32C            | 1/2mi Assembly Valley Road | Framed House        | Blue Roof Beige 2 Story House       |
| Derrick John              | PO Box 541  | Church Rock NM 87311     | (505) 979-8321 | 1/2mi Assembly Valley Road | Hogan               | Brown Roof Cream Hogan              |
| Roy Brown                 | PO Box 263  | Church Rock NM 87311     | 34             | 1/2mi Assembly Valley Road | Framed House        | Red Roof L Shaped House             |
| Jeanita Brown             | PO Box 263  | Church Rock NM 87311     | 32B            | 1/2mi Assembly Valley Road | Hogan               | Red Roof Hogan                      |
| Arlene/Andrew Leslie      | PO Box 321  | Church Rock NM 87311     | (505) 979-2550 | 1/2mi Assembly Valley Road | Framed House        | Brown Roof Pink House               |
| Arlene/Andrew Leslie      | PO Box 321  | Church Rock NM 87311     | (505) 786-7447 | 1/2mi Assembly Valley Road | Shed House          | Red Roof Black Shed                 |
| Arian/Roxanna Largo       | PO Box 321  | Church Rock NM 87311     | (505) 786-7447 | 1/2mi Assembly Valley Road | Framed House        | Green Sheet Metal Roof Cream House  |
| Assembly of God Church    | PO Box 232  | Church Rock NM 87311     | (505) 879-3385 | 1/4mi Assembly Valley Road | Church              | Blue Roof White Church              |
| Delbert Nez               | PO Box      |                          | 20A            | 1/4mi Assembly Valley Road | Framed House        | Gray Roof Light Blue House          |
| Lewis B. Yazzie           | PO Box      | 150 Rehobeth, NM 87322   | 22             | 1/4mi Assembly Valley Road | Framed House        | Red Green Roof Yellow House         |
| Lewis B. Yazzie           | PO Box      | 157 Rehobeth, NM 87322   | 10             | 1/4mi Assembly Valley Road | Framed House        | Gray Roof Purple Stucco House       |
| Lewis B. Yazzie           | PO Box      | 157 Rehobeth, NM 87322   | (505) 786-7447 | 1/4mi Assembly Valley Road | Hogan               | Green Roof Gray Stucco Hogan        |
| Roger B. Johnson          | PO Box 79   | Rehobeth, NM 87322       | 02A            | 1/4mi Assembly Valley Road | Framed House        | Gray Roof Cream House               |
| Bernina Johnson           | PO Box 79   | Rehobeth, NM 87322       | 02B            | 1/4mi Assembly Valley Road | Single Wide Trailer | Silver Roof Green Trailer           |
| Philbert Nez              | PO Box 421  | Church Rock NM 87311     | 8              | 1/4mi Assembly Valley Road | Single Wide Trailer | White Roof Light Blue Trailer       |
| Gilbert Nez               | PO Box 421  | Church Rock NM 87311     | 8              | 1/4mi Assembly Valley Road | Framed House        | Blue Gray House                     |
| Deanna Brodie             | PO Box 1185 | Church Rock NM 87311     | 07A            | 1/4mi Timber Ridge Road    | Framed House        | White Roof Blue House               |
| Deanna Brodie             | PO Box 1185 | Church Rock NM 87311     | 07B            | 1/4mi Timber Ridge Road    | Single Wide Trailer | Silver Roof White Trailer           |
| Guy Brodie                | PO Box 1317 | Church Rock NM 87311     | (505) 786-5559 | 1/4mi Timber Ridge Road    | Framed House        | Brown Roof Light Blue House         |
| Julia Brodie              | PO Box 1185 | Church Rock NM 87311     | (505) 515-4905 | 1/2mi Timber Ridge Road    | Single Wide Trailer | White Roof White Trailer            |
| Christian Reformed Church | PO Box      |                          | (505) 713-4599 | 1/2mi Timber Ridge Road    | Framed House        | Old Church Green                    |
| Boyd Brodie               | PO Box 1195 | Church Rock NM 87311     | 32             | 1/2mi Timber Ridge Road    | Framed House        | Brown Roof Cream Stucco House       |
| Boyd Brodie               | PO Box 1195 | Church Rock NM 87311     | 37A            | 1/2mi Timber Ridge Road    | Hogan               | Gray Roof Log Hogan                 |
| Glady's Brodie            | PO Box 700  | Church Rock NM 87311     | 37B            | 1/2mi Timber Ridge Road    | Framed House        | White Roof Pink House               |
| Paula Brodie              | PO Box 1185 | Church Rock NM 87311     | 49             | 1/2mi Timber Ridge Road    | Framed House        | White Roof Blue House               |
| Timber Ridge Rodeo Ground | PO Box 871  | Church Rock NM 87311     | 51             | 3/4mi Timber Ridge Road    | Framed House        | Rodeo Arena                         |
| Wade S. Morgan            | PO Box 291  | Crownpoint NM 87313      | 64             | 1mi Timber Ridge Road      | Framed House        | Red Roof Yellow House               |
| Tom A. Morgan             | PO Box 844  | Church Rock NM 87311     | 120A           | 1mi Timber Ridge Road      | Framed House        | White Roof White House              |
| Tom A. Morgan             | PO Box 844  | Church Rock NM 87311     | 106A           | 1mi Timber Ridge Road      | Hogan               | White Roof Light Pink Hogan         |
| Lawrence Morgan           | PO Box 871  | Church Rock NM 87311     | 106B           | 1mi Timber Ridge Road      | Single Wide Trailer | Light Green Trailer                 |
| Mary Tom                  | PO Box 1478 | Church Rock NM 87311     | 104B           | 1mi Timber Ridge Road      | Framed House        | White Roof Gray Stucco House        |
| Mary Tom                  | PO Box 1478 | Church Rock NM 87311     | 96C            | 1mi Timber Ridge Road      | Hogan               | White Roof Gray Hogan               |
| Mary Tom                  | PO Box 1478 | Church Rock NM 87311     | 96B            | 1mi Timber Ridge Road      | Single Wide Trailer | White Trailer Yello Trim-Demolished |



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## 12 SOIL REPORT

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## 12 SOIL REPORT

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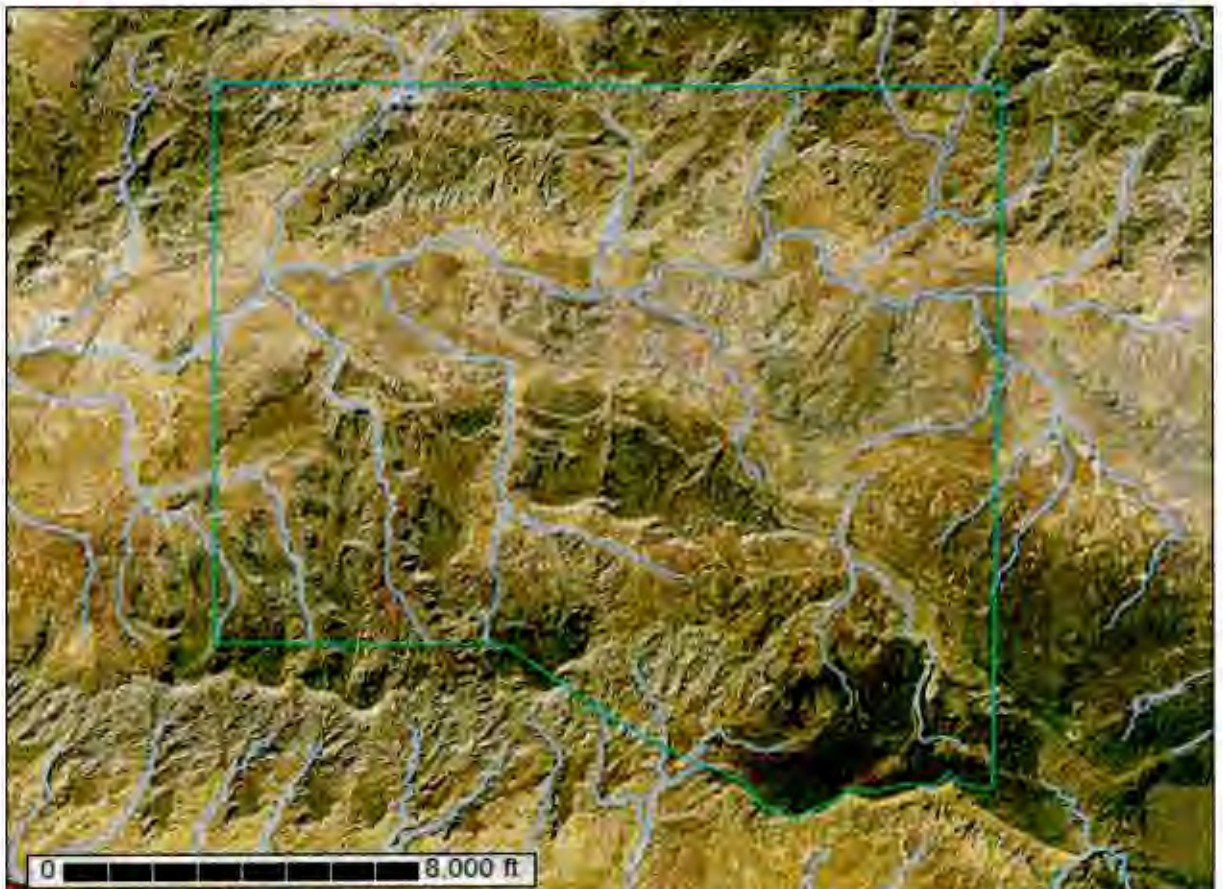
United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

