

**RESOLUTION OF THE
RESOURCES AND DEVELOPMENT COMMITTEE
23rd Navajo Nation Council --- Fourth Year, 2018**

AN ACTION

**RELATING TO RESOURCES AND DEVELOPMENT; APPROVING AND CERTIFYING
NAHODISHGISH CHAPTER COMMUNITY BASE LAND USE PLAN**

BE IT ENACTED:

SECTION ONE. AUTHORITY

- A. The Resources and Development Committee is a standing committee of the Navajo Nation Council. 2 N.N.C. § 500(A).
- B. The Resources and Development Committee approves and certifies Community Base Land Use Plans presented by chapters. 2 N.N.C. § 501(B)(2)(d) and 26 N.N.C. § 2004(D)(2).

SECTION TWO. FINDINGS

- A. Nahodishgish Chapter is a chapter of the Navajo Nation. 26 N.N.C. §3(A).
- B. Navajo Nation chapters, among other authorities, develop Community Base Land Use Plans. Pursuant to 26 N.N.C. § 215, "'Community based land use plan' means a document adopted by chapter resolution setting forth current and proposed uses of land within chapter boundaries, illustrating such uses by map or plat." See also, 26 N.N.C. § 2004.
- C. The Nahodishgish Chapter in 2007 developed and approved its Community Base Land Use Plan. See CLUPC resolution dated September 5, 2017 (documents within Exhibit A hereof). This land use plan has been updated pursuant to 26 N.N.C. § 2004(D)(2). This section states that the "Resources and Development Committee by resolution shall certify the community based land use plan. Every five (5) years the plan shall be reevaluated and readjusted to meet the needs of the changing community."
- D. The Nahodishgish Chapter, pursuant to the 5-year reevaluation requirement of 26 N.N.C. § 2004(D)(2), is submitting for approval its Community Base Land Use Plan. See Attached Exhibit A.

SECTION THREE. APPROVING COMMUNITY BASED LAND USE PLAN

The Resources and Development Committee hereby approves the Nahodishgish Community Development Plan, attached as Exhibit A.

CERTIFICATION

I, hereby certify that the following resolution was duly considered by the Resources and Development Committee of the 23rd Navajo Nation Council at a duly called meeting at the Navajo Transportation Administrative Complex, Tse Bonito, Navajo Nation (New Mexico), at which a quorum was present and that same was passed by a vote of 4 in favor, 0 opposed, 1 abstained on this 16th day of January, 2018.



Benjamin Bennett, Vice Chairperson
Resources and Development Committee
of the 23rd Navajo Nation Council

Motion: Honorable Davis Filfred
Second: Honorable Leonard Pete



**DALTON
PASS**

NAHODISHGISH

CHAPTER

LAND USE PLAN

Nahodishgish, New Mexico
Eastern Navajo Agency – The Navajo Nation
APPROVED BY CHAPTER MEMBERSHIP
SEPTEMBER 24, 2017



THE NAVAJO NATION
NAHODISHGISH CHAPTER
PO BOX 369
CROWNPOINT, NEW MEXICO 87313
PHONE: (505) 786-2028
FAX: (505) 786-2370
Email: Nahodishgish@navajochapters.org

Etta M. Morgan, Chapter President
Roger Morgan, Vice President
Sylvia Morgan, Secretary/Treasurer
Violette Nelson, Land Board
Jonathan Perry, Council Delegate
Clarita Etcitty, Community Services Coordinator
VACANT, Accounts Maintenance Specialist
Valerie Thompson, Office Assistant

RUSSELL BEGAYE, PRESIDENT

JONATHAN NEZ, VICE PRESIDENT

NAHO-2017-09-03

RESOLUTION OF NAHODISHGISH CHAPTER

APPROVING THE REVISED AND UPDATED NAHODISHGISH CHAPTER COMMUNITY-BASED LAND USE PLAN AND REQUESTING THE RESOURCE AND DEVELOPMENT COMMITTEE TO CERTIFY, IN ACCORDANCE WITH THE 5-YEAR REVIEW RECOMMENDATION STATED IN NAVAJO NATION CODE TITLE 26 LOCAL GOVERNANCE ACT, THIS UPDATED AND REVISED PLAN SUPERSEDING THE 2007 VERSION.

WHEREAS:

1. The Nahodishgish Chapter is officially recognized and certified as a political unit of the Navajo Tribal Government pursuant to Navajo Tribe Council Resolution No. CJ-20-55;
2. Pursuant to Resolution No. CAP-34-98, the Navajo Nation Council adopted the Local Governance Act (LGA) under Navajo Nation Code Title 26;
3. Pursuant to the LGA, all chapters shall develop and implement a Community-Based Land Plan and every five years the plan shall be reevaluated and readjusted to meet the needs of the changing community;
4. Pursuant to the LGA, the Nahodishgish Chapter established a Community Land Use Planning Committee (CLUPC) to oversee all land use planning activities under Resolution No. NAHO-DEC-02-0110;
5. Under CLUPC oversight, the Nahodishgish Chapter Community-Based Land Use Plan was revised and updated in the best interest of the community and in accordance with all applicable laws
6. Pursuant to the LGA, the CLUPC recommends the Chapter to approve the Community-Based Land Use Plan attached hereto as Exhibit "A";

NOW THEREFORE BE IT RESOLVED THAT:

1. The Nahodishgish Chapter hereby approves the revised and updated Nahodishgish Chapter Community-Based Land Use Plan attached hereto as Exhibit "A".
2. The Nahodishgish Chapter further hereby requests the Resource and Development Committee to certify, in accordance with the 5-year review recommendation stated in Navajo Nation Code Title 26 Local Governance Act, this updated and revised plan superseding the 2007 version.

Page 2: Resolution-CLUPC-RDC-Certificate
September 18, 2017

*****CERTIFICATION*****

We hereby certify that the foregoing resolution was duly considered by the Nahodishgish Chapter at a duly called Regular meeting at Nahodishgish, NAVAJO NATION, New Mexico, at which a quorum was present and that the same was passed by a vote of 27 in favor, 0 Opposed, and 1 abstained, this 24 day of September, 2017.

Motion: FRANCIS MORGAN


Seconded: ALBERTA JIM



Etta Mae Morgan, President



Roger Morgan Jr., Vice-President



Sylvia Morgan, Secretary-Treasurer



Jonathan Perry, Council Delegate



NAHODISHGISH CHAPTER
COMMUNITY LAND USE PLANNING COMMITTEE
P.O. BOX 369
CROWNPOINT, NM 87313
PHONE: (505) 786-2028
FAX: (505) 786-2370
EMAIL: nahodishgish@navajochapters.org

Chee Bobby Thompson, CLUPC PRESIDENT
Lloyd Morgan, CLUPC VICE-PRESIDENT
Caroline Yazzie, CLUPC SECRETARY
Irvin Garfield, CLUPC MEMBER
Nellie Barbone, CLUPC MEMBER

RUSSELL BEGAYE, PRESIDENT

JONATHAN NEZ, VICE-PRESIDENT

RESOLUTION OF NAHODISHGISH COMMUNITY-BASED LAND USE PLAN

RECOMMENDING THE NAHODISHGISH CHAPTER TO APPROVE THE RE-CERTIFICATION OF THE COMMUNITY LAND USE PLAN MANUAL

WHEREAS:

1. Pursuant to Resolution No. NAHO-DEC-02-010, the Nahodishgish Chapter established its Community-Based Land Use Planning Committee (CLUPC) to oversee all land use planning activities;
2. The CLUPC worked with consulting firm, JJ Clacs & Company, to revise and update the community-based land use plan previously approved in January 04, 2007;
3. Pursuant to the Local Governance Act (LGA), the Community Land Use Planning Committee approved a Community Participation Plan on May 15, 2017 to ensure local community members were given the opportunity to participate in the planning process;
4. Pursuant to the LGA, a 60-day comment period was opened with a public hearing on June 12, 2017 and closed on August 15, 2017;
5. Upon closing the comment period, the CLUPC reviewed and incorporated relevant comments to complete the revised and updated community-based land use plan.

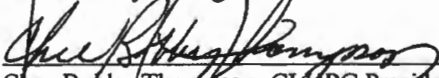
NOW THEREFORE BE IT RESOLVED THAT:

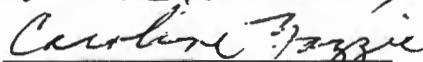
1. The CLUPC hereby recommends the Chapter to approve the Community-Based Land Use Plan in accordance with the requirements of the LGA.
2. The Nahodishgish CLUPC further recommends the Nahodishgish Chapter to request the Resource and Development Committee to re-certify, in accordance with the 5-year review recommendation stated in Navajo Nation Code Title 26 Local Governance Act, this updated and revised plan superseding the 2007 version.

*****CERTIFICATION*****

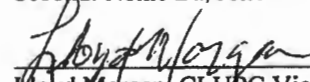
WE HEREBY CERTIFY that the foregoing resolution was duly considered by the CLUPC at a duly called CLUPC meeting at Nahodishgish, NAVAJO NATION, New Mexico, at which a quorum was present and that the same was passed by a vote of 4 in favor, 0 opposed, and 1 abstained, this 5th day of September, 2017.

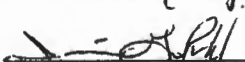
Motion: Lloyd Morgan


Chee Bobby Thompson, CLUPC President


Caroline Yazzie, CLUPC Secretary

Second: Nellie Barbone


Lloyd Morgan, CLUPC Vice-President


Irvin Garfield, CLUPC Member


Nellie Barbone, CLUPC Member

ACKNOWLEDGEMENTS

Nahodishgish Chapter

P.O. Box 369
Crownpoint, New Mexico 87313
Telephone: (505) 786-2028
Fax: (505) 786-2370

Nahodishgish Chapter Community Members

Chapter Officials

Etta M. Morgan, President
Roger Morgan, Jr., Vice-President
Sylvia Morgan, Secretary/Treasurer

Violette Nelson, Land Board

Jonathan Perry, Council Delegate

Chapter Administration

Clarita Etsitty, Chapter Service Coordinator

Community Land Use Planning Committee

Chee Bobby Thompson, CLUPC President
Lloyd Morgan, CLUPC Vice-President
Caroline Yazzie, CLUPC Secretary/Treasurer
Nellie Barbone, Member
Irvin Garfield, Member

Consultant

JJ Clacs & Company
P.O. Box 479
Fort Wingate, New Mexico 87316
wynette@jjclacs.com
(505) 870-9167

Contributors

Navajo Tribal Utility Authority (NTUA), Navajo Nation Land Department,
Navajo Nation Historic Preservation (NNHPD), Navajo Nation Department of
Fish & Wildlife (NNDFWL), Navajo Nation Department of Economic
Development (DED), Navajo Nation, Bureau of Indian Affairs (BIA)
Department of Roads

TABLE OF CONTENTS

1. COMMUNITY VISION, NEEDS & DESIRES	8
MISSION STATEMENT	8
VISION STATEMENT.....	8
NEEDS AND DESIRES.....	8
2. COMMUNITY BACKGROUND.....	12
BRIEF HISTORY	12
LOCATION	12
PLANNING AREA.....	13
GRAZING DISTRICTS	13
LAND OWNERSHIP	13
3. NATURAL CONDITIONS	15
TOPOGRAPHY.....	15
GEOLOGY	15
SOILS.....	18
ECOLOGICAL SITES	18
ENVIRONMENTALLY SENSITIVE SITES	19
GROUND WATER.....	20
SURFACE WATER	20
4. KEY TRENDS AND FORCAST OF OUR PEOPLE	21
COMMUNITY SURVEY RESULTS.....	21
POPULATION TODAY AND TOMORROW	22
HOUSEHOLDS AND FAMILIES.....	23
ECONOMIC CHARACTERISTICS	25
HOUSING CHARACTERISTICS	27
5. LAND USE	30
RESIDENTIAL HOUSING	30
COMMUNITY FACILITIES.....	32
COMMERCIAL	34
INDUSTRIAL	34
RECREATION	35
OPEN SPACE	36
GRAZING.....	37
FARMING	38
CULTURALLY SIGNIFICANT SITES	39
TRADITIONALLY SENSITIVE SITES.....	40
BURIAL SITES	40
6. CAPITAL IMPROVEMENT.....	48
7. PLAN ADMINISTRATION	50
PLANNING PROCESS	50
COMMUNITY PARTICIPATION PLAN.....	50
PLAN AMENDMENTS AND UPDATES	51
REFERENCES	52

Appendix A – Soil Report – Dwellings and Small Commercial Buildings	
Appendix B – Rangeland Ecological Site Report	
Appendix C – Land Use Plans – Public Meetings	

List of Tables

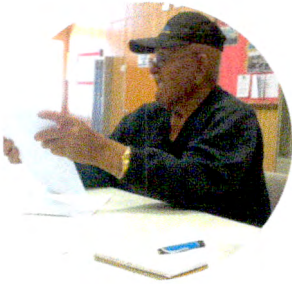
Table 1. Geology.....	16
Table 2. Soils.....	18
Table 3. Community Survey Results	21
Table 4. Age Characteristics	23
Table 5. Median Age.....	23
Table 6. Average Household Size and Family Size	23
Table 7. Unemployment Rate and Poverty Level	26
Table 8. Housing Count	27
Table 9. Type of Housing Unit and Median Home Value	27
Table 10. Nahodishgish ICIP	48
Table 11. Nahodishgish Goal/Priority Rank.....	49

List of Figures

Figure 1. Population	22
Figure 2. Age Distribution.....	22
Figure 3. Household Type.....	24
Figure 4. Large Households	24
Figure 5. Travel Time for Nahodishgish.....	25
Figure 6. Median Household Income	25
Figure 7. Per Capita Income	26
Figure 8. Number of Bedrooms.....	28
Figure 9. Year Housing Built.....	28
Figure 10. House Heating Fuel	29
Figure 11. Land Use Planning Process	50

List of Maps

Map 1 Location.....	12
Map 2 Planning Area	13
Map 3 Grazing Districts	14
Map 4 Land Status.....	14
Map 5 Topographic	15
Map 6 Geology	17
Map 7 Soils	17
Map 8 Environmentally Sensitive Areas.....	19
Map 9 Windmills & Watershed	20
Map 10 Land Use.....	37
Map 11 Land Use - Loop Road.....	38
Map 12 Chapter House Tract Development.....	39
Map 13 Proposed Development N9 & N52 Junction	40
Map 14 Loop Road Improvement	41
Map 15 Proposed Road Realignment.....	42
Map 16 Proposed Driveway Improvements.....	43



1. COMMUNITY VISION, NEEDS & DESIRES

In line with the mission and vision of Nahodishgish Chapter (hereafter used interchangeably with Chapter), the Community-Based Land Use Planning Committee (CLUPC) worked with community members to think about and plan future land uses. The Chapter's mission and vision statements are listed below followed by needs and desires.

MISSION STATEMENT

Provide accountability through technology by providing technical support in the best interest for the community and a substantial government to enhance economic and infrastructure development.

VISION STATEMENT

An effective and efficient local government through leadership and cultural values.

NEEDS AND DESIRES

The needs and desires help determine what the Chapter is to look like in the future. They also establish a baseline to guide the planning process and track progress. Developing the needs and desires gives community members a sense of ownership in how land will be taken care and utilized today, tomorrow and the future. The needs and desires of Nahodishgish Chapter cover a wide range of topics.

1: TRANSPORTATION

Improve community safety with better roads

DESIRES

- Pave roads used by school buses
- Improve drainage crossings on roads
- Re-designate the entire Cross Canyon Loop as N98 (currently, the north loop is sometimes referred to as N52)
- Realign Dalton Pass Road to connect with Cross Canyon Loop and eliminate existing road to the south of the chapter house
 - Improve driveways to homes

2: COMMUNITY FACILITIES

Provide facilities and services enhancing quality of life

DESIRES

- Pave around the Chapter house
- Provide a library for children
- Provide a post office or locked mail boxes

- Provide a medical clinic and health center
 - Establish a community cemetery
 - Establish a rodeo ground and fairground
 - Provide a day care center
- Provide a building where community groups can meet (i.e. activity hall)
 - Provide a better warehouse for the Chapter
- Improve Senior Center with an arts & crafts center and other activities

3: INFRASTRUCTURE AND UTILITIES

Improve infrastructure and utility services

DESIRES

- Prepare for the Navajo/Gallup Water Pipeline
- Reopen existing abandoned wells to use for agriculture
 - Create more water wells
- Improve septic and water services to housing areas
 - Develop solid waste/land fill operation
- Encourage cellular phone service tower in Chapter with low cost service for Chapter members
- Provide public education on septic systems ownership i.e. placement/location, use, maintenance, etc.
- Engage government entities to provide information on utilities/ infrastructure development, regulations, maintenance, etc.
- Establish ordinances for new septic systems within the community
 - Explore the development of a community sewer lagoon
- Improve internet service particularly in no reception areas

4: HOUSING

Provide for housing needs

DESIRES

- Provide areas for family homes i.e. groups, clusters, etc.
- Provide scattered housing in collaboration with grazing permittees & appropriate entities
- Well-constructed homes with quality materials by qualified contractors
 - Establish building codes for house construction
 - Ensure plumbing & electrical in houses is properly constructed
- Allow for individual design of housing, not just plain looking houses
 - Provide houses with interesting architectural styles

5: COMMERCIAL / ECONOMIC DEVELOPMENT

Provide convenient business services

DESIRES

- Provide a convenience store and laundromat
- Plan for a casino in region – seek surrounding chapters support of establishment of gaming
- Review chapter gaming revenue distribution and request periodic updates of gaming revenue
- Explore establishment of regional livestock auction/veterinarian facility

6: RECREATION

Expand recreational opportunities for community members

Desires

- Create a centralized recreational center including playgrounds, ball fields, tennis courts, picnic areas, swimming pool, basketball and volleyball
 - Develop a golf course and driving range

7: NATURAL RESOURCES

Respect natural resources

DESIRES

- Preserve the canyon from which Nahodishgish Chapter gets its name
- Improve or add to existing dams to capture storm water for livestock ponds
 - Control erosion
- Ensure Nahodishgish receives its share of disaster monies e.g. FEMA, flood control, fires, etc.

8: AGRICULTURE

Preserve and maintain agricultural lands

DESIRES

- Plan for and utilize water from the Navajo/Gallup Water Line for agriculture
 - Reestablish farm plots i.e. corn, hay, chili, squash, melon, etc.
 - Work with livestock owners and farmers on development of regional agricultural center
 - Establish livestock and farm boards
- Obtain information on latest technology and uses for agricultural purposes
 - Teach how to control and own livestock i.e. sheep, goats, horses, sheepherding, brand papers, proper livestock branding, etc.

9: EDUCATION

Expand educational opportunities

Desires

- Provide a preschool
- Provide a computer resource center and training for all ages
 - Provide a special needs facility/school
- Encourage educational curriculums to include cultural teachings & knowledge i.e. language, traditional foods & crafts, turquoise, traditional hair bun, corn pollen collection, stories, values, etc.
 - Support public health and safety education i.e. health, proper handling of food, fire etc.
- Include cultural teachings & knowledge in the Chapter summer youth program and other Chapter programs
 - Invest in professional development and leadership training i.e. how to run and participate in meetings; governance for community members, officials and staff

10: TRADITIONAL RESOURCES

Honor our traditional way of life

DESIRES

- Make sure community Hogan is used only for traditional ceremonies and treat it with same respect as a church or religious site
 - Conduct traditional ceremonies on a regular basis in the community Hogan i.e. fall, winter ceremonies, etc.
 - Develop an Elders weaving center
- Make sure Navajo culture teachings & knowledge are shared and taught with Ke' i.e. traditional foods, customs, etc.

11: SAFETY

Have a safe community

DESIRES

- Provide a health clinic, fire & police station
- Establish a safety committee/ALERT team at the local chapter level (first responders)
- Install handicap accessible equipment/fixtures i.e. rails, parking spaces, etc.



