Native Lands Stewardship Webinar

A Conservation Planning Guide for Native American Ranchers

August 5, 2021
STRENGTHENING
American Indian
COMMUNITIES & ECONOMIES
For 40 years

Our Mission...
to strengthen American Indian economies to support healthy Native communities. We invest in and create innovative institutions and models that strengthen asset control and support economic development for American Indian people and their communities.
All attendees will be muted throughout this webinar.

If you have questions, please enter them in the Question box.

Audio Tab: Choose Computer audio to use your computer microphone and speakers. Change your microphone and speaker options using the dropdown menu. Choose Phone call to dial using the information provided to switch to phone audio.

Questions Tab: Ask questions to the staff and panelists about the webinar material or request technical help.
Introductions

Steve Barker
Consultant, First Nations Development Institute
Resource Management Systems, LLC

Melvin Cody (Diné)
Cody Family Ranch, Leupp, Navajo Nation

Alfred Thomas (Diné)
South TL Ranch, Tolani Lake, Navajo Nation

Leiloni Begaye (Diné)
First Nations Development Institute
A Conservation Planning Guide for Native American Ranchers

Presentation by Steve Barker
Resource Management Systems LLC
A Conservation Story

• A conservation plan tells a story about the land a rancher is caring for.

• The soils
• The vegetation
• The water
• The livestock and wildlife

• The work already done
• The work that still needs to be done.
Conservation Planning Guide

• The goal of the conservation planning guide is to help Tribal ranchers tell their story.

• The guide follows the USDA Natural Resources Conservation Service (NRCS) nine step conservation planning process

• To help Tribal ranchers participate in NRCS financial assistance programs.
Developed with Native American Ranchers

• First guide was developed with 14R ranchers on the Navajo Nation.

• First Nations Development Institute has held many hands-on conservation planning workshops for Tribal ranchers.

• The revised conservation planning guide builds on what we have learned and is updated to NRCS changes.

• Reviewed and improved by Native American ranchers and agency professionals.
Range Management Principles

- Photosynthesis
- Deep Roots
- Capturing Rain
- Preventing Erosion
- Dormant Season Harvesting
- Producing Seed
- Grazing Management Systems
- Balancing Forage and Livestock Numbers
- Investing in the Best
- Disturbing Plant Communities
- Preparing for Fire and Drought
Focus on Natural Resources

- Soil
- Water
- Air
- Plants
- Animals
- Energy
Soil Resources

- Wind and Water Erosion
- Soil Health
- Organic Matter
- Compaction
Water Resources

- Surface and Groundwater Use
- Water Quality
- Runoff and Flooding
- Natural Water Use
Air Resources

- Greenhouse Gas
  - Burning
  - Nitrogen Fertilizer
  - Manure
- Particulate Matter
  - Dust
  - Smoke
- Ozone Precursors
  - Pesticides
  - Burning
  - Combustion Engines
Plant Resources

- Plant Productivity and Health
- Plant Structure and Composition
- Wildfire Hazards
- Plant Pests
Animal Resources

- Feed and forage balance
- Water quantity, quality, and distribution
- Terrestrial wildlife habitat
- Aquatic wildlife habitat
Energy Use

• Energy efficiency of equipment and facilities
• Energy efficiency of farming/ranching practices
Web Soil Survey

A high-quality tool for conservation planning

• Soil and Ecological Site Maps
• Detailed Soil Information
• Plant Community Potential Production
• Planning Area Acres
Recommendation to USDA

• Let producers create conservation plan base maps on web soil survey – plain ortho, topo for Area of Interest.

• Already provides north arrow, scale bar, location, acres etc.

• Need larger print size formats options for ranchers. Save as jpg or pdf to print at local photo service.

• Save their Area of Interest (AOI) for use in google earth, ArcGIS, or to share with NRCS, BIA others.
Phase I – Collection and Analysis

- Step 1 – Identify problems and opportunities
- Step 2 – Determine objectives
- Step 3 – Inventory resources
- Step 4 – Analyze resource data
• Existing Range Improvements
• Past land treatments
• Resource Concerns
Goals and Objectives

• Ecological
• Economic
• Community
Current Vegetation Production and Cover

- Identify ecological sites
- Determine current production
- Identify the desired plant community for each ecological site
- Determine initial stocking rates
Phase II – Decision Support

- Step 5 – Formulate alternatives
- Step 6 – Evaluate alternatives
- Step 7 – Make decisions
**Resource Management System Alternative**

- A conservation system that achieves or exceeds the planning standards for soil, water, air, plants, animals and energy resource concerns.