## **Custom Soil Resource Report for McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties**



May 7, 2018

# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

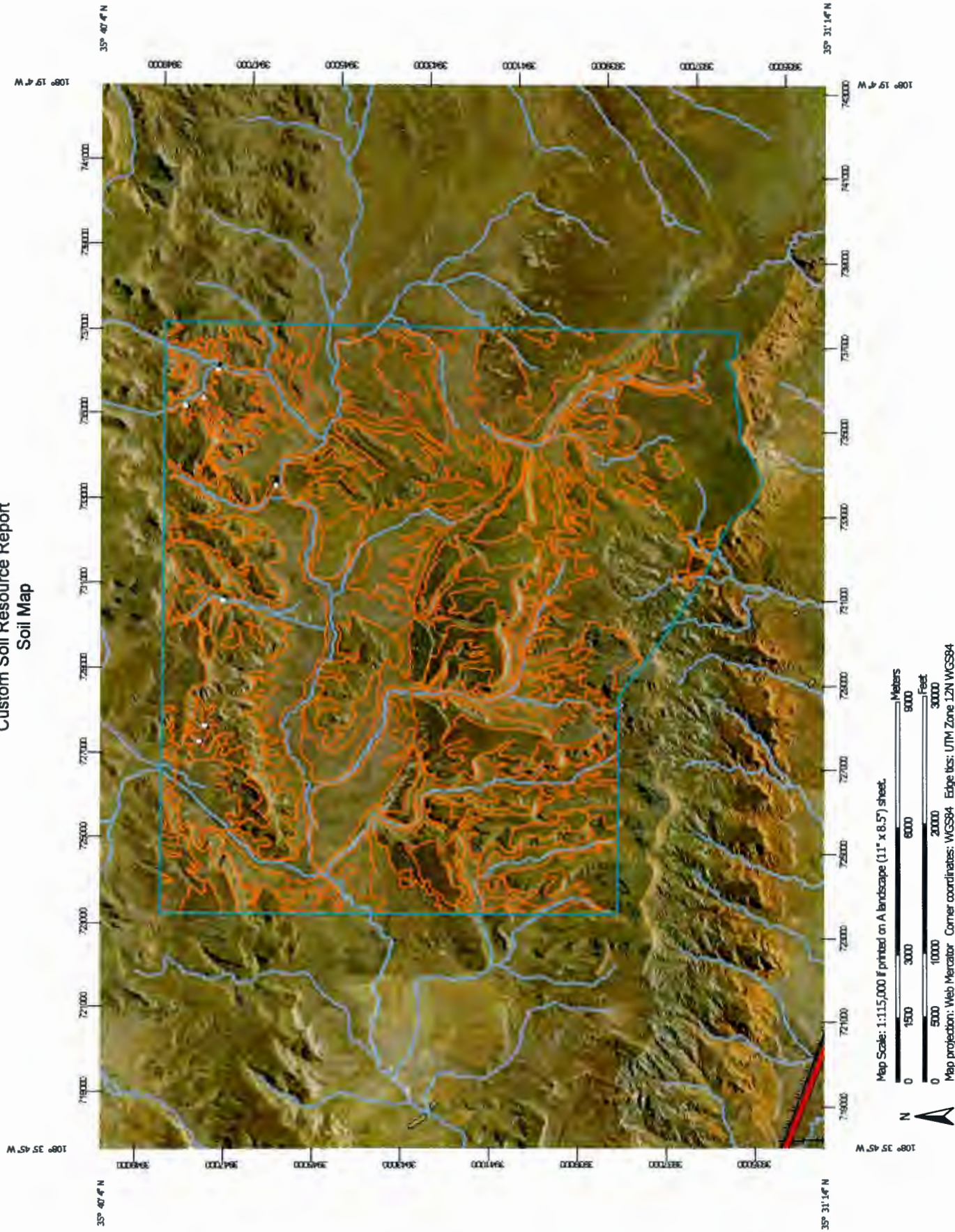


# Soil Map

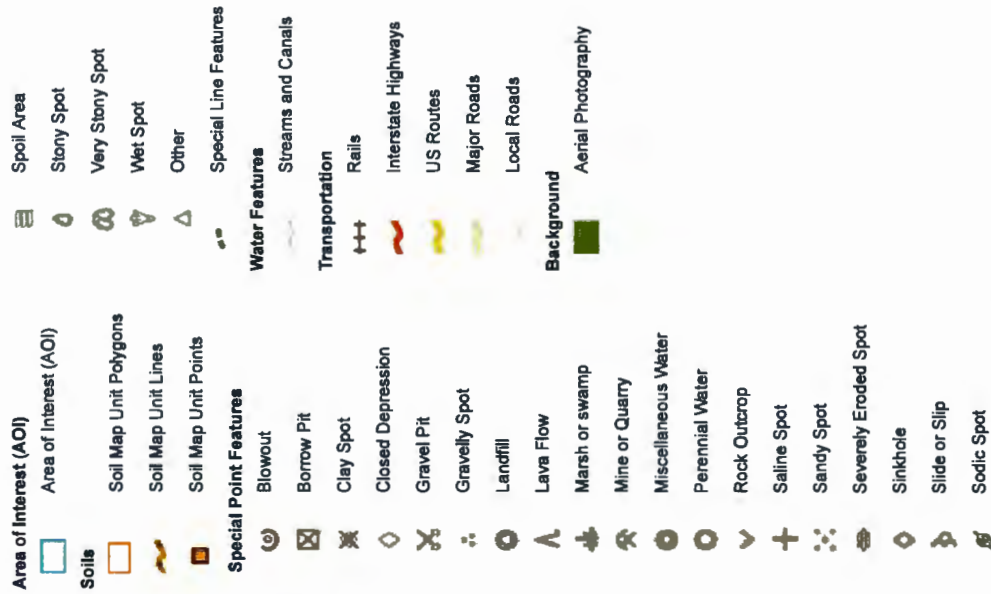
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



## MAP LEGEND



## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties  
Survey Area Data: Version 12, Sep 13, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 13, 2011—Mar 3, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

| Map Unit Symbol | Map Unit Name   | Acres in AOI | Percent of AOI |
|-----------------|---|--------------|----------------|
| 230             | Sparank-San Mateo-Zia complex, 0 to 3 percent slopes              | 2,483.9      | 6.2%           |
| 241             | Mentmore loam, 1 to 8 percent slopes                              | 4,505.7      | 11.3%          |
| 242             | Gish-Mentmore complex, 1 to 8 percent slopes                      | 1,810.1      | 4.5%           |
| 244             | Buckle fine sandy loam, 1 to 8 percent slopes                     | 1,579.7      | 4.0%           |
| 245             | Buckle-Gapmesa-Barboncito complex, 1 to 6 percent slopes          | 584.1        | 1.5%           |
| 258             | Eagleeye-Atchee-Rock outcrop complex, 2 to 35 percent slopes      | 2.5          | 0.0%           |
| 265             | Uranium mined lands   | 512.3        | 1.3%           |
| 290             | Rock outcrop-Westmion-Skyvillage complex, 30 to 80 percent slopes | 3,019.3      | 7.6%           |
| 291             | Rock outcrop-Eagleeye-Atchee complex, 35 to 70 percent slopes     | 2,439.6      | 6.1%           |
| 305             | Celavar-Atarque complex, 1 to 8 percent slopes                    | 1,385.7      | 3.5%           |
| 310             | Parkelei sandy loam, 1 to 8 percent slopes                        | 111.3        | 0.3%           |
| 315             | Flugle-Fragua complex, 1 to 10 percent slopes                     | 1,712.0      | 4.3%           |
| 317             | Highdye-Evpark-Bryway complex, 2 to 20 percent slopes             | 0.0          | 0.0%           |
| 320             | Parkelei-Fraguni complex, 1 to 8 percent slopes                   | 461.8        | 1.2%           |
| 332             | Evpark-Arabrab complex, 2 to 6 percent slopes                     | 1,763.5      | 4.4%           |
| 338             | Zyme-Lockerby association, 5 to 35 percent slopes                 | 3,252.2      | 8.1%           |
| 350             | Toldohn-Vessilla-Rock outcrop complex, 8 to 35 percent slopes     | 7,995.9      | 20.0%          |
| 351             | Rock outcrop-Vessilla complex, 35 to 70 percent slopes            | 590.7        | 1.5%           |
| 352             | Zia sandy loam, 1 to 5 percent slopes                             | 532.2        | 1.3%           |



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| Map Unit Symbol                    | Map Unit Name  | Acres in AOI    | Percent of AOI |
|------------------------------------|--|-----------------|----------------|
| 355                                | Rizno-Tekapo-Rock outcrop complex, 2 to 45 percent slopes    | 32.2            | 0.1%           |
| 360                                | Hosta-Concho association, 0 to 5 percent slopes              | 245.4           | 0.6%           |
| 365                                | Vessilla-Rock outcrop complex, 2 to 15 percent slopes        | 1,893.7         | 4.7%           |
| 375                                | Todest-Shaditto complex, 2 to 8 percent slopes               | 2,447.5         | 6.1%           |
| 380                                | Berryhill-Casamero clays, 2 to 10 percent slopes             | 97.8            | 0.2%           |
| 404                                | Rock outcrop-Techado-Stozuni complex, 5 to 60 percent slopes | 312.1           | 0.8%           |
| 555                                | Parkelei-Evpark fine sandy loams, 2 to 8 percent slopes      | 161.6           | 0.4%           |
| <b>Totals for Area of Interest</b> |  | <b>39,932.6</b> | <b>100.0%</b>  |

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

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was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## **McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties**

### **230—Sparank-San Mateo-Zia complex, 0 to 3 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 1xk8  
*Elevation:* 6,300 to 6,900 feet  
*Mean annual precipitation:* 10 to 13 inches  
*Mean annual air temperature:* 49 to 54 degrees F  
*Frost-free period:* 120 to 140 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Sparank and similar soils:* 40 percent  
*San mateo and similar soils:* 35 percent  
*Zia and similar soils:* 20 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Sparank**

##### **Setting**

*Landform:* Flood plains on valley floors, valley sides  
*Landform position (three-dimensional):* Side slope, tread, talf  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Linear, concave  
*Parent material:* Stream alluvium derived from calcareous sandstone

##### **Typical profile**

*A - 0 to 2 inches:* silty clay loam  
*C1 - 2 to 25 inches:* clay  
*C2 - 25 to 65 inches:* clay

##### **Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low (0.01 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* Frequent  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 5.0  
*Available water storage in profile:* High (about 10.1 inches)

##### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* D  
*Ecological site:* Clayey Bottomland (R035XA119NM)  
*Hydric soil rating:* No

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### Description of San Mateo

#### Setting

*Landform:* Valley sides, valley floors on flood plains

*Landform position (three-dimensional):* Side slope, tread, talf

*Down-slope shape:* Concave, linear

*Across-slope shape:* Concave, linear

*Parent material:* Stream alluvium derived from calcareous sandstone

#### Typical profile

*A - 0 to 2 inches:* clay loam

*C1 - 2 to 15 inches:* clay loam

*C2 - 15 to 30 inches:* sandy clay loam

*C3 - 30 to 39 inches:* clay loam

*C4 - 39 to 45 inches:* sandy loam

*C5 - 45 to 65 inches:* clay loam

#### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* Frequent

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Salinity, maximum in profile:* Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 10.0

*Available water storage in profile:* High (about 10.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* C

*Ecological site:* Bottomland (R035XA118NM)

*Hydric soil rating:* No

### Description of Zia

#### Setting

*Landform:* Alluvial fans on valley sides, stream terraces on valley floors

*Landform position (three-dimensional):* Side slope, tread, rise

*Down-slope shape:* Linear, concave

*Across-slope shape:* Linear, concave

*Parent material:* Eolian deposits over fan and stream alluvium derived from calcareous sandstone

#### Typical profile

*A - 0 to 3 inches:* fine sandy loam

*Bw - 3 to 12 inches:* fine sandy loam

*2C1 - 12 to 20 inches:* fine sandy loam

*2C2 - 20 to 28 inches:* sandy loam

*2C3 - 28 to 70 inches:* fine sandy loam



## Custom Soil Resource Report

### Properties and qualities

*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* Rare  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 2.0  
*Available water storage in profile:* Moderate (about 8.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* A  
*Ecological site:* Sandy (R035XA113NM)  
*Hydric soil rating:* No

### Minor Components

#### Penistaja

*Percent of map unit:* 2 percent  
*Ecological site:* Loamy (R035XA112NM)  
*Other vegetative classification:* Loamy (null\_13)  
*Hydric soil rating:* No

#### Querencia

*Percent of map unit:* 2 percent  
*Ecological site:* Loamy (R035XA112NM)  
*Other vegetative classification:* Loamy (null\_13)  
*Hydric soil rating:* No

#### Escawetter

*Percent of map unit:* 1 percent  
*Landform:* Flood plains  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* Sandy Bottom 6-10" p.z. Perennial (Provisional) (R035XB273AZ)  
*Hydric soil rating:* Yes

## **241—Mentmore loam, 1 to 8 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1xn9  
*Elevation:* 6,100 to 6,900 feet  
*Mean annual precipitation:* 10 to 13 inches  
*Mean annual air temperature:* 45 to 49 degrees F  
*Frost-free period:* 100 to 135 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Mentmore and similar soils:* 85 percent  
*Atrac and similar soils:* 10 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Mentmore**

#### **Setting**

*Landform:* Drainageways, fan remnants on valley sides, dip slopes on cuestas  
*Landform position (three-dimensional):* Side slope, tread, dip  
*Down-slope shape:* Linear, convex, concave  
*Across-slope shape:* Convex, concave  
*Parent material:* Fan and slope alluvium derived from sandstone and shale

#### **Typical profile**

*A - 0 to 1 inches:* loam  
*Bt1 - 1 to 2 inches:* clay loam  
*Bt2 - 2 to 7 inches:* sandy clay loam  
*Btk1 - 7 to 13 inches:* clay loam  
*Btk2 - 13 to 22 inches:* clay loam  
*Bk - 22 to 70 inches:* clay loam

#### **Properties and qualities**

*Slope:* 1 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 10 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* High (about 11.7 inches)

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### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* C  
*Ecological site:* Loamy (R036XB006NM)  
*Hydric soil rating:* No

### Description of Atrac

#### Properties and qualities

*Slope:* 1 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Ecological site:* Loamy (R035XA112NM)  
*Other vegetative classification:* Loamy (null\_13)  
*Hydric soil rating:* No

### Minor Components

#### Gish

*Percent of map unit:* 5 percent  
*Ecological site:* Clayey (R035XA128NM)  
*Other vegetative classification:* Clayey (null\_7)  
*Hydric soil rating:* No

