

Diné College Land Grant Office Conservation Plan Guide

Conservation Plan Guide

Chinle, AZ

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CENTRAL AGENCY
DISTRICT 10



Diné College Land Grant Office Conservation Plan Guide

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I. Introduction

A. History of Agricultural Land Use Permit

This section requires historical chronology of how the current permit holder attained the Agricultural Land Use Permit (ALUP) in addition to the use of the permit as many generations back as the permit holder can recall.

This permit is currently held by Mr. John Tso Jr who cultivates the peach orchard on the farm plot, along with the vegetables planted that are utilized to supplement his maternal family. The permit has been held by the maternal clan (Salt People Clan) of Mr. John Tso Jr. His mother Julie and father John Tso Sr. grew peaches, corn, watermelon, cantaloupe, tomatoes, onions, pumpkins, green beans, and squash. These crops were sold to neighboring individuals, and the other half of the harvest was used to supplement the family's winter food supply. In 1937, the land use permit was attained by Julie from her mother Susie Yazzie.

Susie Yazzie became the original permit holder in 1972. She planted the peach orchard that same year. Susie maintained the farm plot with her husband Benny Yazzie. Together they planted and harvested potatoes, cabbage, corn, and squash. The harvest was used for self-consumption. If there was a surplus, produce was used to barter with neighbors and other farmers for a different variety of vegetables.

B. Dryland Farming or Irrigated Farming

Farmers will identify their main water source as well as their irrigation methods.

Farm plot T-6 receives its water supply from the Wheatfields Lake. Mr. John Tso Jr. plants annual forage crops, therefore he opts to flood irrigate his field.

If the farm plot is a dryland farm plot the ALUP will indicate their monsoon months and describe how they harvest the rainwater.

C. Goals and Objectives of Agricultural Use Permit Holder

While setting goals and objectives the permit holder must take into account the condition of the farm plot (infrastructure), crops that are to be planted/harvested, current state of the water irrigation system, and soil type(s), wildlife, and pests. The following is a small listing the farmer must take into consideration when setting goals:

- **Will the permit holder conduct soil samples?**
- **Will crop rotation be practiced?**
- **Is fertilizer needed?**
- **Do windbreakers exist around the farm plot?**
- **Will cover crops be planted?**

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- Weeds/noxious weeds/pests will need to be identified and an action plan will need to be created to mitigate their impacts on the farmland
- Understand the operation of the irrigation system
- Impacts of wildlife habitat: deer, elk bears, feral/unkept animals (horses/cattle) on the farmland

After the farmer identifies the areas of concerns he/she will then set goals they choose to accomplish and objectives identifying how they will achieve their goals.

- *Goal 1: Improve infrastructure of the farm plot*
 - *Objectives: Run new lines of barbwire and replace old posts*
- *Goal 2: Improve soil health*
 - *Objectives: Conduct soil tests after harvest to learn of nutrient deficiencies in the soil*
 - *Objectives: Plant cool season cover crops in winter months to replenish nutrients in the soil based on soil test results*
- *Goal 3: Clean out irrigation ditches annually*
 - *Objectives: Due to the sandy soil composition as well as the high wind dust storms, irrigation canals have to be cleaned annually*

II. Farmland Descriptions

A. Location of farm plot (size):

A physical description provided by the ALUP holder is entered in this section, in addition to GPS coordinates that are attained through WebSoil Survey.

What Chapter/Grazing district, is the farm plot located?

The Farm is located in the lower Wheatfields farm plot. 7.6 acres make up the agricultural use area. Mr. Tso's Farm plot can be found with the following GPS coordinates 41°24'12.2"N 2°10'26.5"E. Wheatfields lies within district 10 boundaries.

B. Climate:

Climate in areas of the reservation vary. It would be best for the farmer to best describe the typical climate conditions throughout the year and incorporate the climate conditions from WebSoil Survey

The main water source for the Wheatfields area is the mountain runoff which is replenished during the winter snow fall. Summer monsoon rains also brings moisture in the summer months of July –September.

C. Topography and Elevation:

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Farmer needs to describe the topography and get additional information is obtained through WebSoil Survey

D. Soils Map:

Soils Map is obtained through WebSoil Survey

E. Noxious Weeds – ESD map

Ecological Site Description Map is obtained through WebSoil Survey

III. Crop Production Management Plan

A. Record keeping (*crop type, planting time, etc.*)

In this section farmers will explain their methods of record keeping as it pertains to planting dates, harvesting dates, in addition to an activity work log will be recorded for the farm plot.