<table>
<thead>
<tr>
<th>Conservation Practices</th>
<th>Resource Concerns</th>
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<tbody>
<tr>
<td></td>
<td>Soil Erosion</td>
</tr>
<tr>
<td>Prescribed Grazing</td>
<td>x</td>
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<tr>
<td>Brush Management</td>
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</tr>
<tr>
<td>Well</td>
<td></td>
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<tr>
<td>Water Development (Storage Tanks and Troughs)</td>
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</tbody>
</table>
WHAT CONSERVATION PRACTICES DO YOU NEED?

**Structural Practices**
- Fences
- Wells
- Pipelines

**Vegetation Practices**
- Brush management
- Range Planting
- Prescribed Burning

**Management Practices**
- Prescribed grazing
- Upland Wildlife Habitat Management

(About 160 conservation practices)
Phase III – Application and Evaluation

- Step 8 – Implement the plan
- Step 9 – Evaluate the plan
Conservation Practice Standards

• NRCS Conservation Practice Standards establish the minimum level of acceptable quality for planning, designing, installing, operating, and maintaining conservation practices.
Laws and Regulations

• National Environmental Policy Act
• Clean Water Act
• Clean Air Act
• Endangered Species Act
• National Historic Preservation Act
• Tribal laws
• Permits
Monitoring

1983 1984
1986 1988
First Nations Conservation Planning Guide
Appendix A: Common NRCS Conservation Practices on Rangeland

• Developing water for livestock, wildlife, wildfire control
• Managing the movement of animals, people, and vehicles
• Developing or restoring riparian areas and wetlands
• Improving wildlife habitat
• Managing runoff, and reducing sediment loss
• Removing obstructions, dumps, and clearing vegetation
• Reducing air pollution
• Managing wildfire hazards
Appendix B: Map Symbols

STANDARD MAP SYMBOLS

SPECIAL SYMBOLS - CONSERVATION PLAN

<table>
<thead>
<tr>
<th>EXISTING</th>
<th>PLANNED</th>
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<tbody>
<tr>
<td>Fence</td>
<td></td>
</tr>
<tr>
<td>Shelterbelt</td>
<td>+ + + +</td>
</tr>
<tr>
<td>Stream bank protection</td>
<td>Δ Δ Δ</td>
</tr>
<tr>
<td>Dike or levee</td>
<td>+ + + + + + + + + + +</td>
</tr>
<tr>
<td>Pipeline</td>
<td></td>
</tr>
<tr>
<td>Flume or syphon</td>
<td>&gt; &gt; &gt;</td>
</tr>
<tr>
<td>Canal (label)</td>
<td>CANAL CANAL CANAL</td>
</tr>
<tr>
<td>Irrigation ditch</td>
<td></td>
</tr>
<tr>
<td>Pickup ditch</td>
<td></td>
</tr>
<tr>
<td>Diversion</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>EXISTING</th>
<th>PLANNED</th>
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<tbody>
<tr>
<td>Diversion or spreader dam</td>
<td></td>
</tr>
<tr>
<td>Check dam or gully plug</td>
<td></td>
</tr>
<tr>
<td>Drop structure</td>
<td></td>
</tr>
<tr>
<td>Dam and reservoir</td>
<td></td>
</tr>
<tr>
<td>Stock pond, tank or charco</td>
<td></td>
</tr>
<tr>
<td>Spring development</td>
<td></td>
</tr>
<tr>
<td>Spring and trough</td>
<td></td>
</tr>
<tr>
<td>Trough</td>
<td></td>
</tr>
<tr>
<td>Well (label)</td>
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Appendix C: Soil Texture Flow Chart
Appendix D: Useful Websites

- National Planning Procedures Handbook
- National Handbook of Conservation Practices
- National Range and Pasture Handbook
- Field Office Technical Guide
- Interpreting Indicators of Rangeland Health
- Web Soil Survey
- Ecological Site Descriptions
- Google Earth
- Sampling Vegetative Attributes
Thank You!