## 242—Gish-Mentmore complex, 1 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* 1xnc  
*Elevation:* 6,100 to 7,200 feet  
*Mean annual precipitation:* 10 to 13 inches  
*Mean annual air temperature:* 46 to 49 degrees F  
*Frost-free period:* 100 to 135 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Gish and similar soils:* 45 percent  
*Mentmore and similar soils:* 35 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Custom Soil Resource Report

### Description of Gish

#### Setting

*Landform:* Alluvial fans on valley sides, drainageways  
*Landform position (three-dimensional):* Side slope, rise, dip  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Linear, concave, convex  
*Parent material:* Fan alluvium derived from shale

#### Typical profile

*A - 0 to 3 inches:* clay loam  
*Bw - 3 to 13 inches:* clay  
*Bky1 - 13 to 27 inches:* clay  
*Bky2 - 27 to 55 inches:* clay  
*Bky3 - 55 to 64 inches:* clay loam  
*Bky4 - 64 to 70 inches:* clay

#### Properties and qualities

*Slope:* 1 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* Rare  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 10 percent  
*Gypsum, maximum in profile:* 2 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 2.0  
*Available water storage in profile:* High (about 9.4 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* C  
*Ecological site:* Clayey (R036XB002NM)  
*Hydric soil rating:* No

### Description of Mentmore

#### Setting

*Landform:* Fan remnants on valley sides  
*Landform position (three-dimensional):* Side slope, tread  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Convex, concave  
*Parent material:* Fan and slope alluvium derived from sandstone and shale

#### Typical profile

*A - 0 to 2 inches:* fine sandy loam  
*Bw - 2 to 4 inches:* clay loam  
*Bt1 - 4 to 13 inches:* clay loam  
*Bt2 - 13 to 24 inches:* clay loam  
*Bk1 - 24 to 44 inches:* clay loam



## Custom Soil Resource Report

*Bk2 - 44 to 62 inches: clay loam*

*By - 62 to 70 inches: clay loam*

### Properties and qualities

*Slope: 1 to 8 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Well drained*

*Runoff class: Medium*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 5 percent*

*Gypsum, maximum in profile: 2 percent*

*Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*

*Available water storage in profile: High (about 11.9 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 6c*

*Hydrologic Soil Group: C*

*Ecological site: Loamy (R036XB006NM)*

*Hydric soil rating: No*

### Minor Components

#### Berryhill

*Percent of map unit: 10 percent*

*Ecological site: Clayey (R036XB002NM)*

*Other vegetative classification: Clayey (null\_7)*

*Hydric soil rating: No*

#### Nahodish

*Percent of map unit: 10 percent*

*Ecological site: Salty Bottomland (R036XB010NM)*

*Other vegetative classification: SALTY BOTTOMLAND (null\_27)*

*Hydric soil rating: No*

## 244—Buckle fine sandy loam, 1 to 8 percent slopes

### Map Unit Setting

*National map unit symbol: 1xn3*

*Elevation: 6,400 to 6,800 feet*

*Mean annual precipitation: 10 to 13 inches*

*Mean annual air temperature: 45 to 49 degrees F*

*Frost-free period: 100 to 135 days*

*Farmland classification: Not prime farmland*

## Custom Soil Resource Report

### Map Unit Composition

*Buckle and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Buckle

#### Setting

*Landform:* Drainageways, fan remnants on valley sides

*Landform position (three-dimensional):* Side slope, tread, dip

*Down-slope shape:* Concave, linear, convex

*Across-slope shape:* Concave, convex

*Parent material:* Eolian deposits over fan and slope alluvium derived from sandstone and shale

#### Typical profile

*A - 0 to 4 inches:* fine sandy loam

*Bt1 - 4 to 14 inches:* sandy clay loam

*Bt2 - 14 to 22 inches:* sandy clay loam

*Btk1 - 22 to 34 inches:* loam

*Btk2 - 34 to 48 inches:* clay loam

*Btk3 - 48 to 62 inches:* clay loam

*Btk4 - 62 to 75 inches:* clay loam

#### Properties and qualities

*Slope:* 1 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Gypsum, maximum in profile:* 1 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* High (about 10.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* C

*Ecological site:* Loamy (R036XB006NM)

*Hydric soil rating:* No

### Minor Components

#### Gapmesa

*Percent of map unit:* 10 percent

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* Loamy (null\_13)

*Hydric soil rating:* No

## Custom Soil Resource Report

### **Zia**

*Percent of map unit:* 5 percent  
*Ecological site:* Sandy (R035XA113NM)  
*Other vegetative classification:* Sandy (null\_29)  
*Hydric soil rating:* No

## **245—Buckle-Gapmesa-Barboncito complex, 1 to 6 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1xn4  
*Elevation:* 6,400 to 6,800 feet  
*Mean annual precipitation:* 10 to 13 inches  
*Mean annual air temperature:* 45 to 49 degrees F  
*Frost-free period:* 100 to 135 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Buckle and similar soils:* 35 percent  
*Gapmesa and similar soils:* 30 percent  
*Barboncito and similar soils:* 25 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Buckle**

#### **Setting**

*Landform:* Hills, ridges, dip slopes on cuestas  
*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope  
*Landform position (three-dimensional):* Crest, nose slope, side slope, head slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, concave  
*Parent material:* Eolian deposits over fan and slope alluvium derived from sandstone and shale

#### **Typical profile**

*A - 0 to 1 inches:* loamy fine sand  
*Bt1 - 1 to 7 inches:* clay loam  
*Bt2 - 7 to 25 inches:* sandy clay loam  
*Btk - 25 to 35 inches:* clay loam  
*Bk - 35 to 80 inches:* fine sandy loam

#### **Properties and qualities**

*Slope:* 1 to 6 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None

## Custom Soil Resource Report

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* High (about 9.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* C

*Ecological site:* Loamy (R036XB006NM)

*Hydric soil rating:* No

### Description of Gapmesa

#### Setting

*Landform:* Ridges, dip slopes on cuestas, hills

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex, concave

*Parent material:* Eolian deposits over alluvium derived from sandstone and shale

#### Typical profile

*A - 0 to 1 inches:* fine sandy loam

*Bt - 1 to 9 inches:* loam

*Btk1 - 9 to 20 inches:* loam

*Btk2 - 20 to 31 inches:* clay loam

*R - 31 to 40 inches:* bedrock

#### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Gypsum, maximum in profile:* 1 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Low (about 5.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* C

*Ecological site:* Loamy (R036XB006NM)

*Hydric soil rating:* No

### Description of Barboncito

#### Setting

*Landform:* Ridges, dip slopes on cuestas, hills



## Custom Soil Resource Report

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex, concave

*Parent material:* Eolian deposits over slope alluvium derived from sandstone and shale

### Typical profile

*A - 0 to 2 inches:* loamy fine sand

*Bt - 2 to 6 inches:* sandy clay loam

*Btk - 6 to 11 inches:* clay loam

*R - 11 to 20 inches:* bedrock

### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* Loamy (R036XB006NM)

*Hydric soil rating:* No

### Minor Components

#### Betonnie

*Percent of map unit:* 5 percent

*Ecological site:* Sandy (R035XA113NM)

*Other vegetative classification:* Sandy (null\_29)

*Hydric soil rating:* No

#### Rock outcrop

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## 258—Eagleye-Atchee-Rock outcrop complex, 2 to 35 percent slopes

### Map Unit Setting

*National map unit symbol:* 1xnd  
*Elevation:* 6,500 to 7,000 feet  
*Mean annual precipitation:* 10 to 13 inches  
*Mean annual air temperature:* 46 to 49 degrees F  
*Frost-free period:* 100 to 135 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Eagleye and similar soils:* 40 percent  
*Atchee and similar soils:* 35 percent  
*Rock outcrop:* 20 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Eagleye

#### Setting

*Landform:* Ridges, hills  
*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope  
*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Slope alluvium over residuum weathered from shale

#### Typical profile

*A - 0 to 2 inches:* gravelly clay loam  
*Cy - 2 to 10 inches:* clay  
*Cr - 10 to 20 inches:* bedrock

#### Properties and qualities

*Slope:* 5 to 35 percent  
*Depth to restrictive feature:* 5 to 20 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Gypsum, maximum in profile:* 2 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 1.0  
*Available water storage in profile:* Very low (about 1.6 inches)

## Custom Soil Resource Report

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* Clayey (R036XB002NM)  
*Hydric soil rating:* No

### Description of Atchee

#### Setting

*Landform:* Ridges, hills  
*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope  
*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Slope alluvium over residuum weathered from sandstone and shale

#### Typical profile

*A - 0 to 2 inches:* fine sandy loam  
*C1 - 2 to 12 inches:* extremely channery sandy clay loam  
*C2 - 12 to 14 inches:* extremely channery sandy clay loam  
*R - 14 to 20 inches:* bedrock

#### Properties and qualities

*Slope:* 2 to 10 percent  
*Depth to restrictive feature:* 5 to 20 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 1 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 1.0  
*Available water storage in profile:* Very low (about 1.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* D  
*Ecological site:* Clayey (R036XB002NM)  
*Hydric soil rating:* No

### Description of Rock Outcrop

#### Typical profile

*R - 0 to 60 inches:* bedrock

#### Properties and qualities

*Depth to restrictive feature:* 0 inches to lithic bedrock  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)

## Custom Soil Resource Report

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8s

*Hydric soil rating:* No

### Minor Components

#### Lockerby

*Percent of map unit:* 3 percent

*Ecological site:* Clayey (R035XA128NM)

*Other vegetative classification:* Clayey (null\_7)

*Hydric soil rating:* No

#### Barboncito

*Percent of map unit:* 2 percent

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* Loamy (null\_13)

*Hydric soil rating:* No

## 265—Uranium mined lands

### Map Unit Composition

*Uranium mined lands:* 95 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Uranium Mined Lands

#### Typical profile

*C - 0 to 60 inches:* variable

## 290—Rock outcrop-Westmion-Skyvillage complex, 30 to 80 percent slopes

### Map Unit Setting

*National map unit symbol:* 1xkk

*Elevation:* 6,400 to 8,100 feet

*Mean annual precipitation:* 10 to 13 inches

*Mean annual air temperature:* 49 to 54 degrees F

*Frost-free period:* 120 to 140 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Rock outcrop:* 45 percent

*Westmion and similar soils:* 30 percent



## Custom Soil Resource Report

*Skyvillage and similar soils: 15 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Rock Outcrop

#### Typical profile

*R - 0 to 60 inches: bedrock*

#### Properties and qualities

*Depth to restrictive feature: 0 inches to lithic bedrock*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8s*

*Hydric soil rating: No*

### Description of Westmion

#### Setting

*Landform: Escarpments on cuestas, escarpments on mesas*

*Landform position (three-dimensional): Side slope, tal*

*Down-slope shape: Convex*

*Across-slope shape: Linear, convex*

*Parent material: Slope alluvium and colluvium over residuum weathered from shale*

#### Typical profile

*A - 0 to 2 inches: gravelly clay loam*

*2C - 2 to 14 inches: clay*

*2Cr - 14 to 20 inches: bedrock*

#### Properties and qualities

*Slope: 30 to 50 percent*

*Depth to restrictive feature: 5 to 20 inches to paralithic bedrock*

*Natural drainage class: Well drained*

*Runoff class: Very high*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 5 percent*

*Gypsum, maximum in profile: 2 percent*

*Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 5.0*

*Available water storage in profile: Very low (about 2.1 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7e*

*Hydrologic Soil Group: D*

*Ecological site: Foothills (R035XA131NM)*

*Hydric soil rating: No*

## Custom Soil Resource Report

### Description of Skyvillage

#### Setting

*Landform:* Escarpments on cuestas, escarpments on mesas

*Landform position (three-dimensional):* Side slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear

*Parent material:* Eolian deposits over slope alluvium derived from sandstone

#### Typical profile

*A - 0 to 2 inches:* sandy loam

*C - 2 to 13 inches:* sandy loam

*R - 13 to 20 inches:* bedrock

#### Properties and qualities

*Slope:* 30 to 40 percent

*Depth to restrictive feature:* 5 to 20 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Very low (about 1.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* Shallow Sandstone (R035XG121NM)

*Hydric soil rating:* No

### Minor Components

#### Hospah

*Percent of map unit:* 6 percent

*Ecological site:* Shale Hills 10-14" p.z. (Provisional) (R035XA130NM)