2. COMMUNITY BACKGROUND

BRIEF HISTORY

Established in the 1870s by a Navajo family who adopted the name of Morgan, Nahodishgish Chapter is also known as the Dalton Pass Chapter. This name is derived from Jesse Dalton who opened the first trading post in the area in 1927. A transportation route through the surrounding mountains also bears the name. In 1938, J.C. Morgan, a descendant of the founding family, was elected the fifth chairman of the Navajo Tribal Council and held the position until 1942. Originally built in 1963, the community renovated the chapter house in 1993. A preschool and a warehouse are also part of the compound.

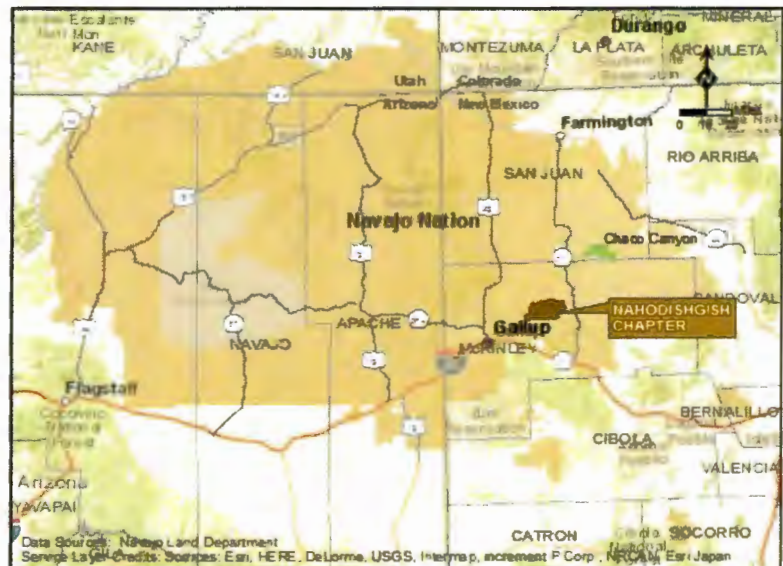
Although no written documentation exists pertaining to the history of industry in the area, Chapter members recall that coal was mined approximately three miles southwest of the Chapter house in the 1950's. Residents used some of the coal to heat schools in nearby communities. The mine closed in the mid 1960's.

The community is recognized and certified as the Nahodishgish Chapter within the Navajo Tribal government. The Navajo Tribal Council certified the Chapter on May 03, 1979 pursuant to Resolution No. CMY23-79. Under the Bureau of Indian Affairs (BIA), the Chapter is part of the Eastern Navajo Agency and grazing District 12. The Eastern Navajo Agency comprises 12 chapters and District 12 comprises six chapters.

LOCATION

Meaning "cross sections of canyons" (Rodgers 1996), Nahodishgish Chapter is located in the southeast part of the Navajo Nation (MAP 1). Situated in McKinley County, New Mexico the Chapter borders the Crownpoint, Mariano Lake, Pinedale, Standing Rock and Becenti Chapters. The Chapter is located along Navajo Route 9 (N9), approximately 12 miles west of Crownpoint.

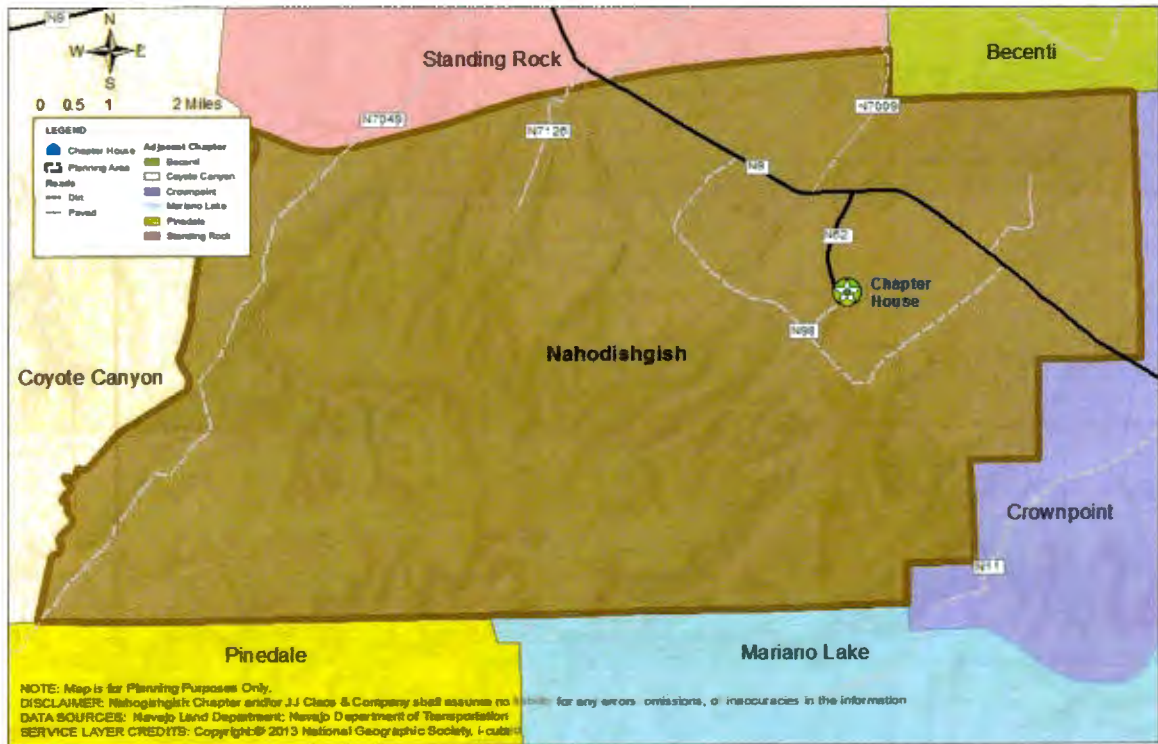
MAP 1 LOCATION



PLANNING AREA

The Chapter members identified the planning area based on the area of land that they use or hold permits for (MAP 2). Because the community members chose the planning area based on areas they currently use or have permits for, it does not completely overlap with the Chapter's "official" boundary. The planning area is referred to as the Chapter in this document.

MAP 2 PLANNING AREA



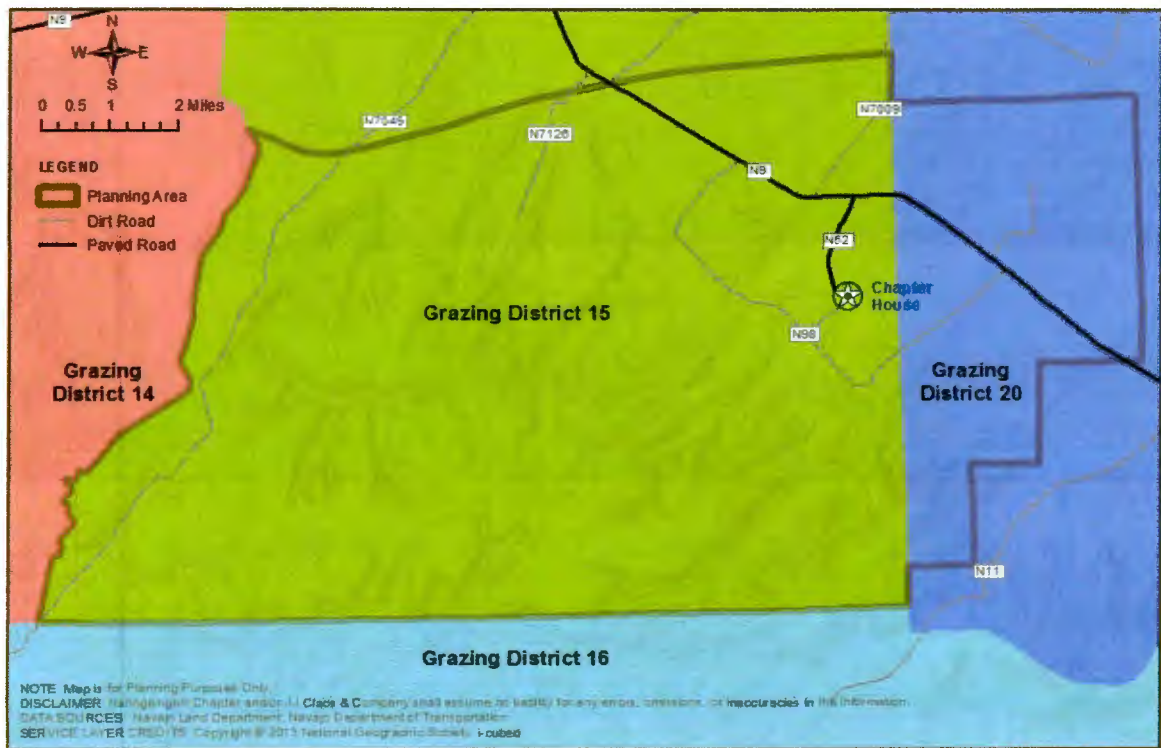
GRAZING DISTRICTS

Nahodishgish Chapter is unique wherein its land base includes the Navajo Reservation and off-reservation land known as the "checkerboard" area. Under the BIA, the chapter is one of 31 chapters in the Eastern Navajo Agency. The portion within the Navajo Reservation is under Grazing District 15 while the off-reservation portion is under Grazing District 20 (MAP 3).

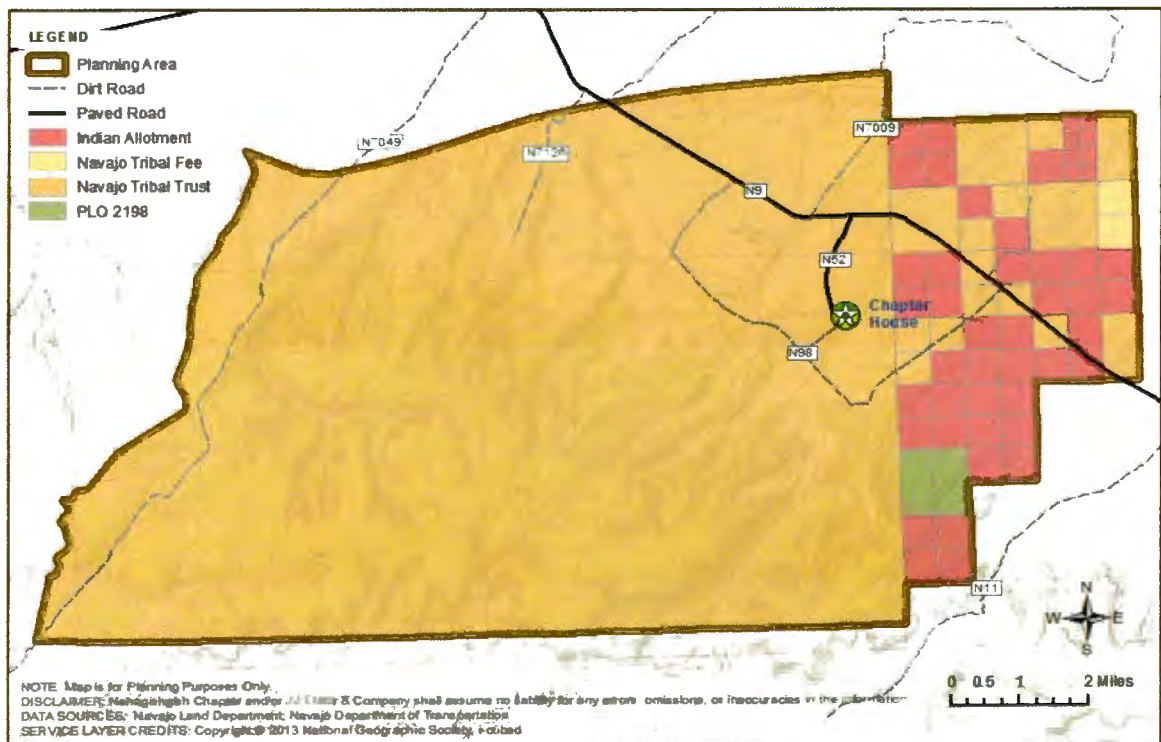
LAND OWNERSHIP

The land status within the Chapter is mostly Navajo Tribal Trust. A small portion along the eastern edge of the community consists of individual Indian allotments, PLO, Navajo Trust and Navajo Fee land. (MAP 4)

MAP 3 GRAZING DISTRICTS



MAP 4 LAND STATUS





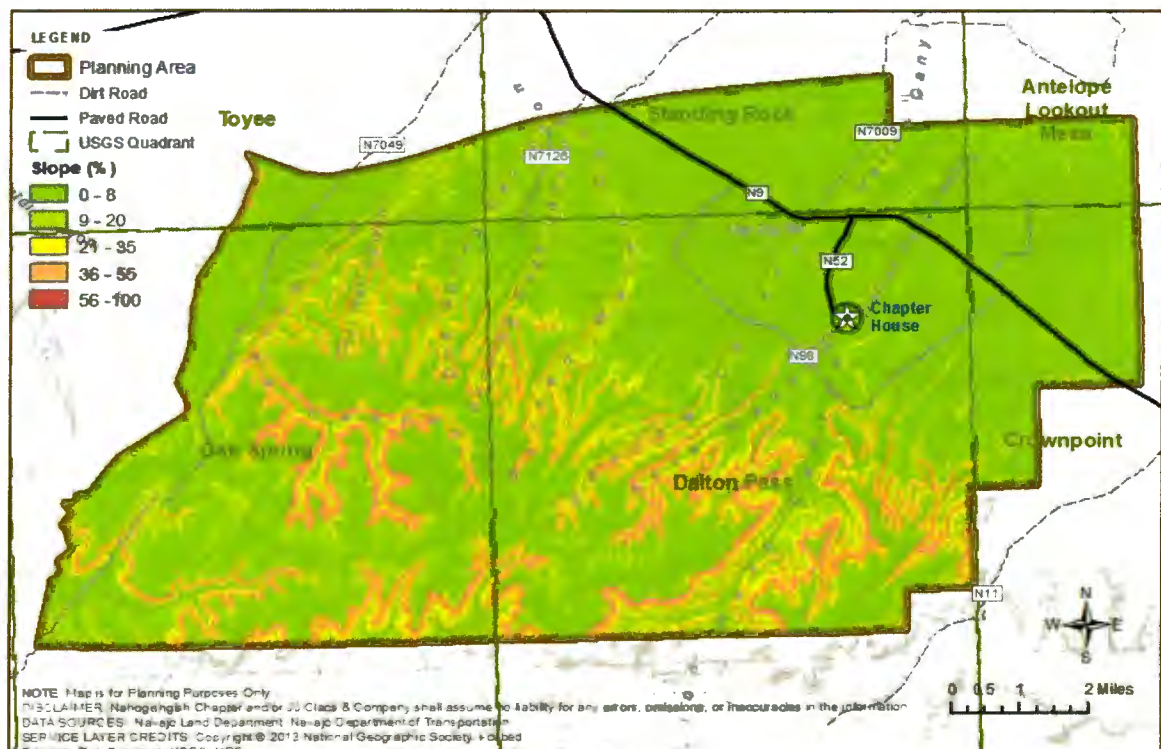
3. NATURAL CONDITIONS

TOPOGRAPHY

The Chapter is situated in the Colorado Plateau region on both the open, heavily dissected flood plains and higher-elevation mountain terrain. The prominent land forms in the area are Nahodishgish and Dalton Pass Canyons. The upper elevations are characterized by deeply cut drainages and steeply cut drainages.

The altitude ranges between 6,000 and 6,500 feet above mean sea level. MAP 5 shows slope percentages as well as the 7.5-minute quadrangle names for the planning area.

MAP 5 TOPOGRAPHIC



GEOLOGY

Nahodishgish lies within the southeastern quarter of the Colorado Plateau physiographic province, which is characterized by mesas that dip gently to the north and broad valleys with intermittent streams. The plateau encompasses much of western Colorado, eastern Utah, northeastern Arizona, and northwestern New Mexico. More specifically, Nahodishgish lies within a structural subdivision of the San Juan Basin termed the Chaco Slope (Kelly and Clinton 1960:76 in Hogan 1981). The San Juan Basin is a structural depression occupying a major portion of the southeastern Colorado Plateau. The basin is underlain by up to 10,000 feet of sedimentary strata that dip gently from the margins toward the center. Relatively small, elongated domes, uplifts, and synclinal

depressions characterize its margins. TABLE 1 and MAP 6 present the geologic formations within the planning area.

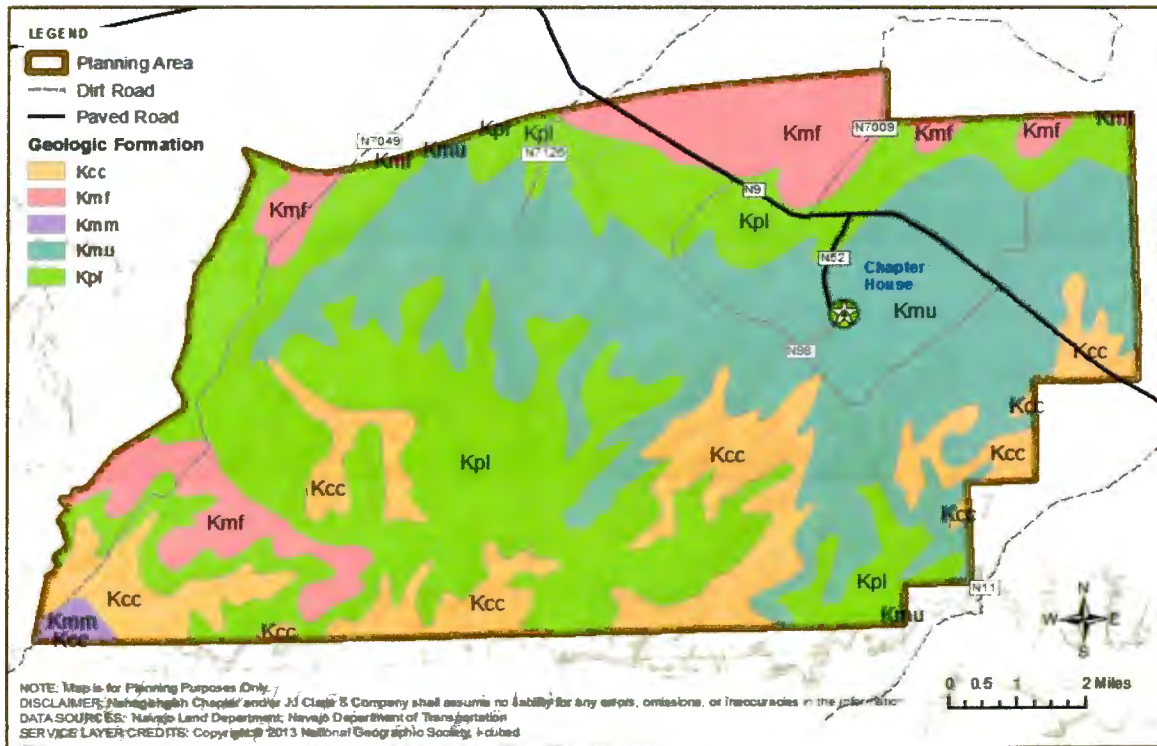
TABLE 1. GEOLOGY

Map Unit	Formation Name	Lithology Class	Primary Lithology	
Kcc	Crevasse Canyon Formation	Sedimentary	Shale	Crevasse Canyon Formation (Santonian to Coniacian) — Coal-bearing units are Dilco and Gibson Coal Members; other members are Bartlett Barren, Dalton Sandstone, and Borrego Pass Sandstone (or Lentil)
Kmf	Menefee Formation	Sedimentary	Mudstone	Menefee Formation (Campanian to Santonian) — Mudstone, shale, and sandstone; coal-bearing
Kmm	Mulatto Tongue of Mancos Shale	Sedimentary	Shale	Mulatto Tongue of Mancos Shale (Santonian to Coniacian)
Kms	Satan Tongue of Mancos Shale	Sedimentary	Shale	Satan Tongue of Mancos Shale (Santonian)
Kmu	Mancos Shale, upper part	Sedimentary	Shale	Mancos Shale, upper part (Campanian to Coniacian)
Kph	Hosta Tongue of Point Lookout Sandstone	Sedimentary	Sandstone	Hosta Tongue of Point Lookout Sandstone (Santonian) — Transgressive marine sandstone
Kpl	Point Lookout Sandstone	Sedimentary	Sandstone	Point Lookout Sandstone (Campanian to Santonian) — Regressive marine sandstone