B. Marketing Plan

What outlet will the farmer choose to sell their produce? Will they sell to local schools, roadside, restaurants, or farmers markets? Do they choose not to sell but instead barter? Or will the food produced solely be used for self-consumption?

C. Production Goals

What is the goal of the producer? Is it to enter into a crop specific market? Is it to sustain their family? Elaborate.

D. Crop Health Management:

How will the farmer maintain the overall health of their crops? Will they be conducting soil tests? Will they be applying pesticides to their crops? Or will they be hand weeding to avoid using pesticides? Will fertilizer be utilized?

It is planned to conduct soil tests in the farm plot to determine what nutrient deficiencies there are, if any, in addition to the fertility of the soil.

IV. Farmland Conservation Plan

A. Resource Concerns:

In this section the farmer needs to identify the resource concerns they face as well as solutions for their concerns.

- **Erosion: water, wind, sheet, rill, etc.**

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- **Animals:** prairie dogs, deer, crows, snakes, bears, cougars, feral/unkept animals etc.
- **Insects:** squash beetles, grasshoppers, aphids, lady bugs
- **Human concerns:** cutting fences
- **Noxious weeds:** tamarisks, field bindweed, Russian olives, sagebrush, etc.

B. Farming Method and Control:

How does the farmer choose to run their operation? Is it family based, where the entire clan, or extended family members participate in the planting preparation, planting, and harvesting processes? Do they choose to grow organic produce? Do they hold the proper certifications? Are they a part of a co-op where they follow certain regulations?

C. Planned Conservation Practices:

Through what methods will the farmer be practicing conservation? The following is a list of methods:

- **Soil testing**
- **Permaculture methods**
- **Wind breaks**

D. Drought Management Plan:

In the instance of drought what routes will the farmer take to conserve water? Will they implement a drip irrigation system? Will they select a crop that that does not need flood irrigation but a less amount of water? Will they plant only a portion of their field as opposed to their entire field?

V. Natural Resource Plan:

A. Wildlife Management

Do any of the following wildlife animals; deer, Black Bear, bobcats, mountain lions, wolves, coyotes, porcupine, and skunks, enter the field and wreak havoc? If so, how to do they work with their local agencies to mitigate infrastructural/crop damages?

B. Woodlands Management

What species of trees grow near or within the ALUP?

The wheatfilelds area is a wooded area. The following species; cottonwood trees, tamarisks, willow, and juniper trees that sit sparse by the agricultural use area.

VI. Summary: Provide a brief summary in this section

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This Conservation Plan is a guide to properly manage the land for generations to come and to provide a document for the land user and other Tribal and Federal agencies.

VII. Agreement and Signatures

- ❖ I agree to keep farm infrastructure i.e. fences, irrigation water delivery and drainage systems in proper working order at all times.
- ❖ I agree to abide by the Farm Board Regulations
- ❖ I agree to submit an annual crop production summary to the Farm board, Navajo Nation Department of Agriculture and BIA, Division of Natural Resources.
- ❖ I agree to attend farm related training sessions and apply for USDA conservation programs if needed.
- ❖ I am aware that if I do not utilize the farm plot, the permit can be terminated by the Bureau of Indian Affairs.

I acknowledge and understand that this Conservation Plan is amendable by the Bureau of Indian Affairs, the _____ Farm Board, and I consent and agree to this plan. If any modifications are to be made I will be notified.

Accordingly, the parties herto have executed this agreement

Approved: _____ Date: _____
XXXXXXX, Land Use Permittee

Approved: _____ Date: _____
XXXXXXX, Farm Board Official

Approved: _____ Date: _____
XXXXXXX, BIA Official

VIII. Appendix

Utilizing the Diné College Land Grant Office Conservation Plan Template, make copies of the ALUP, maps, print pictures, and insert documents in their respective section of the Appendix. Each section will have their own cover page and the document should be filed behind its' respective cover page.

H. Calendar Year "Work Plan" Operation

E. Copy Agricultural Land Use Permit

I. Location Map of Proposed Conservation Plan

F. Pictures of Farming Area