*Other vegetative classification:* Shale Hills (null\_35)

*Hydric soil rating:* No

#### Vessilla

*Percent of map unit:* 2 percent

*Ecological site:* Sandy Upland 13-17" p.z. Moderately Deep (R035XF618AZ)

*Other vegetative classification:* Shallow Sandstone (null\_37)

*Hydric soil rating:* No

#### Skyvillage

*Percent of map unit:* 2 percent

*Ecological site:* Shallow Sandstone (R035XG121NM)

*Hydric soil rating:* No

## **291—Rock outcrop-Eagleeye-Atchee complex, 35 to 70 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1xnf  
*Elevation:* 6,500 to 7,500 feet  
*Mean annual precipitation:* 10 to 13 inches  
*Mean annual air temperature:* 46 to 49 degrees F  
*Frost-free period:* 100 to 135 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Rock outcrop:* 50 percent  
*Eagleeye and similar soils:* 25 percent  
*Atchee and similar soils:* 15 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Rock Outcrop**

#### **Typical profile**

*R - 0 to 60 inches:* bedrock

#### **Properties and qualities**

*Depth to restrictive feature:* 0 inches to lithic bedrock  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8s  
*Hydric soil rating:* No

### **Description of Eagleeye**

#### **Setting**

*Landform:* Escarpments on cuestas, escarpments on mesas  
*Landform position (three-dimensional):* Side slope, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear  
*Parent material:* Slope alluvium over residuum weathered from shale

#### **Typical profile**

*A - 0 to 2 inches:* very gravelly silty clay loam  
*C1 - 2 to 7 inches:* silty clay loam  
*C2 - 7 to 13 inches:* silty clay loam  
*Cr - 13 to 20 inches:* bedrock

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 35 to 70 percent  
*Depth to restrictive feature:* 5 to 20 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.01 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Gypsum, maximum in profile:* 2 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Very low (about 2.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* Clayey (R036XB002NM)  
*Hydric soil rating:* No

### Description of Atchee

#### Setting

*Landform:* Escarpments on cuestas, escarpments on mesas  
*Landform position (three-dimensional):* Side slope, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear  
*Parent material:* Slope alluvium over residuum weathered from sandstone

#### Typical profile

*A - 0 to 2 inches:* very gravelly fine sandy loam  
*C - 2 to 8 inches:* very channery fine sandy loam  
*R - 8 to 20 inches:* bedrock

### Properties and qualities

*Slope:* 35 to 50 percent  
*Depth to restrictive feature:* 5 to 20 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.01 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Very low (about 1.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* Clayey (R036XB002NM)



## Custom Soil Resource Report

*Hydric soil rating:* No

### Minor Components

#### Gapmesa

*Percent of map unit:* 5 percent

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* Loamy (null\_13)

*Hydric soil rating:* No

#### Atchee

*Percent of map unit:* 5 percent

*Ecological site:* Clayey (R035XA128NM)

*Hydric soil rating:* No

## 305—Celavar-Atarque complex, 1 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* 1xkn

*Elevation:* 6,500 to 7,500 feet

*Mean annual precipitation:* 13 to 14 inches

*Mean annual air temperature:* 49 to 53 degrees F

*Frost-free period:* 115 to 135 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Celavar and similar soils:* 50 percent

*Atarque and similar soils:* 35 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Celavar

#### Setting

*Landform:* Mesas, dip slopes on cuestas

*Landform position (three-dimensional):* Side slope, tal

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear, concave

*Parent material:* Eolian deposits over slope alluvium derived from sandstone and shale

#### Typical profile

*A - 0 to 2 inches:* loam

*Bt1 - 2 to 24 inches:* sandy clay loam

*Bt2 - 24 to 31 inches:* sandy clay loam

*2R - 31 to 40 inches:* bedrock

#### Properties and qualities

*Slope:* 1 to 8 percent

## Custom Soil Resource Report

*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 4.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* C  
*Ecological site:* Twoneedle Pinyon/Oneseed Juniper Woodland - Zuni 13 to 17 inches (F035XG001NM)  
*Hydric soil rating:* No

### Description of Atarque

#### Setting

*Landform:* Dip slopes on cuestas, mesas  
*Landform position (three-dimensional):* Side slope, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Concave, convex, linear  
*Parent material:* Eolian deposits over slope alluvium derived from sandstone and shale

#### Typical profile

*A - 0 to 3 inches:* sandy loam  
*Bt - 3 to 14 inches:* sandy clay loam  
*2R - 14 to 20 inches:* bedrock

#### Properties and qualities

*Slope:* 1 to 8 percent  
*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Very low (about 2.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* D  
*Ecological site:* Shallow Sandstone (R035XG121NM)  
*Hydric soil rating:* No

## Custom Soil Resource Report

### Minor Components

#### Rock outcrop

*Percent of map unit:* 9 percent

*Hydric soil rating:* No

#### Flugle

*Percent of map unit:* 6 percent

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* Loamy (null\_13)

*Hydric soil rating:* No

### 310—Parkelei sandy loam, 1 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1xkq

*Elevation:* 6,500 to 7,800 feet

*Mean annual precipitation:* 13 to 16 inches

*Mean annual air temperature:* 46 to 49 degrees F

*Frost-free period:* 100 to 135 days

*Farmland classification:* Farmland of local importance

#### Map Unit Composition

*Parkelei and similar soils:* 80 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Parkelei

##### Setting

*Landform:* Mesas, dip slopes on cuestas, drainageways

*Landform position (three-dimensional):* Side slope, talf, dip

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear, concave, convex

*Parent material:* Eolian deposits over slope alluvium derived from sandstone and shale

##### Typical profile

*A - 0 to 2 inches:* sandy loam

*Bt - 2 to 21 inches:* sandy clay loam

*Btk1 - 21 to 55 inches:* sandy clay loam

*Btk2 - 55 to 65 inches:* clay loam

##### Properties and qualities

*Slope:* 1 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* High (about 9.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3c

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* B

*Ecological site:* Loamy (R036XB006NM)

*Hydric soil rating:* No

### Minor Components

#### Fraguni

*Percent of map unit:* 10 percent

*Ecological site:* Sandy (R035XA113NM)

*Other vegetative classification:* Sandy (null\_29)

*Hydric soil rating:* No

#### Evpark

*Percent of map unit:* 5 percent

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* Loamy (null\_13)

*Hydric soil rating:* No

#### Galzuni

*Percent of map unit:* 3 percent

*Ecological site:* Clayey (R035XA128NM)

*Other vegetative classification:* Clayey (null\_7)

*Hydric soil rating:* No

#### Bryway

*Percent of map unit:* 2 percent

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* Loamy (null\_13)

*Hydric soil rating:* No

## 315—Flugle-Fragua complex, 1 to 10 percent slopes

### Map Unit Setting

*National map unit symbol:* 1xks

*Elevation:* 6,400 to 7,300 feet

*Mean annual precipitation:* 13 to 14 inches

*Mean annual air temperature:* 49 to 53 degrees F

*Frost-free period:* 115 to 135 days



## Custom Soil Resource Report

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Flugle and similar soils:* 50 percent

*Fragua and similar soils:* 40 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Flugle

#### Setting

*Landform:* Mesas, dip slopes on cuestas, fan remnants on valley sides

*Landform position (three-dimensional):* Side slope, tread, talf

*Down-slope shape:* Convex, concave

*Across-slope shape:* Linear, concave, convex

*Parent material:* Eolian deposits over fan and slope alluvium derived from sandstone and shale

#### Typical profile

*A - 0 to 3 inches:* loam

*Bt1 - 3 to 10 inches:* sandy clay loam

*Bt2 - 10 to 28 inches:* clay loam

*Bk - 28 to 65 inches:* sandy loam

#### Properties and qualities

*Slope:* 1 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 9.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* C

*Ecological site:* Twoneedle Pinyon/Oneseed Juniper Woodland - Zuni 13 to 17 inches (F035XG001NM)

*Other vegetative classification:* pinyon-juniper forest (null\_3)

*Hydric soil rating:* No

### Description of Fragua

#### Setting

*Landform:* Dip slopes on cuestas, fan remnants on valley sides, mesas

*Landform position (three-dimensional):* Side slope, tread, talf

*Down-slope shape:* Concave, convex

*Across-slope shape:* Concave, convex, linear

*Parent material:* Eolian deposits over fan and slope alluvium derived from sandstone

## Custom Soil Resource Report

### Typical profile

*A - 0 to 2 inches:* loamy fine sand

*Btk - 2 to 19 inches:* sandy loam

*Bk - 19 to 65 inches:* sandy loam

### Properties and qualities

*Slope:* 1 to 10 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat excessively drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 7.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* A

*Ecological site:* Sandy Slopes (R036XB111NM)

*Hydric soil rating:* No

### Minor Components

#### Celavar

*Percent of map unit:* 5 percent

*Ecological site:* Steep Gravelly - Woodland (F035XG135NM)

*Other vegetative classification:* Pinyon-Juniper Forest (null\_21)

*Hydric soil rating:* No

#### Royosa

*Percent of map unit:* 5 percent

*Ecological site:* Malpais (R051XA009NM)

*Hydric soil rating:* No

## 317—Highdye-Evpark-Bryway complex, 2 to 20 percent slopes

### Map Unit Setting

*National map unit symbol:* 1xkv

*Elevation:* 6,800 to 7,600 feet

*Mean annual precipitation:* 13 to 16 inches

*Mean annual air temperature:* 46 to 49 degrees F

*Frost-free period:* 100 to 135 days

*Farmland classification:* Not prime farmland

## Custom Soil Resource Report

### Map Unit Composition

*Highdye and similar soils:* 35 percent

*Evpark and similar soils:* 30 percent

*Bryway and similar soils:* 20 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Highdye

#### Setting

*Landform:* Ridges, dip slopes on cuestas, hills, mesas

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Convex, concave, linear

*Parent material:* Eolian deposits and slope alluvium derived from sandstone over residuum weathered from shale

#### Typical profile

*A - 0 to 3 inches:* fine sandy loam

*Bt1 - 3 to 5 inches:* clay loam

*2Bt2 - 5 to 12 inches:* clay

*2R - 12 to 20 inches:* bedrock

#### Properties and qualities

*Slope:* 2 to 20 percent

*Depth to restrictive feature:* 5 to 20 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Very low (about 1.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* Gravelly - Woodland (F035XG134NM)

*Other vegetative classification:* pinyon-juniper forest (null\_6)

*Hydric soil rating:* No

### Description of Evpark

#### Setting

*Landform:* Dip slopes on cuestas, hills, mesas, ridges

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Concave, convex, linear

*Parent material:* Eolian deposits over slope alluvium derived from sandstone and shale

## Custom Soil Resource Report

### Typical profile

*A - 0 to 5 inches:* loam  
*Bt1 - 5 to 10 inches:* clay loam  
*Bt2 - 10 to 24 inches:* sandy clay loam  
*R - 24 to 40 inches:* bedrock

### Properties and qualities

*Slope:* 2 to 8 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 10 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 3.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* C  
*Ecological site:* Loamy (R035XA112NM)  
*Other vegetative classification:* pinyon-juniper forest (null\_6)  
*Hydric soil rating:* No

### Description of Bryway

#### Setting

*Landform:* Hills, mesas, ridges, dip slopes on cuestas  
*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope  
*Landform position (three-dimensional):* Crest, nose slope, side slope, head slope, tal  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear, concave  
*Parent material:* Slope alluvium derived from sandstone over residuum weathered from shale

### Typical profile

*A - 0 to 4 inches:* sandy loam  
*Bt1 - 4 to 10 inches:* clay  
*Bt2 - 10 to 23 inches:* clay  
*2Cr - 23 to 40 inches:* bedrock

### Properties and qualities

*Slope:* 2 to 8 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None



## Custom Soil Resource Report

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Available water storage in profile:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* D

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* pinyon-juniper forest (null\_6)

*Hydric soil rating:* No

### Minor Components

#### Vessilla

*Percent of map unit:* 5 percent

*Ecological site:* Sandy Upland 13-17" p.z. Moderately Deep (R035XF618AZ)

*Other vegetative classification:* Shallow Sandstone (null\_37)

*Hydric soil rating:* No

#### Galzuni

*Percent of map unit:* 5 percent

*Ecological site:* Clayey (R035XA128NM)

*Other vegetative classification:* Clayey (null\_7)

*Hydric soil rating:* No

#### Parkelei

*Percent of map unit:* 5 percent

*Ecological site:* Gravelly - Woodland (F035XG134NM)

*Other vegetative classification:* Pinyon-Juniper Forest (null\_21)

*Hydric soil rating:* No

## 320—Parkelei-Fraguni complex, 1 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* 1xkw

*Elevation:* 6,500 to 7,500 feet

*Mean annual precipitation:* 13 to 16 inches

*Mean annual air temperature:* 46 to 49 degrees F

*Frost-free period:* 100 to 135 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Parkelei and similar soils:* 45 percent

*Fraguni and similar soils:* 40 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Custom Soil Resource Report

### Description of Parkelei

#### Setting

*Landform:* Plateaus, mesas, dip slopes on cuestras, fan remnants on valley sides  
*Landform position (three-dimensional):* Side slope, tread, tal  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, convex, concave  
*Parent material:* Eolian deposits over fan and slope alluvium derived from sandstone and shale

#### Typical profile

*A - 0 to 4 inches:* fine sandy loam  
*Bt1 - 4 to 18 inches:* sandy clay loam  
*Bt2 - 18 to 28 inches:* sandy clay loam  
*Bt3 - 28 to 39 inches:* sandy clay loam  
*Btk - 39 to 52 inches:* sandy clay loam  
*Bk - 52 to 70 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 1 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 10 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 8.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* B  
*Ecological site:* Gravelly - Woodland (F035XG134NM)  
*Other vegetative classification:* pinyon-juniper forest (null\_6)  
*Hydric soil rating:* No

### Description of Fraguni

#### Setting

*Landform:* Plateaus, mesas, dip slopes on cuestras, fan remnants on valley sides  
*Landform position (three-dimensional):* Side slope, tread, tal  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, convex, concave  
*Parent material:* Eolian deposits over fan and slope alluvium derived from sandstone

#### Typical profile

*A - 0 to 4 inches:* loamy fine sand  
*Bt1 - 4 to 20 inches:* fine sandy loam  
*Bt2 - 20 to 46 inches:* loamy fine sand  
*Bt3 - 46 to 58 inches:* sandy clay loam

## Custom Soil Resource Report

*BC - 58 to 70 inches: fine sandy loam*

### Properties and qualities

*Slope: 1 to 8 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Somewhat excessively drained*

*Runoff class: Very low*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 1 percent*

*Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*

*Available water storage in profile: Moderate (about 7.3 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 6c*

*Hydrologic Soil Group: A*

*Ecological site: Gravelly - Woodland (F035XG134NM)*

*Other vegetative classification: pinyon-juniper forest (null\_6)*

*Hydric soil rating: No*

### Minor Components

#### Evpark

*Percent of map unit: 8 percent*

*Ecological site: Loamy (R035XA112NM)*

*Other vegetative classification: Pinyon-Juniper Forest (null\_21)*

*Hydric soil rating: No*

#### Bryway

*Percent of map unit: 7 percent*

*Ecological site: Loamy (R035XA112NM)*

*Other vegetative classification: Pinyon-Juniper Forest (null\_21)*

*Hydric soil rating: No*

## 332—Evpark-Arabrab complex, 2 to 6 percent slopes

### Map Unit Setting

*National map unit symbol: 1xky*

*Elevation: 6,800 to 8,000 feet*

*Mean annual precipitation: 13 to 16 inches*

*Mean annual air temperature: 46 to 49 degrees F*

*Frost-free period: 100 to 135 days*

*Farmland classification: Not prime farmland*

## Custom Soil Resource Report

### Map Unit Composition

*Evpark and similar soils:* 50 percent

*Arabrab and similar soils:* 40 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Evpark

#### Setting

*Landform:* Mesas, dip slopes on cuestas

*Landform position (three-dimensional):* Side slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear, concave, convex

*Parent material:* Eolian deposits over slope alluvium derived from sandstone and shale

#### Typical profile

*A - 0 to 2 inches:* fine sandy loam

*Bt1 - 2 to 9 inches:* loam

*Bt2 - 9 to 36 inches:* clay loam

*R - 36 to 40 inches:* bedrock

#### Properties and qualities

*Slope:* 2 to 6 percent

*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Moderate (about 7.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* C

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* pinyon-juniper forest (null\_3)

*Hydric soil rating:* No

### Description of Arabrab

#### Setting

*Landform:* Mesas, dip slopes on cuestas

*Landform position (three-dimensional):* Side slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear, concave

*Parent material:* Eolian deposits and slope alluvium over residuum weathered from sandstone

#### Typical profile

*A - 0 to 2 inches:* gravelly fine sandy loam

*Bt1 - 2 to 7 inches:* sandy clay loam

*Bt2 - 7 to 12 inches:* clay loam

## Custom Soil Resource Report

*Btk - 12 to 17 inches: gravelly clay loam*

*R - 17 to 20 inches: bedrock*

### Properties and qualities

*Slope: 2 to 6 percent*

*Depth to restrictive feature: 10 to 20 inches to lithic bedrock*

*Natural drainage class: Well drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 5 percent*

*Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*

*Available water storage in profile: Very low (about 2.9 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7s*

*Hydrologic Soil Group: D*

*Ecological site: south of Gallup 13-16 (F036XA001NM)*

*Other vegetative classification: pinyon-juniper forest (null\_3)*

*Hydric soil rating: No*

### Minor Components

#### Highdye

*Percent of map unit: 5 percent*

*Ecological site: Gravelly - Woodland (F035XG134NM)*

*Other vegetative classification: Pinyon-Juniper Forest (null\_21)*

*Hydric soil rating: No*

#### Parkelei

*Percent of map unit: 5 percent*

*Ecological site: Gravelly - Woodland (F035XG134NM)*

*Other vegetative classification: Pinyon-Juniper Forest (null\_21)*

*Hydric soil rating: No*

## 338—Zyme-Lockerby association, 5 to 35 percent slopes

### Map Unit Setting

*National map unit symbol: 1xn7*

*Elevation: 6,500 to 7,200 feet*

*Mean annual precipitation: 10 to 13 inches*

*Mean annual air temperature: 46 to 49 degrees F*

*Frost-free period: 100 to 135 days*

*Farmland classification: Not prime farmland*



## Custom Soil Resource Report

### Map Unit Composition

*Zyme and similar soils:* 50 percent

*Lockerby and similar soils:* 40 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Zyme

#### Setting

*Landform:* Ridges, hills

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from shale

#### Typical profile

*A - 0 to 3 inches:* channery silty clay loam

*Cky1 - 3 to 8 inches:* silty clay

*Cky2 - 8 to 15 inches:* channery clay

*Cr - 15 to 20 inches:* bedrock

#### Properties and qualities

*Slope:* 5 to 35 percent

*Depth to restrictive feature:* 5 to 20 inches to paralithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Gypsum, maximum in profile:* 2 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Very low (about 2.4 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* Clayey (R036XB002NM)

*Hydric soil rating:* No

### Description of Lockerby

#### Setting

*Landform:* Hills, ridges

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Crest, nose slope, side slope, head slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from shale

## Custom Soil Resource Report

### Typical profile

*A - 0 to 1 inches:* silty clay loam  
*Bw - 1 to 11 inches:* clay  
*Bss - 11 to 15 inches:* clay  
*Bssy - 15 to 26 inches:* clay  
*Cr - 26 to 40 inches:* bedrock

### Properties and qualities

*Slope:* 5 to 15 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Gypsum, maximum in profile:* 1 percent  
*Salinity, maximum in profile:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 1.0  
*Available water storage in profile:* Low (about 4.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* Clayey (R036XB002NM)  
*Hydric soil rating:* No

### Minor Components

#### Rock outcrop

*Percent of map unit:* 6 percent  
*Hydric soil rating:* No

#### Marianolake

*Percent of map unit:* 4 percent  
*Ecological site:* Loamy (R035XA112NM)  
*Other vegetative classification:* Loamy (null\_13)  
*Hydric soil rating:* No

## 350—Toldohn-Vessilla-Rock outcrop complex, 8 to 35 percent slopes

### Map Unit Setting

*National map unit symbol:* 1x13  
*Elevation:* 6,800 to 8,000 feet  
*Mean annual precipitation:* 13 to 16 inches  
*Mean annual air temperature:* 46 to 49 degrees F

## Custom Soil Resource Report

*Frost-free period:* 100 to 135 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Toldohn and similar soils:* 35 percent

*Vessilla and similar soils:* 30 percent

*Rock outcrop:* 20 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Toldohn

#### Setting

*Landform:* Breaks, ridges, hills

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Slope alluvium over residuum weathered from shale

#### Typical profile

*A - 0 to 4 inches:* gravelly clay loam

*2BC - 4 to 11 inches:* clay

*2Cr - 11 to 20 inches:* bedrock

#### Properties and qualities

*Slope:* 8 to 35 percent

*Depth to restrictive feature:* 5 to 20 inches to paralithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Sodium adsorption ratio, maximum in profile:* 2.0

*Available water storage in profile:* Very low (about 1.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* Gravelly - Woodland (F035XG134NM)

*Other vegetative classification:* pinyon-juniper forest (null\_3)

*Hydric soil rating:* No

### Description of Vessilla

#### Setting

*Landform:* Structural benches on ridges, structural benches on hills, breaks

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Crest, nose slope, side slope, head slope, tread

*Down-slope shape:* Convex

*Across-slope shape:* Linear, convex

*Parent material:* Eolian deposits over slope alluvium derived from sandstone

## Custom Soil Resource Report

### Typical profile

*A - 0 to 2 inches: fine sandy loam*  
*C - 2 to 11 inches: fine sandy loam*  
*2R - 11 to 20 inches: bedrock*

### Properties and qualities

*Slope: 8 to 15 percent*  
*Depth to restrictive feature: 5 to 20 inches to lithic bedrock*  
*Natural drainage class: Somewhat excessively drained*  
*Runoff class: Medium*  
*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum in profile: 5 percent*  
*Available water storage in profile: Very low (about 1.5 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 7s*  
*Hydrologic Soil Group: D*  
*Ecological site: Sandy Upland 13-17" p.z. Moderately Deep (R035XF618AZ)*  
*Other vegetative classification: pinyon-juniper forest (null\_3)*  
*Hydric soil rating: No*

### Description of Rock Outcrop

#### Typical profile

*R - 0 to 60 inches: bedrock*

#### Properties and qualities

*Depth to restrictive feature: 0 inches to lithic bedrock*  
*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 8s*  
*Hydric soil rating: No*

### Minor Components

#### Galzuni

*Percent of map unit: 5 percent*  
*Ecological site: Clayey (R035XA128NM)*  
*Other vegetative classification: Clayey (null\_7)*  
*Hydric soil rating: No*

#### Parkelei

*Percent of map unit: 5 percent*  
*Ecological site: Gravelly - Woodland (F035XG134NM)*  
*Other vegetative classification: Pinyon-Juniper Forest (null\_21)*  
*Hydric soil rating: No*

#### Bryway

*Percent of map unit: 5 percent*  
*Ecological site: Loamy (R035XA112NM)*

## Custom Soil Resource Report

*Other vegetative classification:* Pinyon-Juniper Forest (null\_21)

*Hydric soil rating:* No

### 351—Rock outcrop-Vessilla complex, 35 to 70 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1x14

*Elevation:* 6,800 to 8,000 feet

*Mean annual precipitation:* 13 to 16 inches

*Mean annual air temperature:* 46 to 49 degrees F

*Frost-free period:* 100 to 135 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Rock outcrop:* 60 percent

*Vessilla and similar soils:* 30 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Rock Outcrop

##### Typical profile

*R - 0 to 60 inches:* unweathered bedrock

##### Properties and qualities

*Slope:* 35 to 70 percent

*Depth to restrictive feature:* 0 inches to lithic bedrock

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8s

*Hydric soil rating:* No

#### Description of Vessilla

##### Setting

*Landform:* Escarpments on cuestas, escarpments on mesas

*Landform position (three-dimensional):* Side slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear, convex

*Parent material:* Eolian deposits over slope alluvium derived from sandstone

##### Typical profile

*A - 0 to 5 inches:* fine sandy loam

*2R - 5 to 20 inches:* unweathered bedrock



## Custom Soil Resource Report

### Properties and qualities

*Slope:* 35 to 70 percent  
*Depth to restrictive feature:* 5 to 20 inches to lithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Available water storage in profile:* Very low (about 0.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* D  
*Ecological site:* Shallow Loam (R036XB014NM)  
*Hydric soil rating:* No

### Minor Components

#### Rubble land

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

#### Mido

*Percent of map unit:* 3 percent  
*Ecological site:* Deep Sand (R035XA115NM)  
*Other vegetative classification:* Deep Sand (null\_9)  
*Hydric soil rating:* No

#### Toldohn

*Percent of map unit:* 2 percent  
*Ecological site:* Clayey (R035XA128NM)  
*Other vegetative classification:* Clayey (null\_7)  
*Hydric soil rating:* No

#### Vessilla

*Percent of map unit:* 2 percent  
*Ecological site:* Shallow Sandstone (R035XG121NM)  
*Hydric soil rating:* No

## 352—Zia sandy loam, 1 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2rd0s  
*Elevation:* 6,000 to 6,800 feet  
*Mean annual precipitation:* 10 to 14 inches  
*Mean annual air temperature:* 49 to 53 degrees F

## Custom Soil Resource Report

*Frost-free period:* 120 to 150 days

*Farmland classification:* Farmland of local importance

### Map Unit Composition

*Zia and similar soils:* 80 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Zia

#### Setting

*Landform:* Alluvial fans, stream terraces

*Landform position (three-dimensional):* Tread, rise

*Down-slope shape:* Linear, concave

*Across-slope shape:* Linear

*Parent material:* Eolian deposits derived from sandstone over alluvium derived from sandstone

#### Typical profile

*A - 0 to 3 inches:* sandy loam

*C1 - 3 to 31 inches:* sandy loam

*C2 - 31 to 65 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 1 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat excessively drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 2.0

*Available water storage in profile:* Moderate (about 7.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* A

*Ecological site:* Sandy Loam Upland 10-14" p.z. (R035XA117AZ)

*Hydric soil rating:* No

### Minor Components

#### Mido

*Percent of map unit:* 10 percent

*Landform:* Dunes

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Ecological site:* Sandy Upland 10-14" p.z. (R035XA118AZ)

*Other vegetative classification:* Deep Sand (null\_9)

*Hydric soil rating:* No

## Custom Soil Resource Report

### **Penistaja**

*Percent of map unit:* 5 percent  
*Landform:* Fan remnants  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Ecological site:* Loamy Upland 10-14" p.z. (Provisional) (R035XA113AZ)  
*Other vegetative classification:* Loamy (null\_13)  
*Hydric soil rating:* No

### **Aquima**

*Percent of map unit:* 2 percent  
*Landform:* Alluvial fans on valley sides, stream terraces on valley floors  
*Landform position (three-dimensional):* Side slope, tread, talf  
*Down-slope shape:* Convex, concave, linear  
*Across-slope shape:* Convex, concave, linear  
*Ecological site:* Loamy Wash 10-14" p.z. (R035XA112AZ)  
*Other vegetative classification:* Loamy (null\_13)  
*Hydric soil rating:* No

### **San mateo**

*Percent of map unit:* 2 percent  
*Landform:* Flood plains  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* Loamy Wash 10-14" p.z. (R035XA112AZ)  
*Hydric soil rating:* No

### **Sparank**

*Percent of map unit:* 1 percent  
*Landform:* Alluvial fans, flood plains  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex, linear  
*Ecological site:* Clay Loam Wash 10-14" p.z. (Provisional) (R035XA104AZ)  
*Hydric soil rating:* No

## **355—Rizno-Tekapo-Rock outcrop complex, 2 to 45 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1x18  
*Elevation:* 6,200 to 6,700 feet  
*Mean annual precipitation:* 10 to 13 inches  
*Mean annual air temperature:* 49 to 54 degrees F  
*Frost-free period:* 120 to 140 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Rizno and similar soils:* 35 percent

## Custom Soil Resource Report

*Tekapo and similar soils: 30 percent*

*Rock outcrop: 20 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Rizno

#### Setting

*Landform: Structural benches, escarpments on cuestras, escarpments on mesas*

*Landform position (three-dimensional): Side slope, tread, tal*

*Down-slope shape: Convex*

*Across-slope shape: Linear, convex*

*Parent material: Eolian deposits over residuum weathered from sandstone*

#### Typical profile

*A - 0 to 3 inches: sandy loam*

*C - 3 to 8 inches: sandy loam*

*2R - 8 to 20 inches: bedrock*

#### Properties and qualities

*Slope: 2 to 20 percent*

*Depth to restrictive feature: 5 to 20 inches to lithic bedrock*

*Natural drainage class: Well drained*

*Runoff class: Medium*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 5 percent*

*Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*

*Available water storage in profile: Very low (about 0.9 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7s*

*Hydrologic Soil Group: D*

*Ecological site: Shallow Sandstone (R035XG121NM)*

*Hydric soil rating: No*

### Description of Tekapo

#### Setting

*Landform: Ridges, escarpments on cuestras, escarpments on mesas*

*Landform position (three-dimensional): Side slope, tal*

*Down-slope shape: Convex*

*Across-slope shape: Convex, linear*

*Parent material: Slope alluvium and colluvium derived from siltstone over residuum weathered from shale*

#### Typical profile

*A - 0 to 2 inches: channery silty clay loam*

*C - 2 to 10 inches: silty clay*

*2Cr - 10 to 20 inches: bedrock*

#### Properties and qualities

*Slope: 10 to 45 percent*

## Custom Soil Resource Report

*Depth to restrictive feature:* 5 to 20 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Very low (about 1.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* D  
*Ecological site:* Shale Hills 10-14"p.z. (Provisional) (R035XA130NM)  
*Hydric soil rating:* No

### Description of Rock Outcrop

#### Typical profile

*R - 0 to 60 inches:* bedrock

#### Properties and qualities

*Depth to restrictive feature:* 0 inches to lithic bedrock  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8s  
*Hydric soil rating:* No

### Minor Components

#### Aquima

*Percent of map unit:* 5 percent  
*Ecological site:* Loamy (R035XA112NM)  
*Other vegetative classification:* Loamy (null\_13)  
*Hydric soil rating:* No

#### Mido

*Percent of map unit:* 5 percent  
*Ecological site:* Deep Sand (R035XA115NM)  
*Other vegetative classification:* Deep Sand (null\_9)  
*Hydric soil rating:* No

#### Monpark

*Percent of map unit:* 5 percent  
*Ecological site:* Clayey (R035XA128NM)  
*Other vegetative classification:* Clayey (null\_7)  
*Hydric soil rating:* No



### **360—Hosta-Concho association, 0 to 5 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 1xlb  
*Elevation:* 6,800 to 7,000 feet  
*Mean annual precipitation:* 13 to 16 inches  
*Mean annual air temperature:* 46 to 49 degrees F  
*Frost-free period:* 100 to 135 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Hosta and similar soils:* 45 percent  
*Concho and similar soils:* 40 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Hosta**

##### **Setting**

*Landform:* Fan remnants on valley sides, drainageways  
*Landform position (three-dimensional):* Side slope, tread, dip  
*Down-slope shape:* Convex, concave, linear  
*Across-slope shape:* Convex, concave  
*Parent material:* Fan alluvium derived from sandstone and shale

##### **Typical profile**

*A - 0 to 2 inches:* loam  
*Bt - 2 to 4 inches:* clay loam  
*Btk1 - 4 to 24 inches:* clay loam  
*Btk2 - 24 to 51 inches:* clay  
*Bk - 51 to 65 inches:* sandy clay loam

##### **Properties and qualities**

*Slope:* 1 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 2.0  
*Available water storage in profile:* High (about 10.1 inches)

## Custom Soil Resource Report

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* C  
*Ecological site:* Loamy (R036XB006NM)  
*Hydric soil rating:* No

### Description of Concho

#### Setting

*Landform:* Drainageways, stream terraces on valley floors  
*Landform position (three-dimensional):* Tread, dip  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Convex, linear  
*Parent material:* Fan alluvium over stream alluvium derived from sandstone and shale

#### Typical profile

*Ap1 - 0 to 1 inches:* clay loam  
*Ap2 - 1 to 5 inches:* clay  
*Btss - 5 to 32 inches:* clay  
*Btkss - 32 to 51 inches:* clay  
*Btkz - 51 to 65 inches:* clay

#### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* Rare  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 2.0  
*Available water storage in profile:* High (about 9.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* C  
*Ecological site:* Clayey (R036XB002NM)  
*Hydric soil rating:* No

### Minor Components

#### Fraguni

*Percent of map unit:* 5 percent  
*Ecological site:* Sandy (R035XA113NM)  
*Other vegetative classification:* Sandy (null\_29)  
*Hydric soil rating:* No

#### Parkelei

*Percent of map unit:* 5 percent

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*Ecological site:* Loamy (R035XA112NM)  
*Other vegetative classification:* Loamy (null\_13)  
*Hydric soil rating:* No

### **Silcat**

*Percent of map unit:* 5 percent  
*Ecological site:* Clayey (R035XA128NM)  
*Other vegetative classification:* Clayey (null\_7)  
*Hydric soil rating:* No

## **365—Vessilla-Rock outcrop complex, 2 to 15 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1xld  
*Elevation:* 6,500 to 8,100 feet  
*Mean annual precipitation:* 13 to 14 inches  
*Mean annual air temperature:* 46 to 49 degrees F  
*Frost-free period:* 100 to 135 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Vessilla and similar soils:* 55 percent  
*Rock outcrop:* 35 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Vessilla**

#### **Setting**

*Landform:* Mesas, dip slopes on cuestas  
*Landform position (three-dimensional):* Side slope, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear, concave  
*Parent material:* Eolian deposits derived from sandstone

#### **Typical profile**

*A - 0 to 2 inches:* fine sandy loam  
*Ck1 - 2 to 6 inches:* fine sandy loam  
*Ck2 - 6 to 15 inches:* fine sandy loam  
*R - 15 to 20 inches:* bedrock

#### **Properties and qualities**

*Slope:* 2 to 15 percent  
*Depth to restrictive feature:* 5 to 20 inches to lithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None

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*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Very low (about 2.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* Sandy Upland 13-17" p.z. Moderately Deep (R035XF618AZ)

*Other vegetative classification:* pinyon-juniper forest (null\_3)

*Hydric soil rating:* No

### Description of Rock Outcrop

#### Typical profile

*R - 0 to 60 inches:* unweathered bedrock

#### Properties and qualities

*Depth to restrictive feature:* 0 inches to lithic bedrock

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8s

*Hydric soil rating:* No

### Minor Components

#### Arabrab

*Percent of map unit:* 5 percent

*Ecological site:* south of Gallup 13-16 (F036XA001NM)

*Other vegetative classification:* Pinyon-Juniper Forest (null\_21)

*Hydric soil rating:* No

#### Evpark

*Percent of map unit:* 3 percent

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* Pinyon-Juniper Fcrest (null\_21)

*Hydric soil rating:* No

#### Parkelei

*Percent of map unit:* 2 percent

*Ecological site:* Gravelly - Woodland (F035XG134NM)

*Other vegetative classification:* Pinyon-Juniper Forest (null\_21)

*Hydric soil rating:* No

### **375—Todest-Shadilto complex, 2 to 8 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 1x1h  
*Elevation:* 7,000 to 7,700 feet  
*Mean annual precipitation:* 13 to 16 inches  
*Mean annual air temperature:* 49 to 53 degrees F  
*Frost-free period:* 115 to 135 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Todest and similar soils:* 60 percent  
*Shadilto and similar soils:* 25 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Todest**

##### **Setting**

*Landform:* Dip slopes on cuestas  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Concave, convex  
*Parent material:* Eolian deposits derived from sandstone over slope alluvium derived from limestone