Steve Barker
Stevebarker.rms@cox.net

A Conservation Planning Guide for Native American Ranchers

DEVELOPED IN COOPERATION WITH THE 14R RANCH ON THE NAVAJO NATION, ARIZONA

A project funded with generous support from the U.S. Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) and The Christensen Fund

2nd Edition, Coming Summer 2021
CODY FAMILY RANCH
LEUPP, ARIZONA

Mel Cody (Navajo Rancher)
USDA-EQIP Participant
Livestock Water Development Project
UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)
ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP)

Introduction

The Environmental Quality Incentives Program (EQIP) is a voluntary conservation program that helps agricultural producers in a manner that promotes agricultural production and environmental quality as compatible goals. Through EQIP, agricultural producers and forest landowners can receive financial and technical assistance to implement structural, vegetative and management conservation practices that optimize environmental benefits on working agricultural and forest land.

Eligibility

• Agricultural producers and owners of non-industrial private forestland are eligible to apply for EQIP. Eligible land includes cropland, pastureland, non-industrial private forestland and other farmlands.
• Applicants must:
  • Control or own eligible land
  • Comply with adjusted gross income limitation (AGI) provisions
  • Be in compliance with the highly erodible land and wetland conservation requirements
  • Develop an NRCS EQIP plan of operations
  • Additional program requirements may apply.
RANGE & FARMLAND STEWARDSHIP
DEVELOP A CONSERVATION PLAN FOR YOUR RANGELAND

Acres: 40,000
Miles of pipeline: 8
CONSTRUCTION PHASE

Water pipeline installation process by skilled workers, specialized heavy equipment and tools. Hired workers must be physically fit, dependable, knowledgeable with a good work ethic.
PROPER SUPPLIES AND MATERIALS & EQUIPMENT

Thorough planning prior to the construction phase(s) will be key to the overall success and timely completion of your project(s).
If you work hard in achieving the goals and objectives for your EQIP project(s), the result will be very satisfying and worth the time you invested. Helping your horses, livestock, and wildlife through rangeland improvements will always be a worthwhile endeavor.
THANK YOU!

Mel Cody
Codium4184@gmail.com
Cell: 928-699-7738
Conservation on South TL Ranch

Al Thomas, Rancher
Tolani Lake (Navajo Nation), Arizona
August 5, 2021
Introduction

- Al Thomas, Rancher/Farmer, from Tolani Lake, Navajo Nation, Arizona
- Enrolled member of the Navajo Nation
- Clanship – Mother - Mexican, Father - Salt, Paternal Grandfather – Red Streaked, Maternal Grandfather – Coyote Pass
- Raised in Tolani Lake, AZ on a sheep and cattle ranch
- Education – Attended High School in Flagstaff, AZ, and graduated from Northern AZ University, in Flagstaff, AZ, with a BS degree in 1978
- 4th Generation Rancher
- Married with 5 daughters and 13 grandchildren. All 5 daughters grew up riding horses, roping and chasing cattle.
Ranching

- In early 2000, the Bureau of Reclamation conducted a water study in the Tolani Lake area and determined the water quality to be very brackish and unsuitable for both domestic and livestock use. Although the community used to have a windmill and 3 water wells in the 1960’s through 1980’s, somehow the water became very brackish.

- As a result of the water study the Navajo Nation, the BOR, the NRCS and the Tolani Lake community officials got together in mid 2000’s and decided to put their resources together to develop a water system for Tolani Lake. They drilled a well and ran a 7 mile pipeline system using 3 volunteers and an old trencher borrowed from the Navajo Nation Department of Water Resources.
EQIP Contract with USDA NRCS