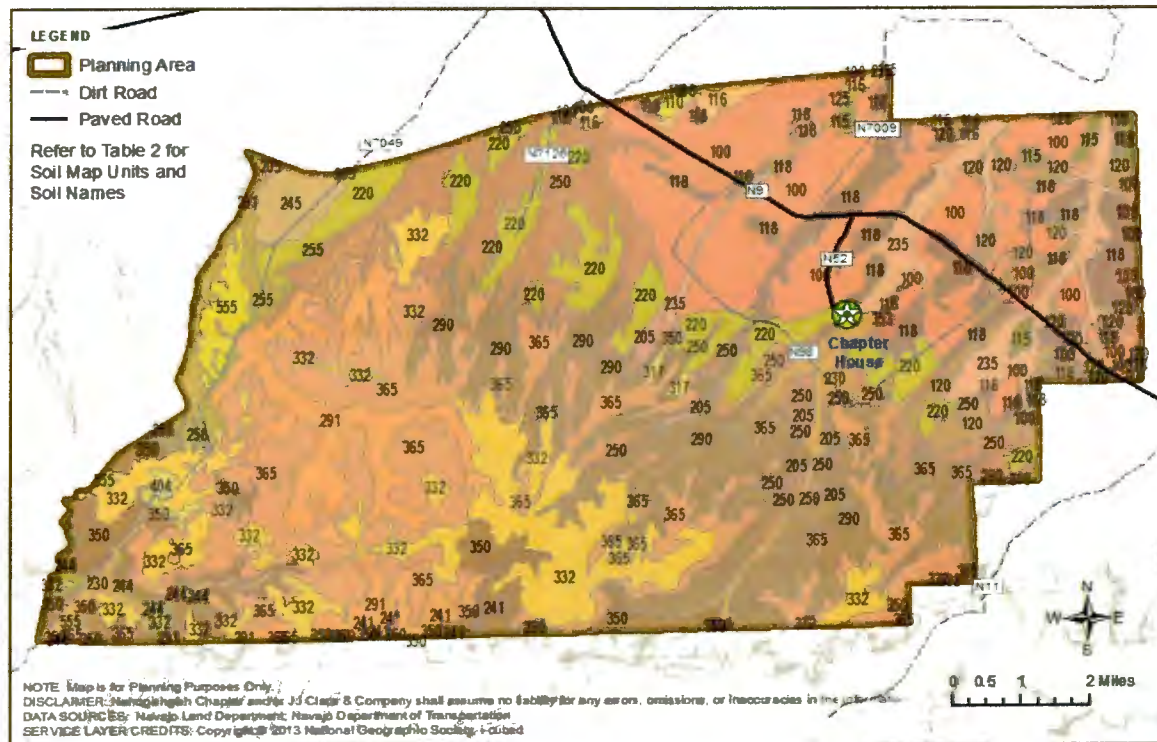
The Gibson Member of the Crevasse Canyon Formation is the dominant slope-forming rock in the Lobo Mesa escarpment to the south and southwest of Crownpoint and in the surrounding isolated mesas and buttes. Furthermore, overlying the Gibson coal member is the Hosta Butte sandstone. In the cliffs to the south, the Hosta sandstone is split into an upper and lower unit by a narrow wedge of marine shale, the Santan Tongue unit of the Mancos shale. The Mancos shale is a gray marine Cretaceous shale containing thin lenses of fine grained sandstone. The Upper Part of the Mancos Shale is found in the central western part of the community. The Hosta sandstone is a Member of the Point Lookout Sandstone. The Point Lookout Sandstone is a fine to medium-grained, gray-brown to white sandstone. The Manefee Formation makes up the north northeastern part of the planning area.

Hogan further explains the dominance of easily eroded; nearly horizontal strata give rise to a topography of gently rolling hills and ridges, dissected by many small ephemeral streams. The valleys of these drainages are generally choked with recent alluvial sediments in which the channels are barely perceptible.

MAP 6 GEOLOGY



MAP 7 SOILS



SOILS

New Mexico's tumultuous physiographic history has resulted in surface rock outcrops of many kinds. Mountain building, graben formation, volcanism, and erosion have placed varied rocks and minerals at the surface, which have weathered into many types of soils (ARC 2001). General soil types, slopes, acres and percent in the planning area, based on a recent survey conducted by the USDA, Soil Conservation Service, are listed in TABLE 2. Soil reports indicating limitations for Dwellings Without Basements are presented in APPENDIX A. The soil distribution is graphically depicted in MAP 7. Each map unit on the general soil map is a unique natural landscape. Typically, it consists of one or more major soils and some minor soils. It is named for the major soils. The soils making up one unit can occur in another but in a different pattern.

TABLE 2. SOILS

Map Unit	Soil	Slopes	Acres	Percent
100	Norkiki-Kimnoli complex	1 to 8 percent	11,331.6	19.1%
115	Razito-Shiprock complex	3 to 8 percent	2,721.5	4.6%
116	Fajada-Huerfano- Benally complex	1 to 5 percent	872.0	1.5%
118	Farb-Chipeta-Rock outcrop complex	2 to 30 percent	4,367.8	7.3%
120	Doak-Shiprock complex	1 to 8 percent	6,537.4	11.0%
205	Penistaja-Tintero complex	1 to 10 percent	639.3	1.1%
210	Marianolake- Skyvillage complex	1 to 8 percent	1,119.5	1.9%
220	Hagerwest-Bond fine sandy loams	1 to 8 percent	5,542.3	9.3%
230	Sparank-San Mateo-Zia complex	0 to 3 percent	1,652.8	2.8%
235	Notal-Hamburn complex	0 to 2 percent	8,019.4	13.5%
241	Mentmore loam	1 to 8 percent	19.9	0.0%
250	Hospah-Skyvillage- Rock outcrop complex	2 to 35 percent	3,821.6	6.4%
290	Rock outcrop-Westmion-Skyvillage complex	30 to 80 percent	8,016.2	13.5%
310	Parkelei sandy loam	1 to 8 percent	46.4	0.1%
332	Evpark-Arabrab complex	2 to 6 percent	471.5	0.8%
350	Toldohn-Vessilla-Rock outcrop complex	8 to 35 percent	499.1	0.8%
353	Mido loamy fine sand	1 to 6 percent	16.4	0.0%
365	Vessilla-Rock outcrop complex	2 to 15 percent	2,845.1	4.8%
366	Bosonoak loam	1 to 5 percent	393.5	0.7%
368	Simitarq-Celavar sandy loams	2 to 8 percent	224.8	0.4%
404	Rock outcrop- Techado-Stozuni complex	5 to 60 percent	100.4	0.2%
555	Parkelei-Evpark fine sandy loams	2 to 8 percent	207.4	0.3%

ECOLOGICAL SITES

According to the Natural Resources Conservation Service in the National Range and Pasture Handbook (2003), an ecological site is a "...distinctive kind of land with specific physical characteristics that differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation. Using the Web Soil Survey provided by NRCS, an ecological report for the planning area was generated (Appendix B).

ENVIRONMENTALLY SENSITIVE SITES

Data from Navajo Nation Department of Fish and Wildlife (NNDFWL) indicate two wildlife zones within the planning area. Wildlife Zone 3 and Zone 1 are present in the community (MAP 8).

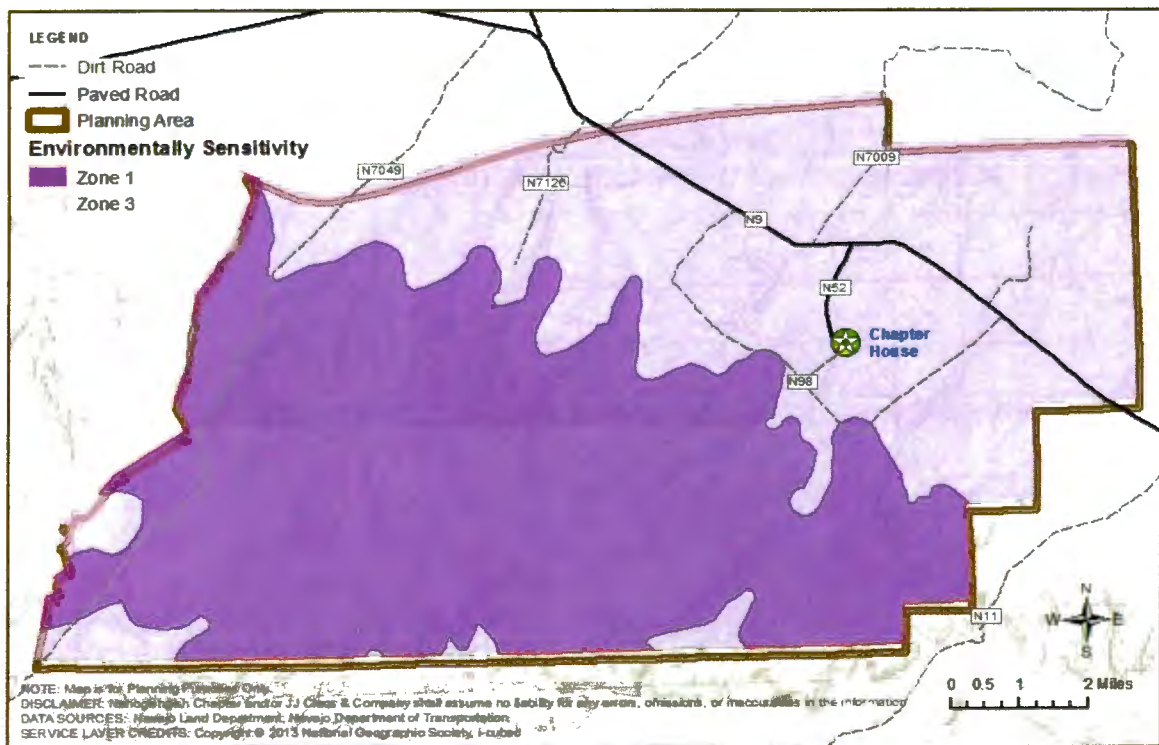
Zone 1: Highly Sensitive/Restrictive Development

This zone contains the best habitat for endangered, rare and sensitive plant, animal, and game species, and the highest concentration of these species on the Navajo Nation. To protect the Navajo Nation's most sensitive habitats for plants and animals the NNDFWL advises no further business or residential development, permanent, temporary or seasonal. Exceptions are not of concern if a biological evaluation determines the proposed development is within or adjacent to an area already developed and not close enough to habitat to cause long-term impacts. "Adjacency" will depend on the species and situation, but generally means within 1/8th of a mile (to existing development). Any proposed development within Zone 1 shall be submitted to the NNDFWL for review and comment. The NNDFWL will evaluate each proposed project for appropriate environmental impact. The NNDFWL has the authority to reject any project in its entirety or approve with conditions.

Zone 3: Low Sensitivity

This zone has a low, fragmented or unknown concentration of species of concern. Species in this zone may be locally- abundant of "islands" of habitat; but islands are few and far between.

MAP 8 ENVIRONMENTALLY SENSITIVE AREAS



GROUND WATER

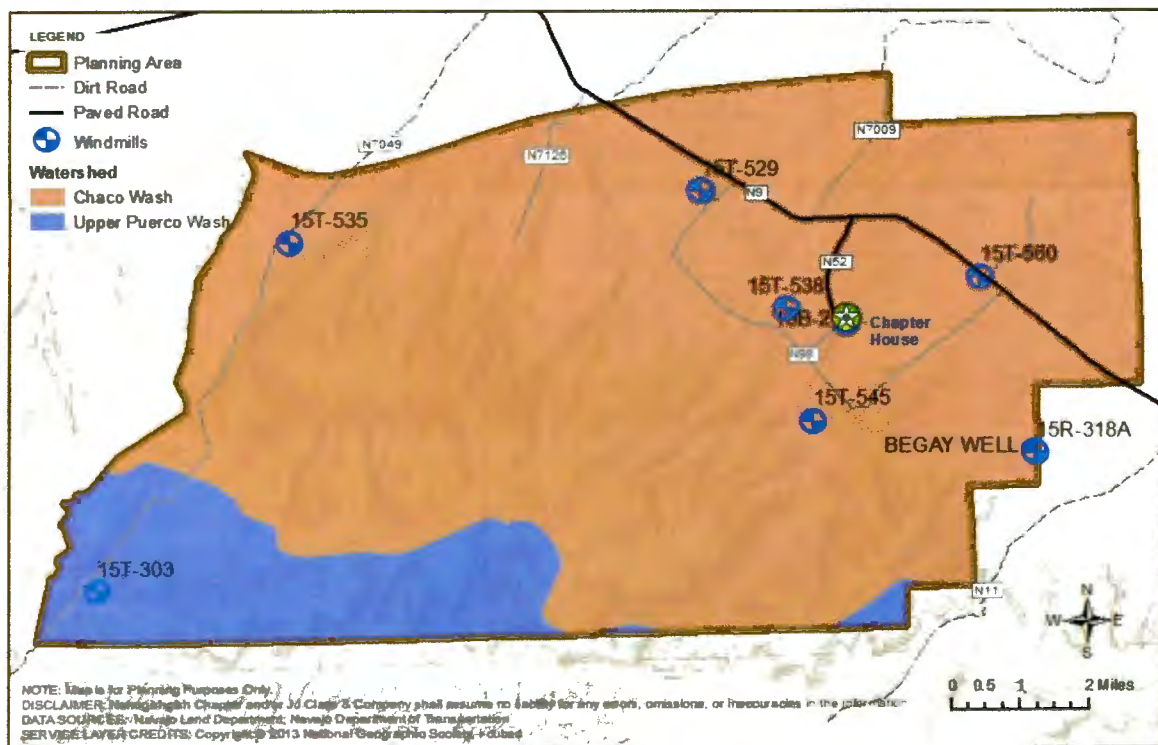
The Chapter is located in the outer margins of the San Juan Basin and Chaco Slope is the principle area in the region where ground water is abundant. Data show however, that ground water levels have been declining over the last twenty years (USGS 2004 <http://nm/water/usgs/gov/drought/gwbasin.html>). The Morrison Formation is a major potable aquifer in the Crownpoint area (Zaman 1982). Zaman stated in his hydraulic analysis the most significant problem is the continuous decline of the Piezo metric head in the Morrison Formation. In a more recent study, the Navajo Nation Department of Water Resources et al. (2001) indicated most of the ground water in the area is from the Westwater and Morrison aquifers.

SURFACE WATER

No perennial surface water exists within the Chapter, with the exception of some man-made impoundments that may contain water year-round, and all water courses are ephemeral. Major drainages of the Chapter are Dalton Pass, Narrow, Burnt Water and Rock Canyons (MAP 9). Chaco Wash, the primary ephemeral drainage in the region, flows north where it empties into the San Juan River near Shiprock, New Mexico. The southern edge flows into the Upper Puerco Wash.

The map also shows windmills within the planning area. Seven are scattered throughout the community.

MAP 9 WINDMILLS & WATERSHED





4. KEY TRENDS AND FORCAST OF OUR PEOPLE

Information for this section comes from a variety of sources. A community survey was conducted. In addition, data were obtained from U.S. Census which was corroborated by a community survey. Changes in the Chapter's population are described below. Data from the SF1 in 2010 and 2000 U.S. Census provided data for population and households. Certain economic and housing data was available from 2008-2012 5-year American Community Survey.

COMMUNITY SURVEY RESULTS

The chapter developed the survey and the results are presented in TABLE 3.

TABLE 3. COMMUNITY SURVEY RESULTS

Age		# of People
0-10 Years	17	
11-20 Years	32	
21-30 Years	17	
31-40 Years	11	
41-50 Years	16	
51+ Years	52	

Gender	
Males	76
Females	50

Marital Status	
Married	16
Single	29
Divorce	2
Widow	6

Home Structure	
Timber	3
Wood	25
Manufactured	5
Concrete	3
Other	14

Age of Home	
0-5 Years	3
6-10 Years	0
11-15 Years	2
16-20 Years	7
21+ Years	37

# of Bedrooms	
1	16
2	23
3	8
More	5

Bathroom	
Yes	48
No	7

Windows	
Broken	13
Cracked	16
Good	22
Other	2

Electricity	
Yes	48
No	7

Running Water	
Yes	14
No	11

Sewer	
Yes	42
No	13

Doors	
Good	29
Broken	16
Other	9

Adequate Kitchen	
Yes	36
No	15

Security	
Locks	27
Dogs	27
Cameras	1
Other	11

Heating Source	
Wood	43
Pellet	7
Heater	4
Other	1

Home Condition	
Excellent	2
Good	13
Fair	26
Poor	11

Home Site Lease	
Yes	36
No	16

Transportation	
Yes	37
No	15

Special Needs	
Disability	22
Health Issue	17
Elderly	16
Unemployed	7
Lack of Education	3

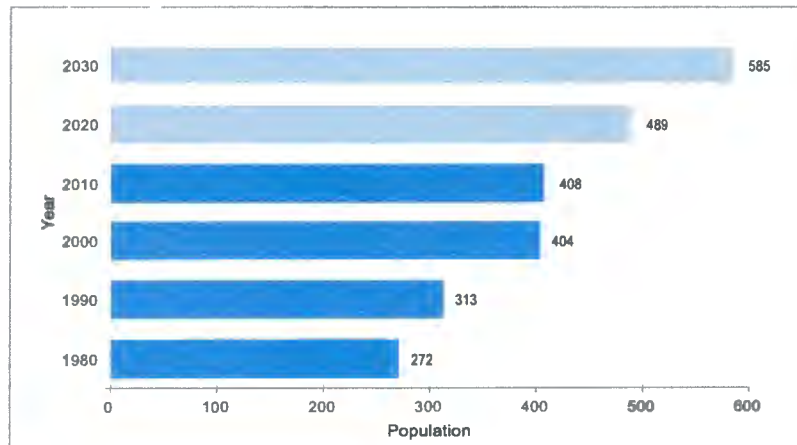
Livestock	
Horse	15
Cows	6
Sheeps	12
Other	13

Permittee	14
Non-Permittee	17

POPULATION TODAY AND TOMORROW

Nahodishgish's population has steadily increased over the last decades (FIGURE 1). In 2010, the Chapter's total population was 408, which is a 1.0 percent increase from 2000. There was more than a 33 percent increase in population from 1980 to 2010 or 136 more residents. Using projections of 1.82 percent per year, the Navajo Nation population growth rate (Choudhary 2005–2006), the Nahodishgish population is expected to grow to 585 people by the year 2030.

FIGURE 1. POPULATION



Under 20 years old are the largest sub-population in the Chapter (FIGURE 2). Together, they represent 46.3 percent of the membership. The age range of females exhibits three increases: 1) between the ages of 0–19; 2) between 30–49; and 3) 80 and over. The census only showed two increases for the males. The first mimics the females closely for the age between 0–20. The male population increased between the ages of 30 and 54.

FIGURE 2. AGE DISTRIBUTION

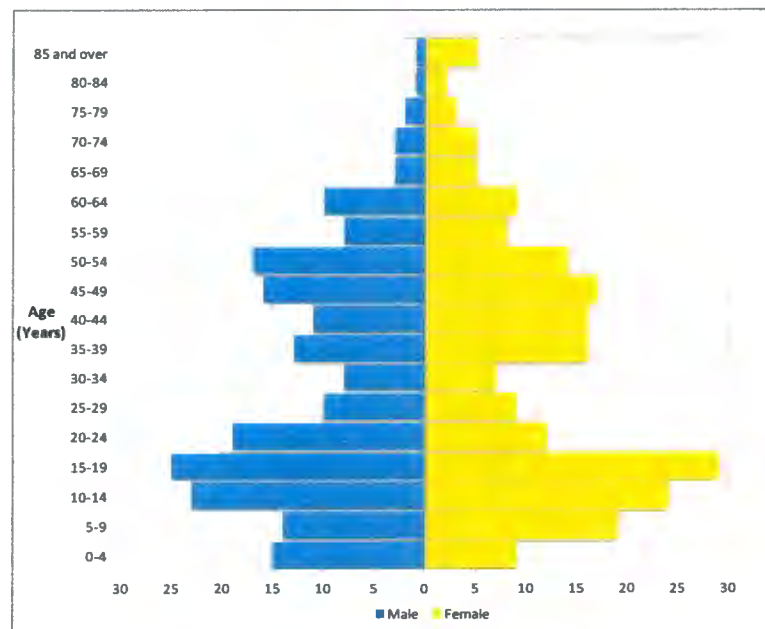


TABLE 4 compares age characteristics for 2000 and 2010 for certain jurisdictions. The Chapter has the highest percentage of under 5 years and the 5 to 17 years of age group.

TABLE 4. AGE CHARACTERISTICS

	Total Population (persons)		Under 5 Years (%)		5- 17 Years (%)		18-64 Years (%)		65 Years & Over (%)	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
United States	281,421,906	308,745,538	6.8	6.5	18.9	17.5	61.9	62.9	13.6	14.7
New Mexico	1,819,046	2,059,179	7.2	7.0	20.8	18.1	60.4	61.6	12.9	15.0
Navajo Nation	180,462	173,667	9.6	8.7	31.4	24.6	52.0	57.1	7.9	10.7
Nahodishgish	404	408	12.1	31.9	30.1	28.9	47.8	57.8	8.7	9.3
McKinley County	74,798	71,492	9.1	8.6	28.8	22.7	55.1	59.2	7.8	10.8

Including the male and female populations, the median age (29) of Nahodishgish and the Navajo Nation are the lowest when compared to McKinley County, the State of New Mexico and the United States (TABLE 5). McKinley county's median age is slightly higher at 30.7. The median age continues to climb at the state and national levels.

TABLE 5. MEDIAN AGE

	Total Population (persons)		Median Age (years)	
	2000	2010	2000	2010
United States	281,421,906	308,745,538	35.3	37.2
New Mexico	1,819,046	2,059,179	34.6	36.7
Navajo Nation	180,462	173,667	24.0	29.1
Nahodishgish	404	408	22.8	29.3
McKinley County	74,798	71,492	26.9	30.7

HOUSEHOLDS AND FAMILIES

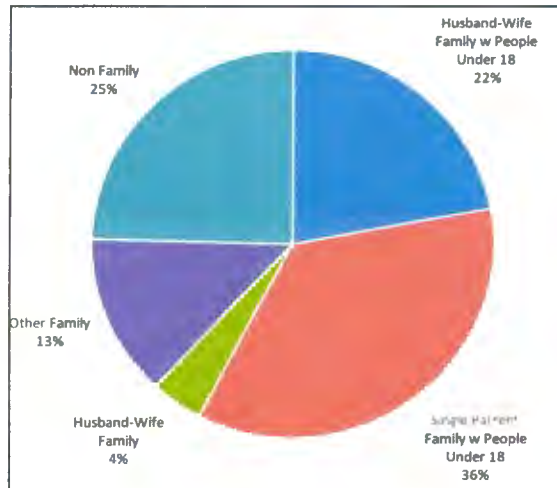
Household and family data are presented in TABLE 6. The average household size (3.46) for the Chapter and the Navajo Nation are the highest among the various geographic regions according to Census 2010. Similarly, the average family size for the Chapter and the Navajo Nation are also the highest.

TABLE 6. AVERAGE HOUSEHOLD SIZE AND FAMILY SIZE

	Households	Families	Average Household Size	Average Family Size
United States	116,716,292	77,538,296	2.58	3.14
New Mexico	791,395	518,698	2.55	3.13
Navajo Nation	49,946	37,718	3.46	4.09
Nahodishgish	118	89	3.46	4.01
McKinley County	21,968	16,219	3.22	3.82

Within the Chapter, almost half (49 percent) of the households are single parent families (FIGURE 3). The next highest household type are the married-couple families followed by 1-person households. Non-family households are lowest at 4 percent.

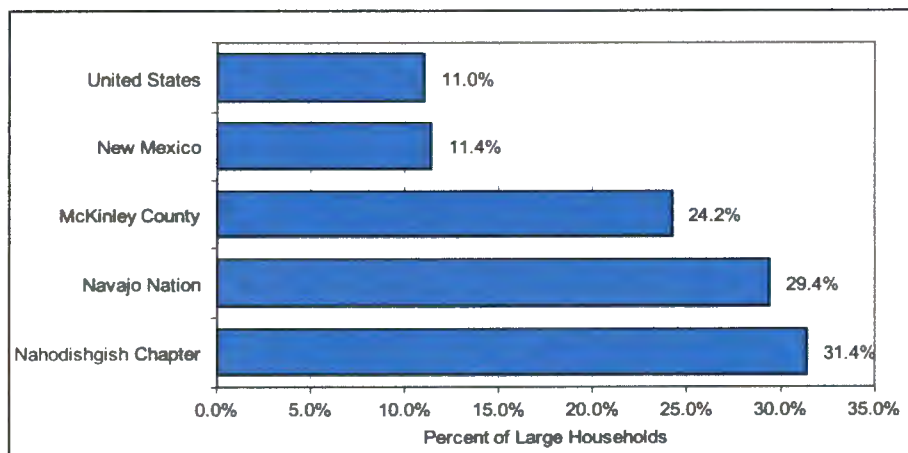
FIGURE 3. HOUSEHOLD TYPE



Large households have special housing needs due to the lack of adequately sized and affordably priced homes in the community, which results in overcrowding. Large family households are defined as households with five or more persons. A five-person household would typically need a three-bedroom unit while a seven-person household would need a five to six-bedroom unit.

Within the Chapter, Census 2010 reports large households comprise 31.4 percent of the households (FIGURE 4). The Chapter's has the highest number of large families among the regions shown. Other geographic areas are much lower, ranging from 11 to 29.4 percent.

FIGURE 4. LARGE HOUSEHOLDS



ECONOMIC CHARACTERISTICS

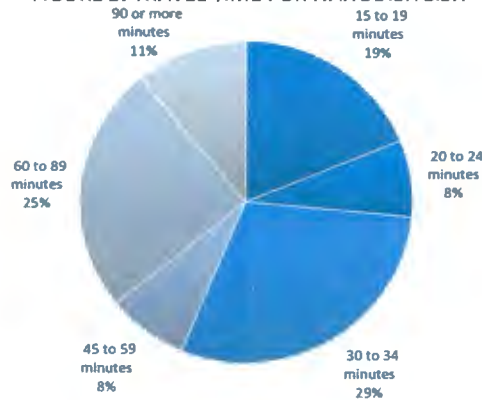
Major Employers

The Chapter house and senior Center are the major employers within the Chapter employing approximately 6 employees. The Chapter house and senior center each has three employees. Most residents work outside of the community. Crownpoint is the nearest town providing employment opportunities. Nearby communities also provide employment to some community members. Major employers throughout these areas include the BIA, Navajo Nation, Indian Health Service (IHS), Navajo Tribal Utility Authority (NTUA), and Navajo Technical University and McKinley County schools.

Travel Time to Work

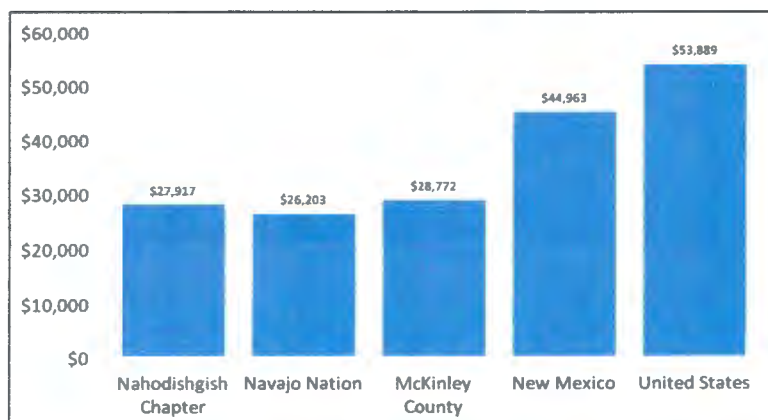
Almost half (44 percent) of the workers in Nahodishgish traveled 45 minutes or more one-way to get to work (FIGURE 5). Of the 44 percent, 25 percent traveled 60 to 89 minutes while 11 percent traveled 90 minutes or more to get to work.

FIGURE 5. TRAVEL TIME FOR NAHODISHGISH



Median Income

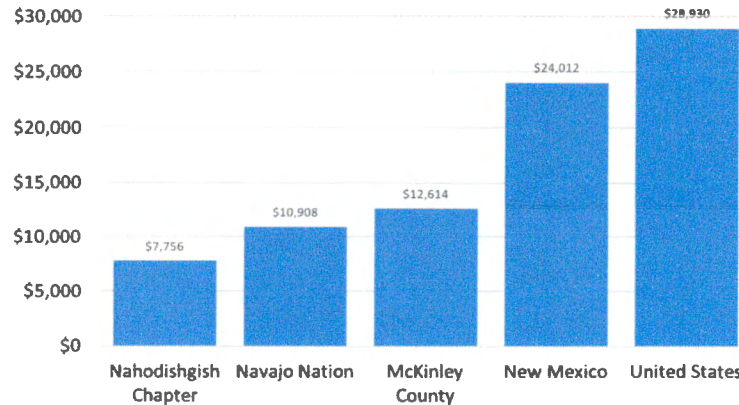
According to the American Community Survey, the median household income for Nahodishgish residents is \$27,917. Compared to other regions, this amount is slightly higher than the Navajo Nation and slightly lower than McKinley County's. State of New Mexico's and the United States' median income are much higher (FIGURE 6).



Per Capita Income

The per capita income for the for the Chapter is \$7,756, which is lower than the Navajo Nation (\$10,908) and McKinley County (\$12,614) as illustrated in FIGURE 7. The margin continues to significantly increase with the New Mexico and the United States. Nahodishgish's per capita income is four times lower than the national level.

FIGURE 7. PER CAPITA INCOME



Unemployment and Poverty

Unemployment rate on the Navajo Nation has always been high and has steadily been growing. In 2009-2010, the NNDED reported that the unemployment rate for the Navajo Nation was 21.5 percent, much higher than the U.S. Census reported state unemployment rate of 9.2 percent and national unemployment rate of 8.3 percent.

More recently, the 2011-2015 American Community Survey 5-Year Estimates reported a lower unemployment rate of 36.8 percent for Nahodishgish and 21.5 for the Navajo Nation (TABLE 7). New Mexico and United States decreased to 9.2 and 8.3 percent, respectively.

Often correlated with high rates of unemployment are high rates of poverty. An estimated 43.7 percent of the total number of families residing in Nahodishgish had income in the past 12 months below the poverty level (2011-2015 American Community Survey) as shown in TABLE 7. Poverty rates are almost as high across the broader Navajo Nation Reservation where upwards of 37.5 percent of families are classified as impoverished. Poverty levels are the lowest for New Mexico and the United States.

TABLE 7. UNEMPLOYMENT RATE AND POVERTY LEVEL

	Unemployment Rate	Poverty Level
United States	8.3%	11.3%
New Mexico	9.2%	15.9%
Navajo Nation	21.5%	37.5%
Nahodishgish Chapter	36.8%	43.7%
McKinley County	15.5%	32.3%

HOUSING CHARACTERISTICS

Housing Count

The number of total housing units within the Chapter decreased from 155 to 140 (-9.7 percent change) as shown in TABLE 8. The Navajo Nation also showed decrease of 6.9 percent. The decreases are possibly due to the census criteria for counting homes. Sheds and shacks used commonly seen on family homesteads on the Navajo Nation were counted as housing units in 2000 while they were excluded in 2010. McKinley County also reported a decrease of 3.5 percent in the number of housing units. The state and national areas showed substantial increases ranging from 13.6 to 15.5 percent.

TABLE 8. HOUSING COUNT

	2000	2010	Percent Change
United States	115,904,641	131,704,730	13.6%
New Mexico	780,579	901,388	15.5%
Navajo Nation	68,744	63,998	-6.9%
Nahodishgish	155	140	-9.7%
McKinley County	26,718	25,813	-3.4%

Housing Type and Median Home Price

TABLE 9 presents housing types and median home value for various jurisdictions according to the American Community Survey for 2011 through 2015. The median home value for the Chapter is high compared to the Navajo Nation. The reason might be due to the small number of homes compared to the other areas. Also, the Navajo Housing Authority subdivision might be contributing to the high home value for Nahodishgish. Only eight percent of the housing units are mobile home units in the Chapter. According the areas listed in the table, Navajo Nation and McKinley County have the highest percentage of mobile homes at 21.2 percent and 25.2 percent, respectively.

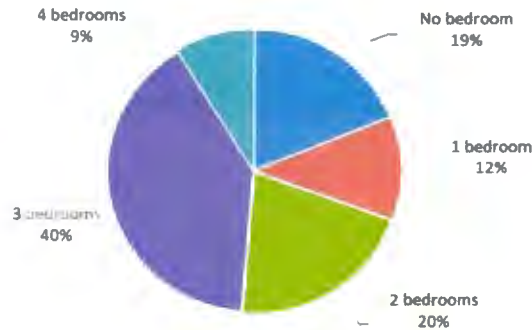
The trend for the states and the U.S have few mobile homes and considerable higher home values. The median home value for McKinley County is \$68,300). The Chapter showed a higher home value (\$80,000). The Chapter's home value is higher than the Navajo Nation and McKinley County.

TABLE 9. TYPE OF HOUSING UNIT AND MEDIAN HOME VALUE

	1-Unit, Detached	Mobile Home Unit	Median Home Value
United States	82,191,994 (61.6%)	8,478,334 (6.4%)	\$178,600
New Mexico	587,227 (64.6%)	151,521 (16.7%)	\$160,300
Navajo Nation	48,551 (72.3%)	14,222 (21.2%)	\$59,400
Nahodishgish Chapter	147 (91.3%)	13 (8.1%)	\$80,000
McKinley County	16,572 (64.3%)	6,499 (25.2%)	\$68,300

FIGURE 8 shows the distribution of the housing units based on number of bedrooms for Nahodishgish Chapter. Most of the houses have 3-bedrooms followed by homes with either 2-bedrooms or no bedrooms. Homes with 1-bedroom make 12 percent of the housing units. The 4-bedroom units drops to 9 percent.

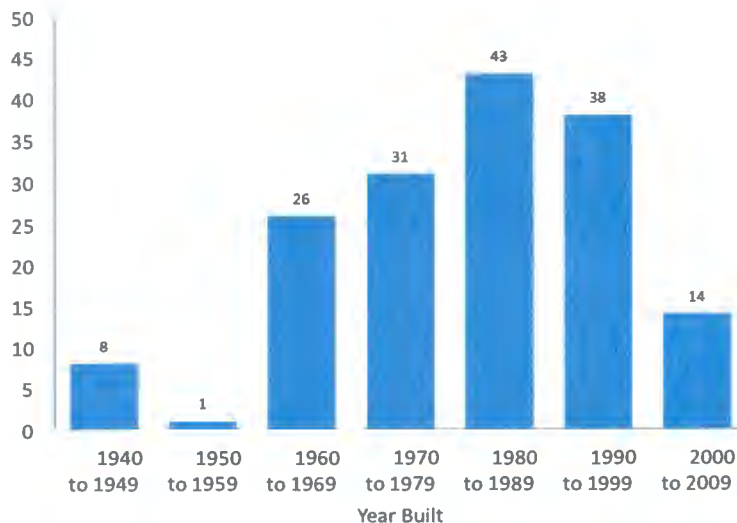
FIGURE 8. NUMBER OF BEDROOMS



Housing Condition

The condition of housing is generally characterized by the age of the homes and the availability of basic facilities, such as plumbing and heating. The majority of houses in the Chapter were built between 1960 to 1999 and a few much earlier than that (FIGURE 9). No houses have been built since 2009.

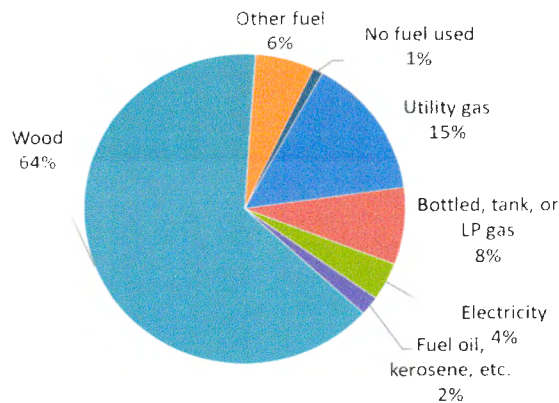
FIGURE 9. YEAR HOUSING BUILT

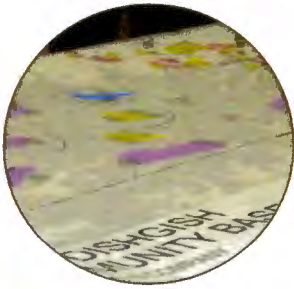


Complete plumbing facilities are defined as hot and cold piped water, a bathtub or shower, and a flush toilet. 18 percent of the Chapter's homes lack complete plumbing facilities. Similarly, 21 percent of the Chapter's homes lack complete kitchen facilities. 31 percent of the housing units in the Chapter have no land line telephone service.

FIGURE 10 estimates the type of heating fuel used within Nahodishgish. According to the 2011-2015 American Community Survey 5-Year Estimates, for the Chapter, 64 percent rely on wood for heating. 15 percent use natural gas, 8 percent use propane and 4 percent have electric heaters.

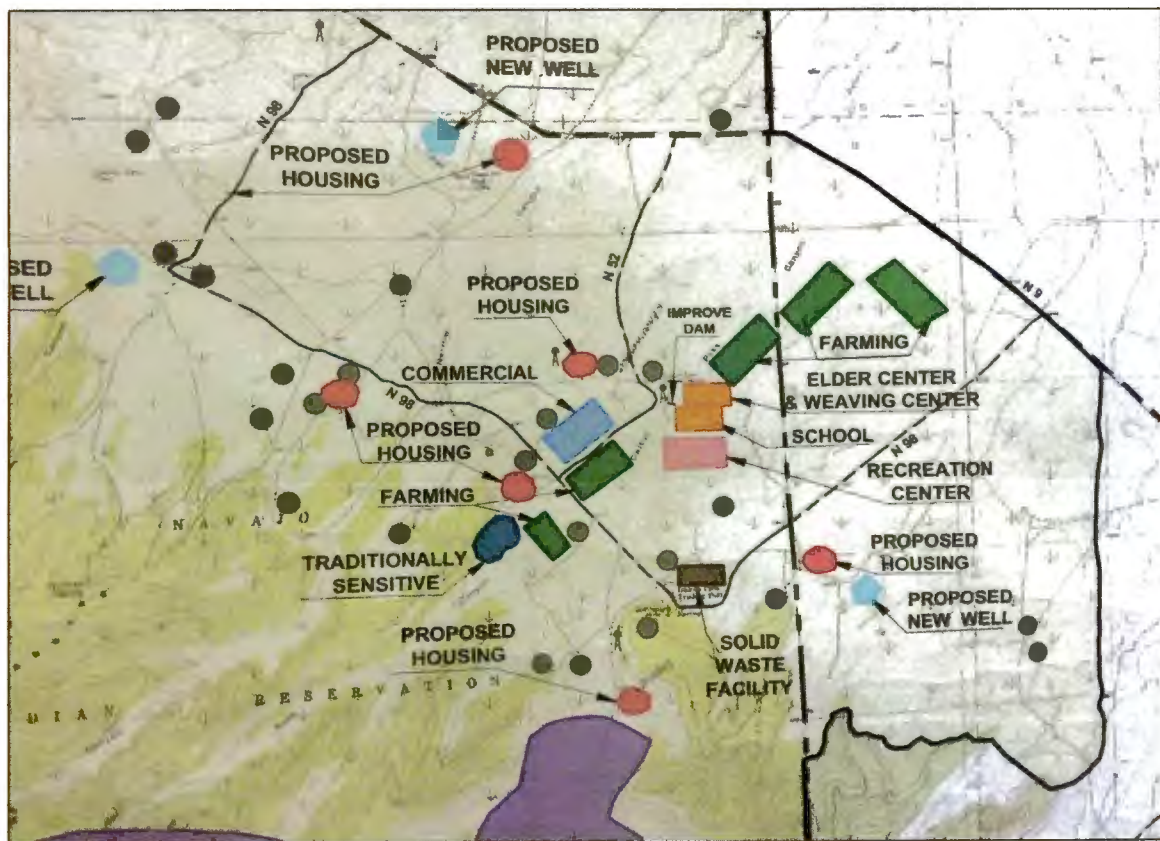
FIGURE 10. HOUSE HEATING FUEL





5. LAND USE

The land use categories reflect the vision, needs and desires while providing guidance for determining appropriate land uses. The following descriptions provide information about each land use element. The existing and future land uses for the Chapter are shown in MAP 10. The map indicates the intended predominate function, density and characteristic use of land. It does not reflect the intended zoning of individual areas, but rather generalize desired future land uses. The map suggests an overall mix of densities and should not be read as tying individual projects to density designations. To achieve appropriate balance among the goals promoted by the land use plan, flexibility in specific decisions is required. A photo of the Cross Canyon Loop road land uses is shown here.



RESIDENTIAL HOUSING

Residential land use includes scattered housing and subdivisions. Scattered housing sites are typically one-acre home sites. Multiple scattered housing sites generally close together make up a cluster. Subdivisions on the other hand, provide a tighter housing arrangement with more houses per acre. Subdivisions are typically a tighter planned arrangement of homes. The subdivisions on the reservation are most likely owned and operated by the BIA, IHS, or NHA.

Existing Residential Housing

Housing in the Chapter includes both scattered housing and one subdivision. Predominately, scattered houses are grouped in small family clusters along either side of N9 and pipeline road. Most are located near the Chapter house and along loop road; however, some others are more isolated. The NHA housing subdivision known as Morgan Estates comprises 46 houses and is located along the eastern side of N52 and north of the Chapter house. They are mutual help and public rentals housing units.



SCATTERED HOMES

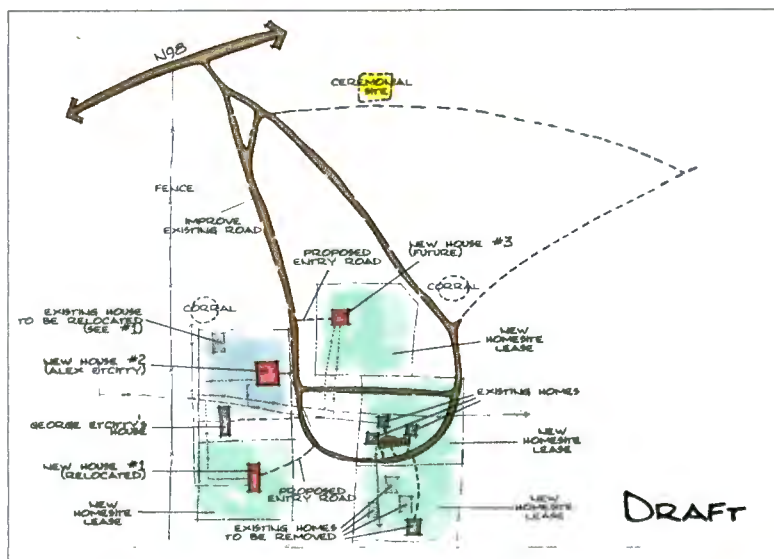


NHA HOUSING SUBDIVISION – MORGAN ESTATES

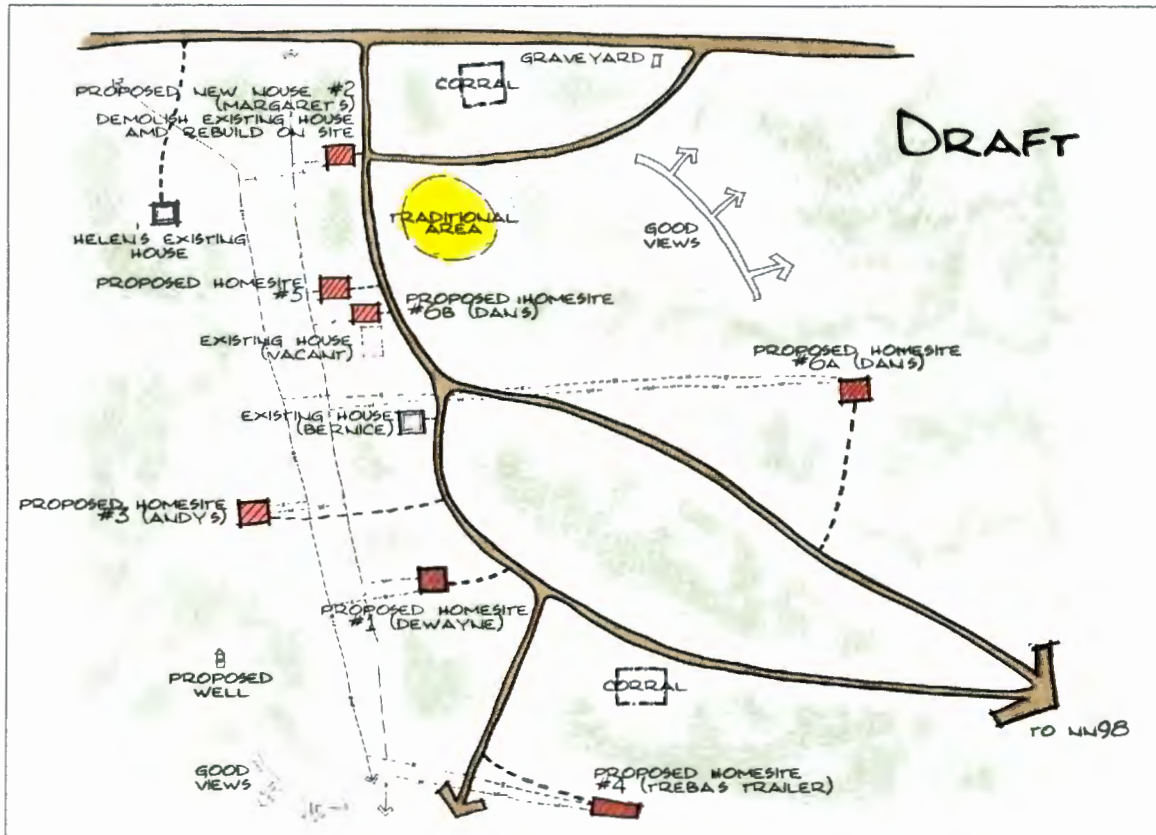
Proposed Residential Housing

Housing is important to the Chapter, with the main concern being that there is sufficient, safe, economical, quality housing that is esthetically attractive housing within the Chapter for families to be able to live near each other. Community members expressed a need for small clusters of family homes. It is envisioned that scattered housing would be near existing family clusters or along utility corridors. The scattered housing arrangement is more conducive to the lifestyles of many of the community members, especially those whose livelihood is farming or grazing.

The CLUPC intends to work with the families to identify future housing over the next five years by creating site plans as illustrated to the right and on the next page. The soil report for dwellings (previously mentioned as Appendix B) will be used to help the families identify future housing sites. In addition, educational and informational sessions are to be conducted to help



community members better understand land use planning, compliance with regulations and optimum siting of residential units.



COMMUNITY FACILITIES

This category designates public land uses, including schools, fire and police stations, museums, governmental offices, utility stations, and hospitals. Community facilities provide a valuable service to the community, offering services to benefit and serve the entire Chapter. Typically, these facilities on the Navajo Nation are public amenities, usually operated and maintained by the Navajo Nation and include places like the Chapter house, which provides a central location for meetings, meals and community gatherings. Other community facilities may include senior centers and churches. In addition, schools are an important community facility to have within the Chapter, providing children of the community with a suitable and well-located educational facility.

Existing Community Facilities

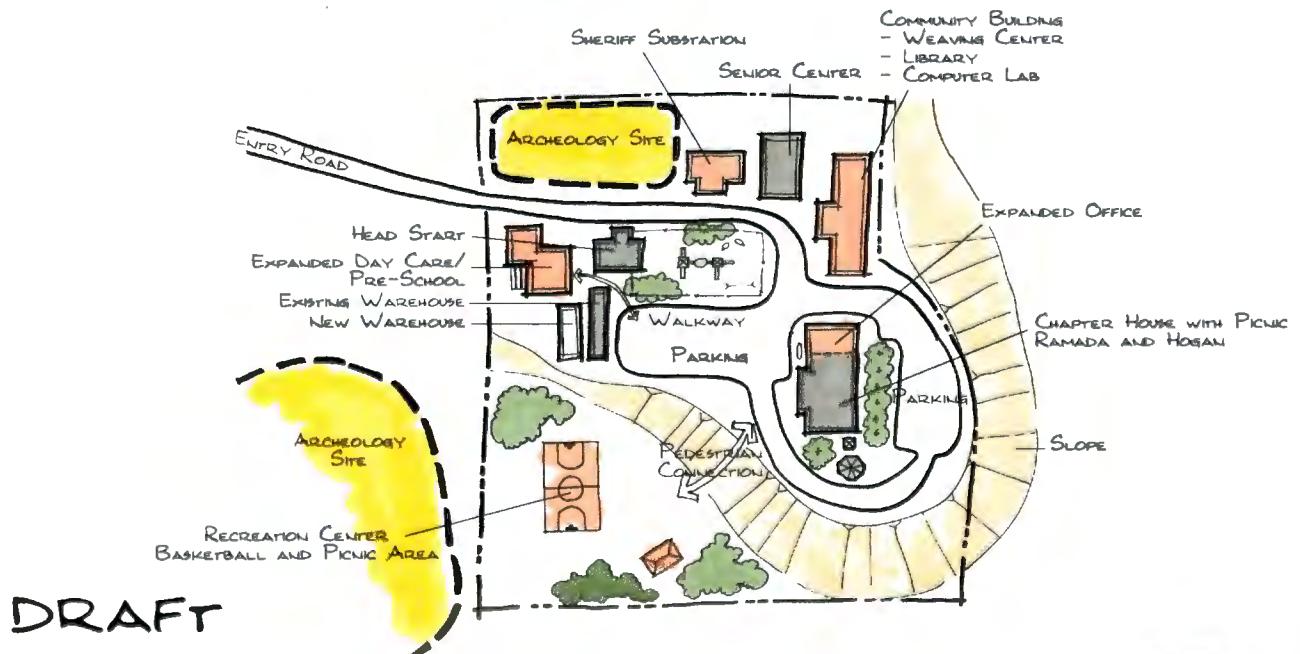
Existing community facilities are located at the Chapter house compound at the southern end of NHA subdivision along N52. The Chapter house compound comprises five acres; this is a central location with access to all community members. The area consists of facilities that provide services to the greater Chapter; they include the chapter house, warehouse, senior center and preschool. A church is located west of the Chapter house and the sewer lagoon to the east.

IHS provides health care for Native Americans; however, there are no facilities within the Chapter. The nearest hospital is in Crownpoint. A Community Health Worker (CHW) is based at the Chapter house and provides general in-home care and health education.



Proposed Community Facilities

The Chapter desires to provide more facilities and services for the Chapter and to keep these facilities located in a centralized, easily accessible location. The primary areas designated for community facilities are near the Chapter house and at the junction of N52 and N9as shown on MAP 11. Locating community facilities at these two locations provide centralized areas that are highly visible and easily accessible. To further assure easy access, the community has expressed a desire to provide pavement around the existing Chapter house and any associated community facilities (MAP 12). A draft conceptual plan for the chapter house compound is illustrated below.



COMMERCIAL

The commercial category is established to provide areas in which business may be conducted, goods sold and distributed, and services rendered, and to provide for public activities and other activities which support retail and business functions. These may include such uses as grocery stores, trading posts, or even areas for local vendors and artists to sell their wares to tourists. This land use is important to the economic development of the Chapter as it provides places for businesses. Businesses which provide jobs and create an economic base and potential revenue, for the Chapter through sales tax or business leases. Local businesses also let community residents spend money “locally” rather than in communities further away. Commercial land use does not include more industrial business such as heavy manufacturing or mining.

Existing Commercial Development

There are no existing commercial businesses in the Chapter. In 1927, Jesse Dalton opened a trading post in the southeastern part of the Chapter. Around 1958, W.A. (Bill) and Lavone Palmer bought Dalton Pass Trading Post and hired Al and Ivy Ashcroft to run it. Eventually the trading post went out of business and the store no longer exist as shown in the photo. (<http://library.nau.edu/speccoll/exhibits/traders/oralhistories/palmer.html> accessed June 29,2017).



Proposed Commercial Development

The community designated areas at the junction of N9 and N52 (MAP 13). This site is within the 750 feet corridor along the main highway and could serve as the gateway to the Navajo Nation for tourism as well as serving local people. This location allows for easy access and high visibility which is necessary for a commercial business.

Tourism development and convenient services can be offered at the designated areas for commercial and mixed used. A convenience store and laundromat, will provide both a retail outlet for goods and a necessary service for community members in a location that would be closer than nearby Crownpoint or Gallup.

Another commercial goal identified is planning for a casino in the region. A casino would also be a means of bringing regional tourism dollars into the Chapter. No location for a casino has been identified. Possible locations include N9,

INDUSTRIAL

Industrial development is another way to enhance economic development. Industrial development typically facilitates businesses connected with the production, manufacture, or construction of a product or a range of products. Typical industrial development may include mining, manufacturing or warehousing. Industrial land use may also include uses needed for providing public utilities, such as water treatment, power lines or power plants, and other utilities.

Industrial development provides jobs for the Chapter and can bring revenue from user fees, sales tax, or other mechanisms.

Existing Industrial Development

Currently, there is no industrial development within the Chapter. In the late 1990s, an in-situ leach (ISL) mine was proposed to extract uranium. Legal challenges brought uranium mining permits into question and the project never materialized.

Community members also indicated the presence of a coal mine in the 1950s to the 1960s. The mine was located approximately three miles southeast of the Chapter house. Some of the coal extracted from the mine was used for the heating (coal-fired furnaces) at nearby schools during that time. Today, a sign posted by Navajo AML/UMTRA Department stands at the coal mining location. This mine was part of the Chacoan I AML Reclamation Project in 2014 to 2015.



Proposed Industrial Development

There are no proposed industrial development areas within the Chapter. However, the Chapter is open to discussion about any possibilities.

RECREATION

Recreation facilities provide places for play, relaxation and fitness. The areas designated as recreation on this plan are intended to be more structured recreation facilities than those provided by trails in the open space. These facilities may include both indoor and outdoor facilities. Outdoor facilities may include parks, playgrounds, ball fields, rodeo or equestrian facilities, or golf courses, and may include hiking and biking trails. Indoor facilities may include gymnasiums, fitness centers, or a multi-use recreation center which may include several recreational elements.

Existing Recreation

Dirt trails exist within the Chapter. People use them to walk, travel from place to place, or they are used by livestock. In addition, there are several arenas that may be used for rodeo type events.



Proposed Recreation

Proposed recreation sites for the Chapter lie in the southwest section of the Chapter. Here proposed recreation sites such as two picnic areas, a golf course and a walking trail lie among vast open spaces that the Chapter has expressed a desire to preserve.

The Chapter has also expressed a desire to establish rodeo grounds and fairgrounds, and create a recreation center with ball fields and courts. No location for these recreational objectives has been identified.

OPEN SPACE

Areas designated as open space are those areas that the community has identified as having special significance, and are areas that should be preserved in their natural state without development. Open space especially in an area where there is so much existing open space ensure significant areas are protected and preserved for the future. Well planned open space enhances quality of life. Types of open space include natural, functional and restored. Natural areas typically are open spaces with natural vegetation or other features that has not been altered by people. Functional open spaces include recreational areas such as parks and ball fields. Restored areas are those areas that have been degraded, but can be restored to a condition that existed sometime in the past. Riparian habitat is one example of a type of habitat that can be restored, creating quality open space.

Existing Open Space

Environmentally sensitive areas and grazing areas are open spaces in the Chapter. Designation was made in the previous certified land use plan. All identified open space sites lie among the hills and canyons located in southwest portion of the Chapter. One site, in particular, is located along Dalton Pass Canyon, an area of special significance to the members of the Chapter and they have identified a desire to preserve it.



It should also be noted that areas designated as ceremonial or cultural sites should also remain undeveloped and should be offered the same respect and protection as open space sites.

Proposed Open Space

Because of the natural beauty, the Chapter recognizes the importance of preserving areas of special significance from development. The Chapter also recognizes the potential to attract tourists by offering them the opportunity to enjoy the mountain and valley scenery this area has to offer. By preserving areas as open space, the community will preserve this valuable resource, while also respecting the natural beauty and importance of the natural land.

GRAZING

Ranching and sheepherding have been a major occupation and, more importantly, a way of life in the Chapter for many years. A majority of the land in the Chapter are now grazed. The suitability of land for grazing is dependent on various factors including the amount of annual precipitation, soil conditions, and the degree of slope on the land. The type of vegetation that will grow on the land is also affected by these factors. Land where the degree of slope is steep is suitable for grazing and/or open space. As open space areas, grazing lands possess scenic values except when overgrazed. Areas designated for grazing should remain primarily undeveloped to ensure that grazing rights in these areas are protected. The grazing areas should be regulated by a grazing management plan. Areas designated for grazing should not limit the use of these areas for other non-development related activities like recreation or hunting, however the primary managed land use on this land is grazing.



Traditionally, home sites and family clusters of homes are located within a grazing lease. This type of home site development is compatible with areas designated for grazing.

Existing Grazing

As noted, within the Chapter, ranching and sheepherding are primary economic activities. They are also customs that date back many years and are well embedded in the community's cultural heritage. Grazing lands exist throughout the Chapter and need to be protected from encroaching developments.



Much of the area is dedicated to grazing. Because people often want to live near to the area they graze, grazing and scattered housing are found together in many areas. In these areas, widely scattered housing is acceptable, but subdivisions or high density housing developments are not encouraged.

Proposed Grazing

The Chapter voiced a desire to preserve and protect grazing lands from encroachment by other uses since they are valued for grazing, as well as, the cultural, economic and aesthetic values they offer. Caring for the lands on a community-wide level is an important step to sustaining long-term grazing. The Chapter has



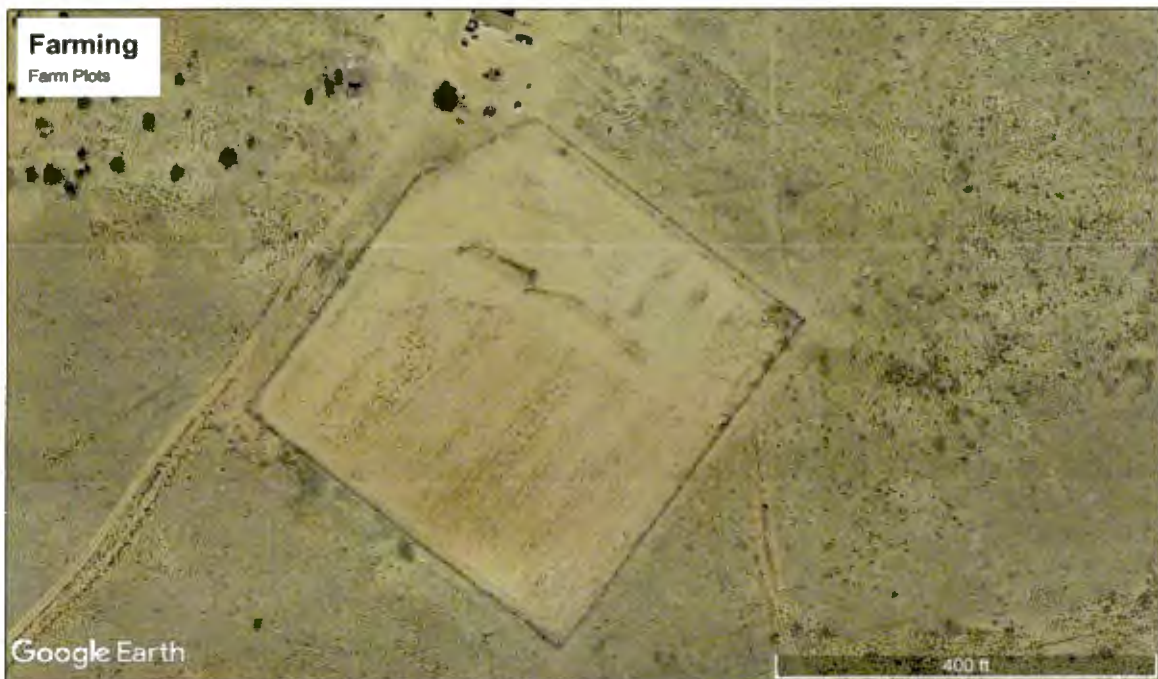
identified a desire to control erosion as one measure to maintain long-term grazing on their lands. They also would like to improve dams or add to existing small dams in order to capture storm water for livestock ponds. One dam identified as needing improvements is located near the Chapter house.

FARMING

Farming is another important way of life for some community members, though on a smaller scale than grazing. Land that has been designated for farming should be used for raising crops, either for subsistence or for market. Soils and location are prime factors in determining the suitability of land for farming. Water is also a serious consideration and limits the amount of land capable of being brought into cultivation. Farming land is typically relatively flat with healthy, rich soils, and near a natural or irrigated water source.

Existing Farming

In the past and to date, many families keep small farming plots for themselves as depicted in the photo below. Crops of the community include squash, corn, melons, and alfalfa. Presently all farms use rain, runoff water or hauled water as the source for farm water. There are several small farm fields located in family cluster areas.

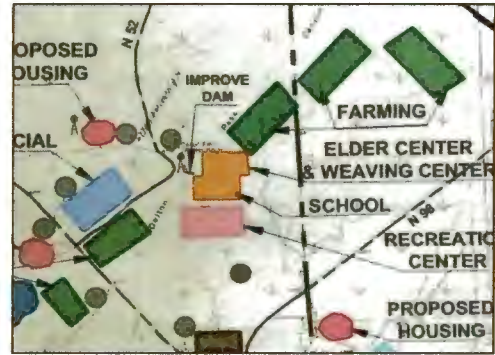


Proposed Farming

Chapter members expressed a desire to develop agriculture to provide needed crops to its members, specifically to grow hay. There are five specific areas designated for farming, all located close to the Chapter house. However, this does not mean that small plots of land cannot be used for growing crops outside of these areas. If a family wants to grow a cornfield or a garden near

their home, this would be acceptable within the plan. However, large tracts of farmland should be confined to those areas designated as farm land.

The source for farm water is proposed to be from Navajo-Gallup Water line Project. The Chapter would like to see abandoned wells in the area re-established as a water source for agriculture.



CULTURALLY SIGNIFICANT SITES

Culturally significant areas include prehistoric and historic sites, as well as traditional cultural objects, structures, locations or natural features. Cultural resource compliance on the Navajo Nation is mandated by the National Environmental Policy Act and by the National Historic Preservation Act (Sections 106 and 110).

The National Environmental Policy Act of 1969 (NEPA) requires environmental impact statements on cultural as well as natural resources affected by proposed projects. The National Historic Preservation Act of 1966 (NHPA), as amended, is one of the most important pieces of cultural resource legislation passed by Congress (Tucker 2000). This act provides protection and preservation of significant cultural properties.

Other relevant cultural resource legislation includes the Antiquities Act of 1906, the Historic Sites Act of 1935, the Archaeological Resource Protection Act of 1979 (ARPA), the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), and Executive Order 13007 (Indian Sacred Sites [1996]).

Existing Culturally Significant Sites

Previously surveyed and recorded cultural sites are scattered throughout the Chapter. Some of the sites in the Chapter include the presence of numerous artifact types and/or architecture that may indicate subsurface components might be present. The locations of individual sites are not shown on the land use plan to protect these areas; however, a large culturally sensitive area is represented on the land use plan map.



Proposed Culturally Significant Sites

The land use plan map identifies an area in the western portion of the Chapter to be recognized as a culturally significant site and proposed to remain undeveloped. Additional existing sites may be uncovered or discovered in the future. As mandated by the National Historic Preservation Act, a cultural resource inventory is required for all proposed development. The cultural resource

inventory is conducted to evaluate the potential effect of the proposed development on any significant cultural properties.

TRADITIONALLY SENSITIVE SITES

Traditionally sensitive sites are defined as those areas that have been designated by community members as areas that are either used for ceremonies, or have some traditional significance. These areas may be areas where herbs are gathered, or they may be areas that hold other historic or traditional significance for members of the community. Traditionally sensitive sites are protected under the NHPA, NAGPRA and Executive Order 13007.

Existing Traditionally Sensitive Sites

Traditionally sensitive sites are scattered throughout the Chapter. These types of sites are typically herb gathering areas. An herb gathering area exists on the mesas in the southern part of the Chapter. This area is not likely to be the only area in the Chapter where herbs are gathered; all traditionally sensitive sites should be respected whether or not they are shown.



Proposed Traditionally Sensitive Sites

The Chapter voiced a desire to preserve and protect these lands from encroachment by other uses. They also would like to honor traditional ways of life by providing a new smaller community Hogan and developing an elder's weaving center by the Chapter house.

BURIAL SITES

Burial sites are protected under the NHPA, NAGPRA and Executive Order 13007.

Existing Burial Sites

There are private burial plots (family plot) scattered throughout the Chapter. Through the land use planning process at least 11 private burial plots were noted. Additionally, many potential unmarked grave sites are present and should remain undisturbed. Local community members are aware of these burial sites and have respected them. They are not located on the land use plan map to further protect these sites.

Proposed Burial Sites

Community members desire to honor burials at private plots currently used for burials. The chapter desires families/individuals to move towards withdrawing these lands for private and/or family burial plots. However, it is an extremely difficult topic to discuss and even harder to make future plans for this particular land use. To that end, the Chapter came up with at least 11 burial sites that continue to be used to date. Proper designation and withdrawal of these lands are encouraged. Another goal of the Chapter was to establish a community cemetery; again, this discussion resulted with no land designation but ideas to work with neighboring communities might work. It is not an easy topic, thus the Chapter will continue to work on a possible solution.



LEGEND

- Electric
- Facility
- Natural Gas
- Fence
- Water
- Proposed Pavement
- Sewer

MAP 12 Chapter House Tract Development

Nahodishgish Chapter
Community-Based Land Use Plan

September 2017

Data Sources Navajo Land Department; Navajo Department of Transportation
Service Layer Credits Source Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN

NOTE: Map is for Planning Purposes Only.
DISCLAIMER: Nahodishgish Chapter and/or JJ Clack & Company
shall assume no liability for any errors, omissions, or inaccuracies
in the information.



LEGEND

	Land Use
--	Dirt Road
—	Paved Road
—	Electric
—	Natural Gas
—	Water
	Commercial
	Community Facility
	Mixed Use

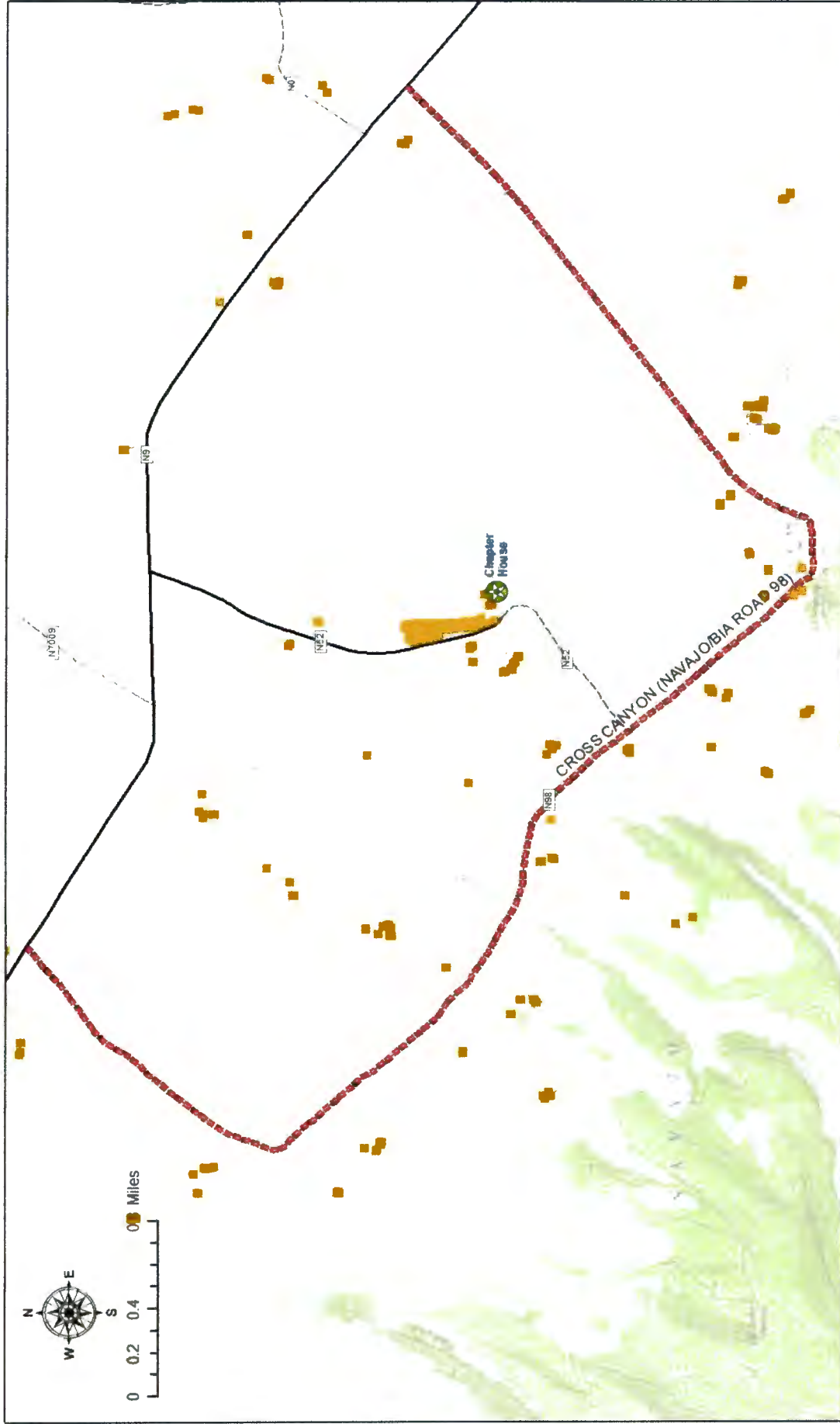
MAP 13 Proposed Development N9 & N52 Junction

Nahodishgish Chapter
Community-Based Land Use Plan

September 2017

NOTE: Map is for Planning Purposes Only.
DISCLAIMER: Nahodishgish Chapter and/or JJ Clacs & Company
shall assume no liability for any errors, omissions, or inaccuracies
in the information.

Data Sources: Navajo Land Department; Navajo Department of Transportation
Service Layer Credits: Source Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerognd, IGN,



LEGEND

- Chapter House
- Residential
- Dirt Road
- Paved Road
- Road Improvement

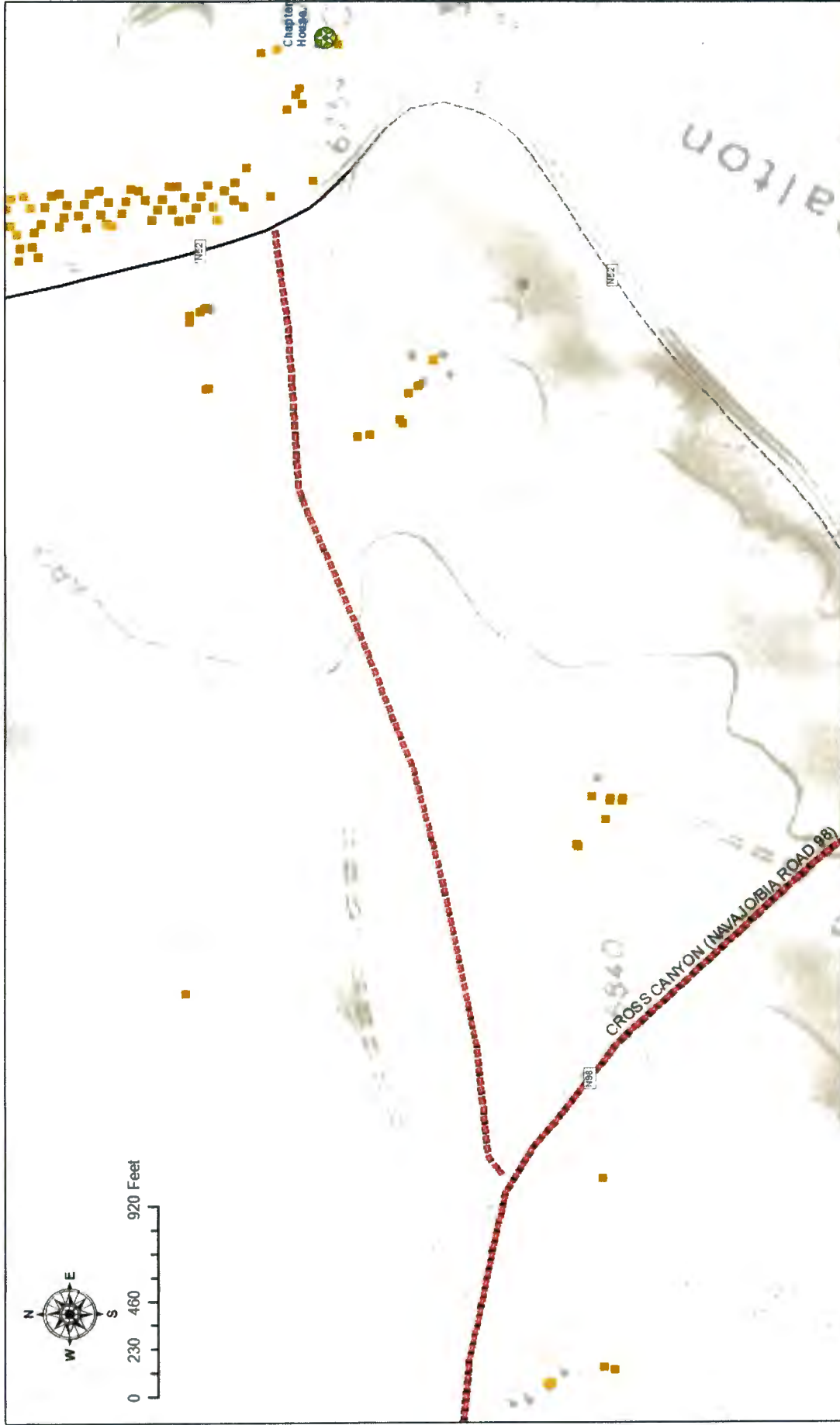
MAP 14 Loop Road Improvement

Nahodishgish Chapter
Community-Based Land Use Plan

September 2017

NOTE: Map is for Planning Purposes Only.
DISCLAIMER: Nahodishgish Chapter and/or JJ Clacs & Company
shall assume no liability for any errors, omissions, or inaccuracies
in the information.

Data Sources: Navajo Land Department; Navajo Department of Transportation
Service Layer Credits: Copyright © 2013 National Geographic Society, i-cubed



LEGEND

- Dirt Road
- Paved Road
- Chapter House
- Residential
- Proposed Road Realignment
- Road Improvement

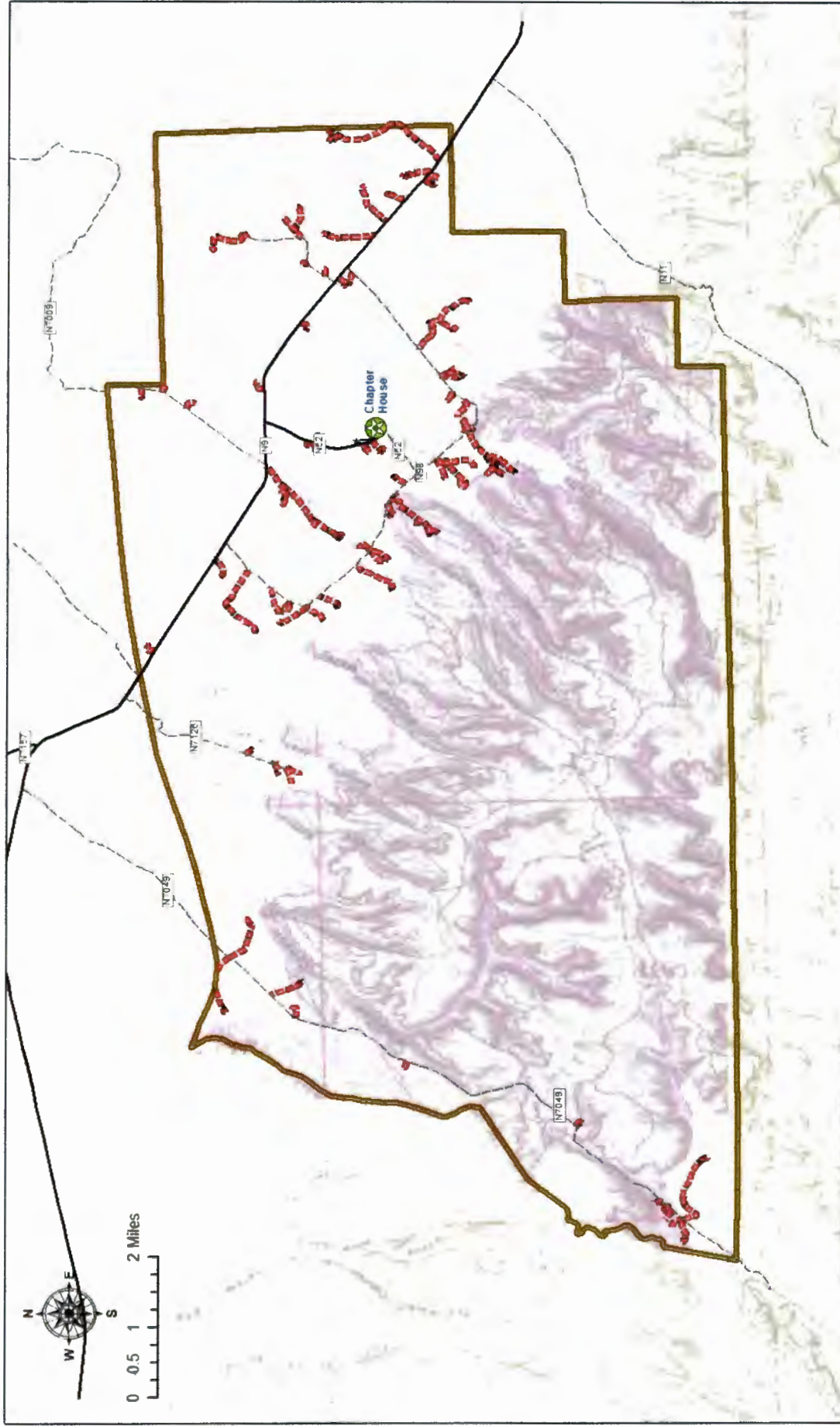
MAP 15 Proposed Road Realignment

Nahodishgiah Chapter
Community-Based Land Use Plan

September 2017

NOTE: Map is for Planning Purposes Only.
DISCLAIMER: Nahodishgiah Chapter and/or JJ Clacs & Company
shall assume no liability for any errors, omissions, or inaccuracies
in the information.

Data Sources: Navajo Land Department; Navajo Department of Transportation
Service Layer Credits: Copyright © 2013 National Geographic Society, i-cubed



MAP 16 **Proposed Driveway** **Improvements**

Nahodishgish Chapter
Community-Based Land Use Plan

September 2017

NOTE: Map is for Planning Purposes Only.
DISCLAIMER: Nahodishgish Chapter and/or JJ Clacs & Company
shall assume no liability for any errors, omissions, or inaccuracies
in the information.

- LEGEND**
- Planning Area
 - Chapter House
 - Zone 1 Envir Sensitive
 - Zone 3 Envir Sensitive
 - Proposed Driveway Improvements
 - Dirt Road
 - Paved Road

Data Sources: Navajo Land Department, Navajo Department of Transportation
Service Layer Credits: Copyright © 2013 National Geographic Society, i-cubed



6. CAPITAL IMPROVEMENT

Capital projects are planned for and built over a period of several years. They are important to the implementation of the land use plan.

Under the Navajo Nation, the Infrastructure and Capital Improvement Plan (ICIP) is a list of priority projects showing the estimated costs and source of revenue and funding for selected projects over a specific period. Eligible projects pursuant to the Navajo Nation Infrastructure and Capital Improvement Guidelines and Procedures include:

- The construction, renovation(s) repair or expansion of public facilities. i.e., Chapter House, Senior Citizens Centers, Headstart/Preschool buildings, Recreation facilities, Cemeteries, Fire Stations, Solid Waste facilities, Airports, Streets & Lights, Bridges, Warehouses and Storage buildings.
- Major equipment purchases such as road maintenance equipment, farm equipment, firefighting equipment, vehicles, school playground equipment, office equipment and furnishings that support new buildings.
- Acquisitions of manufactured buildings, aircraft, land and/or lease of thereof.
- The cost for the development of infrastructure such as electric power line, water line, sewer lagoons, waste water treatment facilities, communication and transportation systems, roads and parking lots, Erosion Control Systems, and Irrigation Systems.
- The installation of bathroom additions and electrical house wiring required as a precedent to planned or current waterline extensions or electrical powerline extensions for the same project.

Nahodishgish's ICIP is presented in TABLE 10. As indicated these projects are planned for fiscal year 2019 to 2023. The priority rank for each goal is presented in Table 11.

TABLE 10. NAHODISHGISH ICIP

Infrastructure Capital Improvement Plan FY 2019-2023													
Nahodishgish Chapter Project Summary													
ID	Year	Rank	Project Title	Category	Funded to date	2019	2020	2021	2022	2023	Total Project Cost	Amount Not Yet Funded	Phases?
26270	2019	001	N-52 Road Improvement, Phase II	Highways/Roads/Streets/Bridges	197,499	750,000	0	0	0	0	1,147,499	750,000	Yes
33532	2019	002	Chapter Handicap Rails	Adm/Service Facilities (local)	10,000	20,000	0	0	0	0	30,000	20,000	No
33533	2019	003	Cell Tower	Other	20,000	80,000	0	0	0	0	100,000	80,000	No
33534	2019	004	Rural Addressing	Highways/Roads/Streets/Bridges	5,000	50,000	0	0	0	0	55,000	50,000	No
12634	2019	005	Chapter Tract Cultural Resources Excvt	Adm/Service Facilities (local)	0	450,000	0	0	0	0	450,000	450,000	Yes
33535	2019	006	Windmill Repairs	Water Supply	20,000	10,000	0	0	0	0	30,000	10,000	No
Number of projects:					6								
Funded to date:					452,499	Year 1:	Year 2:	Year 3:	Year 4:	Year 5:	Total Project Cost:	Total Not Yet Funded:	
Grand Totals					452,499	1,360,000	0	0	0	0	1,812,499	1,360,000	

TABLE 11. NAHODISHGISH GOAL/PRIORITY RANK

2017 - Nahodishgish Chapter - Division of Community Development

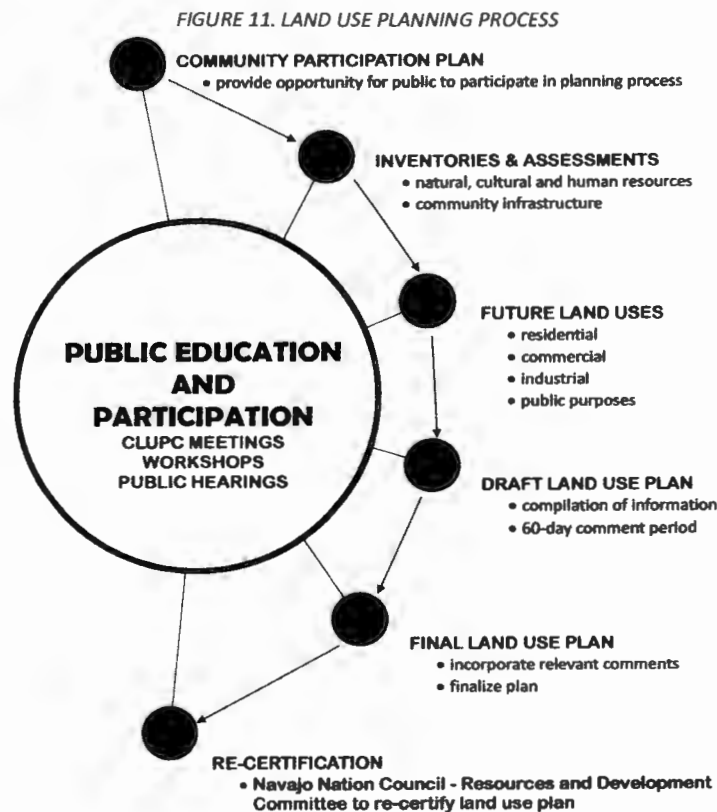
Goal/Priority Rank	Brief Description of Goals	Estimated Cost of Goal/Priority
1	Re-Certification of Community Land Use Plan and Community Assessment.	\$50,000
2	Complete renovation of Head Start.	\$20,000
3	Plan, design and construct a cell tower.	\$75,000
4	Renovation of Senior Center to bring up to standard.	\$175,000
5	Plan and design N52 Phase II, 2.5 miles	\$200,000
6	Chapter Handicap Assissibility need to bring up to standard.	\$175,000
7	Community Powerline Project	\$10,000
8	Rural Addressing and purchase road signs	\$150,000
9	Purchase chapter vehicle	\$20,000
10	Plan and contract NHA boundary fence.	\$20,000
11	Repair local 4-Windmills. 1. 15B2-Below the chapter II. 15T545-Up Nahodishgish III. 15T529-Pillow Hill IV. 15T538-On top of the hill	\$150,000
12	Earth Dam Restoration and Repairs	Unknown



7. PLAN ADMINISTRATION

PLANNING PROCESS

Several systematic steps used to identify and analyze land for affordable housing provided the framework for the planning process (FIGURE 11). The process begins with a community participation plan followed by the establishment of goals and objectives. These goals and objectives are then used to identify potential housing locations and other land uses. Subsequent steps include infrastructure and land suitability analyses on select potential housing locations only. Finally, conclusions and implementation recommendations complete the process. Each step is briefly described here. More in depth discussions are presented in later sections.



COMMUNITY PARTICIPATION PLAN

CLUPC conducted public meetings to educate the community on the status of the project at various stages as well as receive feedback about potential housing sites, prioritization and the goals and objectives among other things. Three types of public meetings were used. Meetings were opened to the public and local community members were especially encouraged and urged to attend and participate. Appendix C presents the activities conducted.

PLAN AMENDMENTS AND UPDATES

The amendment process provides an opportunity for community members, groups, organizations, departments, entities, businesses and the public to propose changes to the community-based land use plan. Proposed amendments may include changes that address changing social, economic and environmental conditions. Changes may also reflect on-going work or new information. Proposed amendments may include changes to policies, maps, appendices or other components of the land use plan.

How to Propose an Amendment

Request for amendments should be in writing to the attention of the CLUPC. Appropriate support material, if any, should be included. Contact the CLUPC if you have any questions.

Criteria for Considering an Amendment

CLUPC will evaluate proposals to amend the land use plan on an as needed basis. CLUPC will decide whether a proposed amendment is appropriate to the land use plan. Specific questions asked during this evaluation include:

- Is the proposed amendment appropriate to the land use plan?
- Consider whether changes pertain to land use planning. Some proposed amendments suggest changes to regulations or budgets while other request for specific assistance. These are more appropriately addressed at Chapter planning meetings and Regular Chapter meetings.
- Is the proposed amendment legal?
- Consider whether the proposed amendment meets existing relevant laws.

Approval of an Amendment

The CLUPC will conduct a public hearing for all proposed amendments determined to be appropriate to the community-based land use plan. At the end of the public hearing, the CLUPC shall vote to accept or reject the proposed amendment. If the proposed amendment is accepted, the CLUPC shall recommend adoption, via a resolution, of the proposed amendment to the Chapter. The chapter membership shall vote on the resolution at a duly called regular chapter meeting. Amendments or modifications shall be approved by the RDC of the Navajo Nation Council, pursuant to 2 N.N.C. Section 425(C)(2). The approval by the RDC is the formal acknowledgement of the Chapter amending the community-based land use plan.

REFERENCES

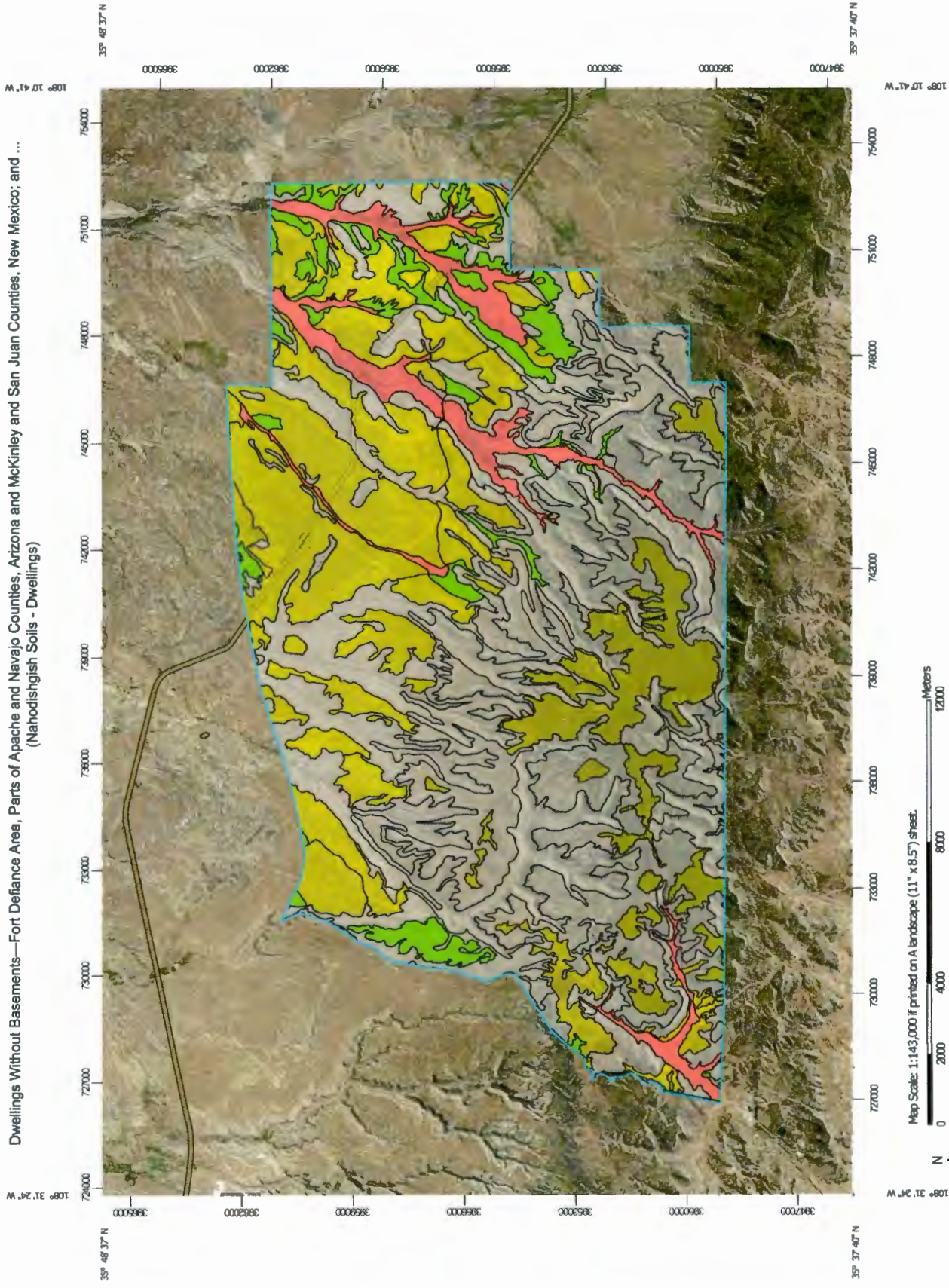
- Brown, D.E., 1994. Biotic Communities – Southwestern United States and Northwestern Mexico. University of Utah Press, 342 pp.
- Choudhary, T. 2001. Economic and Statistical Summary Report. Navajo Nation Economic Development Division. Window Rock, Arizona.
- DED, 1999. Navajo Nation Statistical data.
- Goodman, J.M., 1982. The Navajo Atlas. University of Oklahoma Press. Norman, Oklahoma.
- McKinley County, 2004. Unpublished Soil Survey of McKinley County Area, McKinley County, New Mexico. Bureau of Indian Affairs Land Inventory and Classification Office. Gallup, New Mexico.
- Navajo Division of Community Development. 1997. Chapter Images: 1996. Navajo Nation. Window Rock, Arizona.
- Navajo Department of Transportation, 1998. Navajo Nation Long Range Comprehensive Transportation Plan. Division of Community Development. Transportation Planning Program. Window Rock, Arizona.
- Navajo Department of Water Resources, City of Gallup, Northwest New Mexico Council of Governments, U.S. Bureau of Reclamation, 2001. Final Draft Technical Memorandum. The Navajo-Gallup Water Supply Project.
- Rodgers, L., 1996. Chapter Images: 1996 Edition. Division of Community Development. Window Rock, Arizona.
- Southwest Information Research, 2001. Uranium Mining. University of Arizona. Tucson, Arizona.
- Tucker, D., 2000. South TAC II SWCA Cultural Resource Report No. 99-203. An Archaeological Survey of 7,083 Acres in the Northeastern Frowler Valley on the Barry M. Goldwater Air Force Range in Southwestern Arizona. Arcadis, SWCA, Tucson, Arizona.
- U.S. Environmental Protection Agency (EPA), 2001. www.epa.gov/surf3/hucs/14080105.
- U.S. Geological Survey (USGS), 2002. Generalized Hydrogeology and Ground-Water Budget for the C Aquifer, Little Colorado River Basin and Parts of the Verde and Salt River Basins, Arizona and New Mexico - February 2002 Water-Resources Investigation Report 02-4026.
- U.S. Geological Survey (USGS), 2004. <http://nm/water/usgs/gov/drought/gwbasin.html>
- U.S. Census. 2000. 2010. 2015
- Zaman, M., 1982. Future Crownpoint Water Supply from Proposed Littlewater Well Field. Hydrogeologic Report. Indian Health Services. Window Rock, Arizona.

APPENDIX A

SOIL REPORT - DWELLINGS WITHOUT BASEMENTS



Dwellings Without Basements—Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona and McKinley and San Juan Counties, New Mexico; and ...
(Nahodishgish Soils - Dwellings)



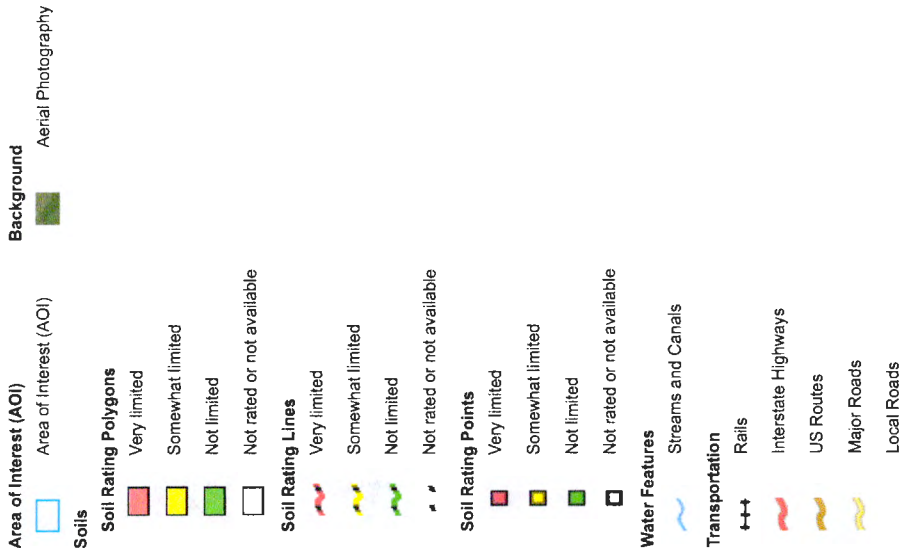
Map Scale: 1:143,000 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 12N WGS84



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: Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona and McKinley and San Juan Counties, New Mexico
Survey Area Data: Version 14, Sep 29, 2016

Soil Survey Area: McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties
Survey Area Data: Version 11, Sep 26, 2014

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

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 18, 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.

Dwellings Without Basements

Dwellings Without Basements— Summary by Map Unit — Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona and McKinley and San Juan Counties, New Mexico (AZ715)						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
25	Doakum fine sandy loam, 1 to 10 percent slopes	Not limited	Doakum (90%)		2.6	0.0%
31	Evpark-Arabrab complex, 2 to 6 percent slopes	Somewhat limited	Evpark (45%)	Depth to hard bedrock (0.46) Shrink-swell (0.22)	5.3	0.0%
76	Parkelei family-Evpark complex, 2 to 8 percent slopes	Not limited	Parkelei family (45%)		0.4	0.0%
100	Rock outcrop-Eagleye-Teesto family complex, 35 to 70 percent slopes	Not rated	Rock outcrop (40%)		3.4	0.0%
110	Skyvillage-Rock outcrop complex, 2 to 15 percent slopes	Not rated	Rock outcrop (35%)		11.8	0.0%
114	Sparank-San Mateo-Zia complex, 0 to 3 percent slopes	Not limited	Zia (20%)		5.1	0.0%
120	Toldohn-Vessilla-Rock outcrop complex, 8 to 35 percent slopes	Not rated	Rock outcrop (20%)		44.7	0.1%
Subtotals for Soil Survey Area					73.3	0.1%
Totals for Area of Interest					66,130.6	100.0%

Dwellings Without Basements— Summary by Map Unit — McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties (NM692)						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
100	Norkiki-Kimnoli complex, 1 to	Somewhat limited	Norkiki (45%)	Depth to hard bedrock (0.64)	9,717.8	14.7%

Dwellings Without Basements— Summary by Map Unit — McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties (NM692)						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
	8 percent slopes			Shrink-swell (0.06)		
110	Benally-Fruitland association, 1 to 5 percent slopes	Not limited	Fruitland (25%)		109.2	0.2%
115	Razito-Shiprock complex, 3 to 8 percent slopes	Not limited	Razito (45%)		383.5	0.6%
			Shiprock (40%)			
116	Fajada-Huerfano-Benally complex, 1 to 5 percent slopes	Somewhat limited	Huerfano (30%)	Depth to soft bedrock (0.50)	391.2	0.6%
				Shrink-swell (0.50)		
			Fajada (30%)	Shrink-swell (0.50)		
			Benally (25%)	Shrink-swell (0.50)		
118	Farb-Chipeta-Rock outcrop complex, 2 to 30 percent slopes	Not rated	Rock outcrop (25%)		3,379.2	5.1%
120	Doak-Shiprock complex, 1 to 8 percent slopes	Not limited	Shiprock (30%)		1,879.1	2.8%
125	Sanfeco fine sandy loam, 0 to 2 percent slopes	Very limited	Sanfeco (75%)	Flooding (1.00)	78.5	0.1%
				Shrink-swell (1.00)		
205	Penistaja-Tintero complex, 1 to 10 percent slopes	Not limited	Penistaja (45%)		441.6	0.7%
			Tintero (40%)			
210	Marianolake-Skyvillage complex, 1 to 8 percent slopes	Somewhat limited	Marianolake (50%)	Shrink-swell (0.50)	0.1	0.0%
220	Hagerwest-Bond fine sandy loams, 1 to 8 percent slopes	Somewhat limited	Hagerwest (50%)	Depth to hard bedrock (0.10)	4,046.5	6.1%
230	Sparank-San Mateo-Zia complex, 0 to 3 percent slopes	Very limited	Sparank (40%)	Flooding (1.00)	1,505.3	2.3%
				Shrink-swell (1.00)		
			San Mateo (35%)	Flooding (1.00)		

Dwellings Without Basements— Summary by Map Unit — McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties (NM692)						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Shrink-swell (0.47)		
			Zia (20%)	Flooding (1.00)		
			Escawetter (1%)	Flooding (1.00)		
				Depth to saturated zone (1.00)		
235	Notal-Hambum complex, 0 to 2 percent slopes	Very limited	Notal (45%)	Flooding (1.00)	2,269.2	3.4%
				Shrink-swell (0.98)		
			Hambum (40%)	Flooding (1.00)		
				Shrink-swell (0.50)		
			Escawetter (1%)	Flooding (1.00)		
				Depth to saturated zone (1.00)		
241	Mentmore loam, 1 to 8 percent slopes	Not rated	Atrac (10%)		153.3	0.2%
244	Buckle fine sandy loam, 1 to 8 percent slopes	Somewhat limited	Buckle (85%)	Shrink-swell (0.66)	264.2	0.4%
245	Buckle- Gapmesa- Barboncito complex, 1 to 6 percent slopes	Somewhat limited	Buckle (35%)	Shrink-swell (0.33)	675.6	1.0%
			Gapmesa (30%)	Depth to hard bedrock (0.35)		
				Shrink-swell (0.22)		
250	Hospah- Skyvillage- Rock outcrop complex, 2 to 35 percent slopes	Not rated	Rock outcrop (25%)		6,149.4	9.3%
255	Farview-Rock outcrop complex, 2 to 15 percent slopes	Not rated	Rock outcrop (35%)		1,107.8	1.7%
258	Eagleeye-Atchee- Rock outcrop complex, 2 to 35 percent slopes	Not rated	Rock outcrop (20%)		115.8	0.2%

Dwellings Without Basements— Summary by Map Unit — McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties (NM692)						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
290	Rock outcrop-Westmion-Skyvillage complex, 30 to 80 percent slopes	Not rated	Rock outcrop (45%)		7,824.9	11.8%
291	Rock outcrop-Eagleeye-Atchee complex, 35 to 70 percent slopes	Not rated	Rock outcrop (50%)		4,269.3	6.5%
317	Highdye-Evpark-Bryway complex, 2 to 20 percent slopes	Somewhat limited	Evpark (30%)	Depth to hard bedrock (0.90) Shrink-swell (0.50)	89.1	0.1%
332	Evpark-Arabrab complex, 2 to 6 percent slopes	Somewhat limited	Evpark (50%)	Shrink-swell (0.50) Depth to hard bedrock (0.06)	6,360.6	9.6%
350	Toldohn-Vessilla-Rock outcrop complex, 8 to 35 percent slopes	Not rated	Rock outcrop (20%)		2,944.0	4.5%
353	Mido loamy fine sand, 1 to 6 percent slopes	Not limited	Mido (90%)		90.1	0.1%
365	Vessilla-Rock outcrop complex, 2 to 15 percent slopes	Not rated	Rock outcrop (35%)		11,038.0	16.7%
404	Rock outcrop-Techado-Stozuni complex, 5 to 60 percent slopes	Not rated	Rock outcrop (35%)		152.7	0.2%
555	Parkelei-Evpark fine sandy loams, 2 to 8 percent slopes	Not limited	Parkelei (45%)		621.1	0.9%
Subtotals for Soil Survey Area					66,057.3	99.9%
Totals for Area of Interest					66,130.6	100.0%

Dwellings Without Basements— Summary by Rating Value		
Rating	Acres in AOI	Percent of AOI
Somewhat limited	21,550.5	32.6%

Dwellings Without Basements— Summary by Rating Value		
Rating	Acres in AOI	Percent of AOI
Very limited	3,853.0	5.8%
Not limited	3,532.6	5.3%
Null or Not Rated	37,194.4	56.2%
Totals for Area of Interest	66,130.6	100.0%

Description

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Least Limiting

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Least Limiting" is suitable only for attributes that correspond to a programmatically generated soil interpretation. Such an interpretation attempts to determine if a soil is suitable for a particular use. The results for such an interpretation can be ranked from least limiting (or most suitable) to most limiting (or least suitable). For this aggregation method, the least limiting result among all components of the map unit is returned. The result returned by this aggregation method may or may not represent the dominant condition throughout the map unit. The result may well be based on the limitations of a map unit component of very minor extent. If one were making a decision based on this result, that decision would be based on the least conservative, or most optimistic, result.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Higher

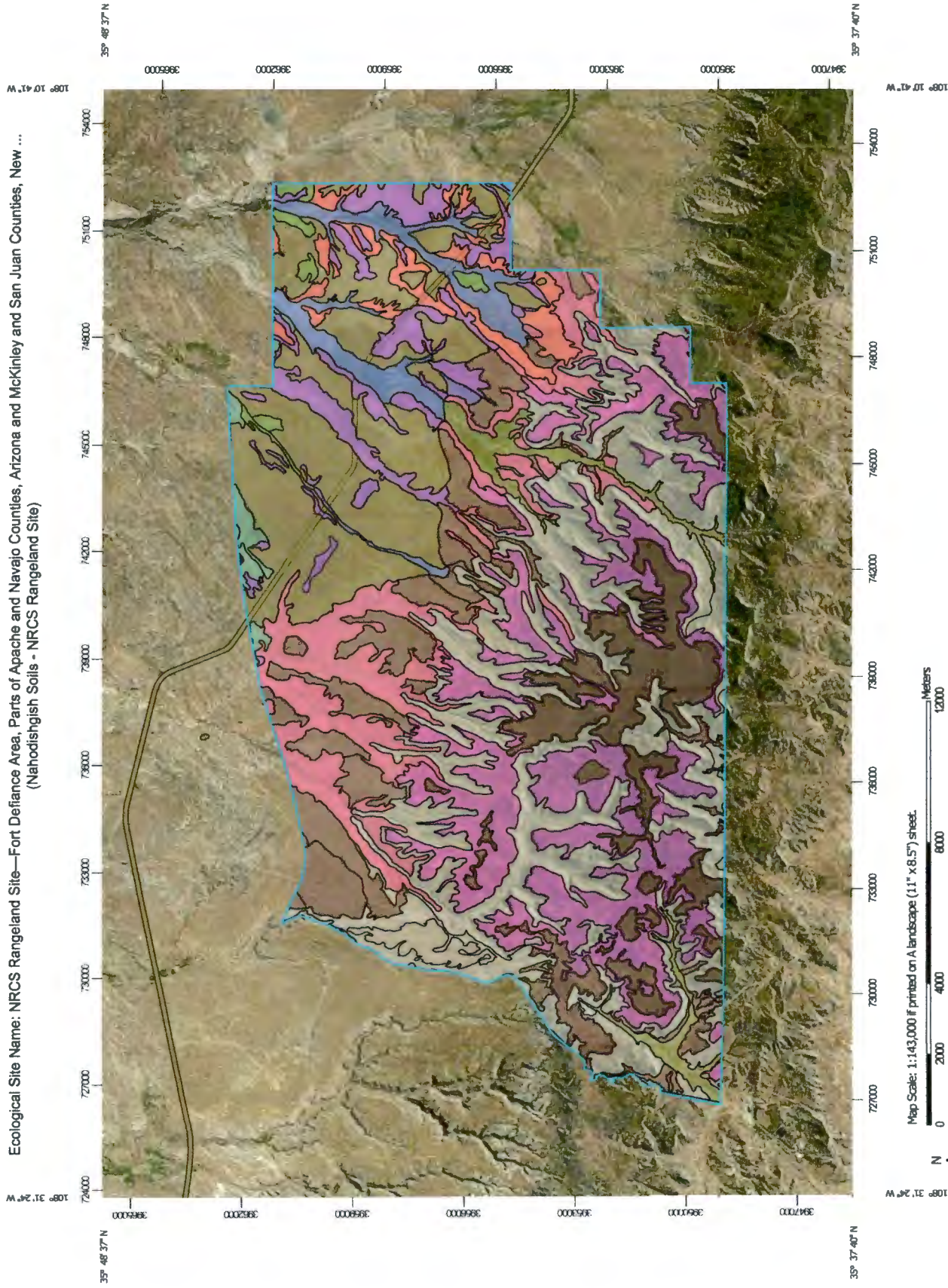
The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

APPENDIX B










































































































RANGELAND ECOLOGICAL SITE REPORT



Ecological Site Name: NRCS Rangeland Site—Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona and McKinley and San Juan Counties, New ...
(Nahodishgish Soils - NRCS Rangeland Site)



MAP LEGEND

Area of Interest (AOI)	Area of Interest (AOI)	Area of Interest (AOI)
 Area of Interest (AOI)	 Area of Interest (AOI)	 Area of Interest (AOI)
Soils	Soils	Soils
Soil Rating Polygons	Soil Rating Polygons	Soil Rating Polygons
 Clay Loam Terrace (Sodic) 7-10"	 Clay Loam Terrace (Sodic) 7-10"	 Clay Loam Terrace (Sodic) 7-10"
 Clayey	 Clayey	 Clayey
 Clayey Bottomland	 Clayey Bottomland	 Clayey Bottomland
 Deep Sand	 Deep Sand	 Deep Sand
 Loamy	 Loamy	 Loamy
 Loamy 6-10" terrace	 Loamy 6-10" terrace	 Loamy 6-10" terrace
 Loamy Upland 7-10	 Loamy Upland 7-10	 Loamy Upland 7-10
 Loamy Upland 10-14" p.z.	 Loamy Upland 10-14" p.z.	 Loamy Upland 10-14" p.z.
 Loamy Upland 6-10"p.z. sodic (Provisional)	 Loamy Upland 6-10"p.z. sodic (Provisional)	 Loamy Upland 6-10"p.z. sodic (Provisional)
 Loamy Wash 10-14" p.z.	 Loamy Wash 10-14" p.z.	 Loamy Wash 10-14" p.z.
 Sandstone Upland 6-10" p.z.	 Sandstone Upland 6-10" p.z.	 Sandstone Upland 6-10" p.z.
 Sandy Loam Upland 6-10"	 Sandy Loam Upland 6-10"	 Sandy Loam Upland 6-10"
 Sandy Upland 6-10"	 Sandy Upland 6-10"	 Sandy Upland 6-10"
 Sandy Upland 13-17" p.z.	 Sandy Upland 13-17" p.z.	 Sandy Upland 13-17" p.z.
 Moderately Deep	 Moderately Deep	 Moderately Deep
 Shale Hills 10-14"p.z. (Provisional)	 Shale Hills 10-14"p.z. (Provisional)	 Shale Hills 10-14"p.z. (Provisional)
 Not rated or not available	 Not rated or not available	 Not rated or not available
Soil Rating Lines	Soil Rating Lines	Soil Rating Lines
 Clay Loam Terrace (Sodic) 7-10"	 Clay Loam Terrace (Sodic) 7-10"	 Clay Loam Terrace (Sodic) 7-10"
 Clayey	 Clayey	 Clayey
 Clayey Bottomland	 Clayey Bottomland	 Clayey Bottomland
 Deep Sand	 Deep Sand	 Deep Sand
 Loamy	 Loamy	 Loamy
 Loamy 6-10" terrace	 Loamy 6-10" terrace	 Loamy 6-10" terrace
 Loamy Upland 7-10	 Loamy Upland 7-10	 Loamy Upland 7-10
 Loamy Upland 10-14" p.z.	 Loamy Upland 10-14" p.z.	 Loamy Upland 10-14" p.z.
 Loamy Upland 6-10"p.z. sodic (Provisional)	 Loamy Upland 6-10"p.z. sodic (Provisional)	 Loamy Upland 6-10"p.z. sodic (Provisional)
 Loamy Wash 10-14" p.z.	 Loamy Wash 10-14" p.z.	 Loamy Wash 10-14" p.z.
 Sandstone Upland 6-10" p.z.	 Sandstone Upland 6-10" p.z.	 Sandstone Upland 6-10" p.z.
 Sandy Loam Upland 6-10"	 Sandy Loam Upland 6-10"	 Sandy Loam Upland 6-10"
 Sandy Upland 6-10"	 Sandy Upland 6-10"	 Sandy Upland 6-10"
 Sandy Upland 13-17" p.z.	 Sandy Upland 13-17" p.z.	 Sandy Upland 13-17" p.z.
 Moderately Deep	 Moderately Deep	 Moderately Deep
 Shale Hills 10-14"p.z. (Provisional)	 Shale Hills 10-14"p.z. (Provisional)	 Shale Hills 10-14"p.z. (Provisional)
 Not rated or not available	 Not rated or not available	 Not rated or not available

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: <http://websoilsurvey.sc.egov.usda.gov>
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: Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona and McKinley and San Juan Counties, New Mexico
Survey Area Data: Version 14, Sep 29, 2016

Soil Survey Area: McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties
Survey Area Data: Version 11, Sep 26, 2014

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

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 18, 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.

Ecological Site Name: NRCS Rangeland Site

Ecological Site Name: NRCS Rangeland Site— Summary by Map Unit — Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona and McKinley and San Juan Counties, New Mexico (AZ715)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
25	Doakum fine sandy loam, 1 to 10 percent slopes	Loamy Upland 10-14" p.z.	2.6	0.0%
31	Evpark-Arabrab complex, 2 to 6 percent slopes		5.3	0.0%
76	Parkelei family-Evpark complex, 2 to 8 percent slopes		0.4	0.0%
100	Rock outcrop-Eagleeye-Teesto family complex, 35 to 70 percent slopes		3.4	0.0%
110	Skyvillage-Rock outcrop complex, 2 to 15 percent slopes		11.8	0.0%
114	Sparank-San Mateo-Zia complex, 0 to 3 percent slopes	Loamy Wash 10-14" p.z.	5.1	0.0%
120	Toldohn-Vessilla-Rock outcrop complex, 8 to 35 percent slopes		44.7	0.1%
Subtotals for Soil Survey Area			73.3	0.1%
Totals for Area of Interest			66,130.6	100.0%

Ecological Site Name: NRCS Rangeland Site— Summary by Map Unit — McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties (NM692)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
100	Norkiki-Kimnoli complex, 1 to 8 percent slopes	Sandy Loam Upland 6-10"	9,717.8	14.7%
110	Benally-Fruitland association, 1 to 5 percent slopes	Loamy Upland 6-10"p.z. sodic (Provisional)	109.2	0.2%
115	Razito-Shiprock complex, 3 to 8 percent slopes	Sandy Upland 6-10"	383.5	0.6%
116	Fajada-Huerfano-Benally complex, 1 to 5 percent slopes	Loamy Upland 6-10"p.z. sodic (Provisional)	391.2	0.6%
118	Farb-Chipeta-Rock outcrop complex, 2 to 30 percent slopes	Sandstone Upland 6-10" p.z.	3,379.2	5.1%
120	Doak-Shiprock complex, 1 to 8 percent slopes	Loamy Upland 7-10	1,879.1	2.8%

Ecological Site Name: NRCS Rangeland Site— Summary by Map Unit — McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties (NM692)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
125	Sanfeco fine sandy loam, 0 to 2 percent slopes	Loamy 6-10" terrace	78.5	0.1%
205	Penistaja-Tintero complex, 1 to 10 percent slopes	Loamy	441.6	0.7%
210	Marianolake-Skyvillage complex, 1 to 8 percent slopes	Loamy	0.1	0.0%
220	Hagerwest-Bond fine sandy loams, 1 to 8 percent slopes	Loamy	4,046.5	6.1%
230	Sparank-San Mateo-Zia complex, 0 to 3 percent slopes	Clayey Bottomland	1,505.3	2.3%
235	Notal-Hambum complex, 0 to 2 percent slopes	Clay Loam Terrace (Sodic) 7-10"	2,269.2	3.4%
241	Mentmore loam, 1 to 8 percent slopes	Loamy	153.3	0.2%
244	Buckle fine sandy loam, 1 to 8 percent slopes	Loamy	264.2	0.4%
245	Buckle-Gapmesa-Barboncito complex, 1 to 6 percent slopes	Loamy	675.8	1.0%
250	Hospah-Skyvillage-Rock outcrop complex, 2 to 35 percent slopes	Shale Hills 10-14"p.z. (Provisional)	6,149.4	9.3%
255	Farview-Rock outcrop complex, 2 to 15 percent slopes		1,107.8	1.7%
258	Eagleeye-Atchee-Rock outcrop complex, 2 to 35 percent slopes	Clayey	115.8	0.2%
290	Rock outcrop-Westmion-Skyvillage complex, 30 to 80 percent slopes		7,824.9	11.8%
291	Rock outcrop-Eagleeye-Atchee complex, 35 to 70 percent slopes		4,269.3	6.5%
317	Highdye-Evpark-Bryway complex, 2 to 20 percent slopes	Loamy	89.1	0.1%
332	Evpark-Arabrab complex, 2 to 6 percent slopes	Loamy	6,360.6	9.6%
350	Toldohn-Vessilla-Rock outcrop complex, 8 to 35 percent slopes		2,944.0	4.5%

Ecological Site Name: NRCS Rangeland Site— Summary by Map Unit — McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties (NM692)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
353	Mido loamy fine sand, 1 to 6 percent slopes	Deep Sand	90.1	0.1%
365	Vessilla-Rock outcrop complex, 2 to 15 percent slopes	Sandy Upland 13-17" p.z. Moderately Deep	11,038.0	16.7%
404	Rock outcrop-Techado-Stozuni complex, 5 to 60 percent slopes		152.7	0.2%
555	Parkelei-Evpark fine sandy loams, 2 to 8 percent slopes		621.1	0.9%
Subtotals for Soil Survey Area			66,057.3	99.9%
Totals for Area of Interest			66,130.6	100.0%

Description

An ecological site name provides a general description of a particular ecological site. For example, "Loamy Upland" is the name of a rangeland ecological site. An "ecological site" is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. For example, the hydrology of the site is influenced by development of the soil and plant community. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production. Descriptions of ecological sites are provided in the Field Office Technical Guide, which is available in local offices of the Natural Resources Conservation Service. Descriptions of those displayed in this map and summary table may also be accessed through the Ecological Site Assessment tab in Web Soil Survey.

Ecological sites and their respective unique set of characteristics are uniquely identified by the Ecological Site ID. The same Ecological Site Name may be assigned to multiple Ecological Site IDs. If you wish to display a map of unique ecological sites, it is recommended that you select the Ecological Site ID attribute from the choice list.

Rating Options

Class: NRCS Rangeland Site

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

APPENDIX C

LAND USE PLAN – PUBLIC MEETINGS

REEVALUATING AND UPDATING THE COMMUNITY-BASED LAND USE PLANNING PROJECT TIMELINE					
ACTIVITY	May	Jun	Jul		Sep
1. CLUPC Meeting - Planning Process - Community Education & Participation Plan	5/15/17 10 AM				
2. Work Session - Reevaluate and update land use plan - Our People - Vision, Needs and Wants - Mapping	5/22/17 9 AM				
3. CLUPC Meeting - Review work session		6/5/17 9 AM			
4. Public Hearing - present draft Land Use Plan - open 60-day comment period		6/12/17 9 AM			
5. CLUPC Meeting - Review and incorporate comments 6.			7/3/17 9 AM		
6. Special Comment Meeting - special session for all			7/31/17 9 AM		
7. CLUPC Meeting - Close 60-day comment period - Finalize Land Use Plan				9/16/17 9 AM	
8. Chapter Meeting - Adopt Community-Based Land Use Plan					9/24/17
9. RDC Meeting - LGA Re-certification					TBA