##### **Typical profile**

*A - 0 to 1 inches:* fine sandy loam  
*BAt - 1 to 3 inches:* fine sandy loam  
*Btk1 - 3 to 10 inches:* sandy clay loam  
*Btk2 - 10 to 18 inches:* sandy clay loam  
*Bk - 18 to 25 inches:* loam  
*2R - 25 to 40 inches:* bedrock

##### **Properties and qualities**

*Slope:* 2 to 8 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 80 percent  
*Available water storage in profile:* Low (about 3.8 inches)

##### **Interpretive groups**

*Land capability classification (irrigated):* None specified



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*Land capability classification (nonirrigated): 6e*

*Hydrologic Soil Group: C*

*Ecological site: Savanna (R035XG127NM)*

*Hydric soil rating: No*

### Description of Shadilto

#### Setting

*Landform: Dip slopes on cuestas*

*Landform position (three-dimensional): Side slope*

*Down-slope shape: Convex*

*Across-slope shape: Convex, concave*

*Parent material: Eolian deposits derived from sandstone over residuum weathered from limestone*

#### Typical profile

*A - 0 to 1 inches: very gravelly sandy loam*

*Bk1 - 1 to 9 inches: sandy loam*

*Bk2 - 9 to 13 inches: sandy loam*

*Bk3 - 13 to 15 inches: sandy loam*

*R - 15 to 20 inches: bedrock*

#### Properties and qualities

*Slope: 2 to 8 percent*

*Depth to restrictive feature: 5 to 20 inches to lithic bedrock*

*Natural drainage class: Somewhat excessively drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.60 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 80 percent*

*Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*

*Available water storage in profile: Very low (about 1.6 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7e*

*Hydrologic Soil Group: D*

*Ecological site: Shallow (R035XG116NM)*

*Hydric soil rating: No*

### Minor Components

#### Flugle

*Percent of map unit: 5 percent*

*Ecological site: Loamy (R035XA112NM)*

*Other vegetative classification: Loamy (null\_13)*

*Hydric soil rating: No*

#### Evpark

*Percent of map unit: 5 percent*

*Ecological site: Loamy (R035XA112NM)*

*Other vegetative classification: Loamy (null\_13)*

*Hydric soil rating: No*

## Custom Soil Resource Report

### Arabrab

*Percent of map unit:* 5 percent

*Ecological site:* south of Gallup 13-16 (F036XA001NM)

*Other vegetative classification:* Shallow Sandstone (null\_37)

*Hydric soil rating:* No

## 380—Berryhill-Casamero clays, 2 to 10 percent slopes

### Map Unit Setting

*National map unit symbol:* 1x1k

*Elevation:* 7,000 to 7,800 feet

*Mean annual precipitation:* 10 to 13 inches

*Mean annual air temperature:* 49 to 53 degrees F

*Frost-free period:* 120 to 140 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Berryhill and similar soils:* 50 percent

*Casamero and similar soils:* 45 percent

*Minor components:* 5 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Berryhill

#### Setting

*Landform:* Valley sides, hills, depressions on valley floors

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope, tread, dip

*Down-slope shape:* Concave, convex

*Across-slope shape:* Concave, convex, linear

*Parent material:* Slope alluvium derived from shale

#### Typical profile

*A - 0 to 2 inches:* clay

*Bw - 2 to 12 inches:* clay

*Bssyz1 - 12 to 26 inches:* clay

*Bssyz2 - 26 to 39 inches:* clay

*Bssyz3 - 39 to 70 inches:* clay

#### Properties and qualities

*Slope:* 2 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low  
(0.01 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

## Custom Soil Resource Report

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Gypsum, maximum in profile:* 35 percent

*Salinity, maximum in profile:* Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 8.0

*Available water storage in profile:* Moderate (about 8.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* D

*Ecological site:* Clayey (R035XA128NM)

*Hydric soil rating:* No

### Description of Casamero

#### Setting

*Landform:* Valley sides, hills

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope

*Down-slope shape:* Concave, convex

*Across-slope shape:* Concave, convex

*Parent material:* Slope alluvium over residuum weathered from shale

#### Typical profile

*A - 0 to 3 inches:* clay

*Bss - 3 to 11 inches:* clay

*Bssyz - 11 to 18 inches:* clay

*Cr - 18 to 20 inches:* bedrock

#### Properties and qualities

*Slope:* 2 to 10 percent

*Depth to restrictive feature:* 10 to 20 inches to paralithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Gypsum, maximum in profile:* 5 percent

*Salinity, maximum in profile:* Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 5.0

*Available water storage in profile:* Very low (about 2.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* Clayey (R035XA128NM)

*Hydric soil rating:* Unranked

## Custom Soil Resource Report

### Minor Components

#### Marianolake

*Percent of map unit:* 3 percent

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* Loamy (null\_13)

*Hydric soil rating:* No

#### Rock outcrop

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

### 404—Rock outcrop-Techado-Stozuni complex, 5 to 60 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1x1s

*Elevation:* 6,600 to 8,000 feet

*Mean annual precipitation:* 16 to 20 inches

*Mean annual air temperature:* 40 to 45 degrees F

*Frost-free period:* 90 to 110 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Rock outcrop:* 35 percent

*Techado and similar soils:* 35 percent

*Stozuni and similar soils:* 25 percent

*Minor components:* 5 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Rock Outcrop

##### Typical profile

*R - 0 to 60 inches:* bedrock

##### Properties and qualities

*Depth to restrictive feature:* 0 inches to lithic bedrock

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8s

*Hydric soil rating:* No

#### Description of Techado

##### Setting

*Landform:* Ridges, hills, escarpments on cuestas, escarpments on mesas

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

## Custom Soil Resource Report

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear

*Parent material:* Slope alluvium and colluvium over residuum weathered from shale

### Typical profile

*A - 0 to 5 inches:* channery clay loam

*C1 - 5 to 8 inches:* clay

*C2 - 8 to 17 inches:* clay

*2R - 17 to 20 inches:* bedrock

### Properties and qualities

*Slope:* 5 to 60 percent

*Depth to restrictive feature:* 10 to 20 inches to paralithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 1.0

*Available water storage in profile:* Very low (about 2.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Hydrologic Soil Group:* D

*Other vegetative classification:* Ponderosa Pine Forest (null\_5)

*Hydric soil rating:* No

## Description of Stozuni

### Setting

*Landform:* Ridges, hills, escarpments on cuestas, escarpments on mesas

*Landform position (two-dimensional):* Backslope, footslope, shoulder, toeslope

*Landform position (three-dimensional):* Side slope, crest, nose slope, head slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear

*Parent material:* Eolian deposits over slope alluvium derived from sandstone

### Typical profile

*A - 0 to 1 inches:* gravelly sandy loam

*C - 1 to 7 inches:* gravelly sandy loam

*R - 7 to 20 inches:* bedrock

### Properties and qualities

*Slope:* 5 to 15 percent

*Depth to restrictive feature:* 5 to 20 inches to lithic bedrock

*Natural drainage class:* Somewhat excessively drained

*Runoff class:* Medium



## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 1 percent

*Available water storage in profile:* Very low (about 0.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Other vegetative classification:* Ponderosa Pine Forest (null\_5)

*Hydric soil rating:* No

### Minor Components

#### Valnor

*Percent of map unit:* 3 percent

*Ecological site:* Montane slopes 12-18" (F039XA007NM)

*Other vegetative classification:* Ponderosa Pine Forest (null\_24)

*Hydric soil rating:* No

#### Asaayi

*Percent of map unit:* 2 percent

*Other vegetative classification:* Ponderosa Pine Forest (null\_24)

*Hydric soil rating:* No

## 555—Parkelei-Evpark fine sandy loams, 2 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* 1xmt

*Elevation:* 6,800 to 8,000 feet

*Mean annual precipitation:* 13 to 16 inches

*Mean annual air temperature:* 46 to 49 degrees F

*Frost-free period:* 100 to 135 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Parkelei and similar soils:* 45 percent

*Evpark and similar soils:* 35 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Parkelei

#### Setting

*Landform:* Mesas, ridges, dip slopes on cuestas

## Custom Soil Resource Report

*Landform position (three-dimensional):* Side slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear, convex, concave

*Parent material:* Eolian deposits over slope alluvium derived from sandstone and shale

### Typical profile

*A - 0 to 3 inches:* fine sandy loam

*Bt1 - 3 to 12 inches:* clay loam

*Bt2 - 12 to 21 inches:* sandy clay loam

*Bk - 21 to 65 inches:* sandy loam

### Properties and qualities

*Slope:* 2 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 1.0

*Available water storage in profile:* Moderate (about 8.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* C

*Ecological site:* Gravelly - Woodland (F035XG134NM)

*Other vegetative classification:* pinyon-juniper forest (null\_3)

*Hydric soil rating:* No

## Description of Evpark

### Setting

*Landform:* Dip slopes on cuestas, mesas, ridges

*Landform position (three-dimensional):* Side slope, talf

*Down-slope shape:* Convex

*Across-slope shape:* Concave, convex, linear

*Parent material:* Eolian deposits over slope alluvium derived from sandstone and shale

### Typical profile

*A - 0 to 3 inches:* fine sandy loam

*Bt1 - 3 to 16 inches:* clay loam

*Bt2 - 16 to 20 inches:* clay loam

*Bt3 - 20 to 29 inches:* sandy clay loam

*Btk - 29 to 35 inches:* sandy clay loam

*2R - 35 to 40 inches:* bedrock

### Properties and qualities

*Slope:* 2 to 8 percent

*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock

## Custom Soil Resource Report

*Natural drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 1.0

*Available water storage in profile:* Moderate (about 6.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6c

*Hydrologic Soil Group:* C

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* pinyon-juniper forest (null\_3)

*Hydric soil rating:* No

### Minor Components

#### Arabrab

*Percent of map unit:* 10 percent

*Ecological site:* south of Gallup 13-16 (F036XA001NM)

*Other vegetative classification:* Pinyon-Juniper Forest (null\_21)

*Hydric soil rating:* No

#### Highdye

*Percent of map unit:* 5 percent

*Ecological site:* Gravelly - Woodland (F035XG134NM)

*Other vegetative classification:* Pinyon-Juniper Forest (null\_21)

*Hydric soil rating:* No

#### Bryway

*Percent of map unit:* 5 percent

*Ecological site:* Loamy (R035XA112NM)

*Other vegetative classification:* Pinyon-Juniper Forest (null\_21)

*Hydric soil rating:* No

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## Custom Soil Resource Report

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**RESOLUTION OF THE CHAPTER**  
**Resolution No. PDC-09-18-203**

**APPROVING THE PINEDALE CHAPTER COMPREHENSIVE COMMUNITY-BASED  
LAND USE PLAN MANUAL**

**WHEREAS:**

1. The Pinedale Chapter is a certified chapter of the Navajo Nation government pursuant to 26 N.N.C. §3.
2. Pursuant to Resolution No. CAP-34-98, the Navajo Nation Council adopted the Navajo Nation Local Governance Act (LGA); and
3. Pursuant to the LGA, all chapters shall develop and implement a comprehensive community-based land use plan pursuant to 26 N.N.C. § 2004; and
4. The Pinedale Chapter completed the development of the comprehensive community-based land use plan in accordance with 26 N.N.C. § 2004; and
5. In the best interest of the community, the Pinedale Chapter hereby approves the comprehensive community-based land use plan, attached hereto as Exhibit "A".

**NOW THEREFORE BE IT RESOLVED THAT:**

1. The Pinedale Chapter hereby approves the Comprehensive Community-Based Land Use Plan in accordance with the requirements of the Local Governance Act, attached hereto as Exhibit "A".
2. The Pinedale Chapter further hereby requests the Resource and Development Committee of the Navajo Nation Council to grant certification of their Comprehensive Community-Based Land Use Plan.

**CERTIFICATION**

We, hereby, certify that the foregoing resolution was duly considered by the Pinedale Chapter at a duly called meeting in Pinedale, Navajo Nation, New Mexico at which a quorum of Chapter members was present and that the same was passed by a vote of 23 in favor, 0 opposed and 5 abstained this 17<sup>th</sup> day of September, 2018.

Motion by: Francis Price

A handwritten signature in black ink, appearing to read "Raphael Martin".

Raphael Martin, President

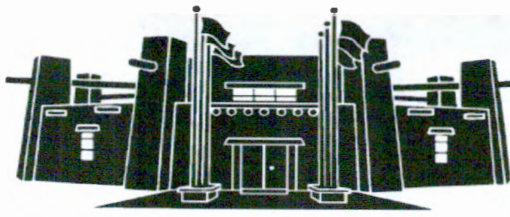
Seconded by: Janice Bennett

A handwritten signature in black ink, appearing to read "Clara J. Daye".

Clara J. Daye, Vice-President

A handwritten signature in black ink, appearing to read "Dorothy Harjo".

Dorothy Harjo, Secretary/Treasurer



## MEMORANDUM

TO: Honorable Edmund Yazzie  
Churchrock, Iyanbito, Mariano Lake, Pinedale, Smith Lake and Thoreau Chapters

FROM: Mariana Kahn  
Mariana Kahn, Attorney  
Office of Legislative Counsel

DATE: September 27, 2018

SUBJECT: PROPOSED STANDING COMMITTEE RESOLUTION; AN ACTION  
RELATING TO RESOURCES AND DEVELOPMENT COMMITTEE,  
CERTIFYING PINEDALE CHAPTER'S COMMUNITY-BASED LAND USE  
PLAN WHICH HAS REEVALUATED AND READJUSTED PINEDALE  
CHAPTER'S FIRST COMMUNITY-BASED LAND USE PLAN

As requested, I have prepared the above-referenced proposed resolution and associated legislative summary sheet pursuant to your request for legislative drafting.

Based on existing law and review of documents submitted, the resolution as drafted is legally sufficient. As with any action of government however, it can be subject to review by the courts in the event of proper challenge.

The Office of Legislative Counsel confirms the appropriate standing committee(s) based on the standing committees powers outlined in 2 N.N.C. §§301, 401, 501, 601 and 701. Nevertheless, "the Speaker of the Navajo Nation Council shall introduce [the proposed resolution] into the legislative process by assigning it to the respective oversight committee(s) of the Navajo Nation Council having authority over the matters for proper consideration." 2 N.N.C. §164(A)(5).

Please ensure that his particular resolution request is precisely what you want. You are encouraged to review the proposed resolution to ensure that it is drafted to your satisfaction.

THE NAVAJO NATION  
LEGISLATIVE BRANCH  
INTERNET PUBLIC REVIEW PUBLICATION



LEGISLATION NO: \_0314-18\_

SPONSOR: Edmund Yazzie

**TITLE: An Action Relating To Resources And Development Committee, Certifying Pinedale Chapter's Community-Based Land Use Plan Which Has Reevaluated And Readjusted Pinedale Chapter's First Community-Based Land Use Plan**

**Date posted: September 27, 2018 at 5:12 PM**

Digital comments may be e-mailed to [comments@navajo-nsn.gov](mailto:comments@navajo-nsn.gov)

Written comments may be mailed to:

Executive Director  
Office of Legislative Services  
P.O. Box 3390  
Window Rock, AZ 86515  
(928) 871-7586

Comments may be made in the form of chapter resolutions, letters, position papers, etc. Please include your name, position title, address for written comments; a valid e-mail address is required. Anonymous comments will not be included in the Legislation packet.

**Please note:** This digital copy is being provided for the benefit of the Navajo Nation chapters and public use. Any political use is prohibited. All written comments received become the property of the Navajo Nation and will be forwarded to the assigned Navajo Nation Council standing committee(s) and/or the Navajo Nation Council for review. Any tampering with public records are punishable by Navajo Nation law pursuant to 17 N.N.C. §374 *et. seq.*

**THE NAVAJO NATION  
LEGISLATIVE BRANCH  
INTERNET PUBLIC REVIEW SUMMARY**

**LEGISLATION NO.: 0314-18**

**SPONSOR: Honorable Edmund Yazzie**

**TITLE: An Action Relating To Resources And Development Committee, Certifying Pinedale Chapter's Community-Based Land Use Plan Which Has Reevaluated And Readjusted Pinedale Chapter's First Community-Based Land Use Plan**

**Posted: September 27, 2018 at 5:12 PM**

**5 DAY Comment Period Ended: October 2, 2018**

**Digital Comments received:**

|                              |             |
|------------------------------|-------------|
| <b>Comments Supporting</b>   | <i>None</i> |
| <b>Comments Opposing</b>     | <i>None</i> |
| <b>Inconclusive Comments</b> | <i>None</i> |

  
\_\_\_\_\_  
**Legislative Secretary II  
Office of Legislative Services**

10/3/2018 8:15am  
\_\_\_\_\_  
**Date/Time**

RESOLUTION OF THE  
RESOURCES AND DEVELOPMENT COMMITTEE  
23<sup>rd</sup> Navajo Nation Council --- Fourth Year, 2018

AN ACTION

RELATING TO RESOURCES AND DEVELOPMENT COMMITTEE; CERTIFYING  
PINEDALE CHAPTER'S COMMUNITY-BASED LAND USE PLAN WHICH HAS  
REEVALUATED AND READJUSTED PINEDALE CHAPTER'S FIRST COMMUNITY-  
BASED LAND USE PLAN

BE IT ENACTED:

SECTION ONE. AUTHORITY

- A. The Resources and Development Committee, pursuant to 26 N.N.C. § 2004(D)(2) shall certify community-based land use plans.
- B. Pursuant to 26 N.N.C. § 2004(D)(2), "Every five years the plan shall be reevaluated and readjusted to meet the needs of the changing community" and such readjustment is subject to the certification of the Resources and Development Committee of the Navajo Nation Council.
- C. Pursuant to 26 N.N.C. § 2004 (B), "Community-Based Land Use Plan. The chapter, at a duly-called chapter meeting shall by resolution, vote to implement a community-based land use plan, after the CLUPC has educated the community on the concepts, needs, and process for planning and implementing a community-based land use plan. The community-based land use plan shall project future community land needs, shown by location and extent, of areas identified for residential, commercial, industrial, and public purposes. The land use plan shall be based upon 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; and, finally with consideration for the land-carrying capacity. Such a plan may also include the following: 1. An open space plan, which preserves for the people certain areas to be retained in their natural state or developed for recreational purposes. 2. A thoroughfare plan which provides information about the existing and proposed road network in relation to



the land use of the surrounding area. 3. A community facilities plan, which shows the location, type, capacity, and area served, of present and projected or required community facilities including, but not limited to, recreation areas, schools, libraries, and other public buildings. It will also show related public utilities and services and indicate how these services are associated with future land use."

## SECTION TWO. FINDINGS

- A. Pursuant to Committee Resolution TCDCJY-22-05, the Transportation and Community Development Committee (predecessor to the Resources and Development Committee; CO-45-12) approved the Pinedale Chapter's Community-Based Land Use Plan in 2005.
- B. Pursuant to Pinedale Chapter Resolution PDC-09-18-203, attached as **Exhibit B**, the Pinedale Chapter approved the Community-Based Land Use Plan, which is attached as **Exhibit A**.
- C. The Resources and Development Committee of the Navajo Nation Council finds it in the best interest of the Navajo Nation to certify the Pinedale Chapter's Community-Based Land Use Plan, which has been reevaluated and readjusted to meet the needs of the changing community.

## SECTION THREE. CERTIFICATION OF PINEDALE CHAPTER'S REEVALUATED AND READJUSTED COMMUNITY-BASED LAND USE PLAN

- A. The Resources and Development Committee of the Navajo Nation Council hereby certifies the reevaluated and readjusted Pinedale Chapter's Community-Based Land Use Plan, attached hereto as **Exhibit A**.
- B. Certification of this Community-Based Land Use Plan shall not delineate adjacent chapter boundaries. Any chapter disputes rest solely with the Courts of the Navajo Nation.

**CERTIFICATION**

I, hereby, certify that the following resolution was duly considered by the Resources and Development Committee of the 23<sup>rd</sup> Navajo Nation Council at a duly called meeting at the Navajo Nation Council Chambers, Window Rock, Navajo Nation (Arizona), at which a quorum was present and that same was passed by a vote of 3 in favor, and 0 opposed, on this 31<sup>st</sup> day of October 2018.



Alton Joe Shepherd, Chairperson  
Resources and Development Committee  
of the 23<sup>rd</sup> Navajo Nation Council

Motion: Honorable Davis Filfred

Second: Honorable Walter Phelps

Chairperson Alton Joe Shepherd not voting.

**RESOURCES AND DEVELOPMENT COMMITTEE  
23rd NAVAJO NATION COUNCIL**

**FOURTH YEAR 2018**

**COMMITTEE REPORT**

Mr. Speaker,

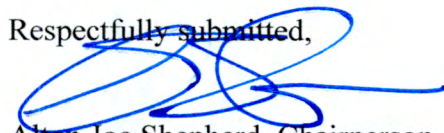
The **RESOURCES AND DEVELOPMENT COMMITTEE** to whom has been assigned:

**LEGISLATION #0314-18:** AN ACTION RELATING TO RESOURCES AND DEVELOPMENT, CERTIFYING PINEDALE CHAPTER'S COMMUNITY-BASED LAND USE PLAN WHICH HAS REEVALUATED AND READJUSTED PINEDALE CHAPTER'S FIRST COMMUNITY-BASED LAND USE PLAN. *Sponsor: Honorable Edmund Yazzie; Co-Sponsor: Jonathan L. Hale*

Has had it under consideration and reports a **DO PASS** with the following amendment;

Extract Exhibit A, Pinedale Chapter's CLUPC Manual because Tab 11 was amended and corrected. Attached is the corrected manual and be marked as the new Exhibit "A". And thereafter the matter was approved.

Respectfully submitted,



Alton Joe Shepherd, Chairperson  
Resource and Development Committee of  
the 23<sup>rd</sup> Navajo Nation Council

Date: October 31, 2018 - Regular Meeting

Meeting Location: Navajo Nation Council Chambers, Window Rock, Arizona

**MAIN MOTION:** Davis Filfred S: Walter Phelps V: 3-0-1 (CNV)

YEAS: Davis Filfred, Walter Phelps and Leonard Pete

NAYS:

EXCUSED: Benjamin Bennett and Jonathan Perry

**AMENDMENT # 1:** Extract Exhibit "A" and replace with new Exhibit "A" which is attached.

MOTION: Walter Phelps S: Leonard Pete V: 3-0-1 (CNV)

YEAS: Davis Filfred, Walter Phelps and Leonard Pete

NAYS:

EXCUSED: Benjamin Bennett and Jonathan Perry

## RESOURCES AND DEVELOPMENT COMMITTEE

**Regular Meeting**

**October 31, 2018**

### ROLL CALL

### VOTE TALLY SHEET:

**LEGISLATION # 0314-18:** AN ACTION RELATING TO RESOURCES AND DEVELOPMENT, CERTIFYING PINEDALE CHAPTER'S COMMUNITY-BASED LAND USE PLAN WHICH HAS REEVALUATED AND READJUSTED PINEDALE CHAPTER'S FIRST COMMUNITY-BASED LAND USE PLAN. *Sponsor: Honorable Edmund Yazzie; Co-Sponsor: Jonathan L. Hale*

Main Motion: Davis Filfred Second: Walter Phelps Vote: 3-0-1 (CNV)

YEAS: Davis Filfred, Walter Phelps, and Leonard Pete

NAYS:

EXCUSED: Benjamin Bennett and Jonathan Perry

**AMENDMENT # 1:** Extract Exhibit "A" and replace with new Exhibit "A" which is attached.

MOTION: Walter Phelps S: Leonard Pete V: 3-0-1 (CNV)

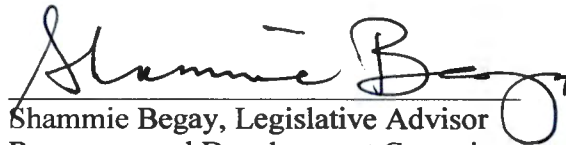
YEAS: Davis Filfred, Walter Phelps and Leonard Pete

NAYS:

EXCUSED: Benjamin Bennett and Jonathan Perry



Alton Joe Shepherd, Chairperson  
Resources and Development Committee



Shammie Begay, Legislative Advisor  
Resources and Development Committee