- After the 7 mile waterline system was developed, the Dilkon, AZ NRCS Office started working with our Tolani Lake Ranchers utilizing the Environmental Quality Incentive Program (EQIP) to become Grass Farmers through Water Projects.
- I first signed up for my NRCS EQIP project in 2010. My contract was approved in 2012 consisting of 12 miles of underground waterline with five 8,800 gallon storage tanks and troughs, 3 stock ponds, Grazing Fees, and fencing to establish a Range Management Unit (RMU) totaling $285,000.
- I completed the first phase of my 9 mile pipeline project in 2014. The second phase, a 3 mile pipeline was completed in 2015. The 3 stock ponds were completed in 2016.
- I was not able to implement my fencing project as any fencing on the Navajo Nation is a complicated and frustrating process.
- Grazing fees paid in 2018.
Setting up one of our 8,800 gallon tanks with the assistance from the Navajo Nation Department of Water Resources. The NN DWR has been very instrumental in our waterline projects. They have provided water tanks, troughs, pipes, a trencher, etc.
In 2012, our community Ranchers got together and formed the Tolani Lake Livestock & Water Users Association. The purpose was to maintain the main trunk line called the Blue Berry Mesa Waterline that was developed by the NN, BOR, NRC and Tolani Lake Chapter.

The Tolani Lake Livestock & Water Users Association (TLLWUA) is 501(c)3 organization.

Since its inception, TLLWUA has been maintained the 7 mile main trunk line system and has assisted NRCS and Tolani Lake Chapter in implementing and developing new waterlines.

In working together with NRCS, the Navajo Nation, the BIA and the Tolani Lake Chapter, TLLWUA has developed additional livestock waterline projects totaling 31 miles and 30 water storage tanks.
Dennebito Wash Soil FBFA 34 Area

San Francisco Peaks Background

2017April18
Tolani Lake Livestock & Water Users Association

- In 2017 the Navajo Nation Department of Justice informed the Tolani Lake Chapter that they can no longer be a part of any NRCS contracts although TLC was never a part of any contracts.
- Over the course of approximately 10 years the revolving Conservation Fund increased to about $80,000. When TLC stopped doing the NRCS projects, the revolving Conservation Fund was given to TLLWUA to continue the EQIP projects on behalf of TL Ranchers.
- TLLWUA has since completed 2 more EQIP projects and the revolving Conservation Fund has grown to approximately $100,000.
- TLLWUA has entered into an MOA with Tolani Lake Enterprises (TLE) for TLE to be its Fiscal Sponsor to continue the EQIP projects.
- TLLWUA will be assisting in 2 more EQIP projects this summer and next year.
Tolani Lake Livestock & Water Users Association

• In addition to assisting Ranchers with their EQIP projects the TLLWUA has also been working with First Nations Development Institute in providing Conservation Planning Trainings in Tolani Lake, AZ.

• The first Conservation Training was held in 2018 and it was a great success. We had at least 10 Ranchers and family members show up for the training. Out of the 10 Permit Holders, 4 new EQIP projects were approved. All the 10 Ranchers developed their own Conservation Plans based upon what their Resource Needs were.

• TLLWUA had another Conservation Planning Training in July 2021 but only 5 Ranchers showed up due to the pandemic.

• First Nations conducted a Conservation Planning session in July 2021 and we anticipate 5 more Ranchers will complete their Conservation Plans to become eligible for EQIP opportunities.
Thank You!

Al Thomas
althomas7@gmail.com
Next Steps and Future Goals

➢ Cody Ranch, Melvin Cody- USDA NRCS EQIP Participant
➢ South TL Ranch, Alfred Thomas- USDA NRCS EQIP Participant
➢ Tolani Lake Livestock & Water Users Association
➢ Conservation Plans for Native American Ranchers, First Nations Development Institute
➢ Tribal Lands Conservation Fund, First Nations Development Institute
Q&A

Please submit your questions in the question box
Contact and Social Media

First Nations Development Institute
2432 Main Street, 2nd Floor
Longmont, Colorado 80501
www.firstnations.org
Tel: 303.774.7836
Fax: 303.774.7841

This webinar will be recorded and can be accessed on our website under the First Nations Knowledge Center at https://www.firstnations.org/fnk
Next Webinar

Tribal Stewardship in the Northern Great Plains
Part 2

Date: Thursday, August 12th 2021 at 12 pm MDT

Where to Register:
https://attendee.gotowebinar.com/register/724546692398769932

Webinar series questions?
Contact: Emilie Ellis at eellis@firstnations.org
Thank